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Trade and Harmonization:
If your institutions are good, does it matter if they are different? [1]

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Abstract

Good institutional quality (function) and similar institutional design (form) can promote international trade by reducing transactions costs. We evaluate the relative importance of function versus form in a gravity model, using an indicator of different legal systems as a proxy for differences in form together with indicators of overall institutional quality. We find that good institutions promote trade much more than similar legal systems and have much more explanatory power. This effect is economically large –up to 10 times the effect of different legal systems. Moreover, better infrastructure matters as much as good institutions.

Introduction

In recent years we have been witnessing a shift of effort into changing specific institutions so that they are standardized across countries (institutional harmonization). In particular, policymakers, governments and multilateral agencies have promoted harmonization of institutions as a way to promote trade, presumably by reducing transactions costs or as a way to protect the distribution of gains from economic activity (or capture them). For instance, the WTO has been pushing forward the Trade Related Intellectual Property Rights (TRIPS) agreement (that was signed in 1994 and then amended in 2003 and 2005) which aims to standardize how intellectual property is protected across countries. The debate on regulatory standards – like pasteurization to ensure safety of traded milk products – is another example. Competition law and enforcement, which were on the negotiating table in the earlier Doha rounds of trade talks is yet another example[2]. A key policy question for developing countries is how important it is to standardize particular institutions versus just trying to get them to work better overall in each country[3]. This question has hitherto not been addressed in the literature.

We evaluate empirically the relative importance for international trade of institutional harmonization versus institutional quality, while differentiating the impact of overall institutional quality from the impact of institutional diversity on trade. Anderson and Marcouillier (2002) estimate the effect of two measures of institutional quality – "Transparency" (of government policies) and "Enforceability" (of legal contracts) – but do not control for differences in form. We use differences in legal origins as a proxy for institutional diversity, and three different

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[2] Market forces, that is, consumer tastes and producer innovations may also increase pressures for voluntary, rather than policy induced standardization and changed trading patterns.

[3] This is especially important since the latter may be an easier, less costly goal to accomplish and potentially more effective.

measures of institutional quality: bureaucratic quality, control of corruption and protection of property rights. We employ two methods in order to evaluate the relative importance of institutional quality versus differences in legal systems. The first is to estimate how much more trade would be induced by a reasonable change in institutional quality versus how much is deterred by differences in legal systems. This method serves as an evaluation of possible policy outcomes[4]. The second method is to evaluate the relative contribution of institutional quality versus differences in legal systems in explaining the variation in trade using beta coefficients, and serves as a way to evaluate explanatory power in practice.

The results are striking. As expected, institutional quality has a positive effect on bilateral trade, while differences in legal origin have a negative effect on trade. But we estimate that the effect of institutional quality is much higher than the effect of differences in legal origin on trade – in some estimates up to ten times higher. By this we mean that, for the average trading pair, a reasonable and achievable improvement in institutional quality[5] can increase bilateral trade much more than harmonization of their legal systems (in the typical case legal origins are different). We also find that institutional quality explains 5-15 times more of the variation in bilateral trade flows, relative to differences in legal origins.

Moreover, we find that the effect of differences in legal origin is estimated to be lower than some of the other factors that affect trade. For example, infrastructure quality turns out to be an important determinant of trade; the number of telephone lines per capita has an effect of up to 10 times the effect of differences in legal origin. The telephone lines per capita are also estimated to have an effect on trade that is 2-3 times the effect of institutional quality.

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[4] We admit to the well known caveat of inferring effects of policy from regression coefficients. However, without a structural model that takes into account institutional factors in a meaningful way, this is the best we can do.
[5] Nevertheless, this may prove to be no easy feat. We discuss this further below.

These results inform policy: the first order of business should be just getting your institutions to work rather than worrying about the trade-related effects of institutional standardization.

In order to estimate the separate effects of institutional form and function on trade we had to use a measure of institutional diversity that is not perfectly correlated with institutional quality. The measure we use to proxy for institutional diversity is differences in legal origin. While some empirical work shows that different legal origins affect institutional quality (La Porta et. al. [1997, 1998, 1999]), other work (Berkowitz et al. [2003], Pistor et al. [2002, 2003] and Acemoglu, ([2001, 2004]) argue that the nature of the process by which institutions are transplanted and developed, rather than legal origin which affects institutional quality. In fact, Acemoglu and Johnson (2005) provide some evidence showing that legal family, while affecting the *type* of financial intermediation that occurs, does not affect economic activity overall[6]. Nor is legal origin a good instrument for institutions that reflect the relation between the state and citizens. [7] Moreover, there is no reason that a mere *difference* in legal origins signals any particular level of institutional quality. We elaborate on this below.

Background and Literature

Good institutions reduce the transactions costs associated with doing business (North [1991, 1994]), and, in particular, should promote trade because they reduce the severity of holdup problems. International trade conducted across great distances and intertemporal lags suffers from potentially large transactions costs. Importers are more likely to purchase from a seller if they can be assured that they are getting what they paid for; and in case they do not get it, what

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[6] Growth, investment and financial development.

[7] Though they do find it to be a good instrument for aspects institutions picking up private contracting relationships between citizens. In particular, they find it to be a good instrument for particular measures of judicial effectiveness.

kind of recourse is available. Exporters are more likely to sell to a partner that is constrained to

honor commitments, where mutual commitments can be written into contracts which can be

enforced. They are also more likely to get access to finance for trade if institutions are good (see

literature below**).**

Differences in endowments, preferences and history have led to the development of

different institutional forms to achieve broadly similar objectives. Moreover, differences in

formal institutional design occur partly because of differences in norms or informal institutions

(and vice versa).

But how important is it for trade that institutions are similar? If country A's laws and

courts are different from country B's, A and B will incur some cost in getting to know each

other's institutions and in writing contracts compatible with each others' systems. Each would

prefer the other partner to have the same institutions. But in the real world, this is generally not

possible for all the institutions that affect trade. Nevertheless, as mentioned above, a great deal of

effort does go into changing specific institutions so that they are standardized across countries.

Having the same set of institutions may increase trade, but this would entail identifying

the best institutions and getting all those trading partners not having these institutions to bear

some cost to obtain them. This is hardly a simple matter for at least 3 reasons: (a) there is not a

"best" design for all institutions; (b) there is a pecuniary cost to changing laws/regulations,

which might prove to be quite large and (c) changing institutions would mean changing the

distribution of benefits which would create resistance by losers. Since global rules determine

inter-country claims on resources or assets, it is difficult to say which rule is the most desirable[8].

Moreover, in some situations, discussed below, formal harmonization may not increase trade but

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[8] Even if a rule were found that truly maximized global gains, ceteris paribus, the resulting distribution of gains may
not be desirable from either a "global" or individual country point of view.

instead may alter the pattern of trade or even reduce it by blocking entry into markets. So in the absence of a best solution, the emphasis on harmonization at the policy level may be misplaced[9]. Although the governments and multilateral organizations who support standardization of institutions claim to do so to promote trade, governments and others may be doing so with a view to restricting trade, or affecting overall trading patterns and profits for their constituencies. We cannot distinguish between harmonization of institutions that is motivated by attempts to limit market entry of competing producers, policy changes intended to promote trade and harmonization induced by changing consumer preferences (which would be associated with rising trade). However, we are really interested in the case of policy induced harmonization. Finally, as in the field of technology there is always a potential conflict between the (cost-lowering) benefits of standardization and the dynamic gains from potential innovations and diversity.[10]

We draw on three strands of the economics literature – institutional economics, international trade and fiscal decentralization – to provide a theoretical background for the work. First we draw on the extensive institutional economics literature such as the seminal works by North (1991, 1994), Grief, Milgrom and Weingast (GMW, 1994), Greif (1989, 1993a), Milgrom, North and Weingast (1990), who study the link between institutions and economic exchange within and between nations. According to North (1991, 1994) in order to gain from increasing specialization and division of labor in economic production it is necessary for society to develop institutions that support impersonal and anonymous exchange across time and space. As individuals and groups become increasingly interdependent, more complex institutional

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[9] Institutional harmonization may occur because of private forces – that is because firms will push for changes to raise their profits or it may occur as a result of policy decisions.

[10] Establishing standards may facilitate trade but once a standard (institution or technology) has been adopted, there is a cost to changing it. When there is no pressure for standardization, a continuous search for better methods could have a higher potential for innovation.

structures are necessary to capture the potential gains from trade. GMW and Grief use game theoretic modeling to explain the development of institutions supporting information exchange, respect for property rights and contract enforcement that support the historical emergence of long-distance trading relationships. In their analyzes, the development of merchant guilds as organizational units that shared information and whose members acted in a coordinated manner, facilitated dealings with medieval rulers and merchants who in turn respected merchants' property rights. Though each guild's precise institutional form varied they performed similar functions. Acemoglu et al (2002) examine how trading opportunities in Europe led to the development of institutions to further support trade.

Pistor et al (2001)[11] analyze how competition between trading states in Europe (notably England and France) promoted the development of company law in these countries. While the laws differed in form, both England and France moved to an impersonal system which granted the right to incorporate as a company based on a set of predetermined criteria rather than patronage. World Bank (2001) examines the effect of international trade on institutions in and vice versa as do Wei (2000) and Islam and Montenegro (2001).[12] Together, these papers show either (a) how trading opportunities and competition led to the emergence of institutions to enhance trade volumes or (b) how the development of effective institutions supported more trade.

The international trade literature is divided into three strands in terms of the perspective taken in analyzing the relationship between institutions and trade. The first strand, represented by papers by Anderson and Marcouillier (2002), Levchenko (2004), Souva et al (2005), is closely

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[11] See also World Bank (2001).

[12] There is a large literature treating the impact of institutions on economic exchange in various areas (such as the financial sector, agriculture) and on income and growth. It is vast, and is not summarized here. Acemoglu et al (2004) have a good summary of the literature linking institutions to growth. We mention only some important papers that relate institutions to international trade and link directly with our paper.

related to the above papers as they explain the value of institutions to international trade through their impact on information asymmetries, property rights and contract enforcement. Anderson and Marcouillier develop a model in which corruption and poor contract enforcement reduce trade between countries. They contend that gravity models that omit the impact of institutional quality on trade produce biased estimates and their empirical estimation confirms this. Levchenko models institutional differences as a source of comparative advantage and shows among other things, that developing countries may not gain from trade due to the poor quality of their institutions and that factor prices may diverge as a result of trade when institutional quality varies among trading partners. Souva et al (2005) examine the relative importance of political versus market institutions for trade and conclude that it is the latter that counts.

Another strand, the game theoretic literature, focuses on standard setting (standards being rules and therefore a form of institution) as a means of limiting entry and competition in markets. This is the approach taken in Brander and Spencer (1985), Fischer and Serra (2000), Barrett (1994) and Kennedy (1994). In these models government policy and standards/regulations are designed with a view to limiting entry and keeping competitors out of the market (or gaining market share) rather than with a view to lowering transactions costs.[13]

Eisenmann and Verdier (2001) distinguish between different types of rule-setting behavior that could be used to regulate trade while meeting other domestic objectives. These are: (1) unilateral, (2) negotiated reciprocity where countries agree to set their standards in a mutually beneficial way, with harmonization as a special case, and (3) mutual recognition defined as agreeing on ultimate objectives but leaving the definition of the means at the discretion of the country. In this case countries trust each others' certification processes. In such a system,

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[13] Brander and Spencer's seminal article deals with government subsidies but the concept has been generalized to cover standards and other regulations affecting trade flows.

countries would have different institutional forms to meet similar objectives.[14] Baldwin (1970) argues that given differences in initial conditions, world trade will be divided between rich countries linked together by mutual recognition agreements and less developed countries that face hegemonic harmonization (rules set by rich countries). The world is divided since poor countries cannot meet the requirements of rich countries and thus are limited in their trading ability. He concludes that in reality harmonization is a practical goal only for countries that are not "too" different. In Bagwell and Staiger's (1999) theoretical work they contend that it does not make sense to look at individual determinants of market access since several factors together determine actual access to a market. In their framework, regulations/standards and tariffs work together, an increase in one in a given country can be offset by a decline in another. One of their main messages is that if governments were granted more sovereignty over their policy choices, (one policy choice being not to harmonize institutions), but asked to maintain a given level of market access, GATT's principles would deliver globally efficient outcomes.

The third strand of the economics literature, the fiscal federalism literature is also relevant for this paper. Essentially, issues related to international trade, international agreements and institutions are an extension of the fiscal federalism issues faced by sovereign states with the difference that a supra sovereign authority to impose discipline or redistribution does not exist.

Alesina and others (2001, 2002), Casella and Feinstein (1990), and Sachs and Sala-i-Martin (1997) among others have differentiated between the economic and the political desires to unify or harmonize countries' policies and institutions in the context of multiple sovereign nations trading together. Much of this work has focused on the particularities of the progressively tighter links between the members of the European Union (EU). In fact, these

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[14]For example, different processes could be used to ensure food safety.

authors contend that much of the pressure for harmonization comes from the desire to have a tighter *political* union.

