Social capital vs institutions in the growth process

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A R T I C L E   I N F O

A B S T R A C T

Is social capital a substitute or a complement to formal institutions for achieving economic growth? A number of recent micro studies suggest that interpersonal trust has its greatest impact on economic performance when court institutions are relatively weak. The conventional wisdom from most macro studies, however, is that social capital is unconditionally good for growth. On the basis of the micro evidence, we outline an investment game between a producer and a lender in an incomplete-contracts setting. A key insight is that social capital will have the greatest effect on the total surplus from the game at lower levels of institutional strength and that the effect of social capital vanishes when institutions are very strong. When we bring this prediction to an empirical cross-country growth regression, it is shown that the marginal effect of social capital (in the form of interpersonal trust) decreases with institutional strength. Our results imply that a one standard deviation rise in social capital in weakly institutionalized Nigeria should increase economic growth by 1.8 percentage points, whereas the same increase in social capital only increases growth by 0.3 percentage points in strongly institutionalized Canada.

1. Introduction

Research on the impacts of social capital and formal institutions on economic development have so far mainly emerged as two distinct fields. In the former literature, trust, networks, social norms, and associational activity are believed to be central aspects of successful economies. In the institutional literature, formal rules of the game such as property rights laws and the strength of courts are regarded as critical for development. We argue that there is an important disconnection between results from micro studies of social capital – which indicate that various self enforcement mechanisms are more prevalent when contracting institutions are weak – and macro studies where social capital-related measures are hypothesized to have a uniform positive impact on economic performance.

In this article, we outline a unified theoretical framework of the relative importance of social capital and formal institutions in a simple principal-agent investment model featuring a producer and a lender in an incomplete contract-setting. The probability of contract enforcement by an exogenous court is our major indicator of institutional strength and social capital enters our model as an extra 'social' or 'intrinsic' payoff to both players from acting trusting or trustworthy. The major insight from our model is that social capital tends to have its greatest positive impact on the total monetary surplus from the game (economic growth) at lower levels of institutional development and that the positive impact eventually vanishes if institutions become strong enough.

This basic prediction about substitution is then brought to the macro level and tested in a cross-country growth regression. In accordance with our hypothesis, our results show that the marginal impact of our proxy for social capital (interpersonal trust) decreases with the quality of formal institutions. More precisely, our results imply that a one standard deviation increase in social

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capital leads to a 1.10 percentage points increase in the growth rate among countries at the 25th percentile of institutional strength, whereas the effect among countries at the 75th percentile of institutional strength is only 0.36 percentage points. Our results are robust to using an instrumental variables-methodology where we take into account that social capital and institutions might be endogenous to growth or indeed have a causal impact on each other.

Our approach combines two major types of building blocks: (1) The literature on the macroeconomic effects of formal institutions and (2) the extensive empirical literature on the micro and macro effects of social capital. Starting with institutional economics, this tradition emphasizes how formal institutions such as those regulating the strength of property rights, the constraints against the executive, and the power of courts are fundamental determinants of long-run growth. Following in the footsteps of North (1981, 1990), a number of seminal contributions have emerged over the recent decade such as Knack and Keefer (1995), Hall and Jones (1999), Acemoglu et al. (2001, 2002), Acemoglu and Johnson (2005), and Banerjee and Iyer (2005). These studies all show that good formal institutions are strongly associated with prosperity, although joint endogeneity problems are still an important econometric issue in the literature. Unlike our study, this literature also aims at explaining why some countries have better formal institutions than others. None of these studies, however, attempt to quantify the effect of informal institutions such as social networks or interpersonal trust. Acemoglu and Johnson (2005) differentiate between court ('contracting') and property rights institutions, but do not study the impact of private enforcement mechanisms.

