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New perspectives in the economics of culture and social interactions

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#### ABSTRACT\_

Since Gary Becker's seminal contributions on the economics of the family and crime, which made him win the Nobel Prize in economics in 1992, economists have become increasingly interested in explaining non-market activities and social behaviours of individuals. There are two main reasons why economists, using the theoretical and empirical tools developed in more standard fields (e.g. consumer theory, monetary policy, international trade, etc.), can add to the policy debate on culture and crime. First, the particular attention economists put in distinguishing causation correlations from links helps improving the understanding of events occurring in these fields. Second, the rigorous quantitative nature of economic analysis can play an important role in properly measuring effects of alternative policies and introducing new variables in the analysis. Recent developments in economic analysis applied to issues related to, among others, criminal behaviour, transmission of cultural traits and emergence of religious institutions have been discussed by prominent European and US scholars during the Conference "Economics of Culture, Institution and Crime" held at FEEM on 20-22/01/2010. This Policy Brief reviews the main findings presented at the Conference and elaborates policy recommendations for Europe and beyond.

### Policy challenge\_

Globalization brings with it an increasing mixture of people whose socio-cultural backgrounds are heterogeneous under many aspects. This is particularly true and relevant in densely populated areas, such as cities, that are the natural unit of analysis if people want to study social interactions. It is therefore increasingly needed to give policymakers at the local and national level the tools to tackle the following questions: Which long term determinants are at play in shaping individuals' social capital, trust and religious sentiments? How these individual characteristics interact and shape people's market and non-market behaviour? Which are the individual and aggregate determinants of criminal behaviour?

### Background\_

In the last thirty years microeconomic theory has improved its ability to analyze many situations, such as fertility, the division of labour within the family, crime attitude, etc., formerly not considered as individuals' market choices. Thanks to the establishment of these mechanisms in the economic literature, the original micro-level analysis expanded into several dimensions in the last decades. Political economy tools have been used to aggregate individuals' behaviour, helping to understand how collective decisions are taken. In a similar fashion, network theories have been used to understand the behaviour of small scale entities such as neighbourhoods, classrooms, etc. with the aim of identifying peer effects in, for example, criminal behaviour and school performance. Finally, the availability of new data and the new techniques developed to manage long term data made it possible to understand some of the historical determinants of the behaviours under analysis.

# Long term determinants of societies' behaviours

In today's society we observe a variety of behaviours that can be broadly classified in terms of cultural clusters, such as "the Mediterraneans", "the Anglo-Saxons" or "the North-Europeans", just to cite some of them. Other kinds of classification can be thought, for example the religious affiliation of individuals. According to these classifications one can attach to different cultures their specific characteristics in terms of social capital, trust toward others, religiosity, work ethic, attitude toward diverse people, etc. To study how these characteristics emerged is not only interesting per se but it is also relevant since these characteristics contribute to shape the behaviour of a society as a whole, understanding their fundamental determinants is of primary importance for policymaking.

- Along this line of reasoning, it has been found that social trust across European regions finds its roots in the variability of climate that occurred in the pre-industrial revolution era. The theoretical explanation comes from the necessity of neighbouring settlements to set up a system of informal insurance aimed at smoothing out the fluctuations of agricultural production. The interactions repeated among close communities, needed to implement this particular kind of insurance, resolved in the social trust we find today.
- In another context, historically determined, conditions such exogenous as the distribution of land productivity have been found to be crucial in the birth and adoption of Islamic economic institutions. In particular, an environment made of small fertile places surrounded by large and very poor areas, in an era in which agriculture was the main source of income and trade was the only way to enhance people's wealth, was the kind of geography that aligned the interest of rich and poor along a social contract that took the form of Islamic economic institutions. The authors conclude that static and dynamic redistribution, complemented by limitations on capital accumulation, arose because of the few rich people wanting to avoid poor to hurt them.
- Culture-specific behaviours have been proven to be very persistent across time and space. The "Culture of Honor", that originates among Scotch-Irish, has its roots in the herding activity that characterized this kind of society: violence was a necessary condition to preserve a reputation for toughness and protect animal from thefts. This attitude has been found still today in the US South, the part of US where Scotch-Irish settled. Accordingly, counties that received more Scotch-Irish are still

characterized by higher level of violent crimes, in particular homicides by white offenders.

# Individuals' culture and aggregate behaviour\_\_\_\_\_

In economics, how prices form as the equilibrium outcome of individuals' supplies and demands of goods and factors of production is a clear example of aggregate behaviour determined by the interaction of individuals. With this in mind, we can parallel the existence of market and non-market institutions, such as religious organizations or labour market regulations, as the equilibrium outcome of the interactions of individual's augmented preferences and abilities, where "augmented" means that they incorporate features that are non-standard in economic analysis.

