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Economic inequality, culture, and governance quality

Andreas P. Kyriacou

Departament d'Economia, Universitat de Girona, Edifici Econòmiques, C/ de la Universitat de Girona, Girona, Spain

Correspondence
Andreas P. Kyriacou, Departament d'Economia, Universitat de Girona, Edifici Econòmiques, C/ de la Universitat de Girona, 10, Campus Montilivi, 17003 Girona, Spain.
Email: andreas.kyriacou@udg.edu.

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Abstract

We review work that has linked economic inequality and culture to governance quality. We start with contributions that have considered the relationship between inequality and governance from a long-run perspective. This historical perspective yields a range of insights and helps identify the deep drivers of specific cultural traits that relate to both economic inequality and governance in contemporary societies. We then survey work that has linked inequality and culture to governance in present-day settings. We identify the complexity of the relationships with causality between any pair of these variables running both ways. These causal patterns, in turn, imply that countries may end up in either a good equilibrium characterized by lower economic inequality, the "right" culture and good governance, or a bad equilibrium described by greater inequality, the "wrong" culture and bad governance. We conclude with a range of policy implications.

KEYWORDS
economic inequality, culture, governance quality, long-run determinants

JEL CLASSIFICATION
D31, D72, D73, Z13

1 | INTRODUCTION

Good governance is impartial governance and more specifically, impartiality in the exercise of public authority (Rothstein & Teorell, 2008). Impartiality exists if, when implementing laws and policies, government officials are not motivated by personal preferences or relationships and, instead, treat all individuals "in the same empirical situation" equally (Weber, 1922). Impartiality means that the selection of public administrators should be based on merits and qualifications previously stipulated in law, rather than on personal relationships, political affinity, or group membership. Corruption or the misuse of public office for private or political gain implies a violation of impartiality since it means that public officials are acting in their own specific interest. Impartiality implies the rule of law insofar as the latter is a set of rules that are equally binding on all members of society, regardless of how powerful they are (see also, Fukuyama, 2011, 2014). Impartial governance "requires that … society be able to create and sustain impersonal categories—such as citizens—and then to treat everyone in the same category alike" (North et al., 2009, p. 262). The effectiveness of formal rules enshrining impartiality depends on the existence of cultural norms that similarly reflect the notion of impartiality or equality before the law (Rothstein & Teorell, 2008).

Culture has been defined as "those customary beliefs and values that ethnic, religious, and social groups transmit fairly unchanged from generation to generation" (Guiso et al., 2006, p. 23). A more specific definition from Greif (1994, p. 915) sees culture as "the ideas and thoughts common to several people that govern interaction … [P]ast cultural beliefs provide focal points and coordinate expectations, thereby influencing equilibrium selection" (see also, Tabellini, 2008). Boyd and Richerson (1985, 2005) focus on the purpose of cultural beliefs when they define culture as heuristics or rules of thumb that have evolved to serve our need to make decisions in complex and uncertain environments. This functionalist approach is also taken by North (2005) who argues that culture includes informal institutions in the form of norms of behavior, conventions, and self-imposed codes of conduct that emerge to reduce uncertainty by channeling choice into a smaller set of actions.

Economic inequality refers to interpersonal or intergroup income or wealth differences. It is useful to differentiate between two types of economic inequality namely *market* and *structural* inequality (Easterly, 2007). Market inequality emerges in the context of voluntary market exchange. It can be due to differences in individual effort, but also a host of factors that are beyond one's control including, chance, initial resource endowments, innate cognitive abilities, and noncognitive personality traits such as risk aversion or the capacity to defer gratification (Bowles & Gintis, 2002; Corak, 2013). Structural inequality on the other hand, is the result of non-market mechanisms that favor some individuals or groups over others. It can be the result of historical events such as conquest, colonization, slavery, and coercive land distribution. Economic inequality can be reduced by progressive tax and spending policies as well as equal opportunity policies, most notably, public health and education (Lustig, 2015).

In this article we will review work that has linked economic inequality and culture to governance. We will begin, by considering work that has analyzed the emergence of good governance—in its manifestation as equality before the law—from a long-run perspective going as far back as our hunter-gatherer ancestors. This long-run perspective is productive for two reasons. First, pre-history and history provide a wealth of variation in the degree of (mostly structural) inequality and governance regimes and can thus help illuminate our understanding of the relationship between these variables. Second, the long-run view identifies the deep drivers of specific cultural traits or norms that relate to both economic inequality and governance in contempo-

rary settings. In this respect, our approach follows a growing body of work that has identified the impact of long-term factors on contemporary social and economic outcomes (for reviews see Ashraf & Galor, 2018; Nunn, 2009; Spolaore & Wacziarg, 2013, 2014). We will then follow with a survey of work that has identified the complex causal relationship between economic inequality, culture, and governance in contemporary societies. The relationship is complex because causality between any pair of these variables potentially goes two ways. This review reveals that, societies may be end up in two types of equilibria: one characterized by lower economic inequality, a more egalitarian and individualist ethos and good governance, and another described by greater inequality, a collectivist ethos that is more accepting of power asymmetries, and bad governance. We discuss these alternative equilibria and whether it is possible to escape the bad governance one in the concluding section of this article.

2 | THE DEEP FOUNDATIONS OF GOOD GOVERNANCE

Human beings strive to reduce the existential uncertainty that emerges from the natural environment and, as technology has granted humans greater mastery over nature and human societies have increased in size, especially from human interaction (North, 2005). In small social groups, the uncertainty that emerges from social interaction is reduced by the personal knowledge of the different members of the group. Dunbar (1992) has explained how the human brain allows us to keep track of social relationships in small groups of up to 150 individuals with whom we have face-to-face interactions. Within such groups, we can identify co-operators and defectors and act accordingly.

The choice between cooperation or defection has been informed by the concepts of kin selection (Hamilton, 1964a, 1964b) and reciprocal altruism (Axelrod, 1984; Trivers, 1971). According to kin selection, individuals will behave more altruistically towards kin the more closely related they are, since by doing so they are improving the survival chances of their own genes. By genetically aligning the self-interest of kin group members, kin selection makes social interaction more predictable. On the other hand, reciprocal altruism describes the ability to sustain cooperation with non-kin in the context of interactions and tit-for-tat strategies or norms: one cooperates if others do and ceases to do so when others do not. Fukuyama (2011, 2014) identifies kin selection and reciprocal altruism as the default mode of human sociability—calling it "natural sociability".

Thus, in small group contexts the personal knowledge of the individual members of the group and repeated exchange increase predictability in social interaction, especially if the members of the group are genetically related. But as the size of the group increases, genetic proximity falls, the likelihood of repeated interactions is reduced, and personal knowledge of others is harder to acquire since, beyond the 150-person threshold, the computational effort required to monitor direct relationships with others becomes overwhelming. This makes it increasingly difficult to sustain cooperative relationships. To reduce the ensuing uncertainty, people will tend to develop a dual strategy, namely, construct hierarchical personal relationships and adopt symbolic markers (Turchin & Gavrilets, 2009).

Hierarchy allows people to maintain personal one-to-one relationships with others, even in large group contexts. Now, individuals can focus on their relationship with those immediately above or below them in the social hierarchy. This reduces the computational effort required to keep track of the intentions of others. It also increases the likelihood of repeated interaction. As such, hierarchically ordered personal relationships will be a rational response to the increased uncertainty in social interaction that emerges in larger group settings. The nature of these relationships has been illuminated by Scott (1972) who identifies three features. First, the relationship

is a face-to-face personal one cultivated by continuing reciprocity over time, often creating trust between the partners. Second, they are based in inequality: "[t]here is an imbalance in exchange between the two partners which expresses and reflects the disparity in their relative wealth, power and status" (Scott, 1972, p. 93). Third, such (patron-client) relationships are reciprocal in that each party provides a valued service to the other. There may be a degree of coercion in the relationship, but it also benefits the parties. As such the relationship is an instrumental one. The individual with higher socioeconomic status (the patron) provides protection or services to the person with lower status (the client) in exchange for support and assistance. The services provided by the patron tend to be vital to the client and, as such, the latter faces an inelastic demand. The degree of asymmetry in the relationship thus depends on the relative coercive power of each party and on how important one's services are to the other.