Casella and Feinstein (1990) develop a model in which an initial expansion in trade is accompanied by the integration of political units (or a degree of institutional harmonization) in order to support trading activity. Over time increased profitability of trade in larger markets leads to reduced transactions costs and a desire for political diversity. This is accompanied by less harmonization. Therefore, depending on the relative returns to diversity (which are increased with heterogeneous preferences and endowments) and standardization (lower transactions costs); the outcomes will differ over time and for different groups of countries (see also Alesina, Angeloni and Etro (2001)). Sykes (2000) and Sauve and Zampetti (2000) find that neither complete harmonization nor diversity (or what Sykes calls competition) between trading partners is always desirable and the relative merits of each depend on the degree of externalities.

Alesina, Angeloni and Schunecht 's (2002) summary of how the EU treats legislation within member countries and a discussion of the types of policy areas that could benefit from centralization or standardization shows that it is difficult, if not impossible, to find areas where à priori countries will always favor standardization (will always gain from harmonization) or always favor diversity.[15]

The first strand of the economics literature generally concludes that good quality institutions promote trade. The second and third strands of the literature indicate that a priori, it is not possible to say whether global rule setting resulting in forced institutional standardization will be accompanied by more trade or not and that the gains from standardization to individual countries is an empirical matter. Moreover, within countries where there are no restrictions on trade in goods or factors, institutional diversity co-exists with free trade.

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[15] See Bhagwati and Hudec eds. (1996) for a discussion on good and bad types of harmonization.

Empirical Framework

We set out to estimate the effect of institutional diversity on international trade relative to that of institutional quality. We would like to know which effect is bigger in an economic sense and to evaluate their relative explanatory power. Our analysis is based on estimating a gravity equation, which is basically an empirical relationship between bilateral trade flows and market size (GDP) and distance between country-pairs. This relationship has theoretical foundations, as discussed in Anderson (1979). We include other variables that potentially capture direct costs to trade (and have become "standard procedure" in the practice of gravity equation estimation); as well as other variables that potentially capture indirect costs to trade.

We use differences in legal origin as a proxy for institutional diversity. The fact that all of the origins of legal systems are European countries that – apart from transition economies – which are rich and have comparable incomes, would lead us to presume that differences in legal systems matter less than their functionality.

In general, it is difficult to find a measure of institutional diversity that is independent of institutional quality. The legal literature and some of the economics literature (see for example Watson (1993), Epstein (1995), Zweigert and Kotz (1987) and World Bank (2001)) discuss design differences among different legal systems, for example, procedural differences. La Porta et al (1997, 1998, 1999), Beck Demirguc-Kunt and Levine (2003) among others, have linked differences in legal origin to overall institutional quality. In particular, these studies contend that French legal origin countries tend to have poorer quality institutions and therefore poorer outcomes, such as lower financial development.

Acemoglu et al. (2001) argue that good institutions developed when colonizers introduced institutions of private property rather than pursuing an extractive strategy. Thus, institutional quality in developing countries is not determined by the legal origin of the country, but by the incentives of the colonizer to set up good institutions regardless of legal origin. In another paper, Acemoglu et al. (2004) relate the development of economic institutions to inequalities in the distribution of resources and political institutions rather than legal origin. Acemoglu and Johnson (2005) contend that while legal origin may be related to the quality of certain types of institutions (they focus on some aspects of the judiciary, or what they call contracting institutions), it is not a good instrument for institutions that regulate interactions between the state and citizens (for example, measures of corruption, bureaucratic efficiency or protection of property rights). Moreover, they show that contracting institutions have an effect only on the *type* of financial intermediation that occurs, but not on economic activity overall[16]; they instrument for contracting institutions with legal origins.

Legal scholars contend that different legal origins and formal legal systems do not signal differences in overall quality, but merely reflect differences in designs and procedures that reflect historical circumstances but that are independent of the overall quality of legal systems. For example Pistor et al. (2001, 2002 and 2003), Berkowitz et al (2003) contend that it is the method of transplantation rather than inherent "badness" of French institutions/legal origin that makes certain institutions perform worse in poor countries. The negative association between French legal origin and institutional performance would be picking up the worse performance of French colonized lands with respect to other lands. These authors attempt to distinguish between the influence of legal family versus the impact of other aspects of the legal transplantation relationship (such as readiness of the country for new laws, familiarity with the new laws) and

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[16] Growth, investment and financial development.

find the latter to be a more important determinant of legal development. The relationship between legal family and legal system development is found not to be robust. Mattei (1998) contends that simply looking at formal differences among civil- and common-law legal systems says little about how institutions really work in practice.

In sum, there is sufficient evidence to support the view that the focus on legal families as a determinant of institutional quality is misplaced and that legal family is not associated with economic outcomes. Moreover, even if our institutional quality measures are related to specific legal origins – in the sense that countries that have Common Law system have better institutions than countries that have Civil Law systems – it does not imply that institutional quality would be higher or lower in country-pairs that have different or similar legal origins. We illustrate this point with a few examples. France and the U.K. have different legal systems, and both exhibit good institutional quality, whereas Togo and Ghana also have different legal systems, but both do not exhibit good institutional quality. Of course, examples do not say much about the average. In the data, the simple correlation between difference in legal origins and institutional quality is in fact positive, but not very large (see Table 3).

Difference in legal origins it is not a time varying variable, and is a proxy for sources of current diversity that are related to history. Its dependence on the past lends to its exogeneity to current trade flows. In a recent paper, Helpman, Melitz and Rubinstein (2005) use a similar indicator to capture differences in legal origin as a regressor in a gravity equation, but they do not simultaneously control for institutional quality.

We use three different measures of institutional quality: Bureaucratic Quality, Control of Corruption and Protection of Property Rights. These three seemed to us to be most important for trade *a priori*. For example, Bureaucratic Quality and Control of Corruption capture the

efficiency of customs control, licensing and other regulatory bodies, and whether extra payments are required in order to "smooth" or expedite customs clearing and other legal procedures. The indicator "Protection of Property Rights" captures elements such as the business environment and risk of hold-ups and expropriation of shipments – both at the source and at the destination. Anderson and Marcouillier (2002) use two related measures of institutional quality (from a different source) – "Transparency" (of government policies) and "Enforceability" (of legal contracts) – but do not control for differences in form.

We estimate gravity equations of the following general form,

$$ln(T_{ijt}) = \delta \cdot dlegor_{ij} + \pi \cdot I_{ijt} + W_{ijt}\beta + X_{ijt}\gamma + v_{ijt},$$

where T is the trade flow between a country-pair; $dlegor$ is an indicator for different legal origins of countries i and j (it does not vary over time); I is the *sum* of an institutional quality index for countries i and j (we have three such indices); W is a set of "gravity" controls, some of which are mandated from the standard gravity model and some capture various direct costs to trade; X is a set of additional controls which will be used for testing robustness; and v is an i.i.d. error term. We interpret the coefficient δ as the half-elasticity of bilateral trade with respect to *dlegor*; that is, it captures the effect of different legal origins for the average trading pair. We interpret the coefficient π as the half-elasticity of bilateral trade with respect to institutional quality; that is, it captures the effect of increasing institutional quality index of either the importer or exporter by one unit.

W, the set of "gravity" controls, includes the log of distance between a country-pair, the log of the product of the two countries' GDP, log of product of land area, the number of landlocked countries in the bilateral relationship (0, 1 or 2), the number of island countries in the bilateral relationship (0, 1 or 2), an indicator for a common border, an indicator for a common language and an indicator for a common currency[17]. Our baseline specification is thus

$$ln(T_{ijt}) = \delta \cdot dlegor_{ij} + \pi \cdot (I_{it}+I_{jt}) + \beta_1 ln(distance_{ij}) + \beta_2 ln(GDP_{it} \cdot GDP_{jt}) + \beta_3 ln(area_{it} \cdot area_{jt}) +$$

$$\beta_4 landlocked_{ij} + \beta_5 islands_{ij} + \beta_6 border_{ij} + \beta_7 common\_language_{ij} + \beta_8 currency\_union_{ijt} + v_{ijt} \,.$$

Eq. (1)

X, the set of additional controls, includes permutations of the following groups of controls in different specifications. One set of controls is for colonial ties; it includes an indicator for a common colonizer and an indicator for colony-colonizer relationship. Another set of controls is for trade agreements; it includes indicators for both countries being members of the WTO, only one country being a member of the WTO, an indicator for country-pairs that are members of the General System of Preferences, and an indicator for regional trade agreements. In one version, tariffs between country-pairs are used[18]. The last controls are for infrastructure quality: the log of product of the number of telephone lines per 1,000 people, and the log of product of road length per 1,000 people.

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[17] We also experimented with estimating gravity equations that include GDP per capita. If preferences are non-homothetic, then this can be an important determinant of preference for non-local, traded goods. However, given the nature of our regressor, we decided not to report estimates that include this variable. Results that do include GDP per capita as a regressor are not materially different and are available upon request.
[18] Including colonial ties and trade agreements is particularly important for our analysis, because they potentially pick up institutional similarities over and above legal origins. We elaborate on this when we describe our results.

Standard error estimation always takes into account the clustering by country-pairs. The coefficients are estimated by OLS or IV, where the latter estimator takes into account the potential endogeneity of institutional quality to trade and measurement error of institutional indicators. In the IV estimations, we instrument our measures of institutional quality by absolute latitude (Hall and Jones (1999), Beck, Demirguc-Kunt and Levine (2003), Easterly and Levine (2003))[19].

Anderson and van Wincoop (2003) stress that consistent estimation of gravity equations requires, at the minimum, adding country dummies which capture price levels in each country[20]. However, our institutional quality indices are collinear with a full set of country dummies. There is very little time variation in these indices. Therefore, if we wish to control for country effects we must choose which ones to include. We choose to estimate all our specifications without any country dummies.

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[19] Additional IV estimates using ethnic fractionalization from Alesina et al. (2003) as an instrument are available upon request.
[20] A more efficient structural estimation procedure would be 3SLS. However, this approach relies on a specific price index formula. See Anderson and van Wincoop (2003) for details.

The Data

Our data set builds on that of Rose (2004)[21]. Unless otherwise stated, the data are from

that source; see our Table 1 for a concise description. Most of the variables from that source are

standard and do not merit an elaborate description here (see Rose (2004) for complete details),

except for the regress and in all our estimations: the log of *average* bilateral trade flows. The

direct source for this variable is the IMF's "Direction of Trade" dataset. This variable is the

average of all four potentially available trade flows between a country-pair (exports from i to j,

imports into j from i, etc'). This implicitly imposes symmetry on the effects of the determinants

of trade, which means that we are estimating the effect of a change in the regressors both on

exports and imports[22]. This seems to be a plausible assumption for some regressors (e.g.,

distance), but not for all (e.g., tariffs vis-a-vis a trading partner). We deal with this issue below.

We focus our study on the 1984-1999 sample due to restrictions on the availability of

data on institutional quality. Our measure of dissimilarity of institutional form is a dummy for

different legal origins. This dummy is equal to 1 when a country-pair does not share the same

legal origin and zero otherwise. Legal origins are from Djankov et al. (2003) and the CIA

Factbook. Two of our measures of institutional quality are Bureaucratic Quality and Control of

Corruption; they are taken from the commonly used International Country Risk Guide (ICRG)

dataset, are available from 1984 and cover 135 countries for which we have trade data, although

coverage is not complete in all years. Our third measure of institutional quality is Protection of

Property Rights; it is taken from the Heritage Foundation dataset, is available from 1995 and

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[21] Available at Rose's web site, http://faculty.haas.berkeley.edu/arose/
[22] See Helpman, Melitz and Rubinstein (2005) for a framework that does not impose this restriction.

onwards, and covers 154 countries for which we have trade data. Here coverage is almost complete for all years. Using two independent sources which employ different methodologies contributes to testing the robustness of our results. A full list of countries can be found in the appendix. We use the sum of the index for a country-pair as a regressor; that is, $I_{ijt} = I_{it} + I_{jt}$. This reflects the aforementioned symmetry built into our data.[23]

Our measures of infrastructure quality are the number of telephone lines (landlines plus cellular phone lines) per 1,000 people, and the total country road length per 1,000 people; they are taken from the World Development Indicators and are available for the entire sample.

We obtained bilateral tariff data from the TRAINS dataset (via the World Bank) for 1988-99. Use of this data immediately eliminates observations from 1984-87. Although this is the most elaborate bilateral tariff dataset we are aware of, the coverage of the bilateral tariffs of all trade pairs in this sample is patchy (in the later years the coverage is significantly better than in the early years) and considerably reduces the sample size in regressions in which it is used. As a regressor, we use (trade-weighted average across goods) bilateral tariffs, averaged for each country-pair. As with institutional quality, the averaging reflects the symmetry assumption. We chose to average rather than to sum in order to make results easy to interpret. For many country-pairs the tariff data was available for only one country. In these cases, we treat the tariff of that country as the "average" of both. This procedure is used in order not to lose too many data points in the estimation of specifications with tariffs. Even so, the tariff data cover only 43% of the entire sample for which trade and institutional data are available. This restriction hardly changes the overall representation of country-pairs in the panel. However, using tariff data the sample is

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[23] We chose not to use the World Bank's "Governance Matters" (see Kaufmann, Kraay and Mastruzzi, 2005) institutional quality indicators because its country- and especially year-coverage is less complete than our institutional indicators. Nevertheless, these indicators are highly correlated with our institutional indicators.

somewhat biased toward industrialized countries, especially in the earlier years of the panel; this is because many country pairs that consist of less-developed countries do not have bilateral tariff data for either one. Therefore we perform all regressions with and without controlling for tariffs.

