The Effect of Culture on the Functioning of Institutions: Evidence from European Regions

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Culture: the missing link?

An influential line of research starting with North (1981) and continuing with Acemoglu, Johnson and Robinson (2001) has stressed the importance of distant history as one of the main determinants of current economic development. In particular, economic backwardness has been identified as a by-product of a past history of despotism or slavery. But what is the channel through which distant history shapes current economic outcomes?

A widespread interpretation is "institutions". However, economic and policy outcomes are often much more persistent than the institutions which are supposed to shape them. Institutions, in fact, may change abruptly, and yet leave economic outcomes nearly unaffected. Consider for example transitions from autocracy to democracy and vice versa: while coups seem to bring about a pronounced deterioration in economic outcomes, democratic transitions are not associated with comparably large improvements. On the other hand, consider a country where political institutions have been the same for centuries. Within that country, economic and policy outcomes may diverge across regions; these differences can be traced back to different regional histories in the past, whose legacy persists in spite of identical political and legal institutions. In Italy, for instance, it is well known that hospitals, courts, schools and local governments are much less efficient in the South than in the North. Clearly, the persistence in institutional outcomes cannot be fully explained by looking at formal institutions only: something else, besides institutional inertia, must account for this legacy of history.

Political economy explains this persistence with reference to the redistributive conflicts and economic incentives of political and economic élites who shape institutions so as to preserve their *status quo* rents. However, economic incentives alone fail to explain several institutional failures: why does a civil lawsuit in Southern Italy last three times as much as in Northern Italy, in spite of identical legislation and incentives, and similar resources? Why do rational voters keep voting for corrupt politicians? More generally, why is it possible to overcome the collective action problem, the core of almost any form of political participation, in some situations, but not in others? The problem is that while individual incentives play a crucial role in most economic situations, this is not the case in several political situations, in which aggregate outcomes reflect the actions of many atomistic individuals. Moreover, inside government organizations, incentives are generally weak, due to lack of competition.

Besides purely economic incentives, we should devote our attention also to other relevant drivers of individual behavior, such as morality. One's belief about the behavior of other people, for example, exerts a strong influence on voters' demands and on citizens' participation; one's perception of what is right or wrong determines the extent of moral hazard inside public organizations. In other words, "culture", by which we mean primarily normative values on what is "right" or "wrong" and how one "ought" to behave in given circumstances, is likely to affect the functioning of institutions.

Values are largely transmitted vertically, from one generation to the next, in a conservative mechanism which takes place mostly within the family, rather than across unrelated individuals. As suggested also by Roland (2004) and Guiso et al. (2006), such slow moving values can indeed be the "missing link" through which distant political history influences the functioning of current institutions and current devel-

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opment, and can explain the persistence of institutional outcomes.

Two stylized facts, discussed in detail in Tabellini (2008), suggest that this is indeed the case. First, it makes sense to talk about the quality of government as a general feature of countries: some countries are governed "well" in many policy areas and others are governed "poorly" also in many areas. This is confirmed by cross country data (Tabellini 2008), showing that government failures and successes are correlated across many different policy dimensions. That policy distortions and government inefficiencies are often clustered together seems to suggest that they may have a common cause. Second, culture is slow moving: exploiting data on third generation immigrants to the US, Tabellini (2008) shows that current values, extrapolated by the World Value Surveys opinion polls, reflect features of the country of origin of the respondents' ancestors. Similar results have also been obtained by Guiso et al. (2006). This article reviews the main results in these recent contributions, drawing on Tabellini (2008; 2009).

Values and institutional outcomes

The first question to be addressed is which cultural traits are especially important in explaining institutional outcomes, and in particular which ones are likely to induce well-functioning institutions.

