# EFFECT OF QUALITY OF INSTITUTIONS ON OUTWARD FOREIGN DIRECT INVESTMENT

Anil Mishra\*, Kevin Daly\*\*

#### **Abstract**

In this paper we study the effect of quality of institutions in the OECD and Asian host countries on outward foreign direct investment (FDI) stocks of source OECD countries using International Country Risk Guide governance indicators, for the period 1991 to 2001. We find that better institutions in the host countries have an overall positive and significant effect on source countries outward FDI stocks. The strength and impartiality of the legal system, popular observance of law, strength and quality of bureaucracy and government stability in host countries' have direct effect on source countries outward FDI stocks. Interestingly, trade changes sign and losses significance in two stage least squares regressions compared to theoretical expectation. Furthermore skill proxied by labour abundance in source countries relative to host countries appears to be insignificant in determining source countries' outward FDI stock.

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\*Contact Information: Anil Mishra; Tel.: +61 2 04037 64431; E-mail: mishra@usq.edu.au. School of Accounting, Finance & Economics, University of Southern Queensland, QLD 4350, Australia

\*\*Contact Information: Kevin Daly; Tel: +61 2 04040 15192 E-mail: k.daly@uws.edu.au. School of Economics & Finance, University of Western Sydney, Locked Bag 1797, Penrith South DC, NSW 1797, Australia

## EFFECT OF QUALITY OF INSTITUTIONS ON OUTWARD FOREIGN DIRECT INVESTMENT

#### 1. Introduction

Direct foreign investment (FDI) has risen much faster than world income and trade since the mid 1970s (Markusen and Venables, (1998); Markusen (1997, 2001)). Worldwide FDI flows have grown by a factor of ten compared to a doubling in trade flows over the period from 1980 to 1990 (Stein, E. and C. Daude, 2002). Outward direct investment from OECD countries has increased by approximately 193%, over the period 1991 to 2001.

Since the late 1990s, a growing interest has emerged in studying the links between institutions and FDI. Good institutions are supposed to exert a positive influence on development through the promotion of investment in general. FDI is a very large part of capital formation in developing countries (UNCTAD, 2004), it remains an interesting question therefore to examine the role of good institutions in promoting FDI.

The quality of institutions may matter in attracting FDI because good governance infrastructure is seen to play a pivotal role (e.g. higher productivity) in attracting foreign investment. On the other hand, poorly regulated institutions or a complete lack of institutional governance have a reputation for incurring additional costs when investing in overseas countries; corruption (Wei, 2000). Given the high sunk costs associated with investing offshore along with the uncertainty associated with poor physical and financial infrastructure along with weak enforcement of regulations and ineffective legal systems has progressively forced companies to be increasingly selective as to where they will invest.

The purpose of this paper is to assess empirically the effect of host countries' institutions on source countries' stocks of outward foreign direct investment. The paper also empirically examines the influence of host countries' institutions on source countries' outward foreign direct investment upon introducing trade and skill variables.

We find that host countries' institutions are significant in explaining the source countries' stocks of outward foreign direct investment. The host countries' institutions remain significant upon introducing trade and skill variables.

The rest of the paper follows as under: Section 2 presents the literature review. Section 3 describes the data and relevant sources. Section 4 describes the empirical specification. Section 5 furnishes the results. Finally, section 6 concludes.

#### 2. Literature Review

Several studies have focused on the role of institutions in locating FDI, for example Wheeler and Mody (1992) find that a composite index of risk factors, which include bureaucratic red tape, political instability, corruption and quality of the legal system, has no significant influence in determining the location of US foreign affiliates. However a composite index lumps together several institutional variables with other variables such as risk of terrorism, living environment of expatriates, inequality etc, which are not directly related to the quality of institutions. Wei (1997, 2000) uses data

on bilateral FDI stocks from OECD countries and finds that corruption, as well as uncertainty regarding corruption, has a significant negative effect on FDI. Globerman and Shapiro (1999) argue that good institutions may have a positive impact on FDI outflows because they create favourable conditions for multinational companies to emerge and invest abroad. Globerman and Shapiro (2002) estimate the impact of governance indicators developed by Kaufman et al. (1999) on both inflows and outflows of FDI. They find that good governance impacts positively both on FDI inflows and outflows, although the latter effect is only significant for relatively big and developed countries. One major limitation of these studies is that the empirical results do not incorporate bilateral parameters where for example institutional quality variables in both the source country and the host country are not included simultaneously. Thus it is not possible to rank the importance of governance in the source country compared to that of the host country.