We use the sum of absolute value of latitude for a country-pair as an instrument for institutional quality variables. The latitude variables are taken from the CIA Factbook.

In Table 2 we report summary statistics for all our regressors. Sixty-five percent of the country-pairs in our sample do not share the same legal origin. Our institutional quality variables exhibit significant variation. It is noteworthy that the average tariff variable has some extreme outliers, usually due to countries that trade very few products and impose a high tariff vis-à-vis each other[24]. In Table 3 we report correlations that were of interest to us a priori[25]. Notably among these correlations is the small positive correlation between trade flows and different legal origins. The institutional quality variables are highly correlated among themselves. The institutional indicators also exhibit a relatively high correlation with trade flows, telephone lines and with roads. Our two infrastructure indicators are also correlated, which will lead us not to estimate specifications using both in order to avoid multi-colinearity problems. Not surprisingly, tariffs are negatively correlated with trade. They are also negatively correlated with institutional quality.

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[24] It is also indicative that average tariffs between trade-pairs (even trade-weighted) mask huge variation in tariffs among different products for each trade-pair.

[25] All correlations are statistically significant at the 1% level except for correl(regional,comcol), which is not statistically significant at conventional levels.

Estimation Results

Our baseline results are summarized in Tables 4-6. Each table presents results for a different measure of institutional quality – Bureaucratic Quality, Control of Corruption and Protection of Property Rights. As mentioned above, we estimate separate equations for each indicator due to their high correlation. Since our tariff data is available for only 43% of the sample for which trade data are available, we estimate all specifications first without tariffs and then add them as a regressor. We address the potential endogeneity of institutional quality to trade by instrumenting for the sum of institutional quality with the sum of absolute latitude for each country-pair.

Our estimates imply that different legal origins do have a detrimental effect on trade, between 10% and 25%, depending on the specification of our regressions[26]. This is a large effect. Using a similar variable, Helpman Melitz and Rubinstein (2005) find a slightly larger impact in their regressions; this could be because they do not control for institutional quality. Our estimate for the detrimental effect of tariffs yields an elasticity of 1 to 2, thus every percentage point increase in tariffs decreases trade by 1%-2% on average.

However, we also find large positive effects of institutional quality on trade – in some cases very large. In order to assess this effect, the last line in Tables 4-6 report the effect of a change of one standard deviation in institutional quality on trade[27]. For instance, take Bureaucratic Quality in Table 4; our estimates imply that one standard deviation increases trade by 50%-120%. This is a much larger effect than that of differences in legal origins. A similar

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[26] The largest point estimate is in table 6, column 4. The effect is $\exp\{-0.29\}-1 = -0.25$.

[27] The percent increase in trade due to 1 s.d. of institutional quality is calculated as follows: $\exp\{coef*sd\}-1$.

picture emerges for our other two institutional quality indicators in Tables 5-6 in terms of magnitudes. The IV estimate of the coefficient to Bureaucratic Quality is larger than the OLS estimate when tariffs are not included (column 2 vs. 1), but smaller when tariffs are included as a regressor.

In order to further illustrate the magnitudes that our estimates with fixed effects and tariffs imply, we provide some examples of an increase of one unit (not standard deviation) in the institutional quality index around the mean. *Ceteris paribus*, had Colombia had the Bureaucratic Quality of Costa Rica (one unit more in the index), it would have traded 60 percent more with its trading partners on average. Had Brazil curbed corruption to the extent that Chile does, it would have traded 32 percent more with its trading partners on average. And had the Dominican Republic protected property rights as well as Ecuador does, it would have traded 43 percent more with its trading partners on average.

These magnitudes should not be taken at face value, since all institutional quality indices are highly correlated and an increase in one index implies an increase in the rest. Rather, the estimates should be understood as capturing the general institutional environment, where an increase in one dimension probably involves all the rest. In sum, we find that the effect of better institutional quality vastly outweighs the detrimental effects of different legal origins.

Relative Explanatory Power

One way to try to evaluate the relative importance of differences in legal systems versus institutional quality is using beta-coefficients (known also as "standardized regression coefficients")[28]. A beta coefficient tells us how many standard deviations the regressand would

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[28] Beta coefficients are computed by fitting a regression to standardized variables (subtracting the average and dividing by the standard deviation).

change in response to a change of one standard deviation of the regressor. Taking this approach to evaluate relative importance is not without problems. The coefficients are interpreted in terms of standard deviations, but the standard deviations of the variables are not equivalent, perhaps not even comparable. Yet, this method does allow us to evaluate the relative explanatory power of each variable. A larger beta coefficient (in absolute value) implies that a regressor explains a larger amount of variation in the regressand. We now turn to describe the estimation results.

Panel A of Table 7a reports OLS estimates of specifications that have the same gravity (W) variables as in tables 4-6, but with different combinations of institutional quality indicators. Panel A is given for completeness. We focus on Panel B, which reports the beta coefficients of those specifications. The main point to take from Panel B is that our institutional variables have much more explanatory power for trade than differences in legal origins. Thus, not only the effect of a marginal change is larger, as described above, but there is a lot more scope for affecting trade through improving institutional quality, relative to legal harmonization.

In column (1) we see that the beta coefficients to Bureaucratic Quality, Control of Corruption and Protection of Property Rights are roughly 3.6, 1.6 and 4.6 larger than the one estimated for differences in legal origins, respectively. From this we may conclude that institutional quality has significantly more explanatory power relative to differences in legal origins. In column (1) we also see that among our three institutional quality variables, Control of Corruption, with a beta of 0.032, has less than half the explanatory power of Bureaucratic Quality and roughly a third the explanatory power of Protection of Property Rights for trade. Of the latter two, property rights seem to have slightly more explanatory power for trade. Bureaucratic Quality captures the efficiency of customs and Protection of Property Rights capture the scope for legal recourse. We may conjecture inefficient customs procedures and

insecure property rights (e.g., higher probability of successful hold-ups) may be more detrimental to international trade than general corruption and paying bribes.

The specification in column (1) can be estimated only in the years 1995-1999 due to the availability of our property rights indicator. Therefore we estimate a similar specification in column (2) without property rights, in 1984-1999. A similar pattern emerges. The beta coefficients to Control of Corruption and Bureaucratic Quality are roughly 4.6 and 7 times larger than the one estimated for differences in legal origins, respectively. In columns (3)-(5) we report the beta coefficients for each institutional quality indicator separately. Notice that these are exactly the same specifications as the first columns in Tables 4-6. The results keep the pattern described above, with the explanatory power of Control of Corruption and Bureaucratic Quality estimated an entire order of magnitude larger than differences in legal origins.

One problem with the previous exercise is the interpretation of the beta coefficient of differences in legal origins. Since this is an indicator variable that takes only the values of zero and one, it is not clear how a country would change it by one standard deviation. We address this problem by estimating the same specifications as in Table 5 where each country's *only* trade partner is the *hypothetical* average of its trading partners[29]. More specifically, we replace all the variables in Eq. (1) that are indexed by j, i.e. partners of country i, by their average for country i. For example, GDP_i is replaced by

$$\overline{GDP}_{J(i)} = \frac{1}{J(i)} \sum_{j=1}^{J(i)} GDP_j \, ,$$

which is the average GDP of country i's trading partners, where $J(i)$ denotes the number of such partners. We note that $J(i)$ is a function only of i and is kept the same for all variables for a given

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[29] We thank Bill Easterly for suggesting this exercise.

year, so that the averaging concept is the same for all variables. Other variables that are denoted both i and j are simply averaged. Thus equation (1) becomes

$$ln(\overline{T}_{J(i)t}) = \delta \cdot \overline{dlegor}_{J(i)} + \pi(I_{it} + \overline{I}_{J(i)t}) + \beta_1 ln(\overline{distance}_{J(i)}) + \beta_2 ln(GDP_{it} \cdot \overline{GDP}_{J(i)t}) + \beta_3 ln(area_i \cdot \overline{area}_{J(i)})$$
$$+ \beta_4 \overline{landlocked}_{J(i)} + \beta_5 \overline{islands}_{J(i)} + \beta_6 \overline{border}_{J(i)} + \beta_7 \overline{common\_language}_{J(i)} + \beta_8 \overline{currency\_union}_{J(i)t} + v_{J(i)t}$$

Eq. (2)

The averaging procedure serves as a way to smooth the legal differences variable and thus making the beta coefficients easier to interpret. However, the averaging procedure changes the interpretation of the standard coefficient to *dlegor*. $\overline{dlegor}_{J(i)}$ denotes the average "different-ness" of country i from its trading partners. It is still bounded between zero and one, but is now continuously distributed on the unit interval. A change from one to zero implies now that a country has moved from a situation in which it was different from *all* its partners to a situation it is fully legally harmonized with them. The full size of the coefficient should be interpreted as the implied increase in trade for such a scenario.

This is different from the previous specifications, in which the coefficient to *dlegor* was to be interpreted as the change in trade vis-a-vis a particular partner. For instance, a country may match its legal system to that of one trading partner but not to another, since there are 5 legal systems in our data. This aspect of the data is lost in the averaging procedure. Therefore, the magnitude of the coefficient should not be compared with other estimates.

Due to the linearity in their construction, our institutional quality variables, $(I_{it} + \overline{I}_{J(i)t})$, keep their previous interpretation, where one can contemplate a one-unit change in country i's institutional quality index in the same way we have done above.

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We report the results of estimating equation (2) in Table 7b, where we replicate the same combinations of institutional variables as in Table 7a. The pattern in Table 7b is similar to that is Table 7a. In column (1) we evaluate the relative importance of all institutional variables and the degree of "Different-ness" in Legal Origins.

As before, we focus on Panel B, but we note two things about the estimates in Panel A. First, in columns (1) and (5), we see that the estimates of the coefficient to Different-ness in Legal Origins are much larger than our previous estimates. One should remember here that the coefficients are not comparable, as they pertain to different situations. Second, in column (1) we see that the coefficient on Control of Corruption is very small, negative and not statistically significant; in column (2) it is positive and smaller still. This is due to colinearity with our other institutional variables, as is evident from column (4), in which the coefficient on Control of Corruption is large, positive and statistically significant.

The results in Panel B convey a similar message as in Table 7a. The beta coefficients to Bureaucratic Quality and Protection of Property Rights are 2.4 and 1.6 times larger that the beta coefficient to Different-ness in Legal Origins. The beta coefficient to Control of Corruption is much smaller now. Here, it is Bureaucratic Quality that has the highest beta coefficient. In columns (2) and (3) we see that the beta coefficient to Bureaucratic Quality is more than 5 times larger than the beta coefficient to Different-ness in Legal Origins. In column (4) the beta coefficient to Control of Corruption is also more than 5 times larger than the beta coefficient to Different-ness in Legal Origins. Here the coefficient is driven by the high correlation with Bureaucratic Quality. In column (5) the beta coefficient to Different-ness in Legal Origins is quite large; the beta coefficient to Protection of Property Rights is but 1.2 times larger. However,

in light of the results in column (1), we can safely conclude that institutional quality has much more explanatory power than Different-ness in Legal Origins.

Robustness: cross-sections

One issue that one might have with our IV estimates is that our instrument is not time-varying, while our instrumented variable is time-varying. In order to address this concern we re-estimate the specification in columns 1-2 in Tables 4-6 on cross sections of 5-year averages. Our sample is 16 years long, so we take averages over three 5-year periods: 1985-90, 1991-94 and 1995-99. Our averaging procedure takes into account the fact that some year observations for a country-pair might be missing; in order to avoid dropping too many observations we average over the years for which data are available, within the 5-year period. We choose not to estimate specifications with tariffs in order to avoid too much imputation out of the tariff data, thus asking too much from already scant tariff data: some of the average tariff data points already exist for only one country as it is (see description in The Data subsection) ; moreover, many year observations for tariffs are missing.

The results are reported in Tables 8-10 and are in line with the estimates from the annual frequency sample. Interestingly, the estimates for the effect of different legal origins in Tables 8-9 – when Bureaucratic Quality or Control of Corruption are controlled for – are much smaller than in the previous ones, sometimes small enough not to render statistical significance. The largest estimate is found in Table 8 in column 2: 18% less trade due to different legal origins. However, the estimates in Table 10 – when Protection of Property Rights is controlled for – are larger than before: 26% (OLS) and 32% (IV) less trade due to different legal origins.

Our estimates for the effects of institutional quality on trade are on the same order of magnitude as before and more. The IV estimates for Bureaucratic Quality imply an increase of 318%, 154% and 88% in trade per one standard deviation of the index in the three sub-samples. The IV estimates for Control of Corruption imply an increase of 182%, 92% and 54% in trade per one standard deviation of the index in the three sub-samples. The IV estimate of the effect on trade of an increase of one standard deviation of the property rights protection index – is 139%, which is twice as large as the estimate in Table 6. Some of these estimates are very large, but they are consistent with the large explanatory power of our institutional quality variables. Moreover, a change in one standard deviation may overstate the relevant change for policy.

Robustness: additional controls

Another objection to our results might arise from omitting other variables that seem important for trade a priori and that might be correlated with other variables. Therefore, we introduce another set of controls, adding them one by one and then all together in the end: colonial ties, trade agreements and infrastructure. The results are reported in Tables 11-13 as follows: column 1 replicates column 1 from Tables 4-6; in columns 2-4 we add each control variable separately; and in column 5 all additional controls are included. In column 6 we also control for tariffs. In all of the estimation results the effects of the additional controls are in the expected direction and meaningful magnitudes.