One key contraposition is between values consistent with "limited" as opposed to "generalized" morality; the distinction concerns the scope of application of norms of good conduct: within a narrow group with which the individual identifies, or towards everybody. In hierarchical societies, codes of good conduct tend to be confined to small circles of related people, outside which opportunistic and selfish behavior is regarded as natural and morally acceptable. In his case study of life in a rural village in Southern Italy (*The Moral Basis of a Backward Society* 1958), political scientist Edward Banfield calls this attitude "amoral familism", referring to the fact that principles of good and evil are applied inside the family only. In modern democratic societies, on the other hand, abstract rules of good conduct apply to many social situations. As argued by Max Weber ([1905] 1970), the emancipation of the individual from feudal arrangements has typically been associated with a diffusion of generalized morality. Yet, the distinction generalized/limited morality is still relevant today, in order to understand cultural differences between different countries or regions.

The idea that generalized morality leads to better collective outcomes has a long history in political science and has recently been gaining grounds in economics as well. The relevance of culture and morality to the functioning of institutions has been stressed amongst others by Landes (1998) and Platteau (2000). A related idea is that a civic culture and a well-educated population are an important prerequisite to a well functioning and stable democracy, as highlighted, inter alia, by Glaeser et al. (2006), and Persson and Tabellini (2006).

Generalized morality norms are likely to instill confidence and respect for abstract principles such as the rule of law, the respect for individual rights and for democratic procedures. Hence they are likely to induce reciprocal cooperation and discourage free riding, with virtuous consequences not only for the economic behavior of individuals but also for their participation in the political and administrative life of their local communities. The latter is crucial to ensure an adequate provision of local public goods and to monitor political representatives or local administrators. Thus, generalized morality is conducive to well functioning institutions through at least three channels: law enforcement is easier because citizens are more likely to be law abiding (eg., less likely to cheat on taxes); bureaucrats are less corrupt; voters expect and demand higher standards of behavior from politicians, monitor public administrators more effectively and are more inclined to vote based on general social welfare rather than personal benefit criteria.

On the other hand, in societies where limited morality is prevalent, individualism is mistrusted; the role for the state, as well as for parental education, is a repressive one: good behavior is deemed to result from coercion, not from internalization of the values of society. Such coercive cultural environments stifle individual initiative and entrepreneurship as well as cooperation within a group, with adverse consequences on economic development. Aghion et al. (2009) suggest that low levels of social capital induce a strong demand for government regulation; conversely, a high level of regulation discourages civic behavior, since, when entrepreneurship is restricted through regulation, investment in social capital may not pay off. In their model, values and institutions mutually affect each other: when people expect to live in an "uncivic" community, they expect high levels of regulation and corruption, and do not invest in social capital; their expectations are fulfilled and the society ends up trapped in a "bad equilibrium" with high levels of corruption and regulation.

The empirics

At the empirical level, it is possible to construct measures for the diffusion of norms of generalized vs limited morality at an aggregate level exploiting the attitudes revealed by The World Value Surveys opinion polls (Inglehart et al. 2000). A variable extensively used in the economic literature is *trust*, defined as the fraction of respondents believing that "most people can be trusted". This has been interpreted in two alternative, but not mutually exclusive ways: as belief about the behavior of others, and as an indicator of moral values and trustworthiness. A moral interpretation has been advocated amongst others by Ulsaner (2005), who has shown that *trust* is a very persistent individual feature correlated with charitable contributions and volunteering, and by Glaeser et al. (2000).

In a similar way we can construct the variable *respect*, as the fraction of respondents who claim to consider "tolerance and respect for others" as an important quality which children should be encouraged to learn at home. These two cultural traits encapsulate what earlier studies have called "social capital". One of the possible interpretations of these variables is as measures for individual values related to generalized morality; conversely, lack of trust and lack of respect for others' actions are typical of hierarchical, coercive societies dominated by limited morality. The above-mentioned variables can be considered in isolation or combined to construct a summary measure of the cultural traits favorable to the good functioning of institutions.