Stein, E. and C. Daude (2002) find inward FDI to be significantly influenced by the quality of institutional variables. They find that political instability and violence, government effectiveness, regulatory burden, rule of law and graft matter for FDI. However political representation and accountability indicators have an insignificant affect on inward FDI. The International Country Risk Guide (ICRG) and La Porta et al. (1998) variables such as risk of repudiation of contracts by government, and risk of the expropriation and shareholders rights are important variables when considering where to invest. Hausmann and Fernandez Arias (2000) use the Kaufmann et al (1999) data on institutional variables and indices of creditor and shareholder rights from La Porta et al (1997, 1998a, 1998b) to study the effects on the composition of capital inflows. They find that foreign portfolio investment is more sensitive to the quality of institutions, that regulatory burden, and government effectiveness and shareholders rights have significant effects on FDI as a share of GDP. Mody et al (2003) finds that the proportion of FDI in comparison to portfolio investment is lower in countries where institutions are more transparent. They present empirical evidence based on an index of creditor's rights from La Porta et al (2000) in their gravity model to explain the ratio of FDI flows to trade. Aizman and Spiegel (2002) find that the share of FDI to gross fixed investment as well as the ratio of FDI to private domestic investment is negatively and significantly correlated with the level of corruption and FDI is more sensitive than domestic investment to the level of institutional quality. In a set of cross country regressions with the average FDI shares in gross private capital flows as dependent variable and controlling by GDP per capita and trade openness, Albuquerque (2003) finds that the ICRG variable Law and Order has a negative and insignificant effect. One limitation of these studies is that they focus on FDI as a share of capital flows. These studies test the models controlling for other possible determinants of FDI as GDP per capita, openness, size etc and rely on ad-hoc empirical specifications. This paper focuses on FDI per se, rather than on the composition of capital inflows. The paper focuses on the quality and types of institutional governance that may affect foreign investors to undertake investment projects in a particular country.

There is a separate class of papers that examines the effects of institutional quality on per capita incomes which include Dollar and Kraay (2002), Easterly and Levine (2002), Alcala and Ciccone (2002) and Rodrik et al (2002). Rodrick et al (2002) estimate the respective contributions of institutions, geography, and trade in determining income levels around the world, using instruments for institutions and

trade. Their results indicate that the once institutions are controlled for, measures of geography have at best weak direct effects on incomes, although they have a strong indirect effect by influencing the quality of institutions. Similarly, once institutions are controlled for, trade is almost always insignificant, and often enters the income equation with the wrong (i.e. negative) sign, although trade too has a positive effect on institutional quality. Dollar and Kraay (2002) investigate the partial effects of institutions and trade on growth. They argue that cross-country regressions of the loglevel of per capita GDP on instrumented measures of trade and institutional quality are uninformative about the relative importance of trade and institutions in the long run, because of the very high correlation between the latter changes in trade and changes in institutional quality provide evidence of significant effect of trade on growth, with a smaller role for improvements in institutions. These results are suggestive of an important joint role for both trade and institutions in the very long run, but a relatively larger role for trade over shorter horizons. Our paper examines the effects of host countries' institutional quality on source countries' outward foreign direct investment.

Moenius and Berkowitz (2004) argue that the quality of institutions that enforce contracts and protect property rights influences the costs of producing high-value added (complex) versus low-value added (simple) products. They find that improvements in institutional quality increase the share and volume of a country's complex product exports. Our paper does not distinguish between the complex and simple products.