The idea of symbolic markers refers to the classification of non-relatives by way of specific criteria such as language, ethnicity, or religion. The symbolic marker acts as a screening device allowing individuals to predict the behavior of others. People within one's ingroup are on average considered more predictable than those outside it. And this predictability facilitates social cooperation within groups, strengthening ties among group members, while its absence or relative scarcity when interacting with outgroup members undermines exchange or even promotes conflict between groups (see also, Boyd & Richerson, 2005; Efferson et al., 2008; Kyriacou, 2005). The important point here is that people strive to reduce uncertainty in social interaction and in the absence of familial or personal relationships, will latch on to specific characteristics to demarcate strangers as "one of us" or "one of them". Symbolic markers and the resulting ingroup bias stem from the basic human need to make the environment more predictable.

What can hierarchically ordered personal relationships and ingroup bias tell us about the emergence of the rule of law? Equal treatment of individuals in similar circumstances is more likely the more egalitarian the personal relationships between people. Less obviously perhaps, equal treatment is also more likely to emerge when ingroups are weaker. On one level, this is simply because a weaker ingroup bias means that one discriminates less in favor of ingroup members. On another level, weak ingroups also increase the likelihood of formal rules emerging that facilitate impersonal relationships with strangers. Greif (1994) differentiates between individualist societies characterized by weak ingroup ties and collectivist societies where ingroup ties are salient. He argues that, historically, salient ingroups have facilitated market exchange between their members by sharing information concerning the reliability of different commercial partners. This practice acted as an informal contract enforcement mechanism since reneging on the terms of a deal injured one's commercial reputation. The reputation mechanism depended on an extensive network of personal acquaintances such that even if one did not know the potential trading partner personally, he could get reputational information through this network. Where ingroups were weaker and thus informal enforcement was not possible, formal institutions eventually emerged to structure market exchange with strangers. Greif labels this impersonal exchange. The move towards impersonality is also one towards impartiality that, by definition, means treating people without regard to personal relationships and preferences.

The combination of flat social hierarchies and weak ingroup bias sets the stage for the emergence of the rule of law. This discussion begs the question: what determines the steepness of personal hierarchical relationships and the strength of ingroup ties? One productive and parsimonious way to examine this issue is by going back to the basic human need to reduce uncertainty in social interaction. From this perspective, four different but related deep sources of existential uncertainty have been identified: the disease environment, societal size, intra and intergroup conflict and finally, the nature of food production. These variables ultimately depend on the biogeographic environment within which each society is embedded. As illustrated in Figure 1,

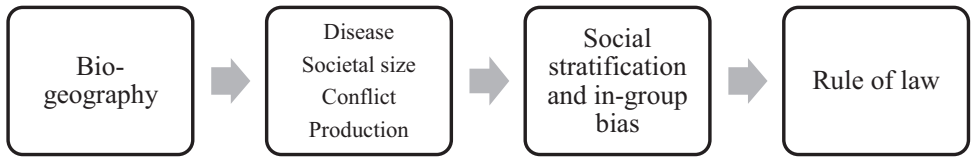

FIGURE 1 Long-run determinants of the rule of law.

biogeographic realities determine the nature of different sources of existential uncertainty. These, in turn, determine the steepness of social hierarchies and the strength of ingroups and this determines the extent to which governance tends towards the equal treatment of individuals in similar circumstances. The arrows in Figure 1 indicate a probabilistic rather than deterministic relationship. In other words, the identified variables affect the likelihood of different outcomes emerging allowing for the influence of alternative factors.

Our approach here is similar to that taken by Olsson and Paik (2016) who have linked the emergence and persistence of hierarchically ordered social relationships and ingroup bias to the disease environment, conflict, and the nature of production. In their account, the first agricultural societies to emerge in the Fertile Crescent had a relatively heavy infectious disease burden, relied on irrigated agriculture and were at risk of attack from hostile neighbors. Hierarchy and ingroup bias were social responses to this environment. Independent-minded individuals were more likely to leave such societies—moving further and further away in successive waves. Those that entered Western and Northern Europe found an environment with fewer pathogens, less conflict, and rainfed agriculture allowing for less hierarchy and weaker ingroup ties. Below we will consider how disease, conflict, and production conditions, but also societal size, can affect social stratification and ingroup bias and how these, in turn, have shaped the extent to which societies have tended towards (in)equality before the law.[1]

2.1 | Disease

The disease environment has been identified as a causal factor determining the relative strength of individuals versus groups. Specifically, Fincher et al. (2008) have put forward a pathogen theory of group bias, arguing that in areas with historically higher infectious disease burdens, societies developed stronger ingroup biases as a defensive strategy (see Thornhill & Fincher, 2014, for a review of work in this area). Because interactions with strangers are perceived to increase the risk of infection, people biased their dealings inwards in the context of identified ingroups. Over time, in areas characterized by a high/ low level of pathogen prevalence, a selection process favoring alleles probabilistically associated with strong/weak ingroups occurred. Geography is an important determinant of pathogen levels: countries closer to the equator have higher infectious disease burdens than countries further away. Nikolaev and Salahodjaev (2017) relate historical infectious diseases to greater contemporary ingroup bias and, as a result, weaker rule of law.

2.2 | Societal size

From a long-run, historical perspective, geography has been a key driver of population size. Biogeographic conditions have been identified as fundamental for the Neolithic Revolution or the movement from a foraging, hunter-gatherer existence, towards settled agriculture. Diamond

(1997) has explained that the speed at which different societies adopted agriculture depended on the availability of domesticable plant and animal species that, in turn, is geographically determined. Thus, agriculture was independently taken up in at least five areas: first the Fertile Crescent where domesticable species were relatively abundant, and later in China, Mesoamerica, the Andes of South America, and the eastern United States. Once adopted, it spread first along the East-West geographic axis, and then on a North-South direction since biogeographic conditions are similar along latitudes but differ along longitudes. The invention of settled agriculture led to population increases (see also, Childe, 1936; Service, 1975). There are at least two reasons for this. First, it allows human beings to produce more food per acre. Second, for a hunter-gatherer who leads a nomadic existence, birth control and even infanticide is rational given that children reduce mobility.

The impact of population growth on aspects of societal organization that determine the quality of governance has already been noted. Individuals seek to reduce uncertainty emerging from social interaction. Increasing group size reduces genetic proximity, pushes against cognitive abilities to monitor interpersonal relationships with others, and reduces the likelihood of repeated interaction. In response to this, ingroup bias and hierarchical personal relationships emerge as predictability-enhancing strategies. Taking Dunbar's community size threshold of 150 persons as a guide, this suggests that below this number, societies will tend to be more individualist and egalitarian. And, in fact, anthropological evidence has shown that nomadic hunter-gatherer communities—whose average size is around 40 individuals (Nolan & Leski, 2009)—enforce an egalitarian ethos with the purpose of preserving individual autonomy (Boehm, 1999; Triandis, 1995; Woodburn, 1982). Faced with despotic or aggrandizing tendencies by individual members, hunter-gatherers apply levelling actions of various intensities: moderate (criticism, ridicule, disobedience), strong (ostracism, expulsion, deposition, or desertion) or very strong (execution of upstarts). The egalitarian nature of hunter-gatherers is also reflected in their practice of meat sharing and decision-making by consensus (Boehm, 1999; Kelly, 1995). Egalitarianism in nomadic foraging bands refers to relationships between male household heads, not within households where relationships are more hierarchical (Boehm, 1999). Moreover, egalitarianism does not imply equality in resources or prestige. Rather, it refers to equal access to resources, technology to acquire them, and the paths leading to prestige (Kelly, 1995).