In cross-country data, *trust* has been shown to be correlated both with favorable economic outcomes and with indicators of well functioning institutions. The latter are measured by perceptions of bureaucratic quality and indicators of property rights protection. Although this correlation should not carelessly be interpreted as evidence of a causal link, the explanatory power of culture in cross-country regressions is remarkable. Consider, for example, the Netherlands and Italy, two countries at comparable levels of development but respectively close to the top and bottom of the distribution of the governance indicator amongst the OECD countries: according to the specification of Tabellini (2008), over half their difference in governance may be explained by differences in the variables *trust* and *respect*. Aghion et al. (2009) have also highlighted a strong negative correlation at the cross-country level between *trust* and government regulation.

The evidence from European regions

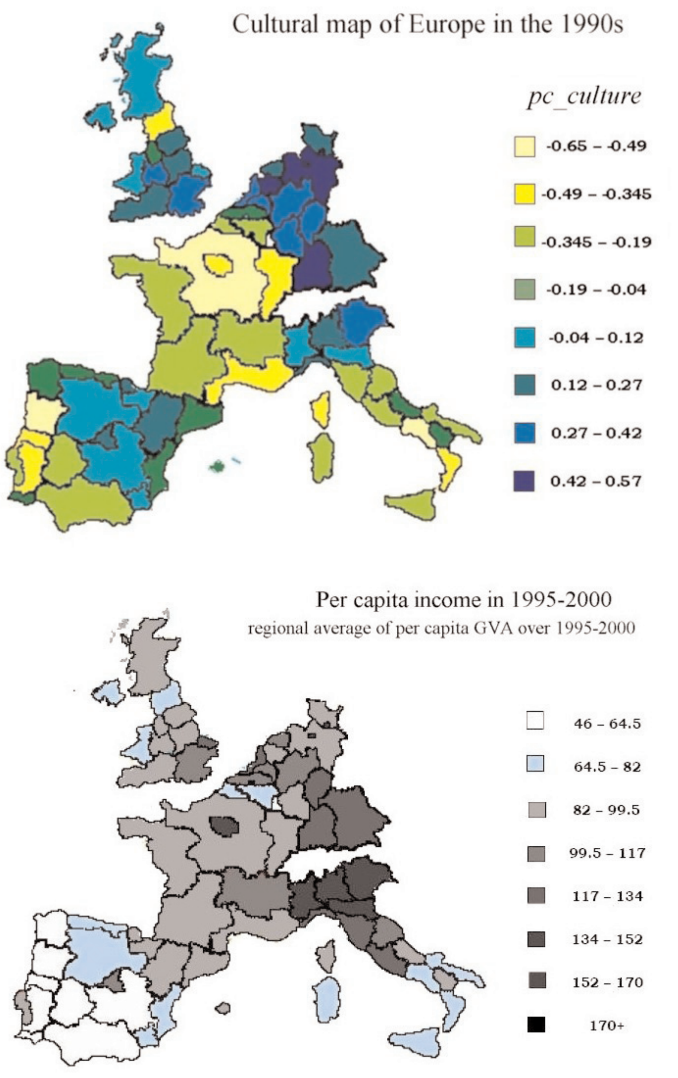
Drawing inferences from cross country data is problematic: countries diverge in a large number of economic and political dimensions, so that the differences in economic outcomes may be due to factors other than culture and not explicitly included in the specification (omitted variables). Moreover, institutions and culture are likely to interact with each other to determine economic development, and working with cross-country data it is hard to disentangle the two effects. Both shortcomings can be overcome by exploiting variation in economic outcomes at the subnational level, focusing on the role of culture as a channel of historical influence within, rather than across, countries.

The importance of social capital within countries had been stressed for the first time by political scientist Robert Putnam in his seminal work on Italy's civic divide (1993), in which the diverging performances of Italian regions are attributed to their different civic traditions. In particular, Putnam points to the free city-state experience during the Middle Ages and the culture of independence which it fostered. Guiso et al. (2008) test these conjectures investigating the historical origins of social capital across Italian cities and estimate that at least 50 percent of the North-South gap in social capital is due to a lack of a free city-state experience in the South. De Blasio and Nuzzo (2006) also conduct a study on differences in social capital across Italian regions.

