Embedded Culture as a Source of Comparative Advantage[*]

Luigi Guiso
(EIEF and CEPR)

Paola Sapienza
(Hoover Institution, NBER and CEPR)

Luigi Zingales
(University of Chicago Booth, NBER and CEPR)

December 2024

Abstract

This paper examines how the concept of embedded culture played a transformative role in the ongoing cultural revolution within economics and business. We trace the field's shift from the 20th-century concept of homo economicus universalis to an approach incorporating cultural embeddedness in economic behavior. Beyond documenting this intellectual transformation, we identify fertile areas for future research and explore how an embedded cultural perspective can enhance both our understanding of economic phenomena and the design of effective policies.

JEL: Z1, D21, M14, Z13

Keywords: Cultural Economics, Corporate Culture, Embedded Culture, Corporate and Societal Culture Transmission

[*] Paper prepared for the Handbook of Culture and Economic Behavior. We thank participants of the Economics of Culture, Kabiller conference 2024.

1. Introduction

During our graduate studies in the late 1980s and early 1990s, the concept of culture was notably absent from economic textbooks. When mentioned in classrooms, it was often dismissed as an imprecise, intangible notion. Today, cultural explanations have gained widespread acceptance in economics, finance, and accounting, with over 9,000 papers in the SSRN database incorporating "culture" in their abstracts. The past three decades have witnessed a profound cultural revolution in economics, fundamentally reshaping both its analytical scope and predictive capabilities. This handbook endeavors to assess the impact of this transformative shift.

This chapter focuses specifically on examining how the sociological conception of culture—what we term "embedded culture"—has influenced and continues to shape this revolution. As scholars who were among the first to introduce sociological cultural frameworks into economics and finance at the dawn of the third millennium, we offer a unique analytical perspective. Our analysis pursues four distinct objectives: First, we aim to historically contextualize the cultural revolution, emphasizing why ideas now widely embraced were once considered beyond the boundaries of economic inquiry. Second, we highlight the evolution and significance of effective interdisciplinary cross-fertilization. While the latter half of the 20th century saw economics primarily colonizing other social sciences, the 21st century has marked a crucial shift toward economics becoming more receptive to insights from other disciplines.

Third, we delineate two fundamental conceptualizations of culture's role in economics: the functional perspective, which views culture as an outcome of optimization processes, and the embedded perspective, which recognizes economic action as inherently situated within cultural and social normative frameworks. While both are relevant, we will focus mostly on the latter, arguing that it shows more promise. Fourth, we examine how embedded culture illuminate individual and firm behaviors in economic and financial markets. These four objectives collectively serve our ultimate goal: identifying promising avenues for future research within this analytical framework.

In Section 2, our discussion begins with a brief historical contextualization. Section 3 follows with an exploration of how culturally based notions of civic capital and trust have transformed our understanding of financial and economic transactions. In Section 4, we review the debate on the origin of culture and its role as a source of comparative advantage (or disadvantage). These sections primarily regard culture as a societal phenomenon. Section 5 shifts focus to examine the role of culture as a firm-level phenomenon, which raises new challenges and opportunities. In the literature of corporate culture, the functional approach to culture has been dominant in contrast to our preferred conceptualization of culture as an embedded phenomenon. This gap presents particularly fertile ground for studying the role of embedded culture in organizational contexts. Section 6 outlines these opportunities. Section 7 concludes.

2. From Homo Economicus to Embeddedness

Research on culture has a long tradition in social sciences with political scientists, sociologists, anthropologists, and psychologists each contributing fundamental insights to the study of culture. Economics, historically, was no exception to this intellectual tradition. Adam Smith, notably, conceived of his arguments in the "Theory of Moral Sentiments" as inherently interconnected with those in "The Wealth of Nations," thus establishing a foundational link between moral philosophy and economic theory. John Stuart Mill further exemplified this tradition, offering what is now recognized as an early utilitarian framework for understanding the emergence of moral norms (Macleod, 2016), thereby demonstrating the historical integration of cultural considerations in economic thought.

The landscape of economic research underwent a profound transformation in the post-World War II era, coinciding with the discipline's increasing embrace of mathematical formalization. This methodological shift precipitated a decline in the prominence of cultural explanations, primarily due to two interrelated factors. First, culture's inherent complexity and resistance to precise definition rendered it poorly suited to the mathematical rigor that was becoming the discipline's methodological standard. Second, the geographical concentration of economic research within the US and UK during this period created an environment of limited cultural variation among economists. This homogeneity facilitated the emergence of a universalist perspective that posited three fundamental driving forces of human behavior: rationality, self-interest, and the maximization of individual utility. These elements coalesced into the conceptual framework of *homo economicus*. Given the presumed universality of these behavioral traits across human societies, we designate this theoretical construct as *homo economicus universalis*.

2.1 The triumph of homo economicus universalis

The fall of the Berlin Wall in 1989 marked a watershed moment that was perceived not merely as the "end of history" but also as the definitive validation of the homo economicus model's universal applicability. Shiller et al. (1990) exemplifies this evolution by arguing that the behavioral assumptions of *homo economicus* exhibited remarkable explanatory power even in the context of the transforming Soviet Union. This view implied that identical economic principles could be applied across vastly different institutional contexts, from established market economies to transitioning socialist systems. Such theoretical confidence profoundly influenced policy formulation, as evidenced particularly in the architectural framework of Russian privatization initiatives (Boycko et al., 1997).

By the 1980s, the *homo economicus universalis* framework had evolved into the intellectual foundation underlying the Washington Consensus—a comprehensive set of policy prescriptions promulgated by Washington, D.C.-based institutions, including the International Monetary Fund (IMF), the World Bank, and the U.S. Treasury Department. This universalist conception of economic behavior fundamentally shaped these influential organizations' approach to global development and institutional reform. In addressing developmental challenges, economists from these influential institutions frequently prioritized market liberalization and competitive price mechanisms, often at the expense subordinating other important considerations such as local institutional contexts and cultural factors to this universal economic framework.

The emergence of behavioral economics presented the first substantive challenge to the *homo economicus universalis* paradigm (see the seminal work of Kahneman and Tversky, 1979 and Richard Thaler's analysis of behavioral "anomalies" – observed departures from rationality -- in his series of contributions to the Journal of Economic Perspectives beginning in the late 1980s). However, this criticism targeted the assumption of perfect rationality rather than the model's universal nature. By incorporating psychological insights, behavioral economics sought to make homo economicus more human but not less universal.

Within this intellectual framework, culture assumed a peripheral role in mainstream economic analysis, primarily serving as a coordination mechanism in multiple equilibria scenarios (Kreps, 1990; Greif, 1994). Paradoxically, the economic literature adopted a quasi-Marxian approach, reducing the complexity of human behavior - including non-market interactions -- to economic calculations and incentives, often expressed in purely monetary terms. This framework modeled people's beliefs, expectations, tastes, and values as outcomes of rational choices, with any conflicts ultimately resolved through the market mechanism (see, for example, Brunnermeier and Parker, 2005).

2.2 North's Institutions

The limitations of the *homo economicus universalis* model became increasingly evident in accounting for the diverse patterns of economic outcomes across historical periods and geographical contexts. While behavioral economists had initiated a critique of perfect rationality, Douglas North's contribution to economic history developed a distinct and complementary line of criticism. Through his seminal work '*Institutions, Institutional Change and Economic Performance*,' North (1990) established institutions as fundamental determinants of economic development, defining them as 'the rules of the game in a society, or, more formally, the humanly devised constraints that shape human interaction."

North's analytical framework adopted a functionalist perspective on institutions, conceptualizing them as optimal responses to organizational challenges. This approach is exemplified in his analysis, with Weingast, of the 1689 Bill of Rights enacted by William III and Mary II following the Glorious Revolution. North and Weingast (1989) interpret this constitutional framework as an institutional solution to the fundamental commitment problem inherent in monarchical governance. The absolutist nature of monarchical power precluded credible commitments against expropriation. Anticipating potential expropriation, subjects would refrain from investing, thereby reducing the overall welfare of both the country and the monarch. The introduction of a constitution granting fundamental rights to subjects and establishing an independent judiciary effectively addressed this issue.

North's functionalist orientation led to a predominant focus on formal legal institutions. While acknowledging the existence of informal constraints—such as conventions and behavioral codes—he did not extensively explore these informal institutions or elaborate their origins. This omission had a profound impact on subsequent institutional literature. Influential contributions in this field, from La Porta et al. (1998) to Acemoglu et al. (2001), maintained this focus on formal legal institutions. Consequently, North's (1990) institutional framework, despite its contributions, inadvertently kept culture at arm's length from economic research for another decade.

2.3 Granovetter's Embeddedness

In 1944, Karl Polanyi distinguished between non-market societies, where economic activities are inserted (*embedded*) in social and political institutions, and market societies, where economic activities follow their distinctive logic of utility maximization. This dichotomy mapped non-market societies onto pre-industrial contexts and market societies onto post-industrial environments. While Polanyi's critique illuminated significant limitations of the neoclassical paradigm, his bifurcated framework inadvertently reinforced the analytical premise that *homo economicus universalis* could adequately characterize post-industrial market societies.

A significant shift in this perspective came in 1985 when Mark Granovetter challenged Polanyi's distinction. Granovetter elaborated a more nuanced theory of embeddedness within market economies, positing that economic rationality operates within—and is fundamentally shaped by—dynamic networks of social relationships. His argument advanced two critical insights: first, that analyses of pre-industrial societies often underestimated the significance of economic incentives, suggesting greater complexity in these economic systems; second, and more pertinent to our analysis, that characterizations of post-industrial societies remained persistently "under-socialized," neglecting the fundamental role of societal and cultural frameworks in shaping individual decision-making, even within ostensibly market-driven contexts.

Granovetter's theoretical framework sought to navigate between two analytical extremes: the dominant sociological paradigms that over-socialized economic behavior by attributing too much influence to social factors, and the dominant economic frameworks that under-socialized behavior by focusing predominantly on individual rational choice and incentive structures. This new perspective, while preserving the analytical significance of incentives, reconceptualized economic action as fundamentally embedded within broader social, cultural, political, and religious contexts, suggesting that even in modern market economies, decisions are not made in a social vacuum. This approach paved the way for future research integrating cultural and social factors into economic and financial studies, marking a significant step away from the narrow confines of *homo economicus universalis*.[1]

2.4 Our Approach

Our exploration into the role of culture in economic choices began within this intellectual context. While we might prefer to attribute our journey's inspiration to a thorough study of Granovetter (1985), our insights were primarily derived from our lived experiences.

As Italians, we recognized that the *homo economicus universalis* aligned poorly with our experiences in Italy, where centuries of history and social context deeply embed every economic transaction. Furthermore, as Italians living abroad, we observed that the disparities in transaction dynamics between our country of origin and the United States could not be attributed solely to different economic incentives or institutions. An additional factor was at play—one that prevailing economic models failed to capture adequately.