#### 3. Data

#### (i) FDI Data

We use data on bilateral outward FDI stocks from the OECD International Direct Investment Statistics in millions of US dollars for the period from 1991 to 2001. Our paper takes into account bilateral outward FDI stocks of OECD source countries viz. Australia, Canada, France, Germany, Italy, Japan, Netherlands, Sweden, Switzerland, United Kingdom and United States and host countries namely Australia, Canada, China, Chinese Taipei, France, Germany, Hong Kong, India, Indonesia, Italy, Japan, Malaysia, Netherlands, Philippines, Spain, Sweden, Switzerland, United Kingdom and United States. We use stocks rather than flows as our main dependent variable because they are able to capture the characteristics of host countries that may have an effect on the total amount of exposure that a firm in a source country may want to have in them. Firms adjust to this exposure, upwards or downwards, according to their business strategies and changes in the relative attractiveness of different locations. In addition, by using the stock data, it is ensured that the differences across countries in the definition and measurement of FDI do not alter the relative allocation of FDI for each of the source countries. Wei (1997, 2000) employs the bilateral outward FDI stocks database to study the effect of corruption on FDI. Blonigen et al (2002) use the stock data to empirically test different theories of FDI and Levy Yeyati et al (2003) use this data to analyse the relationship between FDI and regional integration.

#### (ii) International Country Risk Guide (ICRG) Variables

The ICRG model forecasts financial, economic and political risk. We use International Country Risk Guide model related to political risk. The political risk comprises of 12 components; of which we employ four components viz. Law and

Order, Government Stability, Bureaucratic Quality and Corruption. Each component is assigned a maximum numerical value (risk points), with the highest number of points indicating the lowest potential risk for that component and the lowest number (0) indicating the highest potential risk.

ICRG assigns a maximum value of 6 points to Law and Order component constituting of two sub components. Each sub component equals half of the total. The "law" sub component assesses the strength and impartiality of the legal system, and the "order" sub component assesses popular observance of law.

ICRG assigns a maximum value of 12 points to Government Stability measure. Government Stability is a measure of the government's ability to stay in office and carry out its declared program(s), depending upon such factors as the type of governance, cohesion of the government and governing parties, approach of an election, and command of the legislature.

ICRG assigns a maximum value of 4 points to Bureaucracy Quality measure. Bureaucracy is somewhat autonomous from political pressure in low-risk countries. Bureaucracy Quality measures the institutional strength and quality of bureaucracy that tends to minimize revisions of policy when governments change.

ICRG assigns a maximum value of 6 points to Corruption measure. Corruption is a threat to foreign investment by distorting the economic and financial environment, reducing the efficiency of government and business by enabling people to assume positions of power through patronage rather than ability, and introducing inherent instability into the political process.

#### (iii) TRADE,

 $TRADE_j$  is the ratio of sum of host country's exports and imports to host country's GDP. We have used trade share rather than average tariff rates. If one uses averages of tariff rates, it is possible to give inordinate weight to categories of goods that are relatively unimportant for a country. Further, there is almost no relationship between reductions in reported average tariff rates and changes in trade volumes. For instance, India had large reported declines in tariffs and large increases in trade over past two decades. On the other hand, countries like Pakistan and Kenya had significant reported tariff declines and decreases in trade. China and Mexico had huge increases in trade but only moderate reported tariff reductions. We rely on trade as a fraction of GDP as our measure of  $TRADE_j$  in panel regression and expect its coefficient to have positive sign.

### (iv) Instrumental Variables $(INS_j)$

There may be possibility that the quality of institutions might be endogenous for two reasons. There could be a feedback effect on the quality of institutions, once the foreign investors located in host economies become part of the system that demands better institutions. There may also be subjectivity bias or measurement error in the quality of institutional indicators, leading to errors in econometric results.

In order to address these possible endogeneity problems, we estimate two stage least square results, by taking the instrumental variables that are standard in the literature.

We consider the index of religion, ethnicity and language from Alesina et al (2002). Their variable "language" is based on the data from Encyclopedia Britannica (2001), which reports the shares of languages spoken as "mother tongues", generally based on national census data. Their data includes 1055 major linguistic groups for 201 countries. Their religious fractionalization variable "religion" is based on the data from Encyclopaedia Britannica (2001) and covers 294 different religions in 215 countries. The ethnic fractionalization variable "ethnicity" involves a combination of racial and linguistic characteristics. Their data is based on Encyclopaedia Britannica (2001), CIA (2000), Levinson (1998) and Minority Rights Group International (1997) and covers 650 distinct ethnic groups in 190 countries.

We also use Acemoglu et al. (2001) mortality rates of colonial settlers as an instrument for institutional quality. They state that European colonizers erected solid institutions that protected property rights and established the rule of law, only at those locations where they encountered relatively few health hazards. In other areas, their interests were limited to extracting as much resources as quickly as possible, and they showed little interest in building high quality institutions. Acemoglu et al (2001) argue that since institutions change only gradually over time, therefore settler mortality rates are a good instrument for institutional quality.