Values can influence regional economic development through a variety of channels: from the functioning of the public administration, to criminal activities in the region, to behavior inside private organizations. For example, Ichino and Maggi (2000) investigate moral hazard inside a large Italian bank with branches in different regions, finding that absenteeism and misconduct episodes are substantially more relevant in the South.

Tabellini (2009) considers a sample of 69 regions located in a small number of homogeneous European

Figure 1



Source: Tabellini (2009).

countries.[1] The countries considered share the following peculiarity: although formal and legal institutions at the national level have been the same for 150 years or more, there is a variety of regional political histories within each country. The key idea is to compare current economic outcomes in European regions, controlling for country-fixed effects, in such a way that the effect of the common national institutions is removed. At this point, it will be possible to determine to what extent differences in economic performance can be explained by differences in culture, which in turn are induced by different regional histories.[2]

Figure 1 shows the regional averages of the summary variable *pc_culture*[3] and regional per capita output (measured as average gross value added over the period 1995–2000). The regional pattern of culture is strikingly similar to that of per capita output. In particular, Germany, England and Northern Italy tend to have high per capita output and positive cultural indicators, while Southern Italy, Portugal and Southern Spain fare worse on both counts. The correlation, however, is not perfect: in particular, France has high per capita income in spite of cultural traits which are a priori less favorable to economic development.

This correlation could merely reflect the influence of other common determinants, such as national institutions, education or past levels of economic development. But a deeper analysis, details of which can be found in Tabellini (2008; 2009), reveals that this is not the case: once we control for country-fixed effects and other regional variables, including school enrolment in 1960, urbanization in 1850 and literacy in 1880, culture and per capita output still appear positively correlated, as we can see from the interpolant in Figure 2.

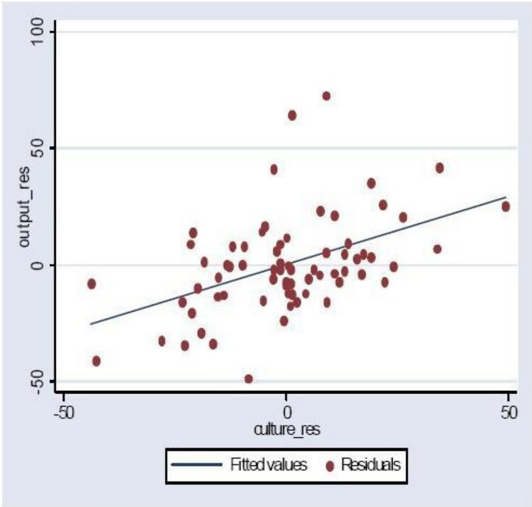
According to this specification, a difference in culture of 50, such as between Lombardy and a typical region in Southern Italy, is predicted to be associated with a difference in GDP per capita of about one third of the EU average; this would be tantamount to accounting for almost half of the observed income difference between Lombardy and Southern Italy.

[1] Belgium, France, Italy, Netherlands, Portugal, Spain, UK and West Germany.
[2] Beugelsdijk, and von Schaik (2001) also study the correlation between social capital and per capita output in European regions, but do not attempt to link social capital to history nor to account for endogeneity.

[3] *Pc_culture* is constructed to include four cultural variables extrapolated from the World Value Surveys: *trust, respect, control* and *obedience*. *Control* captures one's belief in individual effort and initiative, which is correlated with generalized morality, while *obedience* captures a cultural emphasis on hierarchy as opposed to egalitarianism, and is correlated with limited morality. *Pc_culture* is strongly positively correlated with *trust* and *respect* and represents an overall indicator of the cultural traits favourable to well-functioning institutions.

Figure 2

Correlation between output and culture, including country fixed effects and regional controls.



Source: Tabellini (2009).

