Trust and Finance

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In recent years, economists have become increasingly interested in studying how specific institutions and norms affect economic behavior and economic performance. One part of our research, developed with Luigi Guiso, examines the interactions between a small but important subset of norms and institutions: trust and civic capital. This research also explores the effects of these factors on economic outcomes, such as economic growth.

Trust, Social Capital, and Financial Development

Our first contribution in this area introduces the concept of trust into finan-cial economics. One paper investigates how social norms affect financial develop-

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ment.[1] The term "social capital" has been widely used in the social sciences outside of economics and is defined as "features of social life — networks, norms, trust, that enable participants of a given community to act together to pursue shared objectives."[2] As such, a community's level of social capital may affect economic efficiency by enhancing the level of trust among economic agents belonging to the group — here trust is defined as "a particular level of the subjective probability with which an agent assesses that another agent or group of agents will perform a particular action."[3] This concept is foreign in traditional finance, because the prevailing paradigm is based on common knowledge, homogenous beliefs, and, very often, representative agents.

Because financial contracts require trust, differential levels of social capital may have important consequences for the way that financial markets develop. Financing is nothing but an exchange of a sum of money today for a promise to return more money in the future. Whether such an exchange can take place depends not only on the legal enforceability of contracts but also on the extent to which the financier trusts the financee. In relational contracts, what matters is personalized trust — that is, the mutual trust that people develop through repeated interactions. For the development of anonymous markets, though, what matters is generalized trust: the trust that people have in a random member of an identifiable group. Sociological research shows that areas where social capital is greater have higher generalized trust and, thus, are more likely to develop financial relations.

In "The Role of Social Capital in Financial Development" we study this empirical prediction for a variety of households' financial choices: portfolio allocation, use of checks, availability of loans, and reliance on informal lending. Consistent with social capital being important, the results show that in areas characterized by high levels of social capital, households invest a smaller proportion of their financial wealth in cash and a bigger proportion in stock. In areas with a great deal of social capital, households also are more likely to use personal checks and to obtain credit when they seek it. The effect of social capital is stronger when legal enforcement is weaker and is more pronounced among less-educated people, who need to rely more on trust because of their limited understanding of contracting mechanisms. These results have real implications for developing countries where education levels tend to be low and law enforcement is weak. Whether trust is simply an equilibrium outcome of a society in which non-legal mechanisms force people to behave cooperatively, or whether there is an inherited component imprinted during education, is the subject of a long standing debate. In the above-mentioned paper, we address this question by examining the behavior of people who migrated over the course of their lifetime. For these households, we can separately identify the effect of the environment they grew up in versus the environment where they now live. Although most of the effect is attributable to the level of social capital prevailing in the area where an individual lives, roughly one third is attributable to the level of social capital prevailing in the area where he or she was born. This is important, because it emphasizes that subjective priors about other people's behavior may be different from the objective probability, and they may be driven by the individual's educational background and the cultural environment in which the individual was reared.

While deeply affected by societal norms, trust is also influenced by individual characteristics related to biological traits and personal history. We consider each of those factors in subsequent work.

In another study, we look at whether individual trust, rather than the average level of trust of the community, helps to explain the limited stock market participation observed in the data, especially among the wealthy.[4] Analyzing what drives participation in the stock market is important not only for asset pricing and for the development of financial markets but also for analyzing the potential impact of investing social security account balances in the stock market.

We develop a simple testable model in which the decision to buy stocks depends not only on the objective expected return but also on the subjective priors of the investor about the probability of being cheated. Less trusting individuals are less likely to buy stock and, conditional on buying stock, they buy less. The calibration of the model indicates that mistrust is sufficiently severe to account for the lack of participation of some of the wealthiest investors in the United States, as well as for differences in the rate of participation across countries. To test the model's predictions, we use a sample from the Dutch National Bank (DNB) Household survey. Trusting individuals are significantly more likely to buy stocks and risky assets and, conditional on investing in stock, they invest a larger share of their wealth in stocks.

In a related paper, we examine whether cultural biases help to explain the extent to which individuals trust each other.[5] We also study how these cultural biases affect international trade and investments. In this work, the empirical challenge is how to separate customary beliefs from rational expectation beliefs. We do so using a rich dataset that contains the trust of European citizens for citizens of other countries. First, we document that relative trust is affected not only by objective characteristics of the country being trusted (that is, country fixed effects), but also by cultural aspects including religion, a history of conflicts, and similarities between pairs of countries. The impact of both wars and religion on relative trust is reduced by half for people with a college degree, consistent with the hypothesis that cultural stereotypes become less important in shaping people's priors when individuals are more educated.