While cross-country comparisons presented inherent challenges due to the multitude of varying factors, particularly legal institutions, we possessed a unique advantage in our research: firsthand experience of Italy, a country with uniform legal institutions but markedly different outcomes across its regions. Robert Putnam had already highlighted this phenomenon in his book “Making Democracy Work" (1993), but he mostly focused on differences in performances of political institutions, in the presence of identical legal structures and rules. As economists, we observed that Italian regions with identical formal institutions (political and legal) yielded vastly different economic outcomes. This realization ignited our interest to investigate the role of culture—encompassing informal institutions, norms, and shared beliefs—in shaping economic behavior and outcomes.

We defined culture as "those customary beliefs and values that ethnic, religious, and social groups transmit fairly unchanged from generation to generation" (Guiso et al., 2006). Our initial work focused on how inherited cultural traits influence economic outcomes through beliefs and preferences (Guiso et al., 2003, 2006). By focusing on inherited cultural traits, we addressed the challenging issue of causality, demonstrating that culture can have lasting impacts even when

[1] Concurrent with these developments, in the early years of the second millennium, a parallel theoretical strand, spearheaded by Ernst Fehr, systematically challenged the second foundational pillar of *homo economicus universalis*—its characterization of self-interested preferences. For a comprehensive contemporary analysis, see Fehr and Charness (2024).

individuals move to new environments. Additionally, we were able to focus on the dimension of culture embedded in society rather than culture as a response to the current economic environment.

In Guiso et al (2006), we presented evidence of the effect of culture on saving behaviors, and preferences for redistribution, among other economic phenomena. The paper also discussed the persistence of cultural influences and their interaction with formal institutions, opening new avenues for research. This work laid the foundation for further exploration of how culture emerges, persists, and evolves, and how it interacts with other economic and institutional factors to shape our economic world.

A key aspect of our framework is the conceptualization of culture as fundamentally embedded in society rather than purely functional. This perspective represents a significant departure from the orthodox tradition of incorporating external elements to "solve" for equilibrium (North, 1990; Kreps, 1990). Instead, our approach recognizes culture as an inherent and inseparable component of economic systems, shaping behaviors and outcomes in ways that cannot always be fully captured by traditional equilibrium models (Jackson et al., 2012).

In our work in finance, we specifically focused on the connected concepts of social capital and trust. Putnam (2001) defined social capital as "connections among individuals – social networks and the norms of reciprocity and trustworthiness that arise from them." This definition suggests three distinct reasons for higher trust in communities with greater social capital. First, dense network structures facilitate the enforcement of social norms, including reciprocity, enhancing trustworthiness. Second, communities with higher social capital may embrace values like honesty, fostering trustworthiness and, consequently, mutual trust. Third, a less traditional explanation posits that individuals extrapolate past experiences to new domains, especially when lacking information. This extrapolation is reinforced through education and socialization, with parents transmitting views to their children and adolescents finding it difficult to deviate from peer values and beliefs. These three dimensions all provide reinforcing mechanisms consistent with interpreting these phenomena as connected and embedded in the social structure. In particular, because of the role of intergenerational transmission (Bisin and Verdier, 2001), we viewed (and provided evidence of) these norms as grounded in personal experiences and upbringing, embedded in society, forming a cultural background that influenced economic decisions. This approach allows for deviations from standard equilibrium concepts. For instance, it accommodates the possibility that two individuals with access to the same information and incentives might arrive at different subjective probability assessments - a departure from the common prior assumption (or Harsanyi principle) central to many economic models.

Conversely, in orthodox economics, where these concepts had begun to emerge, they were viewed mostly through the prism of individualistic rationality, strategic interactions, and their utility in enhancing economic efficiency (functional view). In mainstream economics, social capital was treated as another form of human capital that individuals can invest in and accumulate to improve economic outcomes, such as enhancing one's position in the labor market or gaining access to credit (Glaeser et al., 2002). Similarly, trust was often reduced to a rational expectation regarding others' behavior based on common knowledge and information. Our work on culture and finance embraced a different perspective, as it will be shown in the next sections.

3 Culture and Finance

3.1 *Social Capital and Trust in Financial Decisions*

Our research into the relationship between culture and finance began with a simple observation: the stark difference in check usage between Northern and Southern Italy in the early 1990s. While checks were common in the North, they were virtually nonexistent in the South, where even monthly rents were paid in cash. This observation, combined with two crucial insights from Arrow (1972), formed the foundation of our 2004 paper "The Role of Social Capital in Financial Development."

Arrow's first insight was that "much of the world's economic backwardness could be explained by a lack of mutual confidence," referencing Banfield's (1958) study of a southern Italian community. This perspective from Arrow, a founder of general equilibrium theory, postulated the critical role of trust in development and suggested that Italy, with its well-documented variations in social capital, offered an ideal setting to examine the relationship between trust and development within a single country. Arrow's second key point was that "virtually every commercial transaction has within itself an element of trust, certainly any transaction conducted over a period of time." This indicated that financial transactions – the exchanges of money today for a promise of (more) money at some future point - were likely the realm where trust's impact on development would be most evident.

These insights led us to realize that by examining variations in financial development across Italian regions, we could challenge the *homo economicus universalis* model and propose a mechanism linking social capital and trust to growth and prosperity through financial development. While previous studies had shown cross-country correlations between trust and economic growth ((Fukuyama, 1995; Knack and Keefer,1997; La Porta et al., 1997: Knack and Zack, 2001), they faced criticism for lacking a clear mechanism connecting trust to economic prosperity (Solow, 1995).[2] We proposed that the linkage between trust and growth could be explained by two key mechanisms: the role of trust in facilitating financial transactions combined with the established importance of the role of financial development in economic growth (e.g. Rajan and Zingales, 1998; Beck et al., 2000; Guiso, Sapienza and Zingales, 2004). Financial exchanges involve trading present money for future promises, relying on both legal enforcement and interpersonal trust. Our aim was to demonstrate the significance of this trust component for financial development.

Our findings revealed that areas with high social capital had greater access to consumer credit and higher check usage. Conversely, low social capital areas relied more heavily on informal credit based on personal rather than generalized trust. These results align with Banfield's (1958) and Fukuyama's (1995) observations that low-social-capital regions often depend more intensely on transactions within narrow groups like family and friends. These findings also point to a dual effect of trust on development. Low trust increases the cost of contracting, hindering economic development while favoring personal and informal relationships that impede the growth of impersonal markets. This nuanced view of how trust and social capital influence financial development as a conduit for economic growth demonstrates how our culturally embedded perspective can offer insights beyond traditional economic models.

3.2 Just an Equilibrium Phenomenon?

Our initial findings on the role of social capital in financial development, while compelling, faced a significant methodological challenge. Despite moving away from cross-country regressions and addressing potential differences in the level of enforcement in our regression analysis, the paper suffered from an identification problem: how could we be certain that our results were driven by social capital and not by unobserved differences in enforcement spuriously correlated with social capital? This concern touched upon a fundamental debate in the field – whether culture is merely functional to economic development or truly embedded in society.

[2] An additional criticism is that these papers relied on cross-countries analysis.

To address this concern, we focused on movers – households that had relocated from one province to another. This method allowed us to separately identify the effect of the environment in which individuals grew up and the environment where they currently lived. Our findings were revealing: a significant fraction (roughly a third) of the effect was attributable to the level of social capital prevailing in a person's area of birth.

This result was significant for two reasons. First, it helped rule out spurious correlations, strengthening the validity of our initial findings. Second, and more importantly, it highlighted the enduring influence of cultural and educational imprints from one's place of origin. This persistence challenged the view of trust as merely an equilibrium outcome of a society where non-legal mechanisms force cooperative behavior (e.g., Coleman, 1990; Spagnolo, 1999). Instead, it suggested that trust is a cultural product that persists over time and can explain the relative economic backwardness of areas that lack it.

Our findings provided empirical support for Granovetter's (1985) influential argument: "The embeddedness approach to the problem of trust and order in economic life, then, threads its way between the over socialized approach of generalized morality and the under socialized one of impersonal, institutional arrangements by following and analyzing concrete patterns of social relations. Unlike either alternative, or the Hobbesian position, it makes no sweeping (and thus unlikely) predictions of universal order or disorder but rather assumes that the details of social structure will determine which is found."

These ideas had a broad impact on both economics and finance. In economics, they led to many studies investigating the role of trust (or lack of it) in explaining the demand for specific institutions, such as regulation as compensating mechanisms (Aghion et al., 2010), or further developing the connection between social capital/trust and economic growth (Algan et al., 2010). In finance, two strands of literature emerged. The first focused on how social interactions impact financial and corporate decisions (for example, see Hong et al., 2004; Brown et al., 2008; Feigenberg et al., 2013); the second focused on intergenerational transmission of culture and beliefs, generally by studying immigrants, and how these beliefs affect corporate and individual financial decisions in spite of local incentives and institutions (for example, Osili and Paulson, 2008; Liu, 2016; Hoi et al. 2019; Brown, 2019).

In subsequent related work, we study why many underwater households do not default on their mortgage and show that considerations of fairness and morality affect this financial decision

(Guiso et al. 2013). The households' propensity to default on mortgages even if they can afford to pay them (strategic default) is undoubtedly affected by monetary calculations: when the mortgage's value exceeds the house's value, households are more likely to default. Nevertheless, not all households base their decision on just pecuniary factors: people who consider it immoral to default are less willing to do so.

Bursztyn et al. (2019) provides additional experimental evidence on the importance of moral considerations with credit card debt repayment in Indonesia. The moral appeals reduce the share of delinquent customers in a meaningful way, beyond the role of traditional financial incentives. These moral considerations may be further enhanced or diminished by social interaction effects (Towe and Lawley, 2013). However, a lot of evidence also suggests that heterogeneity in moral behavior persists when individuals' actions are constrained by cultural norms alone (see for example, Fisman and Miguel, 2007).

Traditional economics has ignored morality. Becker (1968) pioneered a basic utilitarian approach to crime, in which people compare the benefits of a crime with the expected cost of punishment, leaving no space for moral consideration. Becker's model had no intention of telling people how they should behave. But – as reported in Zingales (2012) -- a former student of Becker's admitted that many of his classmates were remarkably amoral. He attributed this to the fact that they took Becker's descriptive model of crime as prescriptive. They perceived any failure to commit a high -benefit crime with a low expected cost as a failure to act rationally—almost a proof of stupidity, rather than a sign of great morality. Morality starts to be studied in the economic literature only with Enke (2019).

Taken together, this research underscored the importance of viewing culture not just as a functional element that helps reach efficient economic equilibrium, but as a deeply embedded factor that shapes economic behavior and outcomes over long periods. It also demonstrated that cultural influences *persist* even when individuals move to new environments, suggesting that these cultural factors are not merely responses to current economic conditions or institutions, but are ingrained through early experiences and socialization. They are embedded in people preferences.

