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Institutional flexibility and economic growth

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ABSTRACT

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This paper develops a formal model to investigate the relationship between institutional quality – the current set of property rights – and institutional flexibility – the ability to develop new institutions – and relate these aspects of institutional structure to dynamic economic performance. The model is used to analyze two types of institutional reform. An increase in institutional quality lowers market transaction costs, producing an immediate but short lived increase in the rate of economic growth. In contrast, an increase in institutional flexibility results in a delayed but permanent increase in economic growth. The analysis suggests that the current work on institutions places too much emphasis on property rights and too little on the determinants of institutional change. *Journal of Comparative Economics* **38** (3) (2010) 306–320. 211D Social Sciences Building, Union College, 807 Union Street, Schenectady, NY 12308, United States.

1. Introduction

If there is an overarching lesson to be taken from the work on the empirics of economic growth, it is the fundamental role played by institutions. Early growth regressions such as Barro's (1991) that included a few political variables were extended and refined in studies by Knack and Philip (1995) and Mauro (1995) to examine a range of measures of contemporary institutional quality. These results were buttressed by later analyses that addressed concerns regarding the endogeneity of institutions (Hall and Jones, 1999; Acemoglu et al., 2001) and argued that institutions were important to explaining observed differences in variables that could be considered the proximate determinants of economic growth, like investment rates and growth-oriented policies (Easterly and Levine, 1997, 2003).

In motivating this line of investigation, many researchers have cited the inspiration of economic historians who place institutions at the center of their analysis, most prominently Douglas North (North and Thomas, 1973; North, 1981, 1990a). It is puzzling, then, that the empirical and historical literatures focus on such different aspects of a country's institutional framework. Typical of the empirical literature are Acemoglu et al. (2001, p. 1370) "focus on private property and checks on government power" and Knack and Philip's (1995, p. 207) emphasis on "the security of property and contractual rights." In contrast to this inherently static notion of what constitutes good institutions, historians of economic growth tend to stress the importance of dynamic characteristics of institutional structure.

Indeed, North (1995, p. 26) goes out of his way to draw attention to the distinction between static and dynamic aspects of institutional structure: "Allocative efficiency is a static concept with a given set of institutions; the key to continuing good economic performance is a flexible institutional matrix that will adjust in the context of evolving technological and demographic changes." Abramovitz (1986, p. 388) makes a similar point regarding a country's ability to adopt foreign tech-

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nologies, noting that while a country's institutions "may be well designed to exploit fully the power of an existing technology; they may be less well fitted to adapt to the requirements of change." In the historical perspective, having a good set of economic policies or commercial laws at any one point in time matters less for growth than having political and legal systems that are capable of responding to the changing institutional demands of a growing economy.

We address the gap between the empirical and historical treatments of institutions by developing a simple model of institutional change that links the quality of existing institutions and the ability to generate new institutions. Like most of the literature on institutions, we adopt a hierarchical view of institutions, distinguishing between the relatively mutable set of economic institutions and a more enduring set of meta-institutions.[1] Economic institutions consist of the policies and laws that constrain economic interactions and thus determine the current level of protection of property and contractual rights. Economic institutions are proximate determinants of economic performance; examples include labor regulations and commercial law. In contrast, meta-institutions have no direct impact on economic behavior or outcomes. Meta-institutions consist of the highly persistent legal, social and political arrangements that constrain behavior in the design and selection of economic institutions, such as the common law legal tradition and the US Constitution.[2] In this framework, economic institutions determine institutional quality – the set of property rights defined by regulations and commercial law – while meta-institutions determine institutional flexibility – the propensity to develop new economic institutions in response to changing economic conditions.

This institutional structure is incorporated into a model in which the engine of growth is the evolution of the division of labor. The accumulation of specialized skills raises the gains to labor specialization. To realize these gains, however, workers must adopt more extensive and complex patterns of interpersonal exchange. Increases in the complexity of transactional relations raise market transaction costs, reducing the incentive for further specialization and growth and increasing the return to new institutions. By exposing agents to new transactions and relationships, increases in the division of labor also provide an opportunity for institutional learning. Institutional learning raises institutional quality, lowering market transaction costs and permitting further expansion of the division of labor. The interplay between market expansion and institutional learning formalized in the model below is central to North's (1991, p. 107) account of European growth: "The increasing volume of long distance trade raised the rate of return to merchants of devising effective mechanisms for enforcing contracts. In turn, the development of such mechanisms lowered the costs of contracting and made trade more profitable, thereby increasing its volume."

Exposure to a more challenging transactional environment is only a permissive source of institutional learning. While new transactional relationships provide an opportunity for institutional development, it is the flexibility of a country's institutional structure that determine how rapidly new institutions are created and adopted. Countries with a well-functioning set of meta-institutions generate a higher rate of institutional learning for a given gap between transactional complexity and current institutional quality. To draw on a market analogy, the division of labor determines the demand for institutional quality, while institutional flexibility determines the rate at which new institutions are generated to meet this demand.

The model predicts that countries with more flexible institutional structures will experience faster steady state growth. In contrast, higher institutional quality generates level effects, leaving the rate of growth unchanged. In the polar case in which institutions are completely inflexible, per capita income converges to a level proportional to institutional quality. Thus, countries with high quality but inflexible institutions will be rich and stagnant, while countries with low quality but flexible institutions will be poor and dynamic. This result contrasts with the literature that views institutional quality as the key to growth, which has trouble accounting for extended periods of stagnation in rich economies.

The model highlights the relationship between institutional quality and institutional flexibility, and their respective roles in economic growth. In particular, we investigate the difference implications of two types of institutional reform. We find that an increase in institutional quality raises income levels and has an immediate but temporary impact on economic growth. In contrast, an increase in institutional flexibility has no initial impact on variables related to the level of economic activity. Over time, however, it results in a gradual but persistent increase in the rate of economic growth.

The model also highlights the manner in which institutional evolution responds to changing economic conditions. In particular, we show that the introduction of a new technology, such as might characterize industrialization or the introduction of modern information technology, can induce a period of rapid institutional learning. Here again the model illustrates a key role for institutional flexibility. In a society with relatively flexible institutions a positive technology shock results in a permanent rise in the rate of economic growth, whereas in a society with less flexible institutions the inability to adapt to the new economic reality results in high market transaction costs that partly or fully choke off economic growth.

While we formalize the role of institutional flexibility in economic growth, we elide important questions regarding what meta-institutional arrangements generate institutional flexibility. This is a complex question with significant ongoing debates regarding the roles of constraints, incentives, information and cooperation in institutional choice. We survey this literature in the following section, but we do not expect to resolve these debates here. Instead, we focus on historical analyses that highlight the distinction between institutional quality and institutional flexibility and empirical studies of measurable meta-institutional structures and their role in determining institutional flexibility. While this literature does not allow us to draw strong conclusions regarding the determinants of institutional flexibility, it does suggest that it is the evolution of insti-

[1] For example, Acemoglu et al. (2004) make a distinction between economic and political institutions that is very similar to the one made here. North (1990b) stresses the relative endurance of political institutions.

[2] Of course, changes in meta-institutions do occur and often define dramatic historical episodes such as the French Revolution or Protestant Reformation. This kind of institutional change requires a different kind of theorizing, e.g. Acemoglu and Robinson (2000, 2001).