Social capital is arguably one of the most elusive concepts in social science. As discussed by Bjornskov (2006), there are at least three important dimensions of social capital: generalized trust, social norms, and associational/network activity. In this paper, we will focus on social capital as generalized trust among people, i.e. an optimistic expectation about the behavior of fellow citizens, many of whom we do not know personally. The empirical cross-country macro literature on social trust includes seminal contributions by Knack and Keefer (1997) and Zak and Knack (2001).[1] The paper most closely related to ours is Zak and Knack (2001) who regress economic growth on both levels of interpersonal trust (from World Value Surveys, WVS) and on an index of formal institutional strength in a cross-section of 41 countries, most of which are industrialized. The authors find that interpersonal trust is positively and significantly related to growth when holding formal institutions constant. However, they do not explore the possibility of non-linear effects of trust that depend on different levels of formal institutions. In a robustness analysis of Zak and Knack (2001), Beugelsdijk et al. (2004) find that the results are in general fairly robust, even when including some institutions-related measures (such as religion and political instability), but that the marginal impact of trust is greater in low-trust countries. Similarly, Tabellini (2006) finds a positive effect of interpersonal trust on growth in European regions using an instrumental variable approach, but does not analyze any differential effects depending on formal institutions.[2]

The overall picture in the micro studies is mixed but nevertheless suggests that social capital has a larger effect on economic performance when formal institutions are weak. Table 1 shows a summary of some of the more well-known studies.[3] For instance, Bigsten et al. (2000) and Fafchamps and Minten (2002) both confirm that social capital has a strong role when property rights and courts are working imperfectly. The main hypothesis that emerges from these micro studies is therefore that social trust and formal institutions should be primarily substitutes in the growth process at the macro level.

Our paper is not the first effort that tries to understand how micro results on trust can be translated to a macro level. Beugelsdijk (2006) argues that it is conceptually difficult to move from micro results to a macro level when it comes to social capital and that generalized trust as measured by the WVS might actually capture the quality of formal institutions, a claim that Uslaner (2008) strongly refutes.[4] In a similar vein, Bjornskov's (2006) empirical analysis suggests that social trust has a positive impact on the quality of government, whereas Rothstein (2000) argues that it is rather good government that causes general trust. Our analysis departs from these studies by treating social trust and institutions as two distinct factors and by estimating whether they are substitutes in development, as our model predicts. Furthermore, our use of instrumental variables arguably neutralizes the concerns referred to above about the possible linkages between generalized trust and formal institutions.

In summary, we argue that our article offers two specific contributions to the literature. Firstly, our simple modelling framework rationalizes the empirical regularity from the micro level that social capital affects growth and investment mainly when institutions are relatively weak. Secondly, our article is the first one to demonstrate empirically (and with the use of IV-methods) that generalized trust and institutional quality are substitutes for growth.

The article is organized as follows. In Section 2 we present the model and derive the key results for the relevance of social capital and institutions. In Section 3 we display the empirical specifications and present the results. Section 4 concludes the exposition.

2. The model

In order to provide an aid for thinking about the effects of institutions and social capital on growth, we present in this section a simple model of an investment game between a Lender and a Producer, inspired by the empirical literature referred to above. The purpose of the model is to provide a micro-foundation for our hypotheses regarding the interrelationships between social capital and institutions at the macro level.

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[1] See Durlauf (2002) and Durlauf and Fafchamps (2005) for a critical discussion of this line of research.

[2] Tabellini uses data from 69 regions in 8 Western European countries and includes country fixed effects. The instruments used are literacy rate around 1880 and constraints on the executive in the years 1600–1850. However, he does not include any measures of formal institutions at the regional level. Studying data from 54 European regions, Beugelsdijk and van Schaik (2005) find that associational activity is the best predictor or growth.

[3] The results referred to in the table should not be thought of as having a perfect correspondence with each other or with our model since the mentioned studies all use different methodologies. We believe they still well illustrate our basic point.

[4] See also Beugelsdijk's recent reply to Uslaner (Beugelsdijk, 2008).