This strong correlation between culture and economic development, however, does not by itself imply a causal link which goes from culture to development. The key difficulty in estimating a causal effect of culture is that it is endogenous to economic development and poses problems of reverse causality: not only does "good culture" induce "good institutions" and development, as we wish to show, but "good institutions" induce "good culture" as well, as underlined by the so-called modernization theory (e.g., Inglehart and Baker 2000). In other words, the correlation we have highlighted may be due in whole or in part to the fact that economic development induces values consistent with generalized morality, rather than the other way around. In order to rule out this reverse causality, we have to rely on some exogenous source of variation in culture, resorting to the technique of instrumental variable regression ("two-stage regression").

Instead of culture, we consider an "instrument" for culture: the quality of political institutions ruling the region in the distant past (i.e., before the countries considered became unified). The crucial identifying assumption is that past institutional quality affects current values but has no direct impact on current development. Under this hypothesis, if we find any impact of past institutional quality on current development, this effect must necessarily occur through culture, according to the causal mechanism: early political institutions => regional cultural traits => current development. The reverse causality problem is then ruled out, since current development can by no means have affected past political institutions.

These identifying assumptions require a careful evaluation. A first-stage regression of current culture on past institutional quality, measured by considering checks and balances on the regional executives between 1600 and 1850, reveals a robust correlation: past institutional quality indeed seems to shape current regional cultural traits. This is consistent with the idea that regions where despotic governments exploited citizens are likely to have inherited a culture of mistrust and limited morality, whereas regions ruled by republican regimes, where participation is promoted and the rule of law is respected are likely to have inherited a culture of generalized morality. It is also interesting to note that, on the other hand, no significant correlation is found between current culture and urbanization in 1850. This supports the identifying assumption that contemporaneous cultural traits do not just reflect economic development in previous centuries, but rather the political environment in which previous generations used to live.

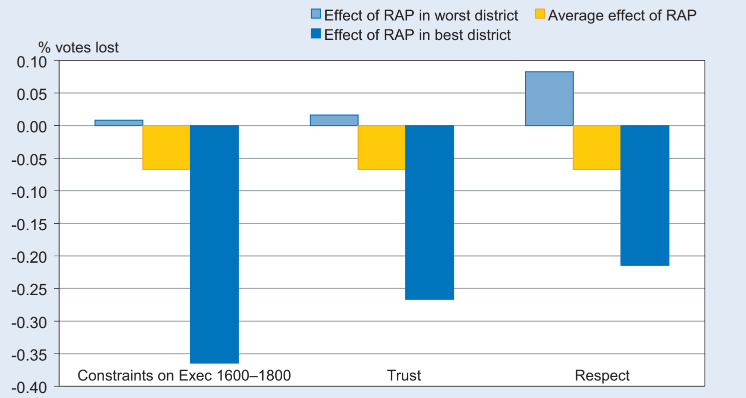
The second assumption, i.e., that past institutional quality has no direct correlation with current development, appears reasonable, although it cannot be tested directly. What we are assuming is that, once we control for past economic development as measured by literacy in 1880 and urbanization in 1850, institutions in place before the unification have no impact on current development. This is tantamount to assuming that 150 years of unification and national policies have made up for those regional differences in development which are due to the inheritance of previous regimes. Under these assumptions, the remaining differential in current development across regions is attributed to differences in culture.

Resorting to history as an instrument for culture, the estimated impact of culture on output is still positive and significant, and appears to be larger compared to the simpler specification. In other words, the cross-regional variation in culture that can be attributed to history appears to be more strongly correlated with development compared to the overall measures of culture. This result, however, should be considered with caution: the two-stage regression could yield higher estimates due to the invalidity of the instruments or measurement error.

These findings are very robust to adding other regressors, alternative measures of values, or alternative estimation strategies, as discussed extensively in Tabellini (2008; 2009).

Figure 3

EFFECT OF RAP ON PREFERENCE VOTES BY TYPE OF ELECTORAL DISTRICT



Source: Nannicini et al. (2009).