In addition, it has been argued that population increases led to the emergence of private property rights and, as a result, social inequality. According to North (1981), in hunter-gatherer societies with low population densities, there was no need for property rights. People simply took from nature. This practice continued as population increased because groups subdivided and moved to new areas. But, at some stage, new areas where scarcer and hunter-gatherer groups came into increasing contact. To avoid the exhaustion of the resource base, groups initially adopted practices to limit population increase, including, infanticide and taboos. Eventually, groups adopted exclusive communal property arrangements thus both limiting the intensity of exploitation by insiders and the access to this base by outsiders. The move towards exclusive communal property is a first step towards individual property rights and opens the door to social inequality. Consistent with this account, Platteau and Hayami (1998) suggest that compared to Asia, in Sub-Saharan Africa, low population densities led to the underdevelopment of property rights and consequently less social stratification and stronger redistributive norms. Kyriacou (2019) employs anthropological data on 186 pre-industrial societies from the Standard Cross-Cultural Sample (SCCS) and finds that population density is positively correlated with the move towards private property and that, moreover, social stratification—measured with a variable ranging from 1 for an egalitarian society to 5 for a society with 3 social classes or castes, with or without slavery—is increasing with both population density and private property.

2.3 | Conflict

Social hierarchy is, potentially, a response to the uncertainty generated by conflict. *Intragroup* conflict can contribute towards the emergence of a leader with a monopoly of force. In our closest primate relatives—chimpanzees, bonobos, and gorillas—being higher up in the social hierarchy entails privileges but also obligations, one of which is the need to diffuse intragroup disputes, if necessary, through the use of force (Boehm, 1999). A monopoly of legal force or violence is widely considered a defining characteristic of states (Weber, 2015). Moreover, *intergroup* conflict puts a premium on the hierarchical organization of society since the latter may facilitate coordination (Andreski, 1968). Hierarchy in the face of intergroup rivalry is all the more likely insofar as increasing the size of the ingroup becomes a rational response to conflict—larger groups will tend to dominate smaller ones, but their size also raises the need for greater hierarchy if they are to be effective (Turchin, 2016). Conflict between groups is also likely to increase the salience of group boundaries, thus strengthening within-group ties and weakening ties outside the group. Thus, we would expect both ingroup bias and social hierarchy to be rational responses to the uncertainty generated by intergroup violence. Consistent with this, Kyriacou (2019) finds a positive association between intergroup conflict and social stratification in the SCCS.

One factor limiting intragroup conflict and thus reducing the need for hierarchy is the possibility that individuals may exit conflictual relationships by moving to another area. Boehm (1999) explains how despotism in chimpanzee communities is buttressed by the inability of subordinate males to exit since they would, in all likelihood, be killed by other chimpanzee groups. In sparsely populated hunter gatherer settings, intragroup conflict is reduced by spatial avoidance, including changing bands (Boehm, 2012; Nolan & Lensky, 2009). Indeed, moving away in response to intragroup conflict may have been an important mechanism driving the gradual habitation of the world (Boix, 2015). Drawing from the SCCS, Kyriacou (2019) reports a negative association between the capacity of people to move when faced with intragroup conflict and social stratification.

However, increasing population densities, especially after the Neolithic revolution, reduced the ability to respond to intragroup conflict by splitting from the group, at the same time as it increased the likelihood of conflict between groups for access to scarce resources. This brings us to the idea of environmental circumscription. Carneiro (1970) explains that the first states that arose—in Egypt, Mesopotamia, India, China, Mexico, and Peru—were delimited by mountains, seas, or deserts. This reduced the area available for colonization and cultivation and, with increasing population densities given the suitability of these areas for agriculture, raised the likelihood of conflict between groups over scarce resources. Environmental circumscription also undermined the capacity of individuals and groups to flee to avoid conflict. This was not the case in places like the Amazon basin or North America where resource abundance and vast expanses reduced competition over territory at the same time as it allowed individuals to flee conflictual situations (Jones, 1981, applies the same logic to Europe, while Fukuyama, 2014, does so to Sub-Saharan Africa). In environmentally circumscribed areas, groups that were less successful in the fight over resources faced extinction or social sub-ordination in the context of larger units such as chiefdoms or kingdoms (see also, Diamond, 1997).

Another factor shaping how conflict can impact on social hierarchy is the technology of violence. In the most general terms, where effective violence technology is only affordable by a wealthy few, this should sow the seeds of social hierarchy. Conversely, the more easily available and effective is this technology, the more egalitarian society should be. At least 50,000 years ago, egalitarianism in hunter-gatherer settings was underpinned by the equal access of group members to simple but lethal projectile weapons such as spears, bows, and arrows (Boehm, 1999;

Gintis et al., 2015). Projectile weapons made potentially dominant individuals vulnerable and underpinned egalitarianism.

Andreski (1968) speaks of the military participation ratio (MPR) defined as the proportion of the total population enlisted in the military. Importantly, the more people that need to be mobilized for war, the more rights must be granted to them in return, thus reducing social stratification. He gives numerous examples. In seventh century Byzantium, external threats led Emperor Heraclius to confiscate large domains, free serfs and distribute land to those willing to fight. In Prussia, the need to mobilize the masses in international conflicts led to the abolition of serfdom, the granting of ownership of lands to peasants, and the establishment of social insurance schemes. Bellah (2011) explains how during the Warring States period in ancient China, mass conscription was accompanied by the suppression of serfdom and the introduction of private property. Scheidel (2017) makes the same argument for the impact of mass mobilization in countries participating in WWI and WWII: it contributed towards the expansion of the franchise, it increased the rights of workers through unionization, and it led to more progressive taxation (see this author for an extensive review of the link between military mobilization and social levelling since classical Athens).

An important determinant of the MPR is the cost of armament such that, more expensive technologies, make weapons unaffordable and drive down the MPR. The introduction of initially costly bronze swords sometime around 3500 BCE in Mesopotamia, reduced the MPR and strengthened the position of the elite. The same happened with the introduction by Eurasian nomads of the horse and chariot in around 1800 BCE as well as that of the short bow and the stirrup (first of leather and then of iron). The iron stirrup eventually led to the heavily armed mounted knight, highly effective against infantry, and underpinned feudalism (see, originally, White, 1962).

Alternatively, the use of cheaper iron swords in fifth century BCE Greece and Rome, together with the Greek "phalanx" and Roman "testudo", raised the need for armed foot soldiers, increasing the MPR and contributing towards social levelling (see also, McNeill, 1982; North, 1981). The effectiveness of the navy in ancient Greece, necessarily staffed by oarsmen, increased the MPR and contributed towards them gaining rights that previously were limited to the armed foot soldiers or "hoplites" that constituted the "phalanx" (see also, Bellah, 2011, who, moreover, links the introduction of iron weapons to the demise of serfdom in China during the Warring States period). The effective use of the pike and the long bow against armored knights tilted the balance in favor of foot archers and contributed to the downfall of the medieval knight (Mann, 1986). Conversely, in England, the rise of (expensive) firearms and the end of the long bow coincides with the enclosure movement during which communal land that was previously available to peasants, was fenced and assigned to a privileged minority. Everywhere, costly guns and canons increased the power of wealthy land-owning elites who could afford them, to the detriment of peasants and those cities too poor to defend themselves (Boix, 2015). Eventually however, the use of firearms increased the value of the foot soldier and heralded a period of economic and political enfranchisement (Andreski, 1968; Gintis et al., 2015).

While the cost of the technology of violence is an important factor explaining the MPR, we must not lose sight of the requirement that this technology be effective. In line with Figure 1, geography is crucial here. Andreski (1968) explains how rugged terrain and/or extensive forests undermined the strength of the cavalry in medieval Sweden, Norway, the Scottish Highlands, and Switzerland, empowering instead a peasant militia of freemen. In Sweden, peasants were judged by tribunals composed mainly by their peers and took orders only from the king. Representatives of peasants sat in parliament. In Switzerland, war leaders were elected and vested with authority only during the duration of the military campaign. Geography there led to the "survival of tribal democracy

amidst countries dominated by feudal lords" (p. 62). Boix (2015) argues that it was not only the move from bronze to iron that reduce social hierarchies in ancient Greece. Another factor was Greek geography full of "fences, terraces, hills, small orchards, and vineyards" (Hanson, 1998, as cited in Boix, 2015) that made cavalry and chariots difficult to deploy. This was not the case in the plains of Thessaly, and the important role in this region of the cavalry meant that democracy did not take root there in the classical period (Andreski, 1968). Like the case of classical Greece, chariots were of little use in the forests of Germania and the peoples of this region organized themselves through assemblies of free warriors. In Africa, socially stratified cavalry states emerged in the savanna and could not expand into the thick tropical forests where, moreover, the tsetse fly erected a disease barrier (Goody, 1971).