We use Frankel and Romer's (1999) measure of predicted trade as an instrument for actual trade/GDP ratios. Frankel and Romer (1999) regress bilateral trade flows as a share of country's GDP on measures of country mass, distance between the trade partners, and a few other geographical variables and then construct a predicted aggregate trade share for each country on the basis of coefficients estimated. They use this constructed trade share as an instrument for actual trade share in estimating the impact of trade on levels of income.

#### (v) GDP

GDP is the sum of the logs of the host country and source country GDPs, in current US dollars; taken from World Development Indicators. Large market sizes are expected to attract FDI because of economies of scale in production and distribution for products sold in the host market; large markets may be associated with agglomeration economies that lower costs for all producers in that market and availability of highly specialized inputs that may not be found in smaller markets. We expect GDP to have a positive sign.

#### (vi) DIS<sub>ii</sub>

 $DIS_{ij}$  is the distance in kilometres between the capital cities of source and host countries; taken from www.indocom.au. The sign of this variable is ambiguous in theory, because distance is an element in both export costs and investment and monitoring costs.

#### (vii) SKILL

*SKILL* is a measure of skill labor abundance in the parent country relative to the host country. Skilled labor endowment is the percentage of labor force with secondary education; taken from World Development Indicators. We expect this coefficient to be positive because firms tend to be headquartered in the skilled labor abundant country. A rise in skilled labor abundance differences tends to increase FDI from the

skilled country to the host country. This effect diminishes when the unskilled host is small.

#### 4. Empirical Specification

We use the following empirical specification:  $\log(FDI_{ij}+1)=\alpha+\beta(GDP)+\gamma(DIS_{ij})+\lambda(INS_j)+\eta(TRADE_j)+\chi(SKILL)+\varepsilon_i$  (1)  $FDI_{ij}$  is the outward FDI stock of country i in country j. GDP is the sum of log of GDPs of countries i and j.  $DIS_{ij}$  is the distance in kilometers between the capital cities of countries i and j.  $INS_j$  is the measure of institution for country j.  $TRADE_j$  is the ratio of trade to GDP for country j. SKILL is the absolute difference between countries' endowments of skilled labor.  $\varepsilon_i$  is the random error term.

The double log specification is chosen because it has typically shown the best adjustment to the data in the empirical trade literature using the gravity model. Our dataset includes some observations where FDI stocks are zero, which would be dropped by taking logs. Therefore, we use  $\log(FDI_{ij} + 1)$  as our dependent variable to keep these zero observations. This specification to deal with the problem of the observations with a value of zero for the dependent variable has been used in gravity models of trade by Eichengreen and Irwin (1995, 1997).

We employ a two stage least squares estimation for addressing the problems associated with reserve causality, omitted variable bias and measurement error. The following equations represent the first stage regressions where  $INS_j$  and  $TRADE_j$  are regressed on all exogenous variables.

are regressed on all exogenous variables.  

$$INS_{j} = \mu + \delta \left(RELIGION_{j}\right) + \phi \left(ETHNIC_{j}\right) + \gamma \left(LAN_{j}\right) + \omega \left(MOR_{j}\right) + \nu \left(CTRADE_{j}\right) + \varepsilon_{INSj}$$

$$TRADE_{j} = \theta + \sigma \left(RELIGION_{j}\right) + \xi \left(ETHNIC_{j}\right) + \nu \left(LAN_{j}\right) + \psi \left(MOR_{j}\right) + \tau \left(CTRADE_{j}\right) + \varepsilon_{TRADEj}$$
(3)

 $RELIGION_j$ ,  $ETHNIC_j$  and  $LAN_j$  are the indices of religion, ethnicity and language from Alesina et al (2002).  $MOR_j$  is the mortality rate from Acemoglu et al. (2001) and  $CTRADE_j$  is the predicted trade share from Frankel and Romer (1999).