In all of these robustness checks colonial ties decrease the effect of different legal origins. This is to be expected, since many countries inherited their legal systems from their colonizer. Indeed, colonial ties are negatively correlated with different legal origins, but far from being a

perfect correlation, at only -0.25 (see Table 3). However, the effects of our institutional quality measures do not change with the introduction of colonial ties.

Controlling for trade agreements increases the effect of different legal origins in Tables 11 and 12 (but not in Table 13). This is surprising; trade agreements are generally written so as to be acceptable regardless of the legal system and presumably would reduce the impact of differences induced by differences in legal origin on trade. We would expect that differences in institutional design would be less important for countries that have regional or other trade agreements, since these agreements are a source of harmonization.[30] Interestingly, the coefficient on membership in the World Trade Organization (WTO) is estimated to be large, negative and statistically significant. Rose (2004) finds smaller negative effects which are statistically insignificant, using the same data in a longer sample (1945-99)[31]. Thus, once institutional quality is controlled for, WTO membership seems to be detrimental to trade, or at least does not promote it. To the extent that the WTO aims at promoting trade through reduced tariffs or through institutional harmonization, it seems that it is not promoting trade through either channel. The effects of our institutional quality measures on trade decrease slightly when trade agreements are controlled for.

Controlling for telephone lines decreases the effect of differences in legal origins in Tables 11 and 12 (but not in Table 13) and the effect of our institutional quality measures on trade decrease by roughly a half. However, a one standard deviation change in institutional quality has a larger effect on trade than differences in legal origins. In Tables 11 and 12 the effect remains an order of magnitude larger. Better means of communication are highly correlated with better institutional environments (see Table 3). Better communications most

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[30] Differences in legal origin are not significantly negatively correlated with membership in regional agreements, that is, trade agreements are not more likely to be made between countries with similar legal systems.

[31] However, the number of reporting countries in the sample is much smaller in the earlier part of the sample.

probably promote better institutional quality since they allow better control and flow of information; and better institutions probably translate into better infrastructure, including infrastructure in telecommunications. In Tables 11 and 12, the estimated elasticity of trade with respect to telephone lines is roughly 0.23, which is reasonable; given this coefficient, an increase of one standard deviation of this variable increases trade by 85%. Thus the effect of telephone lines may be 10 times as large as different legal origins. Moreover, this effect is roughly twice the effect of institutional quality. In Table 13, the coefficient to telephone lines is smaller, at 0.18; this implies a smaller effect of one standard deviation of this variable, 62%. This is still 2.5 times the effect of different legal origins and also twice the effect of Protection of property rights.

Our second measure of quality of infrastructure is roads per 1,000 people. The results are qualitatively the same, but the overall effect of this variable is smaller. The effects of institutional quality in these regressions are estimated larger than when telephone lines were included instead in Tables 11 and 12. In those tables the elasticity with respect to roads is roughly 0.12, which implies an increase in trade of roughly 20% due to an increase of one standard deviation in the roads variable; this is still twice the effect of different legal origins, but half the effect of institutional quality.

However, in Table 13 the effect of roads is much smaller than different legal origins. The elasticity is only 0.04, which implies an increase in trade of only 6% due to an increase of one standard deviation in the roads variable. This is but a fraction of the effect on trade of one

standard deviation in Protection of Property Rights (47%). Since this variable is collinear with telephone lines we do not report estimation results when both are used as regressors[32].

In sum, we can say that infrastructure is an important determinant of trade, in most cases more important than differences in legal origin and without diminishing the role of institutional quality. An increase of one standard deviation in the telephone lines variable seems to entail an effect on trade of roughly twice the effect of one standard deviation of our measures of institutional quality. Roads have only half the effect of institutional quality, or less. However, this comparison should be considered with caution, as we are comparing a real variable with an index. Nevertheless, it is indicative of the relative importance.

When all controls are added we find that the effect of institutional quality is smaller than without them. This is not surprising, since good institutions are correlated with other indicators of economic development that promote trade. The effect of an increase of one standard deviation in the Bureaucratic Quality index falls from 88% to 32%; for Control of Corruption it falls from 70% to 18%; and for Protection of Property Rights it falls from 57% to 22%. However, the effect on trade of different legal origins also diminishes, and in Tables 11-12 it becomes small enough not to render statistical insignificance. Therefore, our main result – that institutional quality matters more than differences in legal origins – holds.

When, in addition, we control for tariffs we find a larger effect of different legal origins. However, given the special nature of the sub-sample for which tariff data are available, we should treat this result with caution; the results are driven mostly by industrial countries, for which tariff data exist. Nevertheless, they are in line with our other estimates.

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[32] Doing so rendered a negative coefficient to roads and did not change much the coefficient to telephone lines. This is due to the colinearity of these two variables. The results for differences in legal origin and institutional quality hardly change in this case. These results are available upon request.

Robustness: subsamples of rich and poor countries

To assess better the relative importance of institutional quality versus differences in legal origins we split the data into two subsamples. The first, "Rich Partner" subsample includes all observations in which at least one country in the pair has PPP GDP per capita *greater* than 10,000 dollars in 2000. This effectively excludes all pairs in which both countries have less than that income. The second, "Poor Partner" subsample includes all observations in which at least one country in the pair has PPP GDP per capita *less* than 10,000 dollars in 2000. This effectively excludes all pairs in which both countries have more than that income[33]. The GDP data were taken from the World Development Indicators[34]. A list of 31 countries that define the Rich Partner subsample is reported in the appendix.

We estimate the same baseline specifications of Tables 4-6 on the two subsamples of country-pairs. The results are reported in Tables 14-16. In all three tables the first two columns replicate the first two columns of Tables 4-6 for convenience. The next two columns report results for the same specification for the Rich Partner subsample, while the last two columns report the results for the Poor Partner subsample. We keep here the practice of using IV estimators for all subsamples to correct for potential endogeneity and measurement error.

The estimates in Tables 14-15 for Bureaucratic Quality and Control of Corruption exhibit a similar pattern. First, differences in legal origin are more important when at least one trading partner is rich than when at least one trading partner is relatively poor. Second, the opposite is true for institutional quality; it is more important when at least one trading partner is relatively poor. Moreover, the *relative* importance of institutional quality versus different legal systems is

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[33] The results reported below hold for a broad range of cutoff incomes. These results are available upon request.
[34] These are published by the World Bank.

much larger when a trading partner is relatively poor than when one trading partner is relatively rich.

For example, in the Poor Partner subsample one standard deviation of either Bureaucratic Quality or Control of Corruption is associated with an increase in trade that is more than 6 times larger than the decrease in trade due to different legal origins. The actual magnitude is economically large: an 84-130% increase in trade due to one standard deviation of Bureaucratic Quality and 71-74% increase in trade due to one standard deviation of Control of Corruption. In the Rich Partner subsample the OLS estimates assign a more modestly larger effect to the institutional quality variables, but the IV estimates reverse this and let the difference in legal origins have a larger effect. In calculating the impact on trade we took the standard deviation in the relevant subsample. Summary statistics in each subsample are reported in Table 17.

What can explain this pattern? If institutional quality is higher in rich countries, then it may cease to be a binding constraint for trade and legal differences become more important. Since our data do not allow disentangling the effect on imports and exports, we can only conjecture that this is true. In Table 17 we can see that all institutional quality variables have higher means and lower variances in the Rich Partner subsample than in the Poor partner subsample. The statistical properties of the indicator for different legal origins are not significantly different in the subsamples.

The picture for Protection of Property Rights in table 16 is slightly different, although it conveys a similar message. The OLS e estimator yields a similar coefficient to differences in legal origin in all subsamples, which is higher than in Tables 14-15. The coefficient to Protection of Property Rights is also similar in all subsamples. However, the IV estimator assigns a small negative coefficient to Property Rights in the Rich Partner subsample, which is statistically not

significant. This might be due to the reason we mentioned above, that when institutional quality is high enough it ceases to be a binding constraint and increasing it may not increases trade. The coefficient to different legal origins is also smaller than in other subsamples in this table.

In the Poor partner subsample the picture is similar to the previous tables; Protection of Property Rights has a much larger effect on trade than differences in legal origin – between 2 and 3 times larger. The economic magnitude is similar to increasing Control of corruption: 57-79% increase in trade due to an increase of one standard deviation of Protection of Property Rights.

In sum, it appears that for relatively poor countries it is more important to increase institutional quality than to harmonize legal systems. This is not a trivial finding. Although poorer countries tend to have worse institutions and thus have larger scope to improve institutional quality, it is not straightforward that the relative importance of institutional quality versus differences in legal systems is higher in poorer countries. In other words, the marginal effect on trade of an increase in institutional quality seems to be higher in poorer countries, but also relatively higher with respect to differences in legal origins.

Conclusion

       In this paper, we have estimated the impact of institutions on bilateral trade flows in a gravity equation. The question we are specifically asking is how much differences in institutional form or design matter for trade, once we control for differences in overall institutional quality. The empirical estimations indicate that the impact of bad institutions – inefficient bureaucracy, corruption and poor property rights protection – is a much larger deterrent to trade than the impact of differences in form as proxied by differences in legal systems. This is particularly true in poor countries. We also found that the impacts of differences in legal origin and even in institutional effectiveness on trade are reduced when we include a whole set of controls in our model. Of particular note is the importance of our measure of infrastructure. Therefore, we argue that policies favoring harmonization may be much less important in promoting trade than policies promoting institutional effectiveness, especially since the latter are more likely to succeed and may be less costly to achieve.

       Our indicator of institutional diversity is broad and picks up the effect of historical factors on trade, while failing to pick up how current legal systems of countries that share legal origins may vary. We argued that this indicator is not perfectly correlated with institutional quality. Rich countries have become rich with different legal systems, which promotes the view that form does not matter but functionality does. We hold the view that legal origin is a good indicator of legal system diversity especially as we control for overall institutional quality as well.

Table 1: List of Variables and Sources

Variable	Availability	Description	Source
Log of average trade flow	1984-99	Average of real imports and exports between trade partners	Rose (2004)
Different Legal Origin	-	Indicator for different legal origins	Djankov et al. (2003) and CIA Factbook
Bureaucratic Quality	1984-99	Sum of bureaucratic quality indicators per country pair	International Country Risk Guide (ICRG)
Control of Corruption	1984-99	Sum of control of corruption indicators per country pair	International Country Risk Guide (ICRG)
Protection of Property Rights	1995-99	Sum of property rights protection indicators per country pair	The Heritage Foundation
log distance	-	Great circle distance between trade pair	Rose (2004)
log product of GDP	1984-99	log of product of trade pair real GDPs	Rose (2004)
log product of land area	-	log product of trade pair land area	Rose (2004)
no. of landlocked	-	Number of landlocked countries in trade pair (0, 1, 2)	Rose (2004)
no. of islands	-	Number of island countries in trade pair (0, 1, 2)	Rose (2004)
common border	-	Indicator for a common border for trade pair	Rose (2004)
common language	-	Indicator for a common official language for trade pair	Rose (2004)
currency union	1984-99	Indicator for both countries in trade pair members in a currency union	Rose (2004)
common colonizer	-	Indicator for common colonizer of both countries in trade pair	Rose (2004)
colony-colonizer	-	Indicator for colony-colonizer relationship in trade pair	Rose (2004)

both in GATT/WTO	1984-99	Indicator for both countries in trade pair members in GATT/WTO	Rose (2004)
only one in GATT/WTO	1984-99	Indicator for only one country in trade pair a member in GATT/WTO	Rose (2004)
generalized system of preferences (GSP)	1984-99	Indicator for one country extending GSP privileges to the other	Rose (2004)
regional trade agreement	1984-99	Indicator for both countries in trade pair members in a regional trade agreement	Rose (2004)
log of product of telephone lines per 1,000 people	1984-99	log of product of telephone lines per 1,000 people in trade pair	WDI, The World Bank
log of product of road length per 1,000 people	1984-99	log of product of road length per 1,000 people in trade pair	WDI, The World Bank
average weighted tariff	1988-99	Average of bilateral weighted tariff for trade pair. When only one value exists, that is the one that is taken	TRAINS, The World Bank
sum of absolute latitude	-	Sum of absolute latitudes of countries in trade pair	CIA Factbook
ethnic fractionalization	-	Sum of probabilities of two people randomly meeting someone not from their own ethnic group	Alesina et al. (2003)

Sources in detail:

Alesina, Alberto, Arnaud Devleeschauwer, William Easterly, Sergio Kurlat and Romain Waicziarg (2003), "Fractionalization, *Journal of Economic Growth* 8

Djankov, Simeon, Rafael La Porta, Florencio Lopez-de-Silanes and Andrei Shleifer (2003), "Courts", *The Quarterly Journal of Economics*, May

Rose, Andrew (2004), "Do we really know that the WTO increases trade?", *American Economic Review* 94(1)