3.3 From Values to Priors

While our 2006 paper primarily focused on values, our personal experiences suggested that culture encompasses more than just values; it also shapes expectations. This idea challenged the rational expectations paradigm, making it more challenging to publish our papers. However, we were convinced of its importance based on two key observations.

Our experience growing up in Italy demonstrated how parents instill not only values but also shape priors about low-frequency events. It's challenging to transmit expectations about frequent, easily observable phenomena, as children can quickly adapt their expectations to reality. However, for infrequent events, especially those where the true distribution is only observable through participation, parental influence on expectations can be profound. For instance, the street shell game illustrates this concept. Our parents taught us to avoid it, claiming it was rigged. Without participating, we couldn't observe the true outcome distribution, relying instead on our parentally shaped priors.

It's important to note that values and expectations can become intrinsically linked, especially over longer time horizons. For example, one's stance on climate change is often tied to expectations about its potential impact. Even in shorter timeframes, values and expectations tend to align. This insight into the role of culture in shaping both values and expectations represents a significant departure from the traditional economic models. It suggests that cultural backgrounds can influence not only preferences but also the very way individuals interpret and process information, leading to persistent differences in economic behaviors and outcomes.

3.4 Implications for Financial and Economic Decisions

We applied the concept of culturally driven priors impacting economic outcomes in two distinct papers, each exploring different aspects of financial behavior and international economic exchange.

In Guiso et al. (2008a), inspired by the shell game analogy, we examined how the subjective probability an individual assigns to the likelihood of being cheated by a financial intermediary affects stock market participation. This *subjective* probability is influenced by both the objective characteristics of the financial system (such as investor protection) and the individual's cultural background. We estimated a model of stock market participation that augmented the standard portfolio problem in finance literature with the role of trust.

The findings were significant: less trusting individuals are less likely to buy stocks, and when they do invest, they tend to invest less. Quantitatively, trust increases the probability of buying stocks by 50% of the average sample probability and raises the share invested in stocks by

3.4 percentage points. These results held robust even when controlling for other factors such as optimism and subjective expectations about stock market performance. This evidence suggests that subjective trust in others not only influences individual investment decisions but also shapes broader market dynamics, contributing to higher stock market participation rates in countries with greater social trust.

What was remarkable of this finding was that the trust that mattered for stock market participation was not a measure of people skepticism of the opacity and intricacies of the stock market but their trust attitudes towards people in general – i.e. a measure of generalized trust. This provides another neat instance of Granovetter notion of social embeddedness of the economy, arising from the fact that an economic action – in this case an individual investment in the stock market –depends on a notion that may be non-economic in nature - such as the trust that people have on other individuals which may be sustained by the strength of social ties in the community. And because the nature of the social ties affects equally poor and wealthy members of society trust contributes to explain limited participation in the stock market even among the wealthy – a feature that appears puzzling for standard explanations based on fixed participation costs.

The idea that trust is a necessary ingredient in financial transaction had profound impact in finance and it was applied to many important phenomena that are hard to explain using traditional economic assumptions, even allowing for market frictions such as fixed participation costs. For example, Gennaioli et al (2015) use the concept of trust to investigate why the financial advisory industry has thrived, while systematically underperforming the market. In their model, trust facilitates delegation of investment decisions to a professional wealth manager which reduces the investor's anxiety that direct stock investments may entail. This creates substantial market segmentation that even in a competitive environment allows for financial advisors' rents, rationalizing why retail investors are willing to pay for advice even if advisors cannot beat the market. Extending the idea that (lack of) trust explains limited investor participation, part of the literature has studied situations when trust is eroded by fraud or scandals (Giannetti and Wang, 2016; Gurun et al., 2018). In an application of this idea, Gennaioli et al (2022) emphasize the centrality of trust for the equilibria that prevail in insurance markets where mistrust can affect both sides of the transaction since consumers can cheat on claims and insurance companies can cheat on payments on valid claims and disputes are costly to be solved in courts.

Another strand has investigated the implications of trust erosion for stock returns and how companies can offset variation of trust. For example, Lins et al. (2017) attempt to understand the excess return earned by high-CSR firms during the financial crisis. While traditional models are not able to explain the excess return, they postulate that, especially during crisis, firms with high CSR ratings are the recipients of higher shareholder trust. The excess return reflects the scarcity of generalized trust during a financial crisis (when financial information is ridden with ambiguity) and the flight of investors to what should be more trustworthy firms. Consistent with this mechanism they document that high-CSR firms experienced higher growth, profitability and productivity than low-CSR firms. Pevzner et al. (2015) investigates how variations in trust interact with more traditional financial variables, such as earning announcement.

Expanding from general to bilateral trust, Guiso et al (2009) investigate how culturally driven biases in trust influence international patterns of economic exchanges. By using measures of trust form a given population (a country of origin of trust) towards populations of other countries (countries of destination of trust), fixed effects of country-of-origin and country-of-destination allow to control for the average level of trust each country gives and receives. Thus, the remaining variation in trust between country pairs cannot be explained by country-specific factors alone. This residual bilateral trust component, the paper shows, reflects cultural factors specific to each country pair relationship, rather than objective differences in trustworthiness. The paper makes two connected contributions. First, it links cultural factors, such as religion, views about historical conflicts and physical and genetic similarities among people, to the idiosyncratic bilateral trust between nations. Second, it investigates how these trust levels impact economic activity. The results shows that lower bilateral trust leads to reduced trade, portfolio investment, and direct investment between countries. This research has some important implications. First, trust is not simply the belief that can be derived from rational expectations: if it was, people in different countries should hold the same belief about the trustworthiness of a given counterpart in a trade. Second, years of history may lead to very different perceptions that could result in a biased expectation of trading partners behaviors, assessment of financial investment outcomes or foreign direct investments. The paper demonstrates how deeply embedded cultural factors can shape economic transactions, influencing patterns of trade and investment in ways that cannot be fully explained by standard economic variables alone.

The idea that individual perception of trustworthiness (biased or unbiased) could affect the development of financial transactions has been later applied to venture capital (Bottazzi et al., 2016), to peer-to-peer lending (Duarte et al., 2012), to mergers and acquisitions (Ahert et al., 2015), to in-group lending (Fisman et al., 2017), and to trade credit (Wu et al., 2014). More recently Eichengreen et al (2024) apply the idea to the portfolio allocation of multinational banks operating in Europe, improving on the methodology and offering more solid evidence of a casual effect of culturally driven biases in bilateral trust in distorting international investments allocations.

Together, these papers provide compelling evidence for the importance of culturally shaped expectations and trust in financial decision-making, from individual investment choices to international economic relations. They highlight the need for economic models to incorporate these cultural factors to better understand and predict economic behavior across different scales.

4 Culture as a Source of Comparative Advantage

4.1 Regional Cultural Persistence and Heterogenous Cultural Endowments

Having established the importance of culture, the literature has studied how culture forms and evolves (for a comprehensive review, see Alesina and Giuliano, 2015). While preferences and expectations may change in response to the environment,[3] a large successful stream of the literature has provided compelling evidence of extraordinary tendency of cultural norms and attitudes to persist over long periods of time (for example, Fernandez et al., 2004; Nunn and Wantchekon, 2011; Alesina et al. 2013, to cite just a few impactful papers and Nunn, 2011 for a comprehensive review). In our own work on social capital and financial development, we had already shown, through the behavior of the movers, that the persistence in social capital and trust was potentially responsible for explaining why certain regions maintained a financial advantage over others. In two subsequent papers (Guiso et al, 2011 and 2016), we argue that the level of long-lasting differences in civic capital (defined as shared beliefs and values that help groups overcome free rider problems) represent a significant omitted factor in explaining persistent economic disparities across regions and countries. In Guiso et al. (2016) we investigate in depth how an historical experience shaped the regional level of civic capital for centuries to come: The Italian

[3] Reuben et al. (2009), using a variation of the trust game in the lab, shows that receivers respond with untrustworthy behavior when they see that little is expected of them. Specifically, receivers who observe a low expectation from senders decrease the amount returned significantly, while those who observe a high expectation tend to increase amount returned, albeit not significantly. This finding suggests that expectations can indeed influence behavior, potentially creating a self-fulfilling cycle of trust/mistrust.

cities that achieved self-government in the Middle Ages exhibit higher levels of civic capital today. This persistence appears to be mediated through a psychological trait we call "self-efficacy" - the belief in one's ability to achieve goals through one's own efforts. Cities with a history of self-government show higher levels of self-efficacy among their current inhabitants, and this trait is associated with higher civic capital. Self-efficacy beliefs, shaped by historical experiences like self-governance, persist over time through intergenerational transmission and socialization. This finding suggests that expectations about the efficacy of civic engagement can be shaped by relevant historical experiences and transmitted over long periods. The free city-state experience seems to have created a culture of civic participation and a shared belief in the effectiveness of collective action, which has persisted even centuries after the formal institutions of self-government disappeared, suggesting it has become embedded in local culture and social norms.

Cultural persistence allows us to make sense of stylized facts that traditional growth models failed to explain. Both cross-country differences in levels of per capita GDP and extreme persistence of these differences are hard to reconcile with standard neoclassical models (Barro and Sala-i-Martin, 1992). If the currently observed stock of culture is no longer the optimal response to the needs of the current environment, the behavior of individuals is not necessarily the reflection of the incentives and institutional constraints to which they are exposed. Not only this violates the assumptions of *homo economic universalis* - as people subject to different cultures may respond differently to the same monetary incentives - but also introduces the possibility that certain cultural backgrounds are more conducive to success than others when exported to a given economic environment. In other words, persistence naturally connects to a concept of culture as comparative advantage. If culture matters for economic performance, it can also help explain why differences in economic success across countries appear to be so long lasting. Culture, as a slowly changing, historically rooted set of beliefs and values, provides societies with unique characteristics that influence their economic performance in ways that are difficult for other societies to replicate quickly (Guiso et al., 2008b).

If norms and beliefs were designed on purpose to enhance economic efficiency in response to the conditions faced when they were first adopted by the members of a community, the lasting nature of culture implies that these cultural traits may confer a comparative advantage or disadvantage to specific groups even after the conditions that prompted them disappear. The persistence of the free city state experience provides a source of comparative advantage for these communities in economic activities that thrive in the presence of high civic engagement and cooperation. Cities with higher civic capital and self-efficacy are likely to have citizens more willing to contribute to public goods, participate in community initiatives, and engage in productive civic behaviors. This phenomenon can lead to more effective local governance, stronger social fabric, and potentially better economic outcomes. An illustration of this point is in a recent paper by Rustagi (2024) that echoes some of Guiso et al. (2016) results: Swiss municipalities which experienced historical self-governance in the Middle Ages exhibit significantly stronger norms of cooperation today, as measured by experimental games and survey data. And effects are remarkably strong: individuals from historically self-governing municipalities display twice the level of conditional cooperation compared to those from municipalities without such historical experience. This effect persists despite all Swiss municipalities eventually acquired self-governance by the 19th century.

