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Trade, trust and the rule of law

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ABSTRACT

Well-functioning institutions, both formal (i.e. rule of law) and informal (i.e. trust), facilitate economic exchange. To investigate the nature of the relationship between formal and informal institutions, we analyze bilateral trade patterns in a sample of 16 European countries between 1996–2009. Our results show that trust and rule of law are substitutes, as the positive effect of trust on trade is conditional on the quality of the rule of law. When the rule of law of the importing country increases relative to that of the exporter, the effect of trust on trade decreases. The decline in the effect of trust on trade is less for importers than for exporters, a result that can be attributed to the risk of non-payment that exporters run.

1. Introduction

Economic exchange is facilitated by well-functioning formal and informal institutions (North, 1990; Hall and Jones, 1999; Acemoglu et al., 2001, 2002; Kerekes and Williamson, 2008). North (1994) and Williamson (2000) classify trust as an informal institution and the judicial system as a formal institution. Historical evidence suggests that both trust and formal institutions are important for the process of economic development (Greif, 1994, 2006; Boettke et al., 2008).

Trust, which is based on deeply rooted cultural traditions (Fukuyama, 1995; Putnam et al., 1993; Tabellini, 2008a), is defined as the willingness to permit others' actions to influence one's welfare (Sobel, 2002). More precisely, an agent is willing to take a risk on the actions of others based on the belief that potential trustees will "do what is right" (Hoffman, 2002).

Since contracts are usually incomplete, a trader has an incentive to expropriate the rights of another trader. To prevent opportunistic behavior, such as hold-up, traders have to divert resources to monitoring and contract enforcement activities. Costs induced by these activities will shy away potential traders. In the context of international trade, this is especially true for exporters who run the risk of non-payment. Trust may mitigate these transaction costs and thereby affect economic outcomes.

Studies have linked trust to economic growth (Knack and Keefer, 1997; Zak and Knack, 2001; Beugelsdijk et al., 2004; Francois and Zabojnik, 2005), the amount of trade (Guiso et al., 2009), government regulation and functioning (Alesina and Zhuravskaya, 2011; Aghion et al., 2010; Fine, 2001; Putnam et al., 1993), corruption (Bjørnskov, 2011) and size of the welfare state (Bjørnskov and Bergh, 2011). One recurring discussion concerns the nature of the relation between trust and formal institutions (Tabellini, 2008a,b).

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Trust and formal institutions are considered to be two different transaction cost reducing channels and as such serve as substitutes. Anderson and Young (2006) argue that country differences in contract enforcement, i.e. formal institutions, create uncertainty concerning the expected payoff from a trade transaction. Although institutions like the International Court of Arbitration are supposed to alleviate this type of disputes, the ultimate enforcement power resides with national courts. Since traders cannot foresee when and where economic disputes will happen, they face uncertainty as to which national court will enforce the contract. When heterogeneity in judicial quality creates uncertainty, informal channels, such as trust, may then have a significant effect on trade. Alternatively, when formal institutions function properly, the trust channel can be hypothesized to be less important. It is against this background that we explore the nature of the relationship between trust and formal institutions. We do so in the context of bilateral trade, because that allows us to relate trust of exporters in importers (and vice versa) to the intensity of market transactions between them while controlling for the quality of institutions in both countries.

In relating formal institutions and trust to trade, existing studies have either focused on formal institutions or on trust, but the interplay between trust and formal institutions has not been explicitly considered so far. Most studies have focused on the role of formal institutions. De Groot et al. (2004) and Berkowitz et al. (2006) show that countries with a higher quality of formal institutions trade more. Anderson and Marcouiller (2002) report that inadequate formal institutions constrain trade as much as tariffs do. Recent literature examines whether institutional quality determines a country's comparative advantage. In particular, Levchenko (2007) demonstrates that countries with better institutions specialize in goods that are institutionally dependent. Nunn (2007) reports that countries with good contract enforcement specialize in the production of goods for which relationship-specific investments are most important. A similar result was found by Ma et al. (2010) using firm level data.

Studies investigating how trust affects trade are less common. Guiso et al. (2009) show that pairs of European countries with high mutual trust trade more than country pairs with low mutual trust. Others test the relationship between trust and trade indirectly, such as Rauch (2001) and Rauch and Trindade (2002) who find that co-ethnic business networks (characterized by high trust levels) reduce the information costs needed for trading more differentiated goods.

To investigate the relation between trust and formal institutions, we analyze bilateral trade patterns in a sample of 16 European countries over the period 1996–2009. Following Guiso et al. (2009), we use a historically determined measure of trust based on a series of Eurobarometer surveys between 1970 and 1996. The quality of formal institutions is measured using World Bank indicators (Kaufmann et al., 2009).

In a carefully specified gravity equation, we show that trust in the trading partners has a significant positive effect on bilateral trade, a finding in line with Guiso et al. (2009). Moreover, and this is our first contribution, our results suggest that this positive trust effect is conditional on the quality of formal institutions. When the institutional quality of the importing country is relatively low compared to that of the exporter, the positive effect of trust on trade is larger than when the institutional quality of the importer is similar to that of the exporter. In other words, exports from country A to the importing country B will increase when the exporters living in A trust the importers living in B more, and trust becomes more important when the institutional quality of importing country B is lower than that of exporting country A. Trust substitutes for a relative lack of well-functioning institutions.

Our second novel finding is that this substitution effect between trust and institutions differs between the exporter's trust in the importer and the importer's trust in the exporter. We find that the substitution effect between trust and institutions is larger for exporter's trust in importers than vice versa. This can be attributed to the differing nature of the expropriation risk for exporter and importers, which is larger for exporters because they run the risk of non-payment.

Our most fundamental contribution is that we show that trust and formal institutions interact in such a way that they can be considered substitutes, and that this substitution effect differs between exporters and importers. Our results imply that by improving the quality of institutions countries can offset the negative lack-of-trust effect on trade. Whereas recent literature on the role of culture in economics, including the literature on trust, seems to suggest that countries are locked in to long run positions related to their (un) favorable cultural endowments, our study shows that this is not necessarily true in the context of trade.

2. Data and sample

To test whether the effect of culture-rooted bilateral trust on trade is conditional on institutional quality, our empirical strategy consists of two steps. First, we deduct the time dimension of a series of social surveys conducted discontinuously between 1970 and 1996. This approach results in a proxy for trust that captures its time-invariant part. Then, this proxy will be used to examine the effect of bilateral trust on trade after 1995. Since the proxy for trust is generated before the sample period used to estimate a gravity model, we make sure that the causality runs from trust to trade and the trust proxy does not capture institutional well-functioning. The use of this time invariant trust variable in the second stage is validated by the fact that trust is largely determined by historical factors, which means that its time-invariant part will not alter after the survey period.

2.1. Time invariant trust

Trust does not change easily (Rainer and Siedler, 2009; Guiso et al., 2008). The measure of bilateral trust used in this study is obtained from a subsample of surveys conducted by Eurobarometer in various years and countries. The first survey was conducted in 1970 in only five countries while the last survey in 1996 included 17 countries. A detailed description of the selected subsample