Having established an effect of culture on priors, we then find that lower relative levels of trust toward citizens of a country lead to less trade with that country, less portfolio investment, and less direct investment in that country, even after controlling for the country's objective characteristics. This effect is stronger for goods that are more trust intensive, and it doubles or triples when trust is instrumented with its cultural determinants. These results suggest that perceptions rooted in culture are important (and generally omitted) determinants of economic exchange.

Cultural Determinants of Preferences and Priors

If trust is important in explaining participation in the market and in the use and availability of financial contracts, then the next logical step — which we take in our research — is to investigate why trust and, more generally, individuals' priors and preferences differ so greatly across countries and across individuals within a country. A logical place to start is by investigating the set of social institutions that affect individuals' lives.

One such important social institution is religion. We analyze the relation between religion and six groups of attitudes that have been shown to be relevant for economic growth: attitudes toward cooperation (trust and tolerance), women, government, legal rules, the market economy and its fairness, and attitudes toward savings.[6] We examine the effect of different religiosity levels and different religious denominations, controlling for individual characteristics and country fixed effects.

On average, we find that religion is positively associated with attitudes that are conducive to free markets and better institutions. Religious people trust others more, trust the government and the legal system more, are less willing to break the law, and are more likely to believe that market outcomes are fair. However, the relation between religiosity and market mechanisms (incentives, competition, and private property) is more mixed. On the negative side, religious people are more intolerant and less sympathetic to women's rights. These effects differ across religious denominations.

This evidence suggests the importance of upbringing and social environment in shaping individuals' preferences and beliefs and in influencing the allocation of resources. The role of culture in this context is very important. In a review paper[7], we discuss and extend the literature on the effect of culture on individual preferences and priors; we also investigate some of the macro effects of culture on economic outcomes.

It is also important to understand how social capital and trust are accumulated and dissipated. Putnam (1993), one of the fathers of the concept of social capital, conjectures that social capital can be the result of historical experiences. For example, he attributes the large difference in social capital between the North and the South of Italy to the period of independence that Northern cities had as free city-states more than 500 years ago.

This conjecture, which Putnam does not formally test, is intriguing for two reasons. First, it identifies how social capital is formed, through the experience of positive cooperation at the local level. Second, it assumes an enormous degree of persistence of this experience. If Putnam is correct, then a lot of the observed persistence in economic development might be caused by the persistence of the social capital. We test Putnam's conjecture by studying both differences within sub-regions of northern Italy and differences between the north and south of Italy.[8]

Both methods suggest that Putnam's conjecture was right and that at least 47 percent of the North-South divide in Italy is attributable to the free city-state experience. More importantly, our results suggest that positive experiences of cooperation at the local level can have extremely long-lasting effects, even when the institutions associated with those experiences have all but vanished. This result has implications that reach beyond the explanation of the Italian experience. What colonizers might have transferred to their colonies is not necessarily a set of institutions, but rather a different experience of cooperation or mistrust. An unresolved question, however, is how these experiences last for so long.

We try to answer this question in subsequent research where the main hypothesis is that the transmission process is cultural and is passed from generation to generation. We define social capital as "good" culture — in other words, a set of beliefs and values that facilitate cooperation among the members of a community — and we build a model of the cultural transmission of beliefs.[9] In this context, even a positive experience of cooperation lasting two to three generations can have permanent effects. This result could rationalize the long-lasting effect of a history of good institutions even after these institutions have vanished. One way to model better legal enforcement, for example, is as a reduction in the cost of being cheated. Even a temporary reduction in this cost can permanently increase the level of cooperation as the good experience is transmitted across generations. This effect also can explain the long-lasting effect of legal origin[10] and of bad colonial institutions.[11]

Conclusions

Research on "social capital" has been plagued by ambiguity on what that term actually means. This ambiguity has made it difficult for this concept to be fully accepted into the mainstream economic debate. In a survey paper[12], we propose a definition of social capital that satisfies the criteria of an economic definition of capital (Solow, 1995) and clearly differentiates social capital from physical and human capital. This so-called "civic capital" is an important omitted factor of production and can explain why differences in economic performance persist over centuries. We discuss how the effect of civic capital can be distinguished empirically from other variables that affect economic performance and its persistence, including institutions and geography.

While this research has brought some useful insights, much remains to be done. First, there is a need for better empirical measures of civic capital. Second, it is important to study the mechanism through which civic capital accumulates and depreciates. The evidence suggests that a positive shock to the benefits of cooperation can have effects that last several centuries. What ensures such a high degree of persistence, however, still remains unclear. A better understanding of these mechanisms is crucial if we want to think about designing policies that might foster the formation and preservation of civic capital.

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