Impacts of Legal and Regulatory Institutions on Economic Development

Pedro Naso, Centre for International Environmental Studies, The Graduate Institute, Geneva, Switzerland

Introduction
Since the second half of the 20th century, with the contributions of Coase, Williamson and North, the economic literature has emphasised the role of institutions in explaining differences in economic performance. According to the most diffused view, countries with good institutions will invest more in physical and human capital, will use productive factors in a more efficient way, and will achieve greater income level. But what are good institutions? And how should governments implement them?

Answers to these questions have proven to be difficult mainly because of two characteristics of institutions: (i) institutional functioning is complex: the way institutions affect economic agents’ incentives is dependent on these agents’ individual preferences and the way they interact, which are difficult to predict; and (ii) they are context specific – the same institution in different contexts might result in a different economic outcome.

Douglass North defines institutions as “humanly devised constraints that structure political, economic, and social interaction”. According to him, “[t]hey consist of both informal constraints (sanctions, taboos, customs, traditions, and codes of conduct), and formal rules (constitutions, laws, property rights)” (North, 1991). Hence, every constraint faced by economic agents that is imposed by the external environment — that is, which is not innate — is a type of institution. For example, the set of laws of a society is a type of institution because, by introducing new laws or by enforcing existent laws, state agents influence the behaviour of individuals and, potentially, the economic performance of a society. Another example of institutions is environmental regulation, which imposes a fine on excessive emissions, changing firms’ production incentives.

Because of the nature of North’s definition, a plethora of social phenomena can be regarded as institutions. North offers us a general theoretical framework but does not explore specific types of institutions. However, the quest for designing and implementing good institutions requires enhanced knowledge of the economic implications of introducing new institutions and of altering existent ones.

In my doctoral thesis (Naso, 2019), I contribute to advance this knowledge by examining the impact of changes in two specific types of institutions — environmental regulation and the legal regime of a society — on microeconomic development. I show that (i) institutions’ complexity can lead to unforeseen outcomes: institutional change might generate unforeseen economic consequences that are neither good nor bad; (ii) institutions are endogenous: institutional change influences and is influenced by the incentives economic agents face; and (iii) institutions with similar functions might coexist and compete for the same space. I demonstrate these features by studying three different problems.

The Impact of Environmental Regulation on Chinese Spatial Development
In the first chapter, I examine the relationship between environmental regulation and spatial development in China. Exploiting changes in national pollution standards for three industries, ammonia, paper and cement, I measure the impact of environmental regulation on industry productivity. My results suggest that national pollution standards do not affect industry productivity, but they reallocate productivity spatially.

I show that regulated industries located in developing cities increase their productivity as compared to similar industries in other cities. This means that environmental regulation affects the spatial distribution of technology in China and might influence long-term spatial development by reducing geographical disparities.
Delegation of Regulation and Perceived Corruption in South Africa

In the second chapter, I study the economic motivations behind a reduction in the discretionary power of environmental regulators, and the impact that such reduction has on perceived corruption in South Africa. I examine the transition from the Air Pollution Protection Act of 1965 to the Air Quality Act of 2005, a change from full to partial delegation of regulation. By constructing a formal model, I argue that this transition might have occurred because of an increase in the dispersion of rent-seeking motivations of public agents. This happens because, from the principal’s perspective, the possible harm – in terms of loose pollution control and misappropriation of environmental fines – generated by corrupt agents is greater than the potential benefits brought by diligent agents. In my empirical analysis, I show that the regulatory change decreased regulated firms’ perceived corruption but did not improve other institutional quality measures.

Legal Pluralism in post-conflict Sierra Leone

In the last chapter thesis, I examine the interaction between two legal systems in post-conflict Sierra Leone. To do that, I measure the impact of competition between state and non-state legal authorities on the number of disputes and on the size of fines charged per dispute. My results suggest a potential negative externality between legal regimes for civil disputes — that is, an increase in the cost of apprehending a person – and a reduction in the size of fines per dispute collected when two regimes operate in the same village. This indicates that a potential benefit to the local people from multiple competing regimes is a reduction on expected authoritative expropriation.

Conclusion

Environmental regulation and the legal regime of a society are types of institutions. They are external constraints on the behaviour of economic agents. Every time state agents alter these institutions, they also alter the set of incentives in the economy and can influence economic development — even if they do not intend to. One important conclusion of my work is that the design and implementation of good institutions — that is, institutions that promote economic development and increase society’s welfare — is complex. It is important for policymakers to understand the impact of institutional change on the economic path of a society. Often, governments introduce institutions that are designed to promote welfare, but that do not deliver the expected results. As I show in the three chapter of my thesis, the key reasons for this failure lie on their complexity, context-specificity and interested motivations. It is only by studying in detail the microeconomics of different types of institutions and their specific context that we will be able to identify and implement good ones.

Acknowledgements

This research was funded by the Swiss National Science Foundation, Project No. 100010_159375 «Environmental regulation and economic competitiveness: Employment, firms’ location and technology adoption». 