Interestingly, even cultural traits that were imposed not to solve a society optimal organization problem (as implied by the functional approach of North) but, for instance, by a powerful religious elite to extract a rent from the population, may grant a comparative advantage to their successors if conditions change. As Botticini and Eckstein (2012) demonstrate, this can explain the thousand years transition of the Jewish people, from (poor) farmers to (successful) merchants. In the late Roman period, the Jewish communities enforced the social norm to teach children the Torah, making them a unique literate population at the time. But distracting people from agriculture imposed a heavy toll on the economy – a dysfunctional choice. This culturally obligated choice gave Jews a competitive advantage in urbanizing societies thousands of years later.

The persistence of these cultural differences over centuries, even after the initial institutional differences disappeared, suggests that the social norms observed today have become deeply embedded in local culture, due to cultural transmission and low historical migration rates, which allowed norms to be passed down through generations within communities.

These findings support the argument that historical initial differences can create heterogeneity in "cultural endowment" across communities. In the example of Italian communities, some of them, by virtue of their historical experience with self-governance, developed cultural norms more conducive to cooperation and civic engagement. Conversely, communities that lack this historical experience may find themselves at a cultural disadvantage in the current environment, where cooperation and civic participation are highly valued.

4.2 Culture becomes a Source of Individual Comparative Advantage

The implications of heterogeneous cultural endowments extend beyond regional variations to illuminate individual-level outcomes. Guiso et al. (2003) demonstrate that specific religious beliefs confer comparative advantages by fostering economic attitudes conducive to heightened per capita income within communities where such dispositions predominate. However, it is within the literature on culture and immigrants that these implications acquire particular importance to explain relevant stylized facts.

The methodological innovation of comparing immigrants from diverse cultural origins within a single geographical context has emerged as an empirical approach for isolating cultural effects from institutional and environmental variables (Guiso et al., 2006; Giuliano, 2007; Fernandez and Fogli, 2009). When immigrants from disparate cultural backgrounds reside within a unified institutional framework—such as the United States—they encounter identical legal structures, institutional constraints, and economic conditions. Consequently, persistent heterogeneity in economic outcomes among these immigrant cohorts can be more readily attributed to cultural heritage rather than contemporaneous external factors, which remain constant across the immigrant population within the host country.

This literature has important implications for the impact of culture in economics. Echoing some earlier research (Borjas, 1992), if cultural traits developed in different environment are carried over to a new institutional and economic setting, an obvious question is whether this gives some immigrants a differential advantage and help explain heterogeneity in economic success among first- or second-generation immigrants (Abramitzky et al., 2014, 2021; Chetty et al., 2024). Figlio et al. (2019) tackle this question by showing that students from countries with higher levels of long-term orientation perform better in school, even after controlling for school fixed effects (place) and several other factors (including time of immigration). This effect is present in the USA and in OECD countries, suggesting large heterogenous cultural differences in how immigrants approach education. The correlation between country-of-origin specific cultural endowments and educational achievement patterns across diverse host nations, despite significant variations in educational institutions, suggests these effects operate independently of host country institutional frameworks (school systems). Thus, the conceptualization of culture as a source of comparative advantage emerges as a compelling theoretical corollary from the literature on long-term persistence.

Economists have been cautious in embracing this interpretation, with the notable exception of Thomas Sowell, who has argued that cultural factors, rather than racial or genetic differences, play a crucial role in shaping many economic outcomes of specific ethnic groups in the US (Sowell, 1994). This reluctance to attribute individual success to culture extends to cross-national comparative advantage as illustrated in the evolution of Hall and Jones' seminal work on national productivity. Their initial version explicitly incorporated culture as a component of infrastructure, defining it as encompassing "characteristics of the government, the culture, and the climate of a country" (Hall and Jones, 1996, p. 1). However, their final published version reframed the discussion entirely in terms of "social infrastructure," defined as "the institutions and government policies that determine the economic environment within which individuals accumulate skills, and firms accumulate capital and produce output" (Hall and Jones, 1999 p. 84), notably excising all references to culture.

The reluctance among economists, including those who have studied culture, can be largely attributed to two distinct factors. First, the historical misappropriation of cultural arguments as instruments of racial discrimination, particularly prevalent in late 19th and early 20th century discourse. This problematic legacy finds stark illustration in the 1881 Western characterization that "the Japanese are a happy race, and being content with little, are not likely to achieve much"—a sentiment that epitomizes the era's reductive cultural determinism. This intellectual trajectory reached its nadir in the emergence of 'Social Darwinism' through Francis Galton's misapplication of Darwinian theory to human societies. Similarly, the historical tradition of attributing national economic success to cultural superiority, particularly prominent among early historians examining English economic development (see, e.g., Landes, 1969), often relied more on post hoc rationalization than rigorous analysis—effectively asserting that England's economic ascendancy necessarily implied cultural superiority.

A second factor underlying the scholarly reluctance to attribute comparative advantages or disadvantages to specific cultures stems from the methodological implications of the cultural persistence literature in economics. Within this framework, societal culture is conceptualized as relatively immutable—analogous to genetic inheritance—functioning more as destiny than choice.

However, recent research suggests a more nuanced reality: while intergenerational cultural transmission demonstrates remarkable persistence in certain domains, substantial evidence indicates significant potential for cultural adaptation and transformation (Giuliano and Nunn, 2021).

Indeed, societal culture exhibits considerable dynamism, with certain components demonstrating remarkable plasticity within compressed temporal frameworks, as evidenced by the profound transformation of societal attitudes toward gay marriage in the United States. These cultural metamorphoses manifest through dual mechanisms: bottom-up evolutionary processes emerging from societal interactions and top-down institutional interventions designed to reshape collective behaviors. The Rwandan government's post-1994 genocide initiative to foster national unity through formal education systems presents a compelling illustration of deliberate cultural engineering within institutional frameworks (Mafeza, 2013).

5. Corporate Culture

Corporate culture as a field of inquiry emerged in organizational behavior and management studies well before the revival of cultural economics (Schein, 1982).The predominant strand of this literature, subsequently adopted by many economists, took a functionalist approach, conceptualizing culture as an instrument that firms deploy to achieve their objectives.[4] In this framework, culture operates as one of several managerial tools—alongside compensation, promotions, and incentives—used to advance organizational goals.

As previously noted, our focus in this chapter departs from this functional view of culture. In reviewing the corporate culture literature as well, our focus is to examine how societal culture is "embedded" into corporate culture, highlighting the cross-pollination between societal and corporate culture. However, since a substantial portion of the literature employs a functional perspective, and because functional and embedded cultural elements coexist within organizations, we first provide a brief review of the functionalist literature.

5.1 Functional corporate culture

[4] The literature on corporate culture is extensive, and a comprehensive treatment is beyond the scope of this chapter. For an excellent review of corporate culture, see Gorton et al. (2022).

The functional view of culture posits that firms employ culture primarily to achieve economic goals (e.g., profit maximization). Under this framework, culture does not impede organizational objectives; rather, it serves to eliminate frictions or reduce costs in pursuing firms' goals. This optimistic perspective on culture's role extends beyond traditional academic literature on organizational culture to practitioners. As Graham et al. (2022) document, executives consider corporate culture one of the primary determinants of a firm's ultimate success or failure.

This conceptualization of corporate culture typically encompasses the set of norms and values that contribute to firm success. These values attain the status of best practices within organizations—value-maximizing norms that advance company success while aligning with shareholder maximization objectives. They become integral to the company's operational effectiveness, deeply embedded in recruitment processes, reward systems, and overall corporate culture. For instance, a railway company might prioritize values of timeliness among employees, while a chip manufacturer might emphasize precision.

Theoretical frameworks have formalized these functional aspects of culture. Kreps (1990) and Hermalin (1999) model these functional values as mechanisms for coordination and cooperation within firms, examining how culture facilitates repeated interactions and sustains cooperation when facing unforeseen contingencies. Lazear (1995) conceptualizes culture as a selection mechanism through which managers choose employees who conform to organizational norms. Schein (1985) characterizes culture as a system of shared assumptions guiding organizational behavior, crucial for resolving internal integration and external adaptation challenges. This approach emphasizes how shared beliefs and values enable effective communication, decision-making, and problem-solving processes.

It is notable that this conceptualization of corporate culture reveals a marked asymmetry with respect to societal culture: unlike the latter, the notion that "superior" cultures confer organizational advantages is widely accepted in both management scholarship and corporate practice. The assertion that "Culture eats strategy for breakfast" (misattributed to Peter Drucker, likely originating from Steve Jobs or Jack Welch, Foust (2024)) exemplifies this prevalent perspective. This viewpoint has gained considerable traction among corporate leaders (Foust, 2024). The academic literature reflects this orientation: Leibenstein (1982) proposed that firm productivity fundamentally depends on the collectively adopted "effort convention" between firm and workforce. Barney (1986) investigated the link between organizational culture and financial performance, while acknowledging the challenges in replicating "superior" corporate cultures. This conceptualization of culture as a competitive advantage extends beyond market competition to regulatory spheres, as evidenced by the New York Federal Reserve's decade-long exploration of culture's role in fostering regulatory compliance.

Two key factors help explain why culture as comparative advantage finds broader acceptance in the literature of corporate culture rather than in the economics of culture applied to individuals or nations. First, there exists a perceived distinction in malleability between societal culture (what Gibbon et al. (2021) term big-C culture) and firm culture (little-C culture). As previously discussed, societal culture is viewed as relatively immutable, analogous to genetic heritage, more destiny than choice. In contrast, firm culture is conceptualized as a malleable management tool deployable for-profit maximization. For example, there is evidence that new managers change culture, and even that new personal experiences shift managerial cultural attitudes (see Ronchi and Smith, 2024).

Second, this divergence stems from different governance structures in societies and firms. In democratic societies, imposing cultural norms from the "top" is challenging, with public education serving as the notable exception for top-down cultural transmission (Paglayan, 2022). In contrast, the relatively autocratic nature of corporate entities is modelled as an enabler of systematic centralized cultural control. According to this view, corporate leadership shapes organizational culture through multiple mechanisms: ideological transmission, selective recruitment, termination policies, and advancement criteria (Guiso et al., 2015b). This autocratic capacity has generated a powerful hypothesis within the literature: that management can implement cultural change from the top down and create a culture that serves the firm's success. In the following paragraphs, we examine various applications of these concepts.