War may contribute towards social levelling because it puts a premium on meritocracy in the military and the public administration more generally. It does so in the military since an incompetent leader makes the group vulnerable to extinction. It can do so in the public administration since a successful defense or attack depends on the volume of financial resources mobilized for war. To see this, we must turn to work that has considered the historical emergence of state capacity. State capacity has generally been defined as the ability of the state to project its authority, for example, by raising taxes (Fukuyama, 2011). Crucially, Weber (1922) states that the rise of a more rational bureaucracy "has been promoted by needs arising from the creation of standing armies, determined by power politics, and from the related development of public finances" (p. 972). As famously put by Tilly (1975): "war made the state, and the state made war" (p. 42). There are several examples of war leading to meritocracy in both the military and the public administration. It did so in nineteenth century Sweden after military defeat by Russia and the resultant loss of Finland, in Britain after the Crimean War, and in Denmark after a series of defeats in the seventeenth and nineteenth centuries (Rothstein & Teorell, 2015a, 2015b). Defeat was blamed on the incompetence of the officer corps, and this was associated with nepotism in recruitment and promotion. The argument whereby war leads to the adoption of merit based autonomous bureaucracy can also be extended to ancient China, and Prussia and Japan in the nineteenth century (Fukuyama, 2014).

It is important to note that insofar as meritocracy is, by definition, recruitment and promotion on the basis of merit rather than personal connections, it represents a move towards impartial governance. But it does not imply the general application of the rule of law in the sense of all individuals being treated equally in the public sphere. The relevant example is ancient China. It was the first society to introduce meritocratic recruitment in the public administration but that in no way meant equal treatment of individuals. In the words of Finer (1997, p. 455), "[t]hroughout all the changes in the form of the state … certain characteristics continued to prevail … [c]ollective and mutual responsibility, not individualism; authoritarianism, paternalism, and absolutism, not self-determination; inequality and hierarchy, not equality before the law; subjects not citizens, duties not rights." So, state capacity does not imply the rule of law. Instead, the latter is driven by the deeper factors that affect societal responses to existential uncertainty reviewed here. The fourth and final factor that we turn to is the nature of food production.

2.4 | Production

It is revealing to start by considering the nature of production in the small group settings characteristic of simple hunter-gatherers (Boehm, 1999; Flannery & Marcus, 2012; Woodburn, 1982). While simple hunter gatherers may keep those plant-based resources gathered by them, they

share animal-based ones. This is because animal-based resources are both variable and, lacking appropriate technology, impossible to store thus making risk pooling a rational strategy. In addition, food storage would be unfeasible for hunter-gatherers who are permanently on the move (Diamond, 1997). Risk pooling, together with the inability to accumulate wealth and transmit it intergenerationally, reinforces egalitarianism (see also, Boix, 2015; Smith et al., 2010).

A direct implication emerging from this is that as food resources become more predictable and storable, risk pooling should be less rational and social hierarchy more likely. This is exactly what happens in complex hunter-gatherer societies that are characterized by a more predictable resource base, storage and, as expected, a degree of social stratification (Hayden, 1995; Knauft, 1991; Woodburn, 1982). A case in point is that of the Native Americans of the Northwest Pacific Coast before European contact (Ames, 1994; Boix, 2015). These peoples lived in an environment rich in salmon. Its exploitation—fishing and storage—required controlling the specific location where this resource was abundant. Flannery and Marcus (2012) suggest that an important factor determining control is who got to the prime locations first. Individuals with access to these resources were able to accumulate wealth and this explains social stratification in these societies.

The shift to settled agriculture led to increases in food production and consequently greater population densities. Higher population densities can lead to social hierarchy for a range of reasons, some of which have already been mentioned. Larger societal size weakens kinship ties, pushes against cognitive constraints when trying to fathom the intention of others, and reduces the likelihood of repeated interactions thus increasing uncertainty in social exchange and opening the way towards hierarchically ordered personal relationships. Higher population densities have been linked to private property and, from there, social inequality. Moreover, higher population densities increase the likelihood of both intra and intergroup conflict and thus put a premium on hierarchy as a way to reduce it. To these rationales, we can now add another: larger societies have a greater scope for specialization in economic and social roles (see, for example, Childe, 1936). To the extent that different activities offer different returns, this can lead to inequality. This may happen simply because some economic activities may be more profitable than others.

But inequality can also emerge if some activities afford opportunities for economic and political control. One example is the centralization of storable food surplus and its subsequent redistribution in the context of consumption smoothing. This opened the door to the concentration of power in the hands of those organizing storage and redistribution (Diamond, 1997; Johnson & Earle, 2000; Mayshar et al., 2022). Another example is the mobilization of the group to obtain food resources. Group mobilization on its own does not imply elite control. In simple hunter-gatherers, hunting for big game is a cooperative endeavor but no hierarchy exists, probably because of the small societal size, the unpredictable nature of food resources and the absence of storage. However, in societies where food is more predictable and storable, the need to mobilize the group to obtain it opens up the possibility of elite control (Hooper et al., 2010). One example were the Eskimo communities of Alaska as observed by Europeans around the mid-nineteenth century. Mobilization was necessary to hunt whales successfully since hunting was undertaken by organized boat crews of seven to ten men led by an *Umialik* or whaling captain. The *Umialik* financed the construction of the boat and managed both the hunt and the distribution of the catch—assigning to himself a disproportionate share. Eskimo society was stratified, with the *Umialik* and his family at the top (Boix, 2015).

A further, notable example of social hierarchy emerging from the need for collective action to obtain food is Wittfogel's (1957) "hydraulic hypothesis". In areas with little rainfall but large rivers, social coordination to build large-scale irrigation projects was necessary to increase agricultural productivity. This empowered enterprising individuals able to organize and later control access to

water resources, thereby laying the basis for social stratification (the examples are Mesopotamia, Egypt, China, and Mexico; see also, Finer, 1997). Empirical evidence has been provided by Bentzen et al. (2016) who show that countries with a higher irrigation potential—land where irrigation can more than double yields as a share of land suitable for agriculture—are less democratic today. These scholars identify historical land inequality—from 1880 up to the mid-twentieth century and thus, before major land reforms in the 1960s and 1970s—as an important transmission channel. Focusing on pre-industrial societies, Kyriacou (2019) reports that the presence of irrigation as well as the availability of food storage are positively associated with social stratification and the latter is, in turn, negatively associated with rule of law in the guise of checks on the power of leaders and the absence of bias in favor of elites when resolving disputes between individuals.[2]

While irrigated agriculture has been linked to more social stratification, rainfed agriculture has been linked to more equality (see Jones, 1981). In areas with sufficient rainfall, autonomous production is feasible thus reducing the capacity of ambitious individuals to accumulate resources and power compared to societies relying on irrigation-fed agriculture. Thus, societies relying on rainfed agriculture should, all other things being equal, be less hierarchical. But they should also be more individualist than regions practicing irrigated agriculture since sufficient rain reduces the need to coordinate within ingroups to access water resources. Individualism is, moreover, likely to be promoted insofar as it is not necessary for farming households to cooperate with each other during planting and harvesting.

Evidence on the link between rainfed agriculture and individualism has emerged from China and specifically a comparison of rice-growing regions south of the Yangtze River that rely on irrigation, and regions in the north of the river that grow rainfed cereals (Talhelm et al., 2014). Rice is much more labor intensive than wheat and requires farmers to cooperate especially during planting and harvesting thus potentially strengthening societal ties. Consistent with this, these authors show that people in regions where irrigated rice farming is prevalent are more collectivist while those in rainfed wheat-growing regions are more individualist. Based on a sample of up to 99 countries, Ang (2019) shows that individualism emerged in societies engaged in the farming of less labor-intensive crops, whereas societies engaged in the farming of more labor-intensive crops are more collectivist.