#### 5. Empirical Results

#### [INSERT TABLE 1]

We start with OLS regression of log(FDI+1) on sum of log components of GDPs of host and source countries (GDP); log of distance between host and source countries (DIS); and institutional variable i.e. Law & Order (LAW). GDP is positive and significant indicating that higher total income should lead to some shifting from national firms, which are high marginal cost suppliers to foreign markets (Markusen and Venables, 1998). DIS is negative and significant indicating that FDI may decrease in countries that are in remote locations. LAW is positive and highly significant with a coefficient of 0.52; indicating that 100 percent increase in strength and impartiality of legal system and observance of law leads to a 52 percent of increase in FDI stocks from source to host countries. In column (2), the instrumented regression with the religion and mortality variables as instruments, Law and Order remains highly

significant. In column (3), to examine the effect of trade on institution, we add Trade variable. GDP, DIS, LAW and Trade are all significant. LAW is positive and highly significant with a coefficient of 0.44. Column (4) performs two stage least squares test, by taking into account the instrumental variables for LAW and Trade. LAW remains highly significant with a coefficient increasing from 0.44 to 0.57. Trade changes sign and remain significant at 10 percent. In column (5), we add SKILL variable to determine the effect of absolute difference in skill level of host and source countries on LAW. SKILL variable appears to be negative and insignificant. LAW and Trade are both positive and highly significant. In Column (6) the instrumented regression with religion, ethnic, mortality and predicted trade share as the instruments; Law and Order and SKILL are highly significant. Trade looses significance and changes sign.

#### [INSERT TABLE 2]

Table 2 employs Bureaucratic Quality (BQ) as the institutional variable. In column (1); GDP, DIS and BQ are all with their respective signs and highly significant. BQ is positive and highly significant with the coefficient of 0.72; indicating that a 100 percent increase in institutional strength and quality of bureaucracy leads to an increase in the outward FDI stock of 72 percent from source to host countries. The instrumented regression in Column (2) indicates an increase in the coefficient of BQ from 0.72 to 0.89. To examine the effect of trade on institutional variable; we add Trade variable in column (3). BQ and Trade are both positive and highly significant. Column (4) performs instrumented regression with religion, ethnic and predicted trade share as instruments. The institutional variable, BQ remains positive and highly significant with a coefficient of 0.91. Trade changes sign and remain significant only at 5 percent. In column (5), we add SKILL variable to determine the effect of absolute difference in skill level of host and source countries on BQ. SKILL variable appears to be negative and insignificant. BQ and Trade are both positive and highly significant. In Column (6) the instrumented regression with religion, ethnic, mortality and predicted trade share as the instruments; BQ remains highly significant. Trade looses significance and changes sign.

#### [INSERT TABLE 3]

Table 3 employs Government Stability (GS) as the institutional variable. In column (1); GDP, DIS and GS are all with their respective signs and highly significant. The instrumented regression in Column (2) indicates an increase in the coefficient of GS from 0.16 to 0.69; indicating that a 100 percent increase in government stability leads to an increase in the outward FDI stock of 69 percent from source to host countries. To examine the effect of trade on institutional variable; we add Trade variable in column (3). GS and Trade are both positive and highly significant. Column (4) performs instrumented regression with religion, ethnic and predicted trade share as instruments. Again, GS and Trade remain positive and significant. In column (5), we add SKILL variable to determine the effect of absolute difference in skill level of host and source countries on GS. SKILL variable appears to be negative and significant. GS and Trade are both positive and highly significant. In Column (6) the instrumented regression with religion, ethnic, mortality and predicted trade share as the instruments; GS and Trade remain positive and highly significant. SKILL changes sign and looses significance.

#### [INSERT TABLE 4]

Table 4 employs Corruption (COR) as the institutional variable. ICRG assigns higher numerical values of COR to countries with low corruption and vice versa. In column (1); GDP, DIS and COR are all with their respective signs and highly significant. The

instrumented regression in Column (2) indicates an increase in the coefficient of COR from 0.30 to 0.56; indicating that host countries' with low level of corruption attracts high level of foreign direct investment. To examine the effect of trade on institutional variable; we add Trade variable in column (3). COR and Trade are positive and highly significant. Column (4) performs instrumented regression with religion, ethnic and predicted trade share as instruments. COR and Trade remain highly significant. However, Trade changes sign and become negative. In column (5), we add SKILL variable to determine the effect of absolute difference in skill level of host and source countries on COR. SKILL variable appears to be negative and significant. COR and Trade are both positive and highly significant. In Column (6) the instrumented regression with religion, ethnic, mortality and predicted trade share as the instruments; COR looses significance and becomes negative. Trade remains positive but looses significance. SKILL remains negative but looses significance.