5.1.1 Corporate Culture as a Solution to Contract Incompleteness

Corporate culture can enhance firm value by addressing problems arising from contractual incompleteness. Hart and Moore (2008) demonstrate that parties may disagree about appropriate outcomes in uncontracted-for contingencies, leading to aggrievement and performance shading.

Frydlinger and Hart (2023) extend this framework by examining how guiding principles—defined as social norms incorporated into formal contracts—can mitigate employee shading behavior. Once these norms achieve common recognition within the organization, they help reduce aggrievement levels in situations not explicitly covered by contracts.

5.1.2 Corporate Culture as a Coordinating Device

O'Reilly (1989) and Kreps (1990) emphasize corporate culture's role in facilitating employee coordination in situations that cannot be regulated ex ante. Erhard et al. (2007) focus on how adherence to integrity functions as a commitment device against purely economic calculations. For instance, an employee operating within an integrity-based culture will prioritize customer satisfaction over immediate profit opportunities. While maintaining such a culture may incur short-term costs through foregone profits, it generates long-term benefits.

5.1.3 Corporate Culture as a Talent Magnet

Culture can serve as a mechanism for attracting specific types of talent to organizations. This phenomenon is evident across various institutional contexts—from universities and academic departments to corporations, where distinctive cultural environments play a fundamental role in talent acquisition. Colonnelli et al. (2024) provide empirical evidence of this mechanism using data from a Brazilian job matching platform. Their analysis of job-seeker preferences reveals that firm characteristics signaling ESG commitment are valued equivalent to approximately 10% of average wages. This cultural preference is particularly pronounced among highly educated, white, and politically liberal individuals, and proves more influential than other costly recruitment strategies such as work-from-home options and non-wage amenities. Consequently, an ESG-oriented culture can function as a cost-effective catalyst for attracting valuable talent.

5.1.4 Corporate Culture as a Consumer Brand

Some brands, such as Patagonia, demonstrate an unwavering commitment to specific values, in their case, sustainability. This commitment manifests in notable actions: their provocative "Don't Buy This Jacket" campaign promoting conscious consumption, their legal activism against the U.S. government regarding environmental protections, and their pioneering decision in 2002 to commit 1% of annual sales to environmental causes.

Patagonia's sustainability ethos is inextricably linked to its founder, Yvon Chouinard. While sustainability appears to have been Chouinard's primary social objective, independent of profitability considerations, it simultaneously served as an effective marketing tool. The synergy between these social and commercial dimensions helps explain the company's success. Independently from the founder's views, using culture to increase the value of the brand is a moon corporate strategy. In a recent paper, Conway and Boxell (2024) show that firms strategically target their consumers when supporting specific political stances, and that, on average, this behavior leads to greater sales.

5.1.5 Advertised Culture versus Effective Culture

When discussing culture's functional role, it is crucial to recognize that treating culture merely as a management tool for maximizing objectives can lead to divergence between advertised and actual organizational culture. This advertised culture can be significantly distorted from reality. Enron provides a stark example: while displaying integrity, communication, and respect as cultural values in their lobby, the company collapsed in 2001 due to fraud, resulting in the imprisonment of its managers. These advertised values clearly did not reflect the actual behavioral norms within Enron.

Goldman Sachs offers another illustrative case. The investment bank prominently advertised its commitment to prioritizing clients' interests. However, when shareholders filed litigation alleging fraud in light of the Abacus deal, Goldman's defense characterized these cultural assurances as "mere puffery" and non-actionable "statements of opinion."

This disconnection between advertised and effective culture extends beyond these prominent cases. Guiso et. al. (2015b) document that 85% of S&P 500 companies maintain website sections dedicated to "corporate culture"—articulating principles and values meant to guide employee behavior. However, their analysis reveals no correlation between the frequency and prominence of these advertised values and measures of either short-term or long-term performance.

5.2 Embedded Culture: From Societal Culture to Corporate Culture

The functional corporate culture literature relies on a potentially unrealistic assumption: that top management can impose whatever culture it deems most conducive to achieving firm objectives. In practice, within democratic societies, corporate cultural influence remains constrained by limited control over individual lives: employees go home at night and retain the option not to return. Through their ability to withdraw participation, employees maintain significant agency, and their attitudes and traits, embedded in societal culture, continuously interact with and shape firm culture.

The bidirectional interaction between societal and corporate culture is exemplified by the relationship between Japanese society and Toyota. While Toyota's principle of continuous improvement (*kaizen*) has significantly influenced Japanese society (Liker, 2004), *kaizen* itself is rooted in the Japanese concept of *hansei* (reflection), taught to Japanese citizens from an early age. As Liker explains, "Without *hansei* it is impossible to have *kaizen*. In Japanese *hansei*, when you do something wrong, at first you must feel really, really sad. Then you must create a future plan to solve that problem, and you must sincerely believe you will never make this type of mistake again. *Hansei* is a mindset, an attitude. *Hansei* and *kaizen* go hand in hand" (Liker 2004, p. 270). This complementarity between *kaizen* and *hansei* illustrates how Granovetter's notion of embeddedness shapes corporate values, as firms establish practices (*kaizen*) that leverage prevailing societal values (*hansei*) through carefully selected employees.

The influence of societal culture on firm culture and behavior extends well beyond the Toyota example. Societal values and expectations affect firms through multiple channels: they shape input quality and character, determine feasible contractual arrangements, and influence cooperation levels. Furthermore, they fundamentally impact firms' objectives. We examine these transmission channels in detail in the following sections.

5.2.1 Societal Culture and Firms' Inputs

Trust represents a crucial channel through which societal culture influences corporate investment. This relationship was recognized as early as John Stuart Mill, who observed: "There are countries in Europe [...] where the most serious impediment to conducting business on a large scale, is the rarity of persons who are supposed fit to be trusted with the receipt and expenditure of large sums of money." While disentangling investors' trust in firms from firms' objective trustworthiness presents methodological challenges, Guiso et al. (2009) address this empirical obstacle through an examination of bilateral trust levels among European nations. Their analysis demonstrates that investment flows (both direct and portfolio) from country *i* to country *j* are influenced by relative trust levels between these countries, even after controlling for country *j*'s average trustworthiness. Bottazzi et al. (2009) extend this analysis, showing that bilateral trust between a venture capitalist's (VC) country of origin and that of the target company influences investment propensity.

Labor, as another critical factor of production, is similarly shaped by societal cultural norms. Guiso et al. (2008) demonstrate how gender norms—societal expectations regarding women's roles—significantly impact the relative development of male and female human capital. Their research reveals that in societies with greater gender equality, the mathematics performance gap between 15-year-old boys and girls disappears, while girls' comparative advantage in literature becomes more pronounced. These cultural effects may expand the supply of skilled labor available to corporations, thereby enhancing productivity.

Beyond basic skill differentials, culture affects fundamental aspects of labor productivity. Ilzetzki and Simonelli (2017) examine the productivity of electoral workers counting ballots in Italy, documenting a 28% north-south productivity gap—exceeding even the 20% regional disparity observed in firm-level labor productivity. More significantly, the cross-provincial variation in ballot-counting efficiency explains up to half of the firm-level productivity dispersion across Italian provinces. This productivity measure exhibits strong correlation with measures of work ethic and trust.

While these correlations are suggestive, they face identification challenges due to potential confounding factors at the provincial level. Yet, Ek (2024) finds similar results using a more rigorous approach that uses detailed Swedish data. Leveraging information about the workers country of birth (or origin of the parents), he uses an epidemiological approach to estimate the cultural effects on workers' productivity. He finds that immigrants and second-generation Swedes from countries with high levels of autonomy and trust (as measured by World Value Survey) generate substantial positive effects on within-firm labor productivity, even after controlling for education and experience. The study's focus on productivity rather than wages notably eliminates potential discrimination-based explanations.

Cultural transmission of societal values can also propagate less desirable attitudes. Simpser (2020), also utilizing the epidemiological approach, demonstrates that attitudes toward bribery in immigrants' countries of ancestral origin predict variations in bribery attitudes among second-generation immigrants in the United States.

5.2.2 Societal Culture and Access to Capital

“Virtually every commercial transaction,” wrote Arrow in 1972, “has within itself an element of trust, certainly any transaction conducted over a period of time.” This temporal dimension makes financial transactions particularly dependent on trust, as demonstrated by Guiso et al. (2004). Among financial instruments, equity emerges as the most trust-dependent due to its limited contractual protections. Consistently, both household investment in equity and corporate equity financing exhibit strong dependence on trust at both micro and national levels (Guiso et al., 2008).

Trust appears not only to promote equity utilization but also to facilitate more sophisticated (state-contingent) venture capital contracts, suggesting a complementary rather than substitutive relationship, as Bottazzi et al. (2009) demonstrate.

5.2.3 Societal Culture and Firm Organizational Form

La Porta et al. (1997) pioneered the examination of societal culture's impact, specifically societal trust, on organizations. Their cross-country analysis of the relationship between trust and organizational scale aligns with Fukuyama's (1995) thesis: a one-standard-deviation increase in trust corresponds to a 7-percentage point (half a standard deviation) increase in large firms' share of the economy.

Bloom et al. (2012) extend this analysis by identifying a specific mechanism through which trust enables larger organizational scale. Their research demonstrates that firms headquartered in high-trust regions show greater propensity for decentralization, with higher bilateral trust between a multinational's home country and its subsidiary's location correlating with increased decentralization. In high-trust environments, CEOs can delegate more decisions, enabling efficient firms to expand their span of control and scale, thereby enhancing aggregate productivity.

Trust influences not only the degree of decentralization but also the feasibility of value-enhancing human capital development initiatives requiring worker-management trust. Ashraf et al. (2024) examine productivity gains from purpose-finding workshops, noting that such programs' effectiveness depends on firms' reputational capital for fair treatment of workers, as these workshops require significant personal disclosure from employees. This trust dependency may explain Guiso et al. (2015b) 's finding that employee trust in management correlates positively with firm valuations.

5.2.4 Societal Culture and Equilibrium Outcomes

Ichino and Maggi (2000) demonstrate societal expectations' direct influence on firm performance through their analysis of Italian bank branches. After documenting substantial regional variation in absenteeism and misconduct rates across branches, they find that relocating employees tend to adapt to local behavioral norms, particularly when these norms favor reduced work effort. This conformity effect, they argue, operates through multiple channels: peer-monitoring mechanisms where reporting probability decreases with collective shirking, social comparison effects where workers calibrate effort to peer behavior, and resource-constrained monitoring where increased shirking reduces detection probability for any individual.