Cross-country empirical work supports the link between rainfed agriculture and equality. Haber (2012) reports a non-linear relationship between rainfall levels and democracy. He argues that in arid areas practicing irrigation agriculture or tropical areas where plantation agriculture is suitable, the resultant social inequality led to autocratic regimes. Alternatively, in areas with moderate rainfall, agriculture was undertaken in the context of family farms, and this underpinned greater social equality and, ultimately, democracy. Previously, Easterly (2007) reports that the ratio of land suitable for growing wheat versus sugar cane is significantly and positively correlated with the share of family farms in the nineteenth and twentieth centuries. Wheat can be farmed by autonomous family units, implying a degree of economic equality, while sugar implies plantation agriculture and large economic disparities between plantation owners and workers. Easterly shows that the share of family farms is significantly and negatively associated with contemporary inequality measures. Moreover, using the wheat versus sugar ratio as an instrumental variable for contemporary inequality, he shows that the latter undermines economic development, governance and education. Welzel (2013) puts forward the cool water (CW) condition that is fulfilled in areas with moderately cold temperatures, continuous seasonal rainfall, and permanently navigable waterways. In areas where the CW condition is satisfied, production can be both greater (these areas are more productive) and more autonomous (family farms are the norm and access to navigable rivers democratizes market access). This contributes towards the

development of contractual society where social exchange is voluntary. Alternatively, social relationships in irrigation-based societies will tend to be coercive (see also, Powelson, 1997). Contractual relationships will, in turn, contribute towards the emergence of "emancipatory values" that include individualism. Welzel (2013) provides cross-country empirical evidence showing that the CW condition is positively associated with emancipatory values.

Scholars have also offered numerous historical examples linking rainfed agriculture to equality. Writing on Athenian democracy, Finer (1997) explains that until the fifth century BCE, the economy was largely based on rainfed cereal farming. This set the basis for autonomous production and family farms illustrated by the estimate that in the fifth century BCE, three quarters of citizens owned land. Patriquin (2015) states that farm sizes ranged between 20 and 60 plethora (one plethora was around 900 square meters) and that in the late fourth century BCE, the wealthiest 10% of citizens owned 30–35% of land and 70% was owned by 70% of citizens. While estimates of land distribution may vary depending on the source, there is strong evidence of economic equality in Athenian society. And according to this author, economic equality was the basis of political equality, most notably in the Assembly and the courts that were open to all male citizens (the Council was not open to the lowest classes). Any citizen could bring a case to court, including one against the state. In fact, "impersonal principles of law and citizenship were taking precedence over the personal rule of kings and lords" (p. 16). Moreover, taxation was progressive since taxes fell almost entirely on the rich. Haber (2012) frames the wars between the ancient Greeks and Persians as clashes between egalitarian and democratic societies dependent on rainfed agriculture and autocratic ones based on irrigated agriculture. Writing on ancient Israel, Finer (1997) explains that it was a relatively egalitarian society of pastoralists and farmers dependent on rainfed agriculture.

Russia had neither irrigation agriculture nor the conditions for autonomous production. Etty (2007) explains that, historically, the most abundant rain fell on regions worst suited for agriculture. In those regions best suited for agriculture, it rained less and, when it did, it was torrential thus ruining one in three harvests. The growing season was short (6 months compared to 9 in Europe) meaning that agricultural activity was concentrated and received less rain that fell disproportionately in the warmer months. This required labor pooling and made extended families rational. Resource scarcity combined with the difficulty of autonomous production is likely to have contributed towards the emergence of a hierarchical and inward-looking society, despite the absence of irrigation agriculture.

Another notable example is Italy. Banfield (1958) coined the term "amoral familism" to describe social interaction in a southern Italian village in the mid-1950s. Amoral familism is an ethos of strong suspicion of non-(nuclear)family members and the legitimacy of behavior as long as it promotes family interests. Inspired by Banfield's insight, Putnam et al. (1993) report empirical evidence of the presence of social capital, mainly generalized trust (trust in strangers), as well as horizontal social relationships in the north of the peninsula, while in the south particularized trust is the norm and hierarchy much more prevalent. Putnam et al. (1993) trace these differences to the eleventh century. In the north, relatively civic and self-governing communities emerged in the context of republican city-states, most notably in Florence, Venice, Bologna, Genoa, and Milan (see also, Guiso et al., 2016; Mungiu-Pippidi, 2015). In the south, the Norman conquest established a centralized and hierarchical state dominated first by a king and, over time, a landed aristocracy. Turchin (2006) argues that the origins of these differences are older and date to the collapse of the Roman empire in the sixth century CE during which the north was settled by relatively egalitarian and high trust Germanic tribes most notably the Lombards. While these historical explanations are illuminating, they may not be the ultimate causes for the observed differences. A deeper and

complementary cause for the differences between the north and south could be geography. Sowell (1981) explains that the north concentrates most of the arable land and enjoys higher and more frequent rainfall while in the south arable land is scarce and rainfall low and highly variable. Guiso et al. (2006) state that the south has historically been characterized by latifunds, while in the north, cultivation has been undertaken in the context of smaller plots. Thus, the differences between the north and south could also be due to the possibility that biogeography allowed for relatively more autonomous production to take root in the former.[3]

2.5 | The importance of diversity within and between groups

Previously, we saw that the rule of law is less likely to emerge in stratified societies since equal treatment of individuals in similar circumstances is less likely the more hierarchical the personal relationships between people. Stratification has been linked to genetic diversity within groups. This diversity emerged in the course of migrations out of East Africa tens of thousands of years ago: as groups of people left to establish new settlements further away, they carried with them only a subset of the overall genetic diversity of their parental colonies, meaning that genetic diversity within groups decreased with migratory distance from East Africa (Ramachandran et al., 2005). Exploiting data on pre-industrial societies, Galor and Klemp (2017) show that genetic diversity within groups, as determined by the exodus of peoples from Africa, led to social stratification because, they argue, it implied diversity in cognitive and physical traits. They then link this greater stratification to more autocratic rule measured through a range of variables from the SCCS that reflect the existence of checks on the exercise of power by leaders. One way that cognitive and physical diversity could impact on social inequality is through the division of labor. Depetris-Chauvin and Ozak (2020) relate higher intragroup diversity—both genetic and linguistic—to greater pre-industrial occupational specialization. While these scholars do not explore the impact of specialization on social inequality, insofar as different occupations yield different returns, the division of labor may lead to social stratification within groups.

While within group diversity can undermine the rule of law through social stratification, between group diversity may undermine equality before the law insofar as it makes intergroup conflict more likely since, recall, conflict may reinforce both hierarchical relationships and ingroup bias. The impact of diversity on conflict depends on the nature of the goods being fought over by groups. Spolarore and Wacziarg (2016, 2019) distinguish between conflict over private or rival goods such as territory, historical sites, or natural resources (including prime farmland), and conflict over public goods which are non-rival and, once provided, must necessarily be consumed by all (see also, Esteban et al., 2012; Olson, 1969). They argue that groups that are more closely related (low diversity between groups) are more likely to engage in conflict over private goods because they will tend to have more similar preferences over such goods and thus prefer them equally. Alternatively, the similarity of preferences between groups is likely to reduce conflict over public goods or, conversely, conflict between groups over public goods is more likely the more diverse their preferences. Biogeography could be a deep source of intergroup differences. Michalopoulos (2012) argues that variation in regional land quality and elevation, gave rise to location-specific human capital, something that diminished population mobility and led to the formation of localized ethnolinguistic groups. Alesina et al. (2016) identify geographic inequality—in elevation, land suitability for agriculture, distance to the coast, precipitation, and temperature—as a root cause of contemporary income differences between ethnic groups.

3 | ECONOMIC INEQUALITY, CULTURE, AND GOVERNANCE IN CONTEMPORARY SETTINGS

Figure 2 indicates that the relationship between economic inequality, culture and governance is a complex one due in part to the two-way causal relationships among these variables. In this section we will review work that has focused on each of these bivariate relationships.

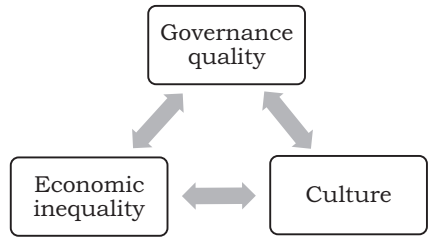

FIGURE 2 The causal relationships.