CIA Factbook,http://www.cia.gov/cia/publications/Factbook/

ICRG, http://www.icrgonline.com/

The Heritage Foundation, http://www.heritage.org/

Table 2: Summary Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
log of average trade flow	83757	10.41	3.47	-16.09	20.81
Different legal origin	83757	0.66	0.48	0	1
Sum of bureaucratic quality	77594	4.67	1.67	0	8
Sum of control of corruption	77594	7.02	1.97	0	12
Sum of property rights protection	29772	4.96	1.47	0	8
log distance	83757	8.19	0.79	4.02	9.42
log product of GDP	83757	48.87	2.48	39.00	59.09
log product of land area	83757	24.69	2.83	11.82	32.77
no. of landlocked	83757	0.27	0.48	0	2
no. of islands	83757	0.26	0.47	0	2
common border	83757	0.03	0.17	0	1
common language	83757	0.19	0.39	0	1
currency union	83757	0.01	0.08	0	1
common colonizer	83757	0.09	0.28	0	1
colony-colonizer	83757	0.02	0.13	0	1
both in GATT/WTO	83757	0.64	0.48	0	1
one in GATT/WTO	83757	0.32	0.47	0	1
generalized system of preferences (GSP)	83757	0.31	0.46	0	1
regional trade agreement	83757	0.02	0.13	0	1
log of product of telephone lines per 1,000 people	80731	8.42	2.70	-0.30	14.37
log of product of road length per 1,000 people	51286	3.03	1.55	-10.87	7.74
average weighted tariff	36107	9.32	10.61	0	326.96

Table 3: Key Correlations

	trade	dlegor	burqua	corrup	pr	comcol	colony	bothin	gsp	regional	lines	lroadpop
Different legal origin	0.05											
Sum of bureaucratic quality	0.48	0.20										
Sum of control of corruption	0.36	0.20	0.68									
Sum of property rights protection	0.41	0.15	0.70	0.47								
common colonizer	-0.11	-0.26	-0.12	-0.16	-0.09							
colony-colinizer	0.14	-0.15	0.07	0.06	0.06	-0.04						
both in GATT/WTO	0.11	0.02	0.25	0.20	0.27	0.03	0.04					
generalized system of preferences (GSP)	0.29	0.16	0.33	0.37	0.33	-0.21	0.09	0.12				
regional trade agreement	0.18	-0.05	0.11	0.11	0.13	0.00	0.03	0.06	-0.05			
log of product of telephone lines per 1,000 people	0.45	0.18	0.66	0.57	0.62	-0.22	0.05	0.09	0.26	0.13		
log of product of road length per 1,000 people	0.14	0.12	0.48	0.49	0.34	-0.19	0.03	0.07	0.24	0.08	0.50	
average weighted tariff	-0.14	-0.05	-0.22	-0.25	-0.20	0.18	-0.05	0.02	-0.21	0.02	-0.28	-0.24

Notes: All correlations are taken for all existing observations. All correlations are statistically significant at the 1% level except for correl(regional,comcol), which is not statistically significant at conventional levels.

Table 4: Trade, Legal Origins and Bureaucratic Quality, Baseline
Results

Dep. Var.: log of average trade flow

	(1) OLS	(2) IV	(3) OLS	(4) IV
Different Legal Origin	-0.10	-0.14	-0.24	-0.21
	(-2.19)	(-2.89)	(-5.42)	(-4.44)
Bureaucratic Quality	0.38	0.47	0.32	0.25
	(26.2)	(12.64)	(21.81)	(6.8)
average weighted tariff			-0.02	-0.02
			(-12.91)	(-12.7)
log distance	-1.09	-1.07	-0.97	-0.98
	(-36.97)	(-35.44)	(-33.55)	(-32.82)
log product of GDP	1.07	1.03	1.01	1.03
	(95.8)	(63.24)	(96.78)	(68.34)
log product of land area	-0.20	-0.18	-0.17	-0.17
	(-21.75)	(-18.06)	(-19.12)	(-17.91)
no. of landlocked	-0.33	-0.35	-0.41	-0.40
	(-7.39)	(-7.81)	(-9.59)	(-9.44)
common border	0.98	1.02	0.97	0.94
	(6.77)	(6.93)	(6.49)	(6.26)
common border	0.98	1.02	0.97	0.94
	(6.77)	(6.93)	(6.49)	(6.26)
common language	0.51	0.49	0.54	0.55
	(9.07)	(8.62)	(9.97)	(10.06)
currency union	1.90	1.86	1.18	1.19
	(7.85)	(7.66)	(4.9)	(4.98)
Observations	77594	77594	32752	32752
R^2	0.67	0.67	0.74	0.74
First stage R^2		0.43		0.44
% increase in trade due to 1s.d. institution	88%	119%	70%	53%

Notes: t-values in parentheses. Standard errors are calculated
taking into account country-pair clusters. A constant and year
dummies are not reported. IV estimators use the sum of
absolute latitude as an instrument for the sum of bureaucratic
quality for both countries in a trading pair. The sum of
bureaucratic quality ranges from 0 to 8 with mean 4.672 and
standard deviation 1.667. The percent increase in trade due to
1s.d. institution (bureaucratic quality) is calculated as follows:
exp(coef*sd)-1.

Table 5: Trade, Legal Origins and Control of Corruption,
Baseline Results

Dep. Var.: log of average trade flow

	(1) OLS	(2) IV	(3) OLS	(4) IV
Different Legal Origin	-0.08	-0.09	-0.19	-0.18
	(-1.70)	(-1.78)	(-4.13)	(-3.83)
Control of Corruption	0.27	0.28	0.17	0.15
	(25.11)	(12.64)	(15.80)	(6.71)
average weighted tariff			-0.02	-0.02
			(-13.12)	(-12.60)
log distance	-1.08	-1.08	-0.97	-0.98
	(-37.03)	(-36.23)	(-32.82)	(-31.90)
log product of GDP	1.13	1.12	1.08	1.09
	(108.66)	(96.35)	(112.99)	(106.44)
log product of land area	-0.21	-0.21	-0.19	-0.19
	(-23.48)	(-22.33)	(-22.14)	(-21.69)
no. of landlocked	-0.35	-0.35	-0.40	-0.40
	(-7.84)	(-7.84)	(-9.32)	(-9.25)
no. of islands	-0.03	-0.03	-0.04	-0.03
	(-0.55)	(-0.64)	(-0.83)	(-0.72)
common border	0.91	0.91	0.92	0.92
	(6.33)	(6.33)	(6.21)	(6.10)
common language	0.62	0.62	0.63	0.63
	(11.05)	(11.06)	(11.64)	(11.64)
currency union	2.15	2.15	1.37	1.36
	(8.59)	(8.60)	(5.66)	(5.58)
Observations	77594	77594	32752	32752
R^2	0.67	0.67	0.73	0.73
First stage R^2		0.40		0.43
% increase in trade due to 1s.d. institution	70%	74%	40%	36%

Notes: t-values in parentheses. Standard errors are calculated
taking into account country-pair clusters. A constant and year
dummies are not reported. IV estimators use the sum of
absolute latitude as an instrument for the sum of control of
corruption for both countries in a trading pair. The sum of control
of corruption ranges from 0 to 12 with mean 7.012 and standard
deviation 1.972. The percent increase in trade due to 1s.d.
institution (control of corruption) is calculated as follows:
exp(coef*sd)-1.

Table 6: Trade, Legal Origins and Protection of Property Rights, Baseline Results

Dep. Var.: log of average trade flow

	(1) OLS	(2) IV	(3) OLS	(4) IV
Different Legal Origin	-0.25	-0.26	-0.29	-0.25
	(-5.96)	(-5.76)	(-6.76)	(-5.38)
Protection of Property Rights	0.31	0.36	0.30	0.18
	(21.43)	(6.34)	(19.71)	(3.40)
average weighted tariff			-0.02	-0.02
			(-8.64)	(-8.52)
log distance	-1.20	-1.20	-1.15	-1.14
	(-48.76)	(-48.47)	(-45.06)	(-44.00)
log product of GDP	0.98	0.97	0.99	1.02
	(105.61)	(49.36)	(102.26)	(59.68)
log product of land area	-0.10	-0.09	-0.10	-0.13
	(-12.20)	(-6.45)	(-12.08)	(-9.76)
no. of landlocked	-0.54	-0.55	-0.55	-0.53
	(-15.70)	(-15.35)	(-15.17)	(-14.15)
no. of islands	-0.18	-0.20	-0.18	-0.12
	(-4.15)	(-3.98)	(-4.15)	(-2.42)
common border	1.04	1.05	0.96	0.95
	(8.38)	(8.36)	(7.59)	(7.46)
common language	0.41	0.38	0.52	0.59
	(7.72)	(6.26)	(9.94)	(9.78)
currency union	1.31	1.32	1.06	1.09
	(5.46)	(5.47)	(2.93)	(3.15)
Observations	29772	29772	19536	19536
R^2	0.72	0.72	0.75	0.75
First stage R^2		0.42		0.42
% increase in trade due to 1s.d. institution	57%	69%	55%	30%

Notes: t-values in parentheses. Standard errors are calculated taking into account country-pair clusters. A constant and year dummies are not reported. IV estimators use the sum of absolute latitude as an instrument for the sum of protection of property rights for both countries in a trading pair. The sum of protection of property rights ranges from 0 to 8 with mean 4.962 and standard deviation 1.47. The percent increase in trade due to 1s.d. institution (property rights) is calculated as follows: exp(coef*sd)-1.

Table 7a: Trade, Legal Origins and Institutional Quality, Relative Explanatory Power

Dep. Var.: log of average trade flow

	(1)	(2)	(3)	(4)	(5)
A.	1995-99	1984-99	1984-99	1984-99	1995-99
Different Legal Origin	-0.14	-0.13	-0.1	-0.08	-0.25
	[3.02]	[2.76]	[2.19]	[1.70]	[5.96]
Bureaucratic Quality	0.16	0.26	0.38		
	[7.76]	[14.90]	[26.20]		
Control of Corruption	0.06	0.14		0.27	
	[4.81]	[11.22]		[25.11]	
Protection of Property Rights	0.2				0.31
	[11.07]				[21.43]
Observations	23609	77594	77594	77594	29772
R^2	0.74	0.67	0.67	0.67	0.72
B.			Beta Coefficients		
Different Legal Origin	-0.020	-0.018	-0.014	-0.011	-0.035
Bureaucratic Quality	0.071	0.126	0.182		
Control of Corruption	0.032	0.082		0.154	
Protection of Property Rights	0.091				0.137

Notes: Panel A reports OLS estimates. t-values in brackets. Standard errors are calculated taking into account country-pair clusters. The following variables are included in the estimation but their coefficients are not reported: log distance, log product of GDP, log product of land area, no. of landlocked, common border, common border, common language, currency union. A constant and year dummies are not reported as well. Panel B reports beta coefficients estimated for the same specification as panel A.

Table 7b: Trade, Legal Origins and Institutional Quality, Relative Explanatory Power, Average Trade Partner

Dep. Var.: log of average trade flow **with average trade partner**

A.	(1) 1995-99	(2) 1984-99	(3) 1984-99	(4) 1984-99	(5) 1995-99
Different-ness in Legal Origin	-0.64	-0.36	-0.36	-0.2	-1.23
	[3.43]	[3.28]	[3.26]	[1.78]	[7.12]
Bureaucratic Quality	0.33	0.33	0.34		
	[5.61]	[12.21]	[16.02]		
Control of Corruption	-0.05	0.01		0.17	
	[1.25]	[0.39]		[9.95]	
Protection of Property Rights	0.22				0.36
	[3.97]				[8.28]
Observations	539	1790	1790	1790	638
R^2	0.82	0.79	0.79	0.77	0.8

B.			Beta Coefficients		
Different Legal Origin	-0.079	-0.042	-0.041	-0.023	-0.166
Bureaucratic Quality	0.185	0.223	0.228		
Control of Corruption	-0.032	0.006		0.133	
Protection of Property Rights	0.124				0.197

Notes: All variables are averages per reporting country vis-à-vis its trading partners. Panel A reports OLS estimates. t-values in brackets. The following variables are included in the estimation but their coefficients are not reported: log distance, log product of GDP, log product of land area, no. of landlocked, common border, common border, common language, currency union. A constant and year dummies are not reported as well. Panel B reports beta coefficients estimated for the same specification as panel A.