A parallel illustration of culturally rooted absenteeism emerges in a Planet Money episode (Smith and Chace, 2012), later adapted into a Harvard Business School case by Gallani et al. (2019). The episode documents productivity disparities between technologically identical Barilla plants in northern and southern Italy, attributable primarily to higher southern absenteeism rates. This pattern reflected a cultural framework combining vertical mistrust (of management) with horizontal trust (among peers), fostering mutual cover-ups and collective resistance to management. As Italians, we can attest to the pervasiveness of such cooperative norms in Italian education, where mutual assistance during examinations (termed cheating in the United States) receives minimal moral sanction from teachers—analogous to guards who perfunctorily punish escaping prisoners of war while tacitly acknowledging the legitimacy of escape attempts. Conversely, students who refuse to assist peers face significant social sanctions from their classmates. Notably, the Planet Money episode demonstrates Barilla's successful cultural transformation at its southern plant, suggesting the potential to overcome cultural disadvantages.

5.2.5 Societal values and firm's goals

In his famous 1970 piece in the New York Times Magazine, Friedman wrote "A corporation is an artificial person and, in this sense, may have artificial responsibilities", what we would now term values. However, Friedman left unaddressed the crucial question of who should determine these responsibilities.

Consider agents concerned about corporate pollution, either through direct impact or moral culpability as stakeholders (investors or consumers) in activities with harmful byproducts. While Friedman (1970) acknowledged such preferences, he posited that individuals could better address these concerns by allocating their proceeds from profit-maximizing firms (such as shareholder dividends) toward mitigating these externalities. This assumption proves problematic for two reasons. First, addressing externalities at the firm level may be more efficient than individual remediation: pollution prevention typically proves less costly than remediation (Hart and Zingales, 2017). In such scenarios, prosocial shareholders rationally prefer corporate-level solutions to individual interventions. Second, as Broccardo et al. (2022) demonstrate, the shareholder pool's size enhances the relative benefit of prosocial actions. The logic is straightforward: for a fixed-size project, larger shareholder pools reduce individual costs of pollution prevention. Yet in voting decisions, shareholders consider their vote's impact only when pivotal, at which point the benefit equals the total pollution prevented. With constant benefits and decreasing individual costs, smaller shareholders exhibit greater propensity to support prosocial initiatives.

If firms can fully extract stakeholders' willingness to pay for alignment with their values, then shareholder welfare maximization achieves social efficiency (Hart et al., 2023). The logic is straightforward: workers who value employment at environmentally responsible firms accept lower wages for such positions, as demonstrated by Kruger et al. (2023) and Colonnelli (2024). Thus, even profit-maximizing shareholders would support environmental initiatives when wage savings offset pollution reduction costs. However, perfect value extraction typically proves elusive. Consequently, while shareholder welfare maximization may not achieve complete social efficiency, it represents a more socially optimal approach than narrow shareholder value maximization. In either case, firm behavior reflects stakeholders' social preferences, albeit with different weights.

Empirical support for these theoretical predictions emerges from several studies. Dyck et al. (2019) demonstrate that investors enhance firms' Environmental and Social (E&S) performance only when they originate from countries with strong communal commitment to E&S values. Complementarily, Bena et al. (2022) find that immigrants firm owners from less individualistic societies implement more egalitarian compensation structures with reduced emphasis on performance-based pay. Bennedsen and Chevrot (2022) reveal how leaders' values permeate corporate organizations, enhancing return on assets, crisis resilience, and organizational flexibility while reducing internal conflict.

The contribution of this literature with respect to the functional view lies in recognizing that corporate objectives can be only implemented if they have social legitimacy: management practices facilitating profit maximization find easier implementation when embedded within cultures that view profit accumulation as legitimate or, as Max Weber theorized regarding Calvinist communities, even as a moral imperative.

6. Outlook and future research

In the second half of the 20th century, economics rejected culture as a variable of interest. In the first quarter of the 21st century, economics has annexed culture among its topics, but mainly a functional notion of culture. Time has come to accept the idea of embedded culture as an important initial endowment that individuals or nations share. As for all endowments, embedded culture can only be modified slowly over time. This chapter illustrated the early attempts in this direction. However, much remains to be done. In this section, we try to outline the future steps in this research agenda.

6.1 Disentangling Functional from Embedded Culture

The economic literature on culture has often failed to distinguish adequately between functional and embedded notions of culture. In this ambiguity, functional culture has dominated discourse as it aligns more readily with traditional economic frameworks, essentially extending maximization principles to cultural domains.

Making this distinction precise will generate important opportunities for future research. While we have reviewed several articles demonstrating how embedded culture affects behavior, the relationship between functional and embedded culture remains underexplored. Functional innovations and institutions can modify societal culture, which eventually becomes embedded in social norms. The development of railways in the 19th century illustrates this dynamic: the need for coordinated train schedules led to the adoption of Greenwich Mean Time (GMT) and greater standardization of time, ultimately fostering a culture of punctuality in many societies. The expansion of railway networks necessitated uniform timekeeping for safe and efficient operations, demonstrating how functional requirements can reshape deeply embedded cultural practices.

Progress in this field requires conceptualizing firms and institutions as culture-producing agents that both shape and are shaped by societal culture (Guiso et al., 2015a). Understanding this bidirectional relationship between functional and embedded culture represents a crucial frontier for future research.

6.2 Education and Culture

The expansion of compulsory education during the nineteenth and early twentieth centuries served as a powerful instrument for governments to homogenize national language, culture, and civic values (Alesina et al., 2021). Jules Ferry's 1882 educational reform in France exemplifies this approach: as the historian Moody characterizes it, the reform aimed to "teach Frenchmen to be confident of their nation's superiority in law, civilization and republican institutions" (Moody, 1978).

Education's cultural impact extends beyond formally taught values to encompass norms transmitted both formally and informally through the educational system. The Italian educational system provides a striking illustration: test cheating receives minimal sanction from teachers and is socially expected among students. Students who refuse to share answers or report cheating face social stigma as "snitches"—a pattern parallel to that documented by Ferguson et al. (2024) in Colombia. As evidenced by the Barilla case discussed earlier, such educational norms have profound implications for organizational feasibility and productivity in the Italian corporate context.

The intersection of public education and cultural transmission represents a particularly promising area for future research. While recent work has begun to explore how cultural diversity in schools affects educational outcomes—for instance, Figlio et al. (2024) document the impact of immigrant students on native students' academic performance—many questions remain unexplored. Future research has the opportunity to examine how educational institutions both shape and are shaped by cultural values and how different pedagogical approaches interact with cultural backgrounds.

6.3 Policy Choices and Cultural Externalities

While education policy's intended and unintended cultural effects often intertwine, other policies demonstrate a clearer distinction between immediate policy objectives and their cultural externalities. Italy's periodic fiscal pardons illustrate this dynamic. While designed to raise immediate revenue through politically expedient means, these pardons fundamentally erode social norms around tax compliance. Over time, this erosion transforms cultural attitudes toward tax payment: conscientious taxpayers shift from being viewed as moral citizens to being perceived as naïve.

The asymmetric visibility of policy outcomes exacerbates this problem: fiscal revenues materialize immediately, while cultural deterioration manifests gradually. This temporal mismatch encourages the proliferation of short-term policies with significant negative cultural consequences. The absence of reliable metrics to measure the erosion of social norms compounds this challenge. Only when we develop real-time measures of cultural deterioration will policymakers face appropriate incentives to consider these long-term effects. Future research has a crucial role in developing such measurement tools.

6.4 Cultural Spillovers from Corporate Decisions

While the literature has increasingly recognized how government policies shape societal culture, the cultural impact of corporate decisions remains understudied. Firms frequently generate cultural effects that extend beyond their immediate business objectives—effects often neither intended nor fully appreciated by their customers and workers. Thus, even when it is not technically an externality (because technically it affects contractual stakeholders rather than uninvolved third parties), their unintended and pervasive nature makes them functionally equivalent to externalities.

6.4.1 Social Media

Throughout history, technological innovations from the plow (Boserup, 1970) to the pill (Goldin and Katz, 2002) have transformed the social structure of production and consumption, profoundly affecting societal culture. These cultural consequences were largely unintended byproducts: the plow was not designed to subjugate women, nor the pill to liberate them. Social media platforms represent a fundamental departure from this pattern, deliberately designing and enforcing norms within their ecosystems to maximize profits, with far-reaching consequences for broader society (Santos and Zingales, 2024).

The ride-hailing platform Uber exemplifies this deliberate cultural engineering. The platform meticulously structures rider-passenger interactions through carefully designed mechanisms. For instance, drivers must rate passengers before learning their tip amount—a sequence engineered not by chance or evolution, but through deliberate design to serve Uber's profit objectives. This mechanism aims to minimize tipping, as tips increase passenger costs without generating platform revenue. Yet this corporate-designed norm may have spillover effects beyond the platform itself: as customers grow accustomed to non-tipping behavior in Uber vehicles, this cultural shift could extend to traditional taxi services.

6.4.2 Politicization of Brand and Societal Culture

The evolution of cultural branding has moved beyond traditional approaches discussed in section 5.1.4, with firms increasingly abandoning the historical principle of political neutrality (e.g., Druker, 1954) in favor of explicit political positioning. Recent examples illustrate this trend: Goya Foods' CEO Bob Unanue maintained his explicit endorsement of Donald Trump despite boycotts from politically opposed consumers; Harley Davidson reversed its Diversity, Equity, and Inclusion initiatives following conservative activist pressure; and the denim market has effectively segregated along political lines, with Wrangler appealing to Republicans and Levi's to Democrats.

This strategic positioning reflects broader market dynamics in the politically polarized United States, where consumers increasingly align purchasing decisions with political beliefs (Conway and Boxell, 2024). Firms use culture functionally to amplify brand differentiation along political lines, accepting reduced market share in exchange for higher mark-ups (Michelacci and Wu, 2024). However, this strategy generates costs beyond traditional market segmentation inefficiencies: by reinforcing and monetizing political divisions, corporate political branding accelerates societal polarization. When firms profit from political antagonism, they become active agents in deepening social divisions.

7. Conclusions

This chapter has traced how the sociological concept of embedded culture has shaped and continues to influence the "cultural revolution" in Economics. We have chronicled both the initial steps taken two decades ago and the subsequent rich body of research that has emerged in this field.

Despite these achievements, embedded economics has not yet attained the disciplinary recognition afforded to behavioral economics, though both approaches modify fundamental assumptions of economic theory while preserving its broader analytical framework. Where behavioral economics relaxes the rationality assumption, embedded economics challenges the universality assumption, recognizing that individuals' beliefs (priors) and preferences (values) are shaped by personal and communal history.

The explanatory power of this approach is illustrated by cases like Southern Italy, where historically-determined low self-efficacy beliefs profoundly impact the success of both democratic and capitalist institutions (Guiso et al., 2016). Rather than constraining economic analysis, embedded economics enhances it in three crucial ways:

First, it substantially improves economics' explanatory power, as demonstrated by the research reviewed here. Second, it illuminates the bidirectional relationship between corporate and societal culture. While societal culture shapes corporate organization and operation, corporate practices in turn mold societal norms—as exemplified by how railway development necessitated time standardization, ultimately fostering a culture of punctuality through the adoption of Greenwich Mean Time.