3.1 | Economic inequality and governance

Consider first the relationship indicated by the top-left arrow in this figure—that between economic inequality and governance. Economic inequality may undermine good governance because of the actions of individuals or groups at both ends of the income distribution. Those at the top end of the distribution will employ their superior resources to skew governance outcomes in their favor. Economic elites can undermine impartial governance by either influencing the institutions in place or by putting into place institutions that represent their interests (Acemoglu et al., 2005; You & Khagram, 2005). This can lead to a popular backlash in the form of revolution—communist or populist (Glaeser et al., 2003). The subsequent expropriation of elite assets to redistribute resources to the poor will undermine property rights. And in many cases, these revolutions simply replace existing economic elites with new ones thus implying the continued capture of governance. Relatively underprivileged individuals or groups on the other hand may contribute to bad governance because they are pushed towards petty corruption. You and Khagram (2005) put forward that in unequal societies with deficient public services, the relatively poor may turn to petty corruption to obtain these (see also, Uslaner, 2008). Moreover, the under-supply of public services creates bottlenecks and thus opportunities for corrupt behavior from public officials who can use their public authority to increase their income. Kyriacou (2013) shows that economic inequality between ethnic groups (ethnic inequality also known as horizontal inequality) undermines good governance. Consistent with the discussion here, he argues that this is due to relatively poor ethnic groups striving to obtain access to basic public services as well as wealthy ethnic groups employing their superior resources to bias public sector decisions in their favor.

Democracy can potentially magnify the negative impact of economic inequality on governance. Democracy in unequal settings is likely to bring with it redistributive pressures from the poor and middle classes in the form of progressive taxation and social spending (based, originally, on Meltzer & Richard, 1981). Rather than directly oppose redistribution towards poorer groups, something that may harden calls for greater redistribution, economic elites can employ their resources to subvert legal, regulatory, and political institutions to maintain the status quo distribution of

resources (see, for example, Acemoglu & Robinson, 2008; Acemoglu et al., 2015). Empirical evidence indicating that economic elites in democracies may dominate legislative decisions has emerged from the United States. Gilens and Page (2014) show that the predicted probability that a policy is adopted is strongly and positively associated with the preferences of elite citizens defined as those belonging to the ninetieth income percentile. Conversely, the preferences of the average citizen—those belonging to the 50th percentile—had no bearing on policy (for more evidence on the influence of economic elites on legislative outcomes, see Bartels, 2008; Gilens, 2012; Stiglitz, 2012).

On the other end of the income distribution, poor voters may enter clientelist political relationships within which they sell their vote in exchange for private material and non-material benefits from political patrons (Hicken, 2011; Kitschelt & Wilkinson, 2007). According to Hicken (2011) clientelism can drive corruption because it reduces the ability of voters to hold politicians accountable thereby creating an environment of impunity (see also, Bardhan, 2022). Moreover, clientelism—in the guise of discretionary access to public services, the circumvention of laws and regulations, and non-merit-based staffing of the public administration—can undermine the effectiveness of the public administration and the rule of law (Kyriacou, 2023). Lindberg et al. (2022) report robust empirical evidence confirming that clientelism will tend to promote corruption and undermine the rule of law.

The discussion so far suggests that economic inequality may be inimical to good governance. Gupta et al. (2002) turn the direction of causality around when they argue that corruption can worsen inequality and poverty. Obviously, corrupt public officials are more likely to be responsive to elite offers than non-corrupt ones. Thus, corruption may reduce both tax pressure and tax progressiveness to the benefit of economic elites and at the cost of less well-off groups. Or it can lead to spending on policies favoring the relatively wealthy to the detriment of spending targeting the poor (see also, Devarajan & Reinikka, 2004). Relatedly, reduced tax pressure means fewer resources for policies that can help equalize market incomes, most notably, public education and health policies. This is compounded by the fact that corruption tends to bias the allocation of public resources towards capital-intensive sectors where corruption opportunities are abundant, to the detriment of other sectors, where the potential rewards are smaller. Empirical evidence has emerged indicating that corrupt countries overinvest in public infrastructure which, moreover, tends to be of lower quality (Tanzi & Davoodi, 1997), spend less on infrastructure maintenance than on new capital projects, spend more on defense (Gupta et al., 2001b), and less on health and education (Gupta et al., 2001a; Liu & Mikesell, 2014; Mauro, 1997, 1998) and social welfare programs (Hessami, 2014).

Another way that corruption can increase income inequality is through the unequal incidence of bribery. Fisman and Golden (2017) suggest that the poor may be more vulnerable to "shake downs" for bribes by public officials because they are less likely to complain than the relatively wealthy. To support this, they report evidence from a study by Fried et al. (2010) that showed that Mexican traffic police stopped wealthy and poor drivers (simulated by hired confederates) with equal frequency but were more likely to extort bribes from the latter. In posterior interviews, the police confessed that the reason for this was the expectation that more affluent drivers would complain. In another field experiment, this time among traffic police in Malawi, Robinson and Seim (2018) found that fewer bribes were extracted from (confederate) drivers who signaled that they were wealthy and politically connected. Fisman and Golden (2017) add that even if the incidence of bribery were the same across income groups, if public officials seek a fixed bribe for their services, this will hurt poor people more.

From another perspective, corruption can increase inequalities because it reduces popular support for the welfare state (Hanousek & Palda, 2004; Rothstein, 2011; Svallfors, 2013). If people perceive government as generally efficient, they are more likely to tolerate the higher tax pressure associated with more robust welfare states. Conversely, bad governance is likely to reduce support for social spending and reduce tax morale (including higher tax evasion) to the detriment of economic equality. Good governance—under the guise of a politically independent and meritocratically staffed public administration—may also affect redistributive efficiency. Kyriacou et al. (2018) consider the impact of an effective public administration, on the redistributive efficiency of social transfers and direct taxes. They measure redistribution as the difference between market and net income Ginis. Redistributive efficiency is measured in terms of the degree of redistribution attained for a given level of transfers (social benefits in cash) and taxes (payroll and income taxes). They find that more effective public administrations achieve more redistribution for any given level of spending and taxation, even after controlling for a range of potentially confounding variables, including, economic and demographic factors that may impact on the redistributive profile of fiscal policy.

Chong and Gradstein (2007) examined the two-way relationship between interpersonal economic inequality and governance and conclude that while the quality of governance does have a negative impact on inequality, "the causal direction from income inequality to institutional quality dominates the linear relationship between these variables regardless of the institutional [see governance] indicators, the sample of countries, and the income distribution variable used" (p. 463). Additional evidence on the existence of a two-way relationship between inequality and governance is provided by Apergis et al. (2010) and Policardo and Sánchez-Carrera (2018).

3.2 | Culture and governance

Consider next the upper-right arrow, that linking culture to the quality of governance. In the previous section we saw that from a long-term historical perspective, the rule of law was more likely to emerge in societies with flatter social hierarchies and weaker ingroup ties. In the context of this section, the important thing to consider is that the influence of these fundamental drivers of good governance will persist in contemporary settings in the form of individualistic and egalitarian cultures as opposed to collectivist or hierarchical ones. According to Hofstede (1980), hierarchical cultures are ones where the less powerful members expect and accept that power is distributed unequally. Regarding the individualism-collectivism dimension, in collectivist societies, people are born into tightly knit ingroups that protect them in exchange for unquestioning loyalty, while in individualist ones, ties between individuals are loose and everyone is expected to look after themselves and their immediate family. Collectivist societies impose mutual obligations and expectations in the context of ingroups that are perceived to have common fates and goals, while individualist societies put rights above duties and emphasize personal control, autonomy, and accomplishments (see also, Schwartz, 1990; Triandis, 1995). Individualism-collectivism has been identified by empirical work as the cultural dimension with the greatest and most robust effect on long run growth (Gorodnichenko & Roland, 2011) and the quality of governance (Licht et al., 2007).[4]

Egalitarianism flows directly into the expectation of equality before the law (Licht et al., 2007). The in-group favoritism inherent to collectivist societies is likely to engender corruption, nepotism and clientelism in the public sphere. In individualist societies, the relative weakness of in-group pressures and an emphasis on personal achievement and worth will contribute towards

a more meritocratic and efficient public sector (Kyriacou, 2016). Together, individualism and egalitarianism set the stage for a Weberian state described by impersonal rules applied equally and impartially to all citizens. Consistent with this, several authors have provided empirical evidence on the direct impact of these cultural traits on governance. Thus, Licht et al. (2007) show that individualism and egalitarianism are positively related to good governance and democratic accountability and, moreover, provide evidence of the causal impact of individualism. Klasing (2013) finds that these cultural traits—combined by taking their first principal component—make a significant positive contribution towards the quality of governance. Kyriacou (2016) shows that individualism improves the quality of governance and this, in turn, promotes economic development.