Table 8: Trade, Legal Origins and Bureaucratic Quality, 5-year averages

Dep. Var.: log of average trade flow

	(1) OLS	(2) IV	(3) OLS	(4) IV	(5) OLS	(6) IV
Years in Average	1985-1989		1990-1994		1995-1999	
Different Legal Origin	-0.04	-0.20	-0.11	-0.19	-0.15	-0.19
	(-0.50)	(-2.33)	(-1.72)	(-2.78)	(-3.10)	(-3.51)
Bureaucratic Quality	0.45	0.81	0.43	0.58	0.32	0.44
	(20.65)	(13.55)	(20.30)	(11.78)	(14.82)	(7.49)
log distance	-1.25	-1.20	-1.12	-1.09	-1.12	-1.10
	(-27.42)	(-24.82)	(-29.94)	(-27.33)	(-38.88)	(-37.26)
log product of GDP	1.16	1.02	1.16	1.11	1.05	1.00
	(62.27)	(37.21)	(73.58)	(50.92)	(78.48)	(42.41)
log product of land area	-0.27	-0.22	-0.24	-0.23	-0.13	-0.11
	(-20.06)	(-15.27)	(-20.89)	(-17.43)	(-13.36)	(-7.30)
no. of landlocked	-0.08	-0.16	-0.29	-0.31	-0.41	-0.43
	(-1.01)	(-1.97)	(-4.97)	(-5.31)	(-9.22)	(-9.70)
no. of islands	-0.05	-0.36	-0.14	-0.22	-0.21	-0.28
	(-0.76)	(-4.32)	(-2.32)	(-3.40)	(-4.28)	(-4.96)
common border	0.91	1.08	1.12	1.21	1.22	1.26
	(4.76)	(5.21)	(6.52)	(6.83)	(7.70)	(7.75)
common language	0.46	0.35	0.52	0.48	0.53	0.51
	(5.34)	(3.91)	(7.18)	(6.59)	(8.73)	(8.12)
currency union	1.96	1.54	2.23	2.18	1.69	1.72
	(6.83)	(4.98)	(8.25)	(7.98)	(6.03)	(6.11)
Observations	5353	5353	5627	5627	7014	7014
R^2	0.62	0.61	0.71	0.71	0.74	0.74
First stage R^2		0.38		0.44		0.52
% increase in trade due to 1s.d. institution	121%	318%	99%	154%	58%	88%

Notes: t-values in parentheses. Standard errors are calculated taking into account country-pair clusters. A constant is not reported. Each column reports a regression performed on one cross-section of 5-year averages. The averages are taken over all *available* years in the 5-year sub-sample, and the procedure takes into account missing year observations. IV estimators use the sum of absolute latitude as an instrument for the sum of bureaucratic quality for both countries in a trading pair. The sum of bureaucratic quality ranges from 0 to 8 with means 4.21, 4.58, 4.85, with standard deviations 1.77, 1.62, 1.42, in years 1985-89, 1990-94, 1995-99, respectively. The percent increase in trade due to 1s.d. institution (property rights) is calculated as follows: exp(coef*sd)-1.

Table 9: Trade, Legal Origins and Control of corruption, 5-year averages

Dep. Var.: log of average trade flow

	(1) OLS	(2) IV	(3) OLS	(4) IV	(5) OLS	(6) IV
Years in Average	1985-1989		1990-1994		1995-1999	
Different Legal Origin	-0.01	-0.09	-0.08	-0.08	-0.11	-0.15
	(-0.12)	(-1.13)	(-1.25)	(-1.29)	(-2.17)	(-2.83)
Control of Corruption	0.33	0.50	0.35	0.35	0.15	0.26
	(19.47)	(13.97)	(19.59)	(11.93)	(11.25)	(7.43)
log distance	-1.25	-1.22	-1.13	-1.13	-1.12	-1.10
	(-27.43)	(-25.78)	(-30.32)	(-29.47)	(-38.63)	(-36.39)
log product of GDP	1.21	1.14	1.20	1.20	1.13	1.11
	(66.47)	(53.91)	(82.16)	(73.21)	(104.23)	(88.84)
log product of land area	-0.27	-0.25	-0.25	-0.25	-0.18	-0.16
	(-20.37)	(-18.02)	(-21.07)	(-20.20)	(-18.97)	(-15.47)
no. of landlocked	-0.14	-0.22	-0.42	-0.42	-0.36	-0.38
	(-1.79)	(-2.72)	(-7.20)	(-7.16)	(-8.24)	(-8.73)
no. of islands	0.22	0.17	-0.06	-0.06	-0.15	-0.22
	(3.26)	(2.50)	(-0.99)	(-1.02)	(-2.94)	(-4.09)
common border	0.81	0.86	1.02	1.03	1.16	1.21
	(4.29)	(4.45)	(6.01)	(5.99)	(7.41)	(7.56)
common language	0.63	0.65	0.65	0.65	0.61	0.62
	(7.29)	(7.41)	(9.11)	(9.10)	(9.94)	(10.11)
currency union	2.42	2.39	2.47	2.47	1.73	1.83
	(8.11)	(7.84)	(8.56)	(8.56)	(6.05)	(6.27)
Observations	5353	5353	5627	5627	7014	7014
R^2	0.62	0.61	0.71	0.71	0.74	0.73
First stage R^2		0.37		0.47		0.34
% increase in trade due to 1s.d. institution	101%	182%	89%	92%	29%	54%

Notes: t-values in parentheses. Standard errors are calculated taking into account country-pair clusters. A constant is not reported. Each column reports a regression performed on one cross-section of 5-year averages. The averages are taken over all *available* years in the 5-year sub-sample, and the procedure takes into account missing year observations. IV estimators use the sum of absolute latitude as an instrument for the sum of control of corruption for both countries in a trading pair. The sum of control of corruption ranges from 0 to 12 with means 6.65, 7.19, 6.79, with standard deviations 2.09, 1.84, 1.66, in years 1985-89, 1990-94, 1995-99, respectively. The percent increase in trade due to 1s.d. institution (property rights) is calculated as follows: exp(coef*sd)-1.

Table 10: Trade, Legal Origins and Property Rights, 5-year averages

Dep. Var.: log of average trade flow

	(1) OLS	(2) IV
Years in Average	1995-1999	
Different Legal Origin	-0.30	-0.39
	(-6.42)	(-7.27)
Protection of Property Rights	0.29	0.58
	(16.20)	(8.29)
log distance	-1.27	-1.30
	(-45.90)	(-44.91)
log product of GDP	1.04	0.94
	(92.83)	(37.87)
log product of land area	-0.11	-0.05
	(-12.24)	(-2.84)
no. of landlocked	-0.43	-0.49
	(-10.72)	(-11.70)
no. of islands	-0.22	-0.38
	(-4.67)	(-6.40)
common border	1.14	1.18
	(7.81)	(7.79)
common language	0.34	0.18
	(5.86)	(2.54)
currency union	1.32	1.42
	(5.38)	(5.50)
Observations	8632	8632
R^2	0.72	0.71
First stage R^2		0.43
% increase in trade due to 1s.d. institution	54%	139%

Notes: t-values in parentheses. Standard errors are calculated taking into account country-pair clusters. A constant is not reported. Each column reports a regression performed on one cross-section of 5-year averages. The averages are taken over all *available* years in the 5-year sub-sample, and the procedure takes into account missing year observations. IV estimators use the sum of absolute latitude as an instrument for the sum of property rights for both countries in a trading pair. The sum of property rights ranges from 0 to 12 with mean 4.8 and standard deviation 1.5, in 1995-99. The percent increase in trade due to 1s.d. institution (property rights) is calculated as follows: exp(coef*sd)-1.

Table 11: Trade, Legal Origins and Bureaucratic Quality, Robustness

Dep. Var.: log of average trade flow							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	OLS	OLS	OLS	OLS	OLS	OLS	OLS
Different Legal Origin	-0.10	-0.07	-0.14	-0.08	-0.10	-0.05	-0.17
	(-2.19)	(-1.45)	(-3.13)	(-1.74)	(-2.21)	(-1.06)	(-3.92)
Bureaucratic Quality	0.38	0.37	0.33	0.21	0.27	0.17	0.18
	(26.20)	(25.95)	(22.45)	(13.08)	(15.43)	(10.41)	(11.47)
log distance	-1.09	-1.09	-1.09	-1.09	-1.03	-1.09	-0.96
	(-36.97)	(-37.00)	(-36.57)	(-37.57)	(-34.45)	(-37.16)	(-34.06)
log product of GDP	1.07	1.06	1.05	0.98	1.09	0.97	0.96
	(95.80)	(94.34)	(93.16)	(87.18)	(93.3)	(85.01)	(88.36)
log product of land area	-0.20	-0.20	-0.20	-0.11	-0.21	-0.10	-0.11
	(-21.75)	(-21.30)	(-21.20)	(-11.28)	(-20.79)	(-9.98)	(-11.64)
no. of landlocked	-0.33	-0.33	-0.34	-0.29	-0.40	-0.32	-0.36
	(-7.39)	(-7.43)	(-7.92)	(-6.54)	(-9.18)	(-7.40)	(-8.70)
no. of islands	-0.16	-0.14	-0.13	-0.18	-0.22	-0.17	-0.11
	(-3.43)	(-3.17)	(-2.77)	(-4.03)	(-4.60)	(-3.83)	(-2.63)
common border	0.98	0.97	1.05	0.97	1.05	1.02	0.75
	(6.77)	(6.58)	(7.40)	(6.84)	(7.31)	(7.21)	(5.35)
common language	0.51	0.46	0.53	0.59	0.61	0.47	0.44
	(9.07)	(7.94)	(9.49)	(10.75)	(10.35)	(8.46)	(8.74)
currency union	1.90	1.96	1.92	2.38	2.11	2.12	1.36
	(7.85)	(7.83)	(7.91)	(9.51)	(8.78)	(8.29)	(4.78)
common colonizer		-0.01				0.45	0.33
		(-0.14)				(4.54)	(2.69)
colony-colonizer		0.96				0.90	0.85
		(6.90)				(6.59)	(6.98)
both in GATT/WTO			-0.25			-0.03	-0.13
			(-2.32)			(-0.25)	(-0.75)
only one in GATT/WTO			-0.16			-0.06	-0.12
			(-1.49)			(-0.56)	(-0.67)
generalized system of preferences (GSP)			0.64			0.54	0.26
			(16.25)			(14.09)	(6.87)
regional trade agreement			0.53			0.36	1.77
			(3.60)			(2.47)	(10.28)
log of product of phone lines per 1,000 people				0.23		0.22	0.16
				(18.37)		(17.64)	(13.17)
log of product of road length per 1,000 people					0.11		
					(7.31)		
average weighted tariff							-0.01
							(-9.62)
Observations	77594	77594	77594	74576	46074	74576	32466
R^2	0.67	0.67	0.68	0.69	0.71	0.69	0.76
% increase in trade due to 1s.d. institution	88%	87%	74%	41%	57%	32%	36%

Notes: t-values in parentheses. Standard errors are calculated taking into account country-pair clusters. A constant, year and country dummies are not reported. The sum of bureaucratic quality ranges from 0 to 8 with mean 4.672 and standard deviation 1.667. The percent increase in trade due to 1s.d. institution (bureaucratic quality) is calculated as follows: exp(coef*sd)-1.

Table 12: Trade, Legal Origins and Control of Corruption, Robustness

Dep. Var.: log of average trade flow

	(1) OLS	(2) OLS	(3) OLS	(4) OLS	(5) OLS	(6) OLS	(7) OLS
Different Legal Origin	-0.08	-0.04	-0.12	-0.06	-0.09	-0.02	-0.13
	(-1.70)	(-0.88)	(-2.49)	(-1.33)	(-1.90)	(-0.52)	(-2.80)
Control of Corruption	0.27	0.27	0.23	0.13	0.17	0.09	0.05
	(25.11)	(24.73)	(20.24)	(10.88)	(14.12)	(7.16)	(4.25)
log distance	-1.08	-1.08	-1.09	-1.09	-1.02	-1.10	-0.97
	(-37.03)	(-37.10)	(-36.56)	(-37.56)	(-34.36)	(-37.20)	(-33.97)
log product of GDP	1.13	1.12	1.10	1.02	1.14	0.99	0.98
	(108.66)	(106.79)	(102.99)	(91.43)	(111.02)	(87.10)	(91.33)
log product of land area	-0.21	-0.21	-0.21	-0.12	-0.23	-0.10	-0.11
	(-23.48)	(-22.90)	(-22.78)	(-11.77)	(-23.27)	(-9.90)	(-11.37)
no. of landlocked	-0.35	-0.35	-0.36	-0.29	-0.40	-0.31	-0.34
	(-7.84)	(-7.90)	(-8.19)	(-6.56)	(-9.29)	(-7.32)	(-8.30)
no. of islands	-0.03	-0.02	-0.01	-0.11	-0.17	-0.11	-0.07
	(-0.55)	(-0.42)	(-0.18)	(-2.40)	(-3.46)	(-2.57)	(-1.71)
common border	0.91	0.90	0.98	0.93	1.01	0.98	0.70
	(6.33)	(6.17)	(6.91)	(6.59)	(7.08)	(6.98)	(5.00)
common language	0.62	0.56	0.62	0.65	0.69	0.50	0.49
	(11.05)	(9.62)	(11.16)	(11.90)	(11.76)	(9.14)	(9.65)
currency union	2.15	2.16	2.12	2.54	2.24	2.22	1.43
	(8.59)	(8.36)	(8.44)	(10.04)	(9.17)	(8.57)	(4.83)
common colonizer		0.06				0.50	0.40
		(0.64)				(5.04)	(3.30)
colony-colonizer		0.92				0.91	0.86
		(6.51)				(6.54)	(6.88)
both in GATT/WTO			-0.17			0.05	-0.02
			(-1.51)			(0.47)	(-0.10)
only one in GATT/WTO			-0.11			-0.01	-0.05
			(-0.97)			(-0.13)	(-0.31)
generalized system of preferences (GSP)			0.61			0.54	0.29
			(15.27)			(13.94)	(7.65)
regional trade agreement			0.47			0.34	1.73
			(3.23)			(2.37)	(10.08)
log of product of phone lines per 1,000 people				0.24		0.24	0.21
				(19.02)		(19.03)	(16.94)
log of product of road length per 1,000 people					0.13		
					(8.60)		
average weighted tariff							-0.01
							(-9.73)
Observations	77594	77594	77594	74576	46074	74576	32466
R^2	0.67	0.67	0.67	0.68	0.71	0.69	0.75
% increase in trade due to 1s.d. institution	70%	69%	56%	29%	40%	18%	10%

Notes: t-values in parentheses. Standard errors are calculated taking into account country-pair clusters. A constant, year and country dummies are not reported. The sum of control of corruption ranges from 0 to 12 with mean 7.012 and standard deviation 1.972. The percent increase in trade due to 1s.d. institution (control of corruption) is calculated as follows: exp(coef*sd)-1.