The evidence presented so far supports the idea that culture is a long-run determinant of output, measured in levels. But does culture affect also regional economic growth in the short run? The evidence suggests that it does. The analysis sketched so far can be replicated, using as a dependent variable regional output growth over the period 1977–2000. Again, we find that the component of regional values explained by distant political history has a positive and significant association with regional growth. In particular, according to the estimated coefficient, if Southern Italy had the same culture as Lombardy, its average yearly growth rate would have been higher by almost 0.5 percent (Tabellini 2009).

Summing up, all the instrumental variable estimates discussed portray a remarkably consistent and robust picture: first, past political institutions and low literacy rates left a mark on regional culture; second, this cultural legacy of history is an important determinant of current economic performance. Moreover, the data cannot reject that past political institutions and literacy rates of previous generations influence economic performance only through culture.

A further interesting piece of evidence of how regional differences in culture can explain divergent institutional outcomes comes from the analysis of Italian voting behavior. In ongoing preliminary work, Nannicini et al. (2009) test the hypothesis that voters sharing norms of generalized morality demand higher standards of behavior on their elected representatives.

In Italy prosecutors cannot investigate elected representatives unless they first obtain authorization to do so by Parliament. Prosecutors' requests to proceed with criminal investigations of elected representatives (called RAP from here on) are public knowledge. We draw on data on Italian regional elections before 1993, when voters could express preference votes over individual candidates to investigate how voters react to RAP on incumbents in different electoral districts.[4] Controlling for district and legislature fixed effects, as well as individual features of the incumbent, we find that voters in regions with a better political history, or with higher values of trust and respect, punish incumbents more, in terms of preference votes, for having received a RAP. In the regions with the lowest values of *trust* and *respect* votes received by an incumbent receiving a RAP increase slightly, although generally by a negligible amount; conversely, in districts with high values of *trust* and *respect* votes received drop by as much as 20 percent to 35 percent, depending on the specification, as summarized in Figure 3.

Implications for research and policy

The evidence presented casts doubts on the primacy of formal institutions as determinants of economic development. Instead it suggests that culture is likely to interact with formal institutions influencing the incentives and the behavior of economic and political agents.

These findings suggest a promising research agenda. Attention should be devoted to how values are formed in the first place, why they reflect past institutions and how they are transmitted over time, following the line of research of Bisin and Verdier (2005) and Fernandez (2007). It would be equally interesting to investigate how values interact with formal institutions and incentives, in particular how do political outcomes (eg., targeted redistribution) shape cultural traits (eg., reinforcing group identity); and vice versa how culture influences political outcomes, through voters' behavior or in the formation of pressure groups.

[4] These data were also studied by Chang and Golden (2004), who however did not focus on heterogeneities across electoral districts.

If confirmed by future research, these findings also suggest a number of relevant policy implications for the regions of Europe and, in particular, Italy, which is characterized by a persistent North-South divide. The low labor productivity of economically backward regions may be linked to adverse cultural traits prevailing in those regions, implying that it is not likely to go away soon. Income transfers and public investment cannot be a solution, because they do not address the source of the problem. Instead, economically and culturally poor regions are likely to benefit from investments in education, from cheap sources of finance (to facilitate the emergence of local entrepreneurs), and from a decentralization of administrative and political powers, in order to stimulate the accumulation of social capital. These findings also reinforce the simple, but often neglected idea that regions with lower productivity ought to pay lower real wages: a single national wage concentrates unemployment in the poor regions (as it happened in Southern Italy and East Germany), self-perpetuating the adverse cultural features that might be at the root of the low labor productivity in these regions.

Moreover, this analysis suggests that the same policies may work differently in different regions, according to the different values prevailing in those areas. For example, active labor market policies are more likely to be abused in Southern Europe, where values do not to discourage free riding. Decentralization may lead to learning or to divergence: while some regions may benefit from decentralization, others may perform worse in a decentralized system. Attention should also be devoted to how different policy instruments influence values. More generally, an effort should be made in order to individuate policy instruments which fit the value system, taking into account how policies and values interact.

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