- The existence of religious organizations has been explained either with the individuals' demand for "spiritual" goods or simply taken as granted, since the main relation under analysis until few years ago was the effect of religion on economic variables. Opening up the black box of religious organization leads to the analysis of how religious beliefs and religious practices evolve (Levi and Razin). It has been found that religious organizations not only affect beliefs of their members, but also indirectly affect members' well being their through cooperation among themselves. With this new view it is possible to rationalize why, for example, part of the religious community is not believer but participates in costly rituals as a way to interact with others, exploiting the benefits of cooperation that exist.
- The persistence of regulated labour markets, for example in some European countries, is blamed for the high level of unemployment since the Eighties. Moreover, outsiders do not strongly oppose regulated labour markets as the logic suggests. However, if people have strong family ties, meaning that moving away from their family to find a job is very costly, it could be actually optimal for them to prefer a highly regulated labour market. This is because with relatively low mobility of workers, firms would have the chance of setting lower wages if the majority of population has strong family ties. This

vicious circle leads to a strong relation between family ties and labour market regulation that is very stable over time, as the data suggest for many countries.

## The economics of criminal behaviour\_

The increasing availability of data and the effort in adapting the existing framework of analysis to new fields of research are playing a fundamental role in the development of economically grounded policy evaluation of crime. In this kind of ethical-sensitive issue, a precondition for discussing policies is to have solid data and theoretical framework able to highlight the causality relations involved. Many of the last empirical studies on crime are based on changes of detention policies, "natural experiments" in the economists' jargon, since different people are touched by policies in a sort of random fashion, the kind of selection into treatments that characterizes experiments in hard sciences. On the theoretical side, the tools that have recently gained attention in the research community are those involving network theory, since the group dynamics have been found to be very important in determining individual criminal behaviour. Moreover, including in the analysis of criminal behaviour psychological notions such as temptations self-control and helps to understand behaviours that can be hardly rationalized using standard theories based on cost-benefit analysis.

Randomized experiment are those kind of policy interventions that allow to evaluate in a very accurate way their effects, since the way the policy treatment is assigned to participants (individuals, firms, regions, etc.) is random. In Argentina, assignment to military service is made random, so that the causal effect of serving in the army on criminal behaviour has been assessed. Among the two competing theories linking military service with crime (one indicating that military service should decrease individuals' attitude to commit crimes because of order and discipline education, better health conditions, enlargement of social networks, etc. The other pointing at the opposite effect, stressing that military service delays young's entrance in the labour market and teach how to use fire arms), data gives full support to the second. In particular the authors find that serving the

military service results in a 4% increase in the probability of individuals to develop a criminal career.

- The structure of young people's social network seems to be crucial in determining how individuals behave in terms of criminal activity. Still, the problem of disentangling the pure individual criminal attitude from the "socially induced" component exists. The contribution of this paper to the literature is to exploit each individual's different location within a network since conformism, that shapes individuals' preferences for crime, originates within the cluster of each individual's close friends. Using this new theoretical apparatus, the key empirical finding for a sample of more than 90 thousands pupils aged 7-12 is that taste for conformity of pupils increases their propensity to commit crimes.
- A puzzling regularity in the crime literature is that there are crimes which are not committed, although their expected economic payoff is clearly positive, and at the same time there are crimes that are committed, although their expected return is clearly negative. Once the interaction of temptation and morality is included in the analysis, new interesting tradeoffs arise, and the examples above can be fully rationalized.

### Conclusions and policy lessons

Characteristics that contribute to define a specific culture such as trust, social capital and religious sentiments are, not surprisingly, very stable and persistent over time. It has been shown that some culture-specific behaviours have very deep roots, both in time and space. However, some scope for policy intervention in today's aggregate behaviour is possible, provided that the key determinants of today's culturespecific characteristics are well understood. If the policy action, instead of being concentrated on these key determinants, is aimed ad modifying endogenous outcome variables there is little chance to achieve valuable and predictable results.

Once the view of atomistic individuals is complemented with non-market characteristics that lead to the emergence of institutions not strictly related to economic activities, a new set of outcomes, pertaining also to the economic sphere, arise. Therefore, in the presence of feedback links between economic and noneconomic institutions, policies that target objectives that seem secondary in the politicoeconomic analysis can turn out to be very developing better economic effective in outcomes. For example relaxing the strong family ties existing in Italy could lead to improvements in the labour market as a whole, according to Alesina et al. On the other hand, policies whose precise aim is to change economic conditions but do not take into account the feedbacks from non-market preferences of individuals could be ineffective.

The economic analysis of criminal behaviour is increasingly including aspects from psychological and network literature. From an individual-based cost-benefit problem, crime is now regarded, and analyzed, as a decision involving social aspects as well as sophisticated intrapersonal decisions. On top of this evolution, even if this applies to more general issues, it has been shown that with carefully collected data it is possible to derive general results about determinants of criminal activity. Policies in this field should also increasingly focus on the social network in which individuals operate, in terms of both direct linkages that contribute to form the criminal personality and those indirect links, or aggregate outcomes, that shapes the individual evaluation of his criminal activity in terms of, for example, social stigma and guilt.

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