Table 13: Trade, Legal Origins and Property Rights, Robustness

Dep. Var.: log of average trade flow

	(1) OLS	(2) OLS	(3) OLS	(4) OLS	(5) OLS	(6) OLS	(7) OLS
Different Legal Origin	-0.25	-0.17	-0.25	-0.26	-0.28	-0.16	-0.21
	(-5.96)	(-4.03)	(-6.00)	(-6.29)	(-6.44)	(-3.77)	(-4.97)
Protection of Property Rights	0.31	0.31	0.28	0.18	0.26	0.13	0.17
	(21.43)	(21.73)	(18.89)	(11.61)	(17.08)	(8.02)	(10.04)
log distance	-1.20	-1.19	-1.16	-1.16	-1.18	-1.13	-1.10
	(-48.76)	(-48.58)	(-46.33)	(-46.91)	(46.66)	(-45.08)	(-43.21)
log product of GDP	0.98	0.98	0.97	0.92	0.99	0.90	0.94
	(105.61)	(105.17)	(102.82)	(94.34)	(103.19)	(91.33)	(94.96)
log product of land area	-0.10	-0.09	-0.11	-0.04	-0.11	-0.03	-0.06
	(-12.20)	(-11.47)	(-12.80)	(-5.04)	(-12.05)	(-3.77)	(-6.93)
no. of landlocked	-0.54	-0.55	-0.54	-0.48	-0.50	-0.47	-0.48
	(-15.70)	(-16.00)	(-15.73)	(-13.80)	(-14.05)	(-13.83)	(-13.28)
no. of islands	-0.18	-0.19	-0.19	-0.16	-0.19	-0.19	-0.22
	(-4.15)	(-4.45)	(-4.63)	(-3.75)	(-4.17)	(-4.62)	(-5.37)
common border	1.04	1.01	1.02	1.07	1.03	1.00	0.73
	(8.38)	(8.04)	(8.31)	(8.76)	(8.03)	(8.22)	(5.60)
common language	0.41	0.27	0.41	0.56	0.42	0.37	0.41
	(7.72)	(4.97)	(7.91)	(10.60)	(7.49)	(7.05)	(8.10)
currency union	1.31	1.12	1.39	1.71	1.35	1.38	1.16
	(5.46)	(4.53)	(5.77)	(7.13)	(5.61)	(5.70)	(3.15)
common colonizer		0.46				0.70	0.52
		(5.07)				(8.00)	(4.66)
colony-colonizer		1.10				0.98	0.95
		(8.53)				(8.02)	(8.31)
both in GATT/WTO			-0.62			-0.13	-0.29
			(-5.05)			(-1.16)	(-1.84)
only one in GATT/WTO			-0.63			-0.30	-0.44
			(-5.11)			(-2.59)	(-2.78)
generalized system of preferences (GSP)			0.42			0.39	0.21
			(11.69)			(11.20)	(5.94)
regional trade agreement			0.66			0.58	1.73
			(5.34)			(4.88)	(9.83)
log of product of phone lines per 1,000 people				0.18		0.19	0.15
				(15.44)		(16.44)	(11.63)
log of product of road length per 1,000 people					0.04		
					(3.91)		
average weighted tariff							-0.01
							(-7.44)
Observations	29772	29772	29772	29696	26129	29696	19488
R^2	0.72	0.72	0.72	0.72	0.72	0.73	0.76
% increase in trade due to 1s.d. institution	57%	58%	51%	30%	47%	22%	29%

Notes: t-values in parentheses. Standard errors are calculated taking into account country-pair clusters. A constant, year and country dummies are not reported. The sum of bureaucratic quality ranges from 0 to 8 with mean 4.672 and standard deviation 1.667. The percent increase in trade due to 1s.d. institution (bureaucratic quality) is calculated as follows: exp(coef*sd)-1.

Table 14: Trade, Legal Origins and Bureaucratic Quality, Rich Countries vs. Poor

Dep. Var.: log of average trade flow

	All		Rich Partner		Poor Partner	
	(1)	(2)	(3)	(4)	(5)	(6)
	OLS	IV	OLS	IV	OLS	IV
Different Legal Origin	-0.1	-0.14	-0.28	-0.2	-0.12	-0.19
	[2.19]	[2.89]	[5.27]	[3.44]	[2.43]	[3.43]
Bureaucratic Quality	0.38	0.47	0.32	0.12	0.38	0.52
	[26.20]	[12.64]	[17.90]	[2.21]	[24.12]	[11.09]
log distance	-1.09	-1.07	-0.81	-0.85	-1.14	-1.14
	[36.97]	[35.44]	[24.97]	[24.52]	[33.34]	[32.94]
log product of GDP	1.07	1.03	1.06	1.11	1.08	1.04
	[95.80]	[63.25]	[79.65]	[62.34]	[89.92]	[56.13]
log product of land area	-0.2	-0.18	-0.18	-0.18	-0.2	-0.18
	[21.75]	[18.07]	[16.62]	[16.49]	[20.43]	[15.69]
no. of landlocked	-0.33	-0.35	-0.28	-0.25	-0.3	-0.33
	[7.39]	[7.82]	[5.99]	[5.44]	[6.40]	[6.93]
common border	-0.16	-0.21	-0.29	-0.16	-0.24	-0.31
	[3.43]	[4.27]	[5.63]	[2.68]	[4.83]	[5.69]
common border	0.98	1.02	0.09	0.17	1.17	1.24
	[6.77]	[6.93]	[0.59]	[1.00]	[7.44]	[7.74]
common language	0.51	0.49	0.38	0.44	0.52	0.48
	[9.07]	[8.62]	[6.13]	[6.90]	[8.35]	[7.52]
currency union	1.9	1.86	1.11	0.98	1.81	1.74
	[7.85]	[7.66]	[6.17]	[9.69]	[7.51]	[7.15]
Observations	77594	77594	39961	39961	69014	69014
R^2	0.67	0.67	0.78	0.77	0.64	0.64
First stage R^2		0.43		0.38		0.37
% increase in trade due to 1s.d. institution	88%	119%	52%	17%	84%	130%

Notes: t-values in Brackets. Standard errors are calculated taking into account country-pair clusters. A constant and year dummies are not reported. IV estimators use the sum of absolute latitude as an instrument for Bureaucratic Quality. The Rich Partner subsample includes all country pairs where at least one is "rich". The Poor Partner subsample includes all country pairs where at least one is "poor". "Rich" countries are defined as those with PPP GDP per capita larger than 10,000 dollars in 2000 and the rest are "poor". The percent increase in trade due to 1s.d. institution is calculated as exp(coef*sd)-1 and takes into account different standard deviations in each subsample. Summary statistics for the institutional quality variable in each subsample are reported in Table 16.

Table 15: Trade, Legal Origins and Corruption, Rich Countries vs. Poor

Dep. Var.: log of average trade flow

	All		Rich Partner		Poor Partner	
	(1)	(2)	(3)	(4)	(5)	(6)
	OLS	IV	OLS	IV	OLS	IV
Different Legal Origin	-0.08	-0.09	-0.25	-0.19	-0.1	-0.11
	[1.70]	[1.78]	[4.42]	[3.33]	[2.01]	[2.08]
Control of Corruption	0.27	0.28	0.17	0.07	0.29	0.3
	[25.11]	[12.65]	[11.89]	[2.19]	[23.52]	[11.17]
log distance	-1.08	-1.08	-0.83	-0.85	-1.14	-1.14
	[37.03]	[36.24]	[24.99]	[24.68]	[33.24]	[33.25]
log product of GDP	1.13	1.12	1.12	1.13	1.14	1.14
	[108.66]	[96.37]	[91.33]	[87.20]	[99.52]	[91.34]
log product of land area	-0.21	-0.21	-0.19	-0.19	-0.22	-0.21
	[23.48]	[22.34]	[17.79]	[17.38]	[21.76]	[20.44]
no. of landlocked	-0.35	-0.35	-0.27	-0.25	-0.32	-0.33
	[7.84]	[7.84]	[5.76]	[5.37]	[6.84]	[6.85]
common border	-0.03	-0.03	-0.13	-0.11	-0.13	-0.14
	[0.55]	[0.64]	[2.55]	[2.04]	[2.59]	[2.64]
common border	0.91	0.91	0.12	0.17	1.09	1.1
	[6.33]	[6.33]	[0.76]	[1.02]	[6.93]	[6.93]
common language	0.62	0.62	0.49	0.48	0.63	0.63
	[11.05]	[11.06]	[7.93]	[7.73]	[10.10]	[10.11]
currency union	2.15	2.15	1.2	1.03	2.09	2.1
	[8.59]	[8.60]	[11.54]	[9.00]	[8.33]	[8.33]
Observations	77594	77594	39961	39961	69014	69014
R^2	0.67	0.67	0.77	0.77	0.64	0.64
First stage R^2		0.40		0.32		0.35
% increase in trade due to 1s.d. institution	70%	74%	34%	13%	71%	74%

Notes: t-values in Brackets. Standard errors are calculated taking into account country-pair clusters. A constant and year dummies are not reported. IV estimators use the sum of absolute latitude as an instrument for Control of Corruption. The Rich Partner subsample includes all country pairs where at least one is "rich". The Poor Partner subsample includes all country pairs where at least one is "poor". "Rich" countries are defined as those with PPP GDP per capita larger than 10,000 dollars in 2000 and the rest are "poor". The percent increase in trade due to 1s.d. institution is calculated as exp(coef*sd)-1 and takes into account different standard deviations in each subsample. Summary statistics for the institutional quality variable in each subsample are reported in Table 16.

Table 16: Trade, Legal Origins and Property Rights, Rich Countries vs. Poor

Dep. Var.: log of average trade flow

	All		Rich Partner		Poor Partner	
	(1)	(2)	(3)	(4)	(5)	(6)
	OLS	IV	OLS	IV	OLS	IV
Different Legal Origin	-0.25	-0.26	-0.27	-0.16	-0.28	-0.31
	[5.96]	[5.76]	[5.55]	[2.90]	[6.34]	[6.23]
Protection of Property Rights	0.31	0.36	0.3	-0.1	0.32	0.41
	[21.43]	[6.35]	[15.83]	[1.52]	[20.33]	[6.05]
log distance	-1.2	-1.2	-0.99	-0.96	-1.25	-1.27
	[48.76]	[48.48]	[35.11]	[31.77]	[45.62]	[43.92]
log product of GDP	0.98	0.97	1.01	1.11	0.99	0.97
	[105.61]	[49.37]	[88.91]	[58.67]	[98.69]	[44.96]
log product of land area	-0.1	-0.09	-0.1	-0.15	-0.1	-0.08
	[12.20]	[6.45]	[10.83]	[11.96]	[11.34]	[5.06]
no. of landlocked	-0.54	-0.55	-0.61	-0.54	-0.53	-0.55
	[15.70]	[15.35]	[15.54]	[13.04]	[14.84]	[14.54]
common border	-0.18	-0.2	-0.2	-0.07	-0.27	-0.31
	[4.15]	[3.98]	[4.23]	[1.18]	[5.69]	[5.55]
common border	1.04	1.05	-0.03	0.19	1.22	1.23
	[8.38]	[8.37]	[0.15]	[0.96]	[9.44]	[9.46]
common language	0.41	0.38	0.41	0.62	0.4	0.35
	[7.72]	[6.26]	[6.82]	[8.48]	[7.00]	[5.12]
currency union	1.31	1.32	0.31	0.6	1.21	1.23
	[5.46]	[5.48]	[0.68]	[2.33]	[5.05]	[5.07]
Observations	29772	29772	14160	14160	26948	26948
R^2	0.72	0.72	0.81	0.79	0.69	0.69
First stage R^2		0.42		0.30		0.38
% increase in trade due to 1s.d. institution	58%	70%	42%	-11%	57%	79%

Notes: t-values in Brackets. Standard errors are calculated taking into account country-pair clusters. A constant and year dummies are not reported. IV estimators use the sum of absolute latitude as an instrument for Protection of Property Rights. The Rich Partner subsample includes all country pairs where at least one is "rich". The Poor Partner subsample includes all country pairs where at least one is "poor". "Rich" countries are defined as those with PPP GDP per capita larger than 10,000 dollars in 2000 and the rest are "poor". The percent increase in trade due to 1s.d. institution is calculated as exp(coef*sd)-1 and takes into account different standard deviations in each subsample. Summary statistics for the institutional quality variable in each subsample are reported in Table 16.