Tabellini (2008) considers the impact of generalized morality—as measured by generalized trust and respect for others—on governance. Generalized morality reflects the idea "that individual values support a generalized application of norms of good conduct in a society of abstract individuals entitled to specific rights" (p. 257) as well as the idea that "we are all equal, in the limited sense that the same principles of justice should be applied equally towards everybody" (p. 272). He takes the notion of generalized morality from Platteau (1994, 2000), who distinguishes between generalized and limited morality. In the case of the latter, individuals restrict the application of ethical standards to ingroups and opportunistic behavior is morally acceptable outside these groups. With generalized morality, the same ethical or moral standards are extended to ingroups and strangers. And as stated in the previous section, Banfield (1958) had coined the concept of "amoral familism" to describe the application of moral behavior within the nuclear family and the abandonment of considerations of right and wrong outside this context. Tabellini (2008) argues that good governance is likely to rise with generalized morality since: "law enforcement is easier because citizens are more likely to be law-abiding; bureaucrats are more likely to refrain from corruption; and voters expect and demand higher standards of behavior from political representatives and are more inclined to vote based on general social welfare rather than personal benefit criteria." (p. 261). He finds that generalized morality has a positive impact on a range of governance indicators.

Thus, culture can influence impartial governance. But good governance can also potentially impact on the cultural traits reviewed here. Impartial governance that, by definition, implies equality before the law, is likely to promote a more egalitarian cultural outlook. People treated equally by public authority are less likely to perceive power asymmetries as acceptable. Moreover, in societies characterized by the rule of law, meritocratic public administrations and the absence of corruption, there is less need for identified ingroups and personal hierarchical relationships as sources of predictability in social interaction. Good governance allows individuals to interact with strangers beyond ingroup boundaries since it reduces the risk that these interactions end up harming them (Rothstein, 2000). Empirical evidence indicating that good governance can undermine ingroup ties has been provided by Delhey and Newton (2005) and Rothstein and Stolle (2008) who associate more impartial institutions with more generalized trust. In addition, Hruschka and Henrich (2013) provide empirical evidence to support the idea that the quality of governance, will tend to undermine ingroup ties because it provides an alternative source of existential security.[5]

3.3 | Economic inequality and culture

Consider finally the bottom arrow, linking economic inequality with culture. Economic inequality can affect the cultural traits reviewed here in several ways. At the most basic level, income

inequality may strengthen ingroup ties because it increases uncertainty in social interaction (see Kyriacou & Trivin, 2020). Income inequality is one dimension of social heterogeneity and, like ethnic or religious diversity, makes it more difficult to predict the behavior of others thus increasing the rationality of ingroup bias. This is especially so since, in unequal settings, wealthy individuals may expect relatively poorer ones to defect from cooperative agreements that perpetuate the status quo (Boix & Posner, 1998). In addition, one would expect economic inequality to reinforce the hierarchy-versus-egalitarianism cultural trait. One reason is, again, that economic inequality increases uncertainty in social interaction and personal hierarchical relationships can be a source of predictability. Another is, simply, that economic inequality will reinforce social acceptance of steep inequalities in the distribution of power across society.

Previous work has reported a negative association between income inequality and generalized trust (for example, Alesina & La Ferrara, 2002; Bjørnskov, 2007; Delhey & Newton, 2005; Knack & Keefer, 1997; Leigh, 2006; Pickett & Wilkinson, 2009; Rothstein & Uslaner, 2005; Barone and Mocetti, 2016). Moreover, Kyriacou and López-Velásquez (2015) show that income inequality has a negative impact on a cultural variable that includes both generalized trust and respect for others. Finally, Kyriacou and Trivin (2020) provide empirical evidence to support the idea that while economic development may increase generalized trust because it reduces existential uncertainty, this positive effect is mitigated in the presence of income inequality, since the latter increases social uncertainty and thus the rationality of ingroup bias.

The possibility exists for the cultural traits described here to affect the degree of economic inequality. The reason is that when people consider others, including strangers, as part of their moral community, they may be inclined to contribute towards public policies that provide a degree of social security. Conversely, if ingroup ties are strong or, in other words, people adhere to the notion of particularized morality, they are less likely to support social welfare programs that underpin a more egalitarian distribution of income across society. Moreover, in cultures where power asymmetries are generally accepted, people may be more likely to perceive economic inequalities as legitimate. Empirical evidence has shown that historical levels of generalized trust positively determine contemporary government spending and revenues (Bergh & Bjørnskov, 2011; Bjørnskov & Svendsen, 2013). In addition, indirect evidence of the impact of culture on welfare policies has emerged from empirical work identifying a (causal) relationship running from individualism (Nikolaev et al., 2017) and generalized trust (Bergh & Bjørnskov, 2014) to lower economic inequalities.

On the other hand, one brand of individualism called "rugged individualism" has been associated with weaker redistributive preferences in the United States (Bazzi et al., 2020). According to these authors, the US frontier historically attracted individualists but also deepened individualism among those living there because the harsh conditions of frontier life put a premium on independence and self-reliance. Contemporary opposition to redistribution in historically frontier locations is linked by these scholars to the abundance of land at the frontier. This may have created expectations of upward mobility through effort and, following Alesina and Angeletos (2005), these expectations may weaken preferences for redistribution. This result suggests that we should be cautious before assuming that a more individualistic culture is necessarily associated with more redistributive preferences and egalitarian outcomes. In the same vein, we should not assume that redistribution will be weak in collectivist cultures. Collectivist societies tend to have strong redistributive norms within the context of ingroups (Platteau, 2000). Ceteris paribus, the extent of redistribution in such societies is likely to increase with the size of ingroups.

4 | CONCLUSION

The discussion in the previous section suggests that both economic inequality and culture can impact on good governance. Kyriacou (2019) provides empirical evidence based on a cross-section sample of up to 88 countries, showing that both economic inequality and a hierarchical-collectivist culture can undermine good governance although the estimated impact of culture is stronger and more robust. These results must be placed in the fuller context displayed by Figure 2. The absence of impartiality will in turn, perpetuate both hierarchical-collectivist cultures and economic inequities. Moreover, economic inequality may contribute towards the general acceptance of asymmetric social relationships and increase the rationality of ingroup bias, while these cultural traits may reduce support for public policies aimed at reducing economic inequalities. This analysis points to the possibility that societies may be trapped in a high-inequality-"wrong culture"-poor governance equilibrium. In this vein, Rothstein and Uslaner have put economic inequality and bad governance at the beginning of a causal chain generating what they term an "inequality trap": high inequality or bad governance reduce social trust, and this undermines the putting into place of universalistic social policies that can secure greater equality (Rothstein, 2011; Rothstein & Uslaner, 2005; Uslaner, 2008). This leads these authors to the pessimistic conclusion that countries may be trapped in a high inequality, bad governance and low trust equilibrium or, alternatively, may be blessed with a low inequality, good governance and high trust one.

Consistent with this, Rothstein and Uslaner (2005) provide evidence on the "stickiness" of economic inequality, corruption, and generalized trust. This evidence is based on relatively strong correlations between initial and final values of each variable in a panel of countries (see also, Kyriacou, 2019). The stickiness of culture has also been confirmed by work reporting high correlations in trust levels between parents and children, and between second-generation immigrants and current inhabitants of the country of origin (both are consistent with the inter-generational transmission of cultural values), as well as contributions that trace contemporary trust levels to long-term historical factors (for discussions and related citations, see Alesina & Giuliano, 2015; Buggle & Durante, 2021; Guiso et al., 2016). And, of course, in Section 2 we have seen how the contemporary cultural traits of egalitarianism-hierarchy and individualism-collectivism may ultimately depend on the biogeographic conditions facing early societies.