Third, it deepens our understanding of policy effectiveness across different cultural contexts. Economic and social policies must align with embedded culture to succeed: the early 20th-century cooperative movement flourished in Germany and Northern Italy, building on their historical legacy of free city-states and high self-efficacy, yet faltered in Southern Italy where this cultural foundation was absent.

The most significant contributions of this approach likely lie ahead. We hope this review provides a roadmap for future economists to further explore and develop these promising directions.

References

Abramitzky, Ran, Leah Platt Boustan, and Katherine Eriksson. 2014. "A Nation of Immigrants: Assimilation and Economic Outcomes in the Age of Mass Migration." *Journal of Political Economy* 122, no. 3: 467-506.

Abramitzky, Ran, Leah Platt Boustan, Elisa Jácome, and Santiago Pérez. 2021. "Intergenerational Mobility of Immigrants in the United States over Two Centuries." *American Economic Review* 111, no. 2: 580-608.

Acemoglu, D., S. Johnson and J.A. Robinson. 2001. "The Colonial Origins of Comparative Development: An Empirical Investigation," *American Economic Review*, 91, 1369-1401.

Ahern Kenneth R., Daniele Daminelli, Cesare Fracassi.2015. Lost in translation? The effect of cultural values on mergers around the world. *Journal of Financial Economics*. Volume 117, Issue 1, Pages 165-189.

Alesina Alberto and Paola Giuliano. 2015. "Culture and Institutions." *Journal of Economic Literature* 53, no. 4: 898-944.

Alesina, Alberto, Paola Giuliano, and Nathan Nunn. 2013. "On the Origins of Gender Roles: Women and the Plough." *The Quarterly Journal of Economics* 128(2): 469-530.

Alberto Alesina, Paola Giuliano, Bryony Reich, Nation-Building and Education, *The Economic Journal*, Volume 131, Issue 638, August 2021, Pages 2273–2303,

Arrow, Kenneth. "Gifts and Exchanges." *Philosophy and Public Affairs*, 1972, 1, pp. 343–62.

Ashraf, Nava, Oriana Bandiera, Virginia Minni, an Luigi Zingales, 2024,"Meaning at Work," working paper.

Banfield, Edward C. 1958, *The Moral basis of a Backward Society*. New York, NY: Free Press.

Barney, Jay B. , .1986. "Organizational Culture: Can It Be a Source of Sustained Competitive Advantage?", *The Academy of Management Review*, 11 (3), pp. 656-665.

Barro, Robert and Xavier Sala-i-Martin. 1992. "Convergence", Journal of Political Economy, 100 (2), pp.

Beck, Thorsten., Ross Levine, and Norman Loayza. 2000. Financial Intermediation and Growth: Causality and Causes. *Journal of Monetary Economics*, 46(1), 31-77.

Becker, G.S., 1968. Crime and Punishment: An Economic Approach. *Journal of Political Economy* Volume 76, Number 2 Mar. - Apr., 1968

Bena, J., Lu, G. and Wang, I., 2022. Owner culture and pay inequality within firms. Working Paper.

Bennedsen, Morten and E Chevrot-Bianco. 2023. "Value-based Leadership",

Bisin, Alberto, and Thierry Verdier. 2001. "The Economics of Cultural Transmission and the Dynamics of Preferences." *Journal of Economic Theory* 97, no. 2: 298-319.

Bloom, N., Sadun, R. and Van Reenen, J., 2012. The organization of firms across countries. The Quarterly Journal of Economics, 127(4), pp.1663-1705.

Boserup, Ester. 1970. "Woman's Role in Economic Development", London: George Allen & Unwin Ltd.

Bottazzi, Laura Marco Da Rin, Thomas Hellmann. 2016. The Importance of Trust for Investment: Evidence from Venture Capital. *The Review of Financial Studies*. Volume 29, Issue 9, September, Pages 2283–2318.

Brown, Jeffrey R., Zoran Ivkovic, Paul A. Smith. and Scott Weisbenner. 2008. "Neighbors Matter: Causal Community Effects and Stock Market Participation." *The Journal of Finance*, 63: 1509-1531.

Brown, James R. J. Anthony Cookson, Rawley Z. Heimer. 2019. Growing up without finance, *Journal of Financial Economics*. Volume 134, Issue 3.Pages 591-616,

Botticini, Maristella and Zvi Eckstein (2012), "The Chosen Few: How Education Shaped Jewis History, 70-1492", Princeton University Press,

Boycko, M., Shleifer, Andrei and Rob Vishny, 1997. *Privatizing Russia*. MIT press.

Brunnermeier, Markus K., and Jonathan A. Parker. 2005. "Optimal Expectations." *The American Economic Review*, vol. 95, no. 4, pp. 1092–118.

Bursztyn, L., Fiorin, S., Gottlieb, D. and Kanz, M. 2019. Moral incentives in credit card debt repayment: Evidence from a field experiment. *Journal of Political Economy*, 127(4), pp.1641-1683.

Drucker, Peter F., .1954. "The practice of management", New York : Harper & Row

Dyck, A., Lins, K.V., Roth, L. and Wagner, H.F., 2019. Do institutional investors drive corporate social responsibility? International evidence. Journal of financial economics, 131(3), pp.693-714.

Chetty Raj, Will Dobbie, Benjamin Goldman, Sonya R. Porter, and Crystal S. Yang.2024. Changing Opportunity: Sociological Mechanisms Underlying Growing Class Gaps and Shrinking Race Gaps in Economic Mobility, NBER Working Paper No. 32697.

Coleman, J. 1990. *Foundations of Social Theory,* Harvard University Press: Cambridge.

Colonnelli Emanuele, Tim McQuade, Gabriel Ramos, Thomas Rauters and Oliva Xiong (2024) “Polarizing Corporations: Does Talent Flow to “Good Firms”, University of Chocago WP

Conway, J. and Boxell, L., 2024. Consuming values. Available at SSRN 4855718.

Duarte Jefferson, Stephan Siegel, Lance Young. 2012. Trust and Credit: The Role of Appearance in Peer-to-peer Lending. *The Review of Financial Studies*. Volume 25, Issue 8, August. Pages 2455–2484.

Eichengreen, Berry and Orkun Saka. 2024. “Cultural Stereotypes of Multinational Banks”,

Enke Benjamin. 2019. “Kinship, Cooperation, and the Evolution of Moral Systems
Quarterly Journal of Economics,” vol. 134(2), pp. 953-1019.
Fehr, Ernst and Charness. 2024. Social Preferences: Fundamental Characteristics and Economic Consequences. *The Journal of Economic Literature.* Forthcoming

Ek, A., 2024. Cultural values and productivity. Journal of Political Economy, 132(1), pp.295-335.

Feigenberg Benjamin, Erica Field, and Rohini Pande. 2013. “The Economic Returns to Social Interaction: Experimental Evidence from Microfinance.” *The Review of Economic Studies*. Volume 80, Issue 4. October. Pages 1459–1483

Fergusson, L., Guerra, J.A. and Robinson, J.A., 2024. Anti-social norms (No. w32717). National Bureau of Economic Research.

Fernández, Raquel, and Alessandra Fogli. 2009. "Culture: An Empirical Investigation of Beliefs, Work, and Fertility." *American Economic Journal: Macroeconomics* 1, no. 1: 146-177.

Figlio, David, Paola Giuliano, Umut Özek, and Paola Sapienza. 2019. "Long-Term Orientation and Educational Performance*." American Economic Journal: Economic Policy* 11, no. 4 (November): 272-309.

Figlio, David, Paola Giuliano, Riccardo Marchingiglio, Umut Özek, and Paola Sapienza.2024 “Diversity in Schools: Immigrants and the Educational Performance of US-Born Students” *Review of Economic Studies*. Volume 91, Issue 2, Pages 972-1006.

Fisman, Raymond and Edward Miguel. 2007. “Corruption, Norms, and Legal Enforcement: Evidence from Diplomatic Parking Tickets.” *Journal of Political Economy*. 115:6, 1020-1048

Fisman, Raymond, Daniel Paravisini, and Vikrant Vig. 2017. "Cultural Proximity and Loan Outcomes." *American Economic Review*, 107 (2): 457–92.

Foust, Dean .2024. “Peter Drucker never said, “Culture eats strategy for breakfast”,
https://medium.com/@deanfoust_94519/peter-drucker-never-said-culture-eats-strategy-for-breakfast-0fe87beeb357
ì

Frydlinger, David, and Oliver Hart. Forthcoming. “Overcoming Contractual Incompleteness: The Role of Guiding Principles” 2023, *Journal of Law, Economics and Organization.*

Fukuyama, Francis. 1995, *Trust: The Social Virtues and the Creation of Prosperity*. Free Press, New York.

Gallani, Susanna , Francesca Gino, Raffaella Sadun, 2019, “Cooking Down a Storm: Changing Culture at Pasta Serafina, HBS case # 120013

Gennaioli, Nicola, Andrei Shleifer, and Robert Vishny. 2015. Money doctors. *The Journal of Finance*, 70(1), pp.91-114.

Gennaioli, Nicola, Rafael La Porta, Florencio Lopez-de-Silanes, Andrei Shleifer. 2022. The Review of Financial Studies, 35 (12), 5287–5333,

Giannetti, M. and Wang, T.Y., 2016. Corporate scandals and household stock market participation. The Journal of Finance, 71(6), pp.2591-2636.

Gibbons, R., Siegel, J. and Weber, R.A., 2021. Strategy meets culture (for breakfast): Understanding the relationship and highlighting its potential. Strategy Science, 6(2), pp.111-118.

Giuliano, Paola. "Living Arrangements in Western Europe: Does Cultural Origin Matter?" *Journal of the European Economic Association* 5, no. 5 (September): 927-952.

Giuliano Paola and Nathan Nunn. 2021. “Understanding Cultural Persistence and Change.” The Review of Economic Studies, Volume 88, Issue 4, July. Pages 1541–1581.

Glaeser, Ed L., David Laibson, and Bruce Sacerdote. 2002. An Economic Approach to Social Capital. *The Economic Journal*, 112: F437-F458. https://doi.org/10.1111/1468-0297.00078

Goldin, Claudia and Lawrence F. Katz. 2002. The power of the pill: Oral contraceptives and women's career and marriage decisions. Journal of Political Economy 110(4): 730-770.

Gorton, G., J. Grennan, and A. Zentefis, 2022. "Corporate Culture" Annual Review of Financial Economics 14, 535-561.

Graham, J.R., Grennan, J., Harvey, C.R. and Rajgopal, S., 2022. Corporate culture: Evidence from the field. *Journal of Financial Economics*, 146(2), pp.552-593.