Table 17: Summary Statistics for Rich\Poor Subsamples

Variable	Obs	Mean	Std. Dev.	Min	Max
Rich Partner subsample: at least one country with PPP GDP per capita >10,000 in 2000					
Sum of bureaucratic quality	39961	5.60	1.32	1	8
Sum of control of corruption	39961	8.11	1.70	0	12
Sum of property rights protection	14160	5.82	1.16	2	8
Poor Partner subsample: at least one country with PPP GDP per capita <10,000 in 2000					
Sum of bureaucratic quality	69014	4.51	1.60	0	8
Sum of control of corruption	69014	6.87	1.85	0	12
Sum of property rights protection	26948	4.83	1.42	0	8

Appendix

ICRG countries sample (Bureaucratic Quality, Control of Corruption)

ALBANIA, ALGERIA, ANGOLA, ARGENTINA, ARMENIA, AUSTRALIA, AUSTRIA, AZERBAIJAN, BAHAMAS, BAHRAIN, BANGLADESH, BELARUS, BELGIUM, BOLIVIA, BOTSWANA, BRAZIL, BULGARIA, BURKINA FASO, BURMA(Myanmar) , CAMEROON, CANADA, CHILE, CHINA, COLOMBIA, CONGO, DEM. REP. OF (ZAIRE) , CONGO, REP. OF, COSTA RICA, COTE D'IVORIE (IVORY COAST) , CROATIA, CYPRUS, CZECH REPUBLIC, DENMARK, DOMINICAN REP. , ECUADOR, EGYPT, EL SALVADOR, ESTONIA, ETHIOPIA, FINLAND, FRANCE, GABON, GAMBIA, GERMANY, GHANA, GREECE, GUATEMALA, GUINEA, GUINEA-BISSAU, GUYANA, HAITI, HONDURAS, HONG KONG, HUNGARY, ICELAND, INDIA, INDONESIA, IRAN, IRAQ, IRELAND, ISRAEL, ITALY, JAMAICA, JAPAN, JORDAN, KAZAKHSTAN, KENYA, KOREA,SOUTH(R) , KUWAIT, LATVIA, LEBANON, LIBERIA, LIBYA, LITHUANIA, LUXEMBOURG, MADAGASCAR, MALAWI, MALAYSIA, MALI, MALTA, MEXICO, MOLDVA, MONGOLIA, MOROCCO, MOZAMBIQUE, NAMIBIA, NETHERLANDS, NEW ZEALAND, NICARAGUA, NIGER, NIGERIA, NORWAY, OMAN, PAKISTAN, PANAMA, PAPUA N.GUINEA, PARAGUAY, PERU, PHILIPPINES, POLAND, PORTUGAL, QATAR, ROMANIA, RUSSIA, SAUDI ARABIA, SENEGAL, SIERRA LEONE, SINGAPORE, SLOVAK REPUBLIC, SLOVENIA, SOMALIA, SOUTH AFRICA, SPAIN, SRI LANKA, SUDAN, SURINAME, SWEDEN, SWITZERLAND, SYRIA, TANZANIA, THAILAND, TOGO, TRINIDAD&TOBAGO, TUNISIA, TURKEY, UGANDA, UKRAINE, UNITED ARAB EMIRATES, UNITED KINGDOM, UNITED STATES, URUGUAY, VENEZUELA, VIETNAM, YEMEN, REPUBLIC OF, ZAMBIA, ZIMBABWE.

Heritage Foundation countries sample (Property Rights)

ALBANIA, ALGERIA, ANGOLA, ARGENTINA, ARMENIA, AUSTRALIA, AUSTRIA, AZERBAIJAN, BAHAMAS, BAHRAIN, BANGLADESH, BARBADOS, BELARUS, BELGIUM, BELIZE, BENIN, BOLIVIA, BOTSWANA, BRAZIL, BULGARIA, BURKINA FASO, BURMA(Myanmar) , BURUNDI, CAMBODIA, CAMEROON, CANADA, CAPE VERDE, CHAD, CHILE, CHINA, COLOMBIA, CONGO, DEM. REP. OF (ZAIRE) , CONGO, REP. OF, COSTA RICA, COTE D'IVORIE (IVORY COAST) , CROATIA, CYPRUS, CZECH REPUBLIC, DENMARK, DJIBOUTI, DOMINICAN REP. , ECUADOR, EGYPT, EL SALVADOR, EQUATORIAL GUINEA, ESTONIA, ETHIOPIA, FIJI, FINLAND, FRANCE, GABON, GAMBIA, GEORGIA, GERMANY, GHANA, GREECE, GUATEMALA, GUINEA, GUINEA-BISSAU, GUYANA, HAITI, HONDURAS, HONG KONG, HUNGARY, ICELAND, INDIA, INDONESIA, IRAN, IRELAND, ISRAEL, ITALY, JAMAICA, JAPAN, JORDAN, KAZAKHSTAN, KENYA, KOREA, SOUTH(R), KUWAIT, KYRQYZ REPUBLIC, LAO PEOPLE'S DEM. REP. , LATVIA, LEBANON, LESOTHO, LIBYA, LITHUANIA, LUXEMBOURG, MADAGASCAR, MALAWI, MALAYSIA, MALI, MALTA, MAURITANIA, MAURITIUS, MEXICO, MOLDVA, MONGOLIA, MOROCCO, MOZAMBIQUE, NAMIBIA, NEPAL, NETHERLANDS, NEW ZEALAND, NICARAGUA, NIGER, NIGERIA, NORWAY, OMAN, PAKISTAN, PANAMA, PAPUA N.GUINEA, PARAGUAY, PERU, PHILIPPINES, POLAND, PORTUGAL, ROMANIA, RUSSIA, RWANDA, SAMOA, SAUDI ARABIA, SENEGAL, SIERRA LEONE, SINGAPORE, SLOVAK REPUBLIC, SLOVENIA, SOUTH AFRICA, SPAIN, SRI LANKA, SUDAN, SURINAME, SWAZILAND, SWEDEN, SWITZERLAND, SYRIA, TAJIKISTAN, TANZANIA, THAILAND, TOGO, TRINIDAD&TOBAGO, TUNISIA, TURKEY, TURKMENISTAN, UGANDA, UKRAINE, UNITED ARAB EMIRATES, UNITED KINGDOM, UNITED STATES, URUGUAY, UZBEKISTAN, VENEZUELA, VIETNAM, YEMEN, , REPUBLIC OF, ZAMBIA, ZIMBABWE

List of 31 countries with PPP GDP per capita >10,000 in 2000

AUSTRALIA, AUSTRIA, BELGIUM, CANADA, DENMARK, FINLAND, FRANCE, GERMANY, HONG KONG, ICELAND, IRELAND, JAPAN, LUXEMBOURG, NETHERLANDS, NORWAY, SINGAPORE, SWEDEN, SWITZERLAND, UNITED ARAB EMIRATES, UNITED KINGDOM, UNITED STATES, BAHAMAS, ISRAEL, ITALY, KUWAIT, CYPRUS, GREECE, KOREA,SOUTH(R) , PORTUGAL, SPAIN, NEW ZEALAND

Table A1: Trade and Legal Origins

Dep. Var.: log of average trade flow

	(1) OLS	(2) OLS
Different Legal Origin	0.015	-0.14
	(0.31)	(-3.34)
average weighted tariff		-0.03
		(-16.12)
log distance	-1.18	-1.08
	(-41.88)	(-39.49)
log product of GDP	1.19	1.11
	(122.29)	(126.77)
log product of land area	-0.24	-0.20
	(-27.34)	(-24.69)
no. of landlocked	-0.28	-0.41
	(-6.64)	(-10.63)
common border	0.07	0.01
	(1.54)	(0.28)
common border	0.81	0.82
	(5.90)	(6.00)
common language	0.56	0.62
	(9.84)	(11.66)
currency union	1.92	1.14
	(8.24)	(4.97)
Observations	83757	36107
R^2	0.65	0.72

Notes: t-values in parentheses. Standard errors are calculated taking into account country-pair clusters. A constant and year dummies are not reported.

Table A2: Trade and Bureaucratic Quality

Dep. Var.: log of average trade flow

	(1) OLS	(2) IV	(3) OLS	(4) IV
Bureaucratic Quality	0.37	0.45	0.30	0.23
	(26.35)	(12.77)	(21.01)	(6.35)
average weighted tariff			-0.02	-0.02
			(-12.96)	(-12.95)
log distance	-1.09	-1.08	-0.98	-0.99
	(-37.14)	(-35.92)	(-33.82)	(-33.39)
log product of GDP	1.07	1.03	1.01	1.04
	(95.74)	(63.85)	(95.90)	(68.87)
log product of land area	-0.20	-0.18	-0.16	-0.17
	(-21.65)	(-17.98)	(-18.75)	(-17.80)
no. of landlocked	-0.34	-0.36	-0.44	-0.42
	(-7.68)	(-8.08)	(-10.37)	(-10.04)
common border	-0.16	-0.21	-0.11	-0.08
	(-3.42)	(-4.15)	(-2.49)	(-1.73)
common border	0.99	1.03	1.01	0.96
	(6.84)	(6.99)	(6.63)	(6.34)
common language	0.55	0.54	0.62	0.63
	(9.94)	(9.79)	(11.83)	(12.00)
currency union	1.92	1.89	1.21	1.22
	(7.94)	(7.80)	(5.13)	(5.18)
Observations	77594	77594	32752	32752
R^2	0.67	0.67	0.74	0.74
First stage R^2		0.43		0.43
% increase in trade due to 1s.d. institution	86%	113%	66%	46%

Notes: t-values in parentheses. Standard errors are calculated taking into account country-pair clusters. A constant and year dummies are not reported. IV estimators use the sum of absolute latitude as an instrument for the sum of bureaucratic quality for both countries in a trading pair. The sum of bureaucratic quality ranges from 0 to 8 with mean 4.672 and standard deviation 1.667. The percent increase in trade due to 1s.d. institution (bureaucratic quality) is calculated as follows: exp(coef*sd)-1.

Table A3: Trade and Control of Corruption

Dep. Var.: log of average trade flow

	(1) OLS	(2) IV	(3) OLS	(4) IV
Control of Corruption	0.27	0.27	0.16	0.14
	(25.41)	(12.78)	(15.41)	(6.27)
average weighted tariff			-0.02	-0.02
			(-13.16)	(-12.80)
log distance	-1.09	-1.09	-0.98	-0.99
	(-37.20)	(-36.56)	(-33.15)	(-32.50)
log product of GDP	1.12	1.12	1.08	1.08
	(108.96)	(96.09)	(111.94)	(105.28)
log product of land area	-0.21	-0.21	-0.19	-0.19
	(-23.43)	(-22.22)	(-21.81)	(-21.41)
no. of landlocked	-0.36	-0.36	-0.42	-0.42
	(-8.08)	(-8.02)	(-9.98)	(-9.81)
no. of islands	-0.03	-0.03	-0.05	-0.04
	(-0.58)	(-0.63)	(-1.00)	(-0.82)
common border	0.92	0.92	0.95	0.94
	(6.40)	(6.39)	(6.33)	(6.19)
common language	0.64	0.65	0.69	0.69
	(11.81)	(11.77)	(13.19)	(13.12)
currency union	2.16	2.17	1.39	1.36
	(8.65)	(8.65)	(5.76)	(5.65)
Observations	77594	77594	32752	32752
R^2	0.67	0.67	0.73	0.73
First stage R^2		0.40		0.43
% increase in trade due to 1s.d. institution	70%	72%	38%	32%

Notes: t-values in parentheses. Standard errors are calculated taking into account country-pair clusters. A constant and year dummies are not reported. IV estimators use the sum of absolute latitude as an instrument for the sum of control of corruption for both countries in a trading pair. The sum of control of corruption ranges from 0 to 12 with mean 7.012 and standard deviation 1.972. The percent increase in trade due to 1s.d. institution (control of corruption) is calculated as follows: exp(coef*sd)-1.

Table A4: Trade and Protection of Property Rights

Dep. Var.: log of average trade flow

	(1) OLS	(2) IV	(3) OLS	(4) IV
Protection of Property Rights	0.30	0.31	0.29	0.13
	(20.87)	(5.83)	(19.01)	(2.65)
average weighted tariff			-0.02	-0.02
			(-8.52)	(-8.62)
log distance	-1.21	-1.21	-1.16	-1.14
	(-49.00)	(-48.49)	(-45.18)	(-43.76)
log product of GDP	0.98	0.97	0.99	1.03
	(104.85)	(50.49)	(101.19)	(61.21)
log product of land area	-0.10	-0.09	-0.10	-0.13
	(-11.91)	(-6.83)	(-11.71)	(-10.27)
no. of landlocked	-0.55	-0.56	-0.58	-0.55
	(-16.02)	(-15.42)	(-15.97)	(-14.47)
no. of islands	-0.17	-0.18	-0.18	-0.10
	(-4.07)	(-3.63)	(-4.12)	(-2.07)
common border	1.08	1.08	1.01	0.99
	(8.62)	(8.58)	(7.96)	(7.69)
common language	0.50	0.50	0.64	0.71
	(9.97)	(8.96)	(12.93)	(13.15)
currency union	1.35	1.35	1.08	1.11
	(5.61)	(5.61)	(3.03)	(3.32)
Year dummies	yes	yes	yes	yes
Country dummies	no	no	no	no
Observations	29772	29772	19536	19536
R^2	0.71	0.71	0.75	0.74
First stage R^2		0.42		0.42
% increase in trade due to 1s.d. institution	55%	59%	52%	22%

Notes: t-values in parentheses. Standard errors are calculated taking into account country-pair clusters. A constant and year dummies are not reported. IV estimators use the sum of absolute latitude as an instrument for the sum of protection of property rights for both countries in a trading pair. The sum of protection of property rights ranges from 0 to 8 with mean 4.962 and standard deviation 1.47. The percent increase in trade due to 1s.d. institution (property rights) is calculated as follows: exp(coef*sd)-1.

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