#### [INSERT TABLE 5]

Table 5 shows the first stage regressions corresponding to the IV regressions in Tables 1 to 4. In column (1), LAW is the dependent variable. Trshare and religion are highly significant and positive. The value of adjusted R<sup>2</sup> is 0.46. Column (2) has BQ as the dependent variable. Religion is positive and highly significant. Trshare is negative and significant only at 10 percent. The value of adjusted R<sup>2</sup> is 0.46. In column (3), GS is the dependent variable. Trshare, religion and mortality are all positive and significant. The value of adjusted R<sup>2</sup> is 0.18. In column (4), COR is the dependent variable. Trshare appears to be positive and significant. The value of adjusted R<sup>2</sup> is 0.49. In column (5), trade is the dependent variable. Trshare is positive and highly significant. Mortality and religion are both negative and significant. The value of adjusted R<sup>2</sup> is 0.33.

The correlation between fitted trade and fitted instrumental variables viz. Law and Order, Bureaucratic Quality, Government Stability and Corruption is -0.04, -0.05, -0.58 and 0.22. The low levels of correlation between the fitted trade and instrument variables (Law and Order, Bureaucratic Quality) suggest that the regressions do not suffer from the problem of multi-collinearity. The level data on FDI stocks is informative about the separate roles of trade and institutions.

#### **6.** Conclusions and Policy Implications

This paper assesses the effect of the quality of host countries' institutional variables on the source OECD countries' outward FDI stocks. The host countries' sample includes both, OECD and Asian countries.

We find that quality of host countries' institutions have positive effects on source countries' outward FDI stocks. Institutions remain positive and significant in two stage least squares regression. Trade changes sign and losses significance in two stage least squares regression. Skill labor abundance in host country relative to parent country appears to be ambiguous and insignificant.

ICRG institutional variables viz. Law and Order, Bureaucratic Quality, Government Stability and Corruption appear to be positive and significant. Good political governance is characterized by policies promoting competition on both domestic and an international level; policies promoting open markets and effective and non-corrupt public institutions as well as by open and transparent legal and regulatory regimes, and effective delivery of government services.

**TABLE 1: FDI regression considering Institution (Law & Order)** 

	OLS	IV	OLS	IV	OLS	IV
GDP	0.32	0.38	0.34	0.30	0.34	0.08
	(58.81)*	(9.65)*	(61.36)*	(13.87)*	(51.00)*	(1.04)
DIS	-0.30	-0.85	-0.32	-0.21	-0.33	-0.13
	(-17.69)*	(-2.54)**	(-19.44)*	(-1.27)	(-17.67)*	(-0.40)
LAW	0.52	0.56	0.44	0.57	0.45	1.20
	(24.63)*	(10.52)*	(20.05)*	(13.83)*	(18.01)*	(6.94)*
Trade			0.24	-0.09	0.25	-0.13
			(13.08)*	(-1.84)***	(12.20)*	(-1.30)
SKILL					-0.00	0.04
					(-1.09)	(3.16)*
Instrumental		Religion		Religion		Religion
Variables		Mor		Mor		Ethnic
				Trshare		Mor
						Trshare
Adj. R <sup>2</sup>	0.33		0.38		0.40	
Obs.	2420	2420	2420	2420	2420	2420

**TABLE 2: FDI regression considering Institution (Bureaucratic Quality)** 

	OLS	IV	OLS	IV	OLS	IV
GDP	0.33	0.35	0.35	0.22	0.34	-0.26
	(65.64)*	(10.12)*	(69.11)*	(5.54)*	(52.64)*	(-0.81)
DIS	-0.30	-0.65	-0.32	0.43	-0.32	1.85
	(-17.38)*	(-2.16)**	(-19.33)*	(1.52)	(-17.55)*	(1.51)
BQ	0.72	0.89	0.61	0.91	0.64	2.38
	(24.21)*	(12.09)*	(20.04)*	(9.13)*	(17.51)*	(2.55)**
Trade			0.26	-0.15	0.27	-0.47
			(14.22)*	(-2.08)**	(13.10)*	(-1.40)
SKILL					-0.00	0.06
					(-0.57)	(1.47)
Instrumental		Religion		Religion		Religion
Variables		Mor		Ethnic		Ethnic
				Trshare		Mor
						Trshare
Adj. R <sup>2</sup>	0.31		0.38		0.40	
Obs.	2420	2420	2420	2420	2420	2420