But evidence has also emerged indicating that these cultural traits do evolve over time. Beugelsdijk et al. (2015) exploit data from the World Values Survey to consider and compare responses to a set of questions that are related to these cultural traits from two age cohorts: one born between 1902 and 1958 and another cohort born after 1958. Among their findings, they report that societies have become, on average, more individualist and egalitarian. These changes are absolute rather than relative or, in other words, the changes emerge when tracking their evolution within rather than between countries. Tarabar (2019) employs the same data to show that this cultural change is driven, in part, by economic development (see also, Greenfield, 2013; Hamamura, 2012). This raises the more optimistic prospect that a cultural environment more conducive towards better governance may eventually emerge in countries that experience sustained economic growth rates.

More work is needed if we are to fully understand if and how cultural traits reflecting social power hierarchies and group ties change over time. One approach in this respect relates cultural persistence to a change in the state of the world, the cost of learning, and the proportion of the population that are "traditionalists" defined as those that are influenced by the values, beliefs, and actions of the previous generation (Nunn, 2022). Cultures will persist the smaller the change in the environment, the greater the cost of learning—a cost that is not borne by those

following tradition—and the greater the number of traditionalists. Another promising approach is Acemoglu and Robinson's (2023) distinction between fluid and hardwired cultures. The former can allow for "discontinuous jumps" or "saltational change" in cultures in response to economic or social changes, while the latter imply a greater degree of cultural persistence.

Finally, the relationships described in Section 3 are probabilistic rather than deterministic. This allows some scope for human agency. Public officials with a genuine interest in introducing governance reforms are not completely helpless, especially if they are supported by civil society organizations with the same agenda. The scope for reform can be broadened by the international community, provided that international institutions can leverage their influence in badly governed countries to support domestic reform efforts. There is some debate about whether reform should follow a "big bang" or gradualist approach. The "big bang" or radical approach is supported by work identifying individual expectations about the actions of others as a key driver of transitions from one governance equilibrium to another (see, among others, Andvig, 1991; Bardhan, 1997; Fisman & Golden, 2017; Persson et al., 2013). In corrupt settings, any individual who unilaterally decides to abstain from corruption can be "priced out" from accessing scarce public resources. Given the potential private or individual costs of foregoing corruption, it will only make sense to eschew corrupt behavior when you expect most individuals to behave in the same way. The strength of the radical approach lies in its capacity to change individual expectations more fully. Moreover, compared to gradual or incremental reform, radical reform is faster and thus may make it more difficult for those with an interest in the status quo to react. On the other hand, because the stakes are greater with radical reform, so too is the likelihood of political instability due to opposition from vested interests.[6]

To the extent that policy makers seeking improvements in governance have some agency, they could focus their efforts on reducing economic inequality. Lower inequality reduces the capacity of economic elites to capture public sector agents as well as their incentive to do so since, in more equal countries, redistributive demands will be weaker. Less inequality also reduces the need for poorer individuals to bribe public officials or rely on personal patron-client relationships to access valued public resources—relationships that are antithetical to impartial governance. A key policy that can soften economic inequality is equal opportunity in education since this can help reduce inequalities in market income. Equal opportunity in education is not a matter of equal spending per student. Rather, it means assigning public resources to minimize the impact of factors beyond a person's control on his or her educational achievement (Roemer, 1998). Facilitating the education of people on the left of the income distribution can improve governance by reducing economic inequality. But it can also improve governance through other channels. It can help weaken patron-client ties by improving one's employment prospects (Uslaner, 2017). It makes it more likely that bad governance will be detected and contested since more educated people are more knowledgeable, more articulate, and less fearful of official reprisals (Botero et al., 2013; Pellegrini & Gerlagh, 2008; Treisman, 2000). Finally, education can also impact favorably on governance because it can undermine ingroup ties or, conversely, strengthen ties across groups, as suggested by empirical evidence that has established a positive relationship between education and generalized trust (see, for example, Helliwell & Putnam, 2007; Huang et al., 2011; Knack & Keefer, 1997; Uslaner, 2002). While the "inequality trap" suggests that the putting into place of public education policies that empower poorer individuals may be difficult, we end on a more optimistic note by pointing to empirical evidence showing that education inequalities within countries have been falling over time mainly due to a sizable decline in illiteracy (Castelló-Climent & Doménech, 2021).

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This article is drawn from my book *Inequality and Governance* published in the Routledge Frontiers of Political Economy series in 2019. The book also covers insights from social psychology and experimental economics and provides additional empirical evidence on many of the ideas presented here that, due to space constraints, have been omitted. Where necessary, I have added relevant work that has been published since then as well as work published prior to 2019 but which only now has come to my attention. I would like to thank Routledge (Taylor and Francis) for their kind permission to reproduce parts of *Inequality and Governance* in this review article. I would also like to thank the two anonymous reviewers of this article for their insightful comments. Any errors are entirely my own.

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CONFLICT OF INTEREST STATEMENT

The author has no conflict of interest to declare.

DATA AVAILABILITY STATEMENT

Data sharing not applicable to this article as no datasets were generated or analysed during the current study.

ORCID

Andreas P. Kyriacou https://orcid.org/0000-0001-9571-2833

ENDNOTES

[1] The nature of production combined with the disease environment has also had an impact on social inequality and governance through their effect on the colonization strategies adopted by Europeans since the sixteenth century CE. Because of space constraints we do not review this work here. Kyriacou (2019, chapter 3) reviews related work and, moreover, interprets a range of religious beliefs as the product of variations in hierarchically ordered personal relationships and ingroup bias that may ultimately be rooted in biogeography.

[2] Taken together with the results reported in the previous pages, and consistent with the basic story depicted in Figure 1, Kyriacou (2019) finds that food storage, intergroup conflict, and population density are positively associated with social stratification and that stratification is negatively associated with the rule of law.

[3] An additional source of existential uncertainty impacting on social capital could be natural disasters. Buonanno et al. (2023) argue that earthquakes may promote cooperative behaviour as a way of coping with their aftermath and in anticipation of future adverse events. Based on a sample of Italian municipalities, they find that high-magnitude earthquakes have a positive effect on pro-social behaviour. Interestingly they also report that the results are driven by "ancient earthquakes" (those occurring before 1861) and "old earthquakes" (events between 1861 and 1945), thus raising the possibility that contemporary civic capital may partly be driven by a history of natural disasters.

[4] Other cultural dimensions include masculinity, uncertainty avoidance, long-term orientation, hard work and thrift, and tolerance. However, to date, work relating culture to governance quality has focused on cultural traits reflecting the strength of ingroups and, to a lesser extent, social asymmetries (for a recent review, see Roland, 2020).

[5] Interestingly, Freitag and Traunmüller (2009) have identified impartial institutions as key drivers of *both* generalized and particularized trust. While generalized trust will be facilitated by impartial national and supranational institutions, particularized trust will be fomented by impartial local institutions. As they put it, "[i]t will be rather difficult to trust neighbours, acquaintances and friends if local authorities signal that it is acceptable to cheat or bribe and if the police do not intervene and sanction harmful actions within one's immediate social surroundings." (p. 790). Additional determinants of both types of trust proposed by these authors are personal experience in social interactions within and outside ingroups, as well personal psychological predispositions. For example, indi-

viduals with a sense of control tend to be more trusting of people they know, while those who are more optimistic are more trusting of strangers.

[6] An example of radical reform against corruption is Georgia in the context of the 2003 Rose Revolution led by Mikheil Saakashvili (for the details see, Fisman and Golden, 2017). Within the first two years of his presidency, more than 60% of the country's police were fired and corruption in other government offices was actively prosecuted. Expectations of corrupt behavior were drastically reduced. Georgia went from being the 124th least corrupt country in 2003 (according to Transparency International's Corruption Perception Index), to the 41st least corrupt in 2022. While Fisman and Golden (2017) raise the possibility that this was achieved in part by undermining civil liberties, this is not supported by Freedom House's civil liberty measure that ranges from 1 to 7 and falls with the improvement of civil liberties: in Georgia, the civil liberties score went from 4 in 2003 to 3 in 2012 when Saakashvili failed to gain reelection.

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