Graham, John Robert and Grennan, Jillian and Harvey, Campbell R. and Rajgopal, Shivaram. 2022. “What Do Financial Executives Say about Corporate Culture and Strategy?” 4, *Management and Business Review*,

Granovetter, Mark. 1985. Economic Action and Social Structure: The Problem of Embeddedness. *American Journal of Sociology*, 91(3), 481–510. http://www.jstor.org/stable/2780199.

Greif, Avner. 1994 "Cultural Beliefs and the Organization of Society: A Historical and Theoretical Reflection on Collectivist and Individualist Societies," *Journal of Political Economy* 102(5), 912-950.

Guiso, Luigi, Paola Sapienza, and Luigi Zingales. 2003. "People's opium? Religion and Economic Attitudes," *Journal of Monetary Economics*, 2003, 50: 225-282.

Guiso, Luigi, Paola Sapienza and Luigi Zingales. 2004a. "The Role of Social Capital in Financial Development," *The American Economic Review*, 94(3), pp. 526-556.

Guiso, Luigi, Paola Sapienza and Luigi Zingales. 2004b. "Does Local Financial Development Matter?", *The Quarterly Journal of Economics*, 119 (3), 929–969.

Guiso, Luigi, Paola Sapienza, and Luigi Zingales. 2006 "Does Culture Affect Economic Outcomes?" *Journal of Economic Perspectives*, 20 (2), 23-48.

Guiso, Luigi, Paola Sapienza and Luigi Zingales. 2008a. Trusting the Stock Market, *The Journal of Finance*, 63(6): 2557-2600.

Guiso, Luigi, Paola Sapienza, and Luigi Zingales, (2008b) "Social Capital as Good Culture", *Journal of the European Economic Association* 6: 295-320 .

Guiso, Luigi, Paola Sapienza and Luigi Zingales. 2009. Cultural Biases in Economic Exchange? *The Quarterly Journal of Economics*, 124(3), pp. 1095–1131.

Guiso, Luigi, Paola Sapienza, and Luigi Zingales. 2011. "Civic Capital as the Missing Link," in the *Handbook of Social Economics*, J. Benhabib, A. Bisin, and M. O. Jackson (eds.), Elsevier.

Guiso, Luigi, Paola Sapienza, and Luigi Zingales. 2013."The Determinants of Attitudes toward Strategic Default on Mortgages." *Journal of Finance*. 68(4): 1473–1515.

Guiso, L., Sapienza, P. and Zingales, L., 2015a. Corporate culture, societal culture, and institutions. *American Economic Review*, 105(5), pp.336-339.

Guiso, L., Sapienza, P. and Zingales, L., 2015b. The value of corporate culture. *Journal of Financial Economics,* 117(1), pp.60-76.

Guiso, Luigi, Paola Sapienza and Luigi Zingales. 2016, Long Term Persistence, *Journal of European Economic Association,* December 2016, Vol. 14(6):1401-1436.

Gurun, U.G., Stoffman, N. and1 Yonker, S.E., 2018. Trust busting: The effect of fraud on investor behavior. *The Review of Financial Studies*, 31(4), pp.1341-1376.

Hart, Oliver, David Thesmar, and Luigi Zingales. 2024. "Private Sanctions." *Economic Policy* 39, no. 117. 203-268.

Hoi, Chun Keung(Stan) Hoi, Qiang Wu, and Hao Zhang. 2019. “Does social capital mitigate agency problems? Evidence from Chief Executive Officer (CEO) compensation.” *Journal of Financial Economics*, Volume 133, Issue 2, Pages 498-519.

Hong, H., Kubik, J.D. and Stein, J.C., 2004. Social interaction and stock-market participation. *The journal of finance*, 59(1), pp.137-163.

Ilzetzki, E. and Simonelli, S., 2017. Measuring productivity dispersion: Lessons from counting one-hundred million ballots.

Ichino, A. and Maggi, G., 2000. Work environment and individual background: Explaining regional shirking differentials in a large Italian firm. The Quarterly Journal of Economics, 115(3), pp.1057-1090.

Jackson, Matthew O., Tomas Rodriguez-Barraquer, and Xu Tan. 2012. "Social Capital and Social Quilts: Network Patterns of Favor Exchange." *American Economic Review*, 102 (5): 1857–97.

Kahneman, Daniel, and Amos Tversky. 1979. "Prospect Theory: An Analysis of Decision under Risk." *Econometrica* 47(2): 263-291.

Knack, Stephen and Philip Keefer. 1996. “Does Social Capital Have an Economic Payoff? A Cross-country Investigation,” *The Quarterly Journal of Economics*, 112:4, pp. 1251.

Knack, Stephen and Paul Zack.2001. “Trust and Growth.” *Economic Journal*, April, 111(470), pp. 295–321.

La Porta, Rafael; Lopez de Silanes, Florencio; Shleifer, Andrei and Vishny, Robert. 1997. “Trust in Large Organizations.” *American Economic Review*, May, (Papers and Proceedings), 87(2), pp. 333–38.

Leibenstein, Harvey, .1982. “The Prisoners' Dilemma in the Invisible Hand: An Analysis of Intrafirm Productivity”, *American Economic Review*, 1982, 72(2): pp. 92-97

Lins, K.V., Servaes, H. and Tamayo, A., 2017. Social capital, trust, and firm performance: The value of corporate social responsibility during the financial crisis. *The Journal of Finance*, 72(4), pp.1785-1824.

Kreps, David. 1990. Corporate Culture and Economic Theory. In *Perspectives on Positive Political Economy*. Edited by James E. Alt and Kenneth A. Shepsle.

Landes, David. S. (1969). The Unbound Prometheus: Technological Change and Industrial Development in Western Europe from 1750 to the Present. Cambridge, New York: Press

La Porta, Rafael, Florencio Lopez-de-Silanes, Andrei Shleifer, Robert W. Vishny, 1997, The American Economic Review, Vol. 87, No. 2, May, pp. 333-338

LaPorta, Rafael, Florencio Lopez-de-Silanes, Andrei Shleifer, and Robert W Vishny. 1998., "Law and Finance*", Journal of Political Economy* 106 (6): 1113-1155.

Liker, J.K., 2004. The Toyota Way: 14 Management Principles from the World's Greatest Manufacturer McGraw-Hill Education.

Macleod, Christopher. 2016. "John Stuart Mill", Stanford Encyclopedia of Philosophy, Section 4.3 Morality.

Mafeza, F., 2013. The role of education in combating genocide ideology in post-genocide Rwanda. International Journal of Education and Research, 1(10), pp.1-10.

Michelacci, Claudio and Liangjie Wu, .2024. " *Profiting from Consumer Politicization", seminar presentation EIEF*

North, D.C. and Weingast, B.R.. 1989. Constitutions and commitment: the evolution of institutions governing public choice in seventeenth-century England. *The Journal of Economic History*, *49*(4), pp.803-832.

North, Douglass C. 1990. *Institutions, Institutional Change, and Economic Performance*, Cambridge University Press, New York.

Nunn, Nathan. 2011. "The Persistence of Culture." In *Handbook of Economic Growth*, Volume 2A, edited by Philippe Aghion and Steven N. Durlauf, 325-377. Amsterdam: North Holland.

Nunn, Nathan, and Leonard Wantchekon. 2011. "The Slave Trade and the Origins of Mistrust in Africa." *American Economic Review*, 101 (7): 3221–52.

Osili, Una Okonkwo and Anna Paulson. 2008. "What Can we Learn about Financial Access from US Immigrants? The Role of Country of Origin Institutions and Immigrant Beliefs. *The World Bank Economic Review*. 22, n.3: 431-455.

Pevzner, M., Xie, F. and Xin, X., 2015. When firms talk, do investors listen? The role of trust in stock market reactions to corporate earnings announcements. *Journal of Financial Economics*, 117(1), pp.190-223.

Polanyi, Karl. 1944. *The Great Transformation*. New York: Farrar & Rinehart, Inc.

Putnam, Robert H. 1993. *Making Democracy Work*, Princeton: Princeton University Press.

Putnam Robert D. 2001. *Bowling Alone: The Collapse and Revival of American Community.* Simon and Schuster.

Polanyi, Karl. 1944. *The Great Transformation: The Political and Economic Origins of Our Time*, Farrar and Rinehart, New York

Rajan, Raghuram G., and Luigi Zingales. 1998. Financial Dependence and Growth. *The American Economic Review*, 88(3), 559-586.

Reuben, Ernesto, Paola Sapienza, and Luigi Zingales. 2009 "Is Mistrust Self-Fulfilling?" Economics Letters 104, no. 2: 89-91.

Ronchi, Maddalena and Nina Smith (2024), "Daddy's girl: Daughters, managerial decisions, and gender inequality.

Rustagi, Devesh, .2024. "Historical Self-Governance and Norms of Cooperation", Econometrica, 92(5), pp. 1473-1502.

Santos, Tano and Luigi Zingales, 2024, "How Big Tech Undermines Democracy," Compact Magazine, March 20, 2024.

Schein, Edgar H, *Organizational culture and leadership*, John Wiley & Sons, 1985

Shiller, R.J., Boycko, M., Korobov, V., Winter, S.G. and Schelling, T., 1992. Hunting for Homo Sovieticus: situational versus attitudinal factors in economic behavior. *Brookings Papers on Economic Activity*, *1992*(1), pp.127-194.

Shive, S.A. and Forster, M.M., 2020. Corporate governance and pollution externalities of public and private firms. *The Review of Financial Studies*, 33(3), pp.1296-1330.

Simpser, A., 2020. The culture of corruption across generations: An empirical study of bribery attitudes and behavior. The Journal of Politics, 82(4), pp.1373-1389.
Smith, Adam. 1759. *The Theory of Moral Sentiments*. London: A. Millar.

Smith, Adam. 1776. *An Inquiry into the Nature and Causes of the Wealth of Nations*. London: W. Strahan and T. Cadell.

Smith, Robert and Zoe Chace, 2012, "How A Pasta Factory Got People To Show Up For Work," Planet Money, August 10, 2012

Solow, Robert M. 1995. "Trust: The Social Virtues and the Creation of Prosperity (Book Review)." New Republic, 213, pp. 36–40.

Spagnolo, Giancarlo. 1999."Social Relations and Cooperation in Organizations."*Journal of Economic Behavior and Organization*, 38(1), pp. 1-25.

Thaler R. and C. Sunstein. 2007. *Nudge: Improving Decisions about health, wealth, and happiness.* Yale University Press.

Towe, C. and Lawley, C., 2013. The contagion effect of neighboring foreclosures. *American Economic Journal: Economic Policy*, 5(2), pp.313-335.

Wu, Wenfeng, Michael Firth, Oliver M. Rui. 2014. Trust and the provision of trade credit. *Journal of Banking & Finance*. Volume 39. February. Pages 146-159.

Zingales, L., 2012. A capitalism for the people: Recapturing the lost genius of American prosperity. Basic books.