TABLE 3: FDI regression considering Institution (Government Stability)

	OLS	IV	OLS	IV	OLS	IV
GDP	0.38	0.06	0.39	0.45	0.40	0.39
	(80.34)*	(0.92)	(86.68)*	(5.91)*	(82.44)*	(5.05)*
DIS	-0.29	0.64	-0.31	-2.57	-0.31	-2.05
	(-14.67)*	(1.20)	(-17.18)*	(-2.70)*	(-15.62)*	(-2.81)*
GS	0.16	0.69	0.12	0.65	0.15	0.63
	(14.49)*	(6.59)*	(10.74)*	(3.51)*	(12.60)*	(3.18)*
Trade			0.33	0.44	0.33	0.60
			(16.66)*	(2.22)**	(15.45)*	(3.04)*
SKILL					-0.00	0.00
					(-6.92)*	(0.48)
Instrumental		Religion		Religion		Religion
Variables		Mortality		Mortality		Ethnic
				Trshare		Mortality
						Trshare
Adj. R <sup>2</sup>	0.15		0.25		0.31	
Obs.	2420	2420	2420	2420	2420	2420

**TABLE 4: FDI regression considering Institution (Corruption)** 

	- 0		0			
	OLS	IV	OLS	IV	OLS	IV
GDP	0.38	0.43	0.40	0.26	0.40	3.97
	(108.81)*	(8.97)*	(118.68)*	(7.95)*	(81.18)*	(0.64)
DIS	-0.30	-1.08	-0.32	0.35	-0.33	-3.75
	(-16.18)*	(-2.52)**	(-18.22)*	(1.45)	(-16.41)*	(-0.52)
COR	0.30	0.56	0.22	0.57	0.22	-9.74
	(19.47)*	(8.65)*	(15.23)*	(8.89)*	(11.37)*	(-0.56)
Trade			0.30	-0.20	0.32	2.61
			(15.49)*	(-2.69)*	(14.04)*	(0.58)
SKILL					-0.00	-0.76
					(-1.67)***	(-0.58)
Instrumental		Religion		Religion		Religion
Variables		Mor		Mor		Ethnic
				Trshare		Mor
						Trshare
Adj. R <sup>2</sup>	0.18		0.27		0.28	
Obs.	2420	2420	2420	2420	2420	2420

**TABLE 5: First Stage Regressions** 

Dependent Variable	LAW	BQ	GS	COR	TRADE
GDP	0.08	0.08	-0.01	0.09	0.06

	(7.41)*	(12.14)*	(-0.50)	(8.95)*	(4.38)*
DIS	0.00	0.00	-0.00	-0.00	0.00
	(0.13)	(0.45)	(-0.08)	(-0.19)	(0.12)
TRSHARE	0.41	-0.05	1.49	0.14	1.38
	(7.91)*	(-1.66)***	(10.47)*	(2.56)**	(16.71)*
MOR	0.05	-0.08	2.30	-0.43	-1.25
	(0.47)	(-1.14)	(9.19)*	(-3.95)	(-10.12)*
RELIGION	4.55	2.79	6.98	3.94	-0.68
	(26.73)*	(28.04)*	(15.23)*	(22.98)	(-2.47)**
Obs.	2420	2420	2420	2420	2420
Adj. R <sup>2</sup>	0.46	0.46	0.18	0.49	0.33

**Note:** GDP is the sum of the logs of the host country and source country Gross Domestic Products; DIS is the distance in kilometres between the capital cities of source and host countries; SKILL is a measure of skill labour abundance in the parent country relative to the host country;  $TRADE_j$  is the ratio of sum of host country's exports and imports to host country's GDP. LAW represents law and order, BQ represents Bureaucratic Quality, GS represents Government Stability, COR represents corruption, Trshare is predicted trade share, Mor is mortality. Significance at 1 %, 5 % and 10% are denoted by \*, \*\*, \*\*\* respectively.

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