WPS4032

Do Institutions Matter More for Services?

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Recent empirical research has focused on the role of institutions in overall economic performance. This paper examines the impact of institutions on the relative performance of the service sector. Through cross-country level and growth regressions we establish the following stylized fact: countries with better institutions have relatively larger and more dynamic service sectors. We suggest that regulatory and contract enforcing institutions play a key role in the development of service sectors because these sectors enter into a more complex web of transactions with the rest of the economy and are more prone to market failure due to asymmetric information.

JEL: D23, L80, O11, O14

World Bank Policy Research Working Paper 4032, October 2006

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The research is supported by the U.K. Department for International Development.

Introduction

The service sector accounts for an overwhelming and growing proportion of economic activity in all parts of the world today. The share of the service sector, as measured by the value added in the sector as a proportion of GDP, stood on average at 54% in 2000 in a sample of over 150 countries. The corresponding figure a decade earlier was just under 50%.[1] At the same time there is considerable variation in the size of the sector ranging from 5.6% in Equatorial Guinea to 86% in Hong Kong.

Why is it that some countries transformed into service-based economies while others did not? Existing work on this question has largely focused on the demand side. It is argued that services have an income elasticity of demand greater than 1 so that as real income per capita increases, real services per capita grow more than the proportional growth in income (Inman, 1985, p. 2; Fuchs, 1968). The present paper suggests another reason, i.e. the role of institutions. We duly control for GDP per capita, endowments, infrastructure, geography and use the instrumental variable method to address endogeneity related concerns. Our main finding is that better institutions have a significant and positive effect on the size of the service sector relative to GDP. In other words, institutions are more important for the service sector than for the rest of the economy. This holds for the level as well as the growth of services share in GDP.

[1] The figure for 2000 is the average share over the period 1999-2001. The 50% figure is similarly obtained as the average share over the period 1989-91.

That institutions matter for the level of GDP per capita is at some level obvious (Acemoglu et al. 2001). The argument can be extended to per capita value added in the service sector given that the sector is the most significant contributor to GDP in a majority of countries. What is not obvious is whether institutions matter more for the service sector than for the rest of the economy and addressing this issue is the primary concern of the present paper.

There is a large body of empirical work on the impact of institutions on the overall performance (GDP per capita) of the economy but relatively little on the how the impact varies across sectors. Levchencko (2004) and Nunn (2005) find that better institutions shift a country's comparative advantage towards goods which depend more on institutions. These papers draw a clear link between institutions and the structure (pattern of specialization) of the economy. Rajan and Zingales (1998) study whether industrial sectors that are relatively more in need of external finance develop faster in countries with more-developed financial institutions (markets). These papers do shed some light on the impact of institutions across sectors in the relative sense. However, unlike the present work, none of them considers the role of broad governance institutions on the performance of the service sector.

Institutional development is particularly important for the service sector because of both supply- and demand-side attributes. Blanchard and Kremer (1997) argue that a sector is institutionally more dependent the more evenly spread are its intermediate input

purchases across other sectors.[2] The basic insight here is that institutions lower the transaction cost and hence benefit those sectors more which enter into a more complex web of transactions with the rest of the economy. The measure suggested by Blanchard and Kremer is acknowledged by the authors to be a "noisy" one and has a number of limitations. First, the measure does not include intra-sector transactions between firms largely due to data limitations. Second, it does not take into account inputs supplied by a sector although there is no reason to believe that high transaction costs do not affect the suppliers as well.

Nevertheless, an examination of the input-output matrices for a number of countries reveals that in general input supplies and purchases were much more evenly distributed for the services sectors relative to manufacturing. In the spirit of Blanchard and Kremer, it can be argued that the services sectors are more institutionally dependent than the other sectors. As an example, institutional dependence of various sectors calculated using India's input-output matrix is shown in Figure 1 where higher values indicate greater dependence.[3]

[2] Blanchard and Kremer (1997) look at the decline in output of manufacturing sectors in the former Soviet Union countries between 1992 and 1994 and argue that the decline was more pronounced in the more institutionally dependent sectors.

[3] The graph uses GTAP data for India. To construct the graph we first computed the Gini coefficient for the inputs supplied to and bought from a sector to all other sectors. We then calculated 100 minus Gini for each sector to arrive at the figures shown in the graph. This is slightly different from the approach of Blanchard and Kremer who use the inverse of the Herfindahl index instead. Both these measures are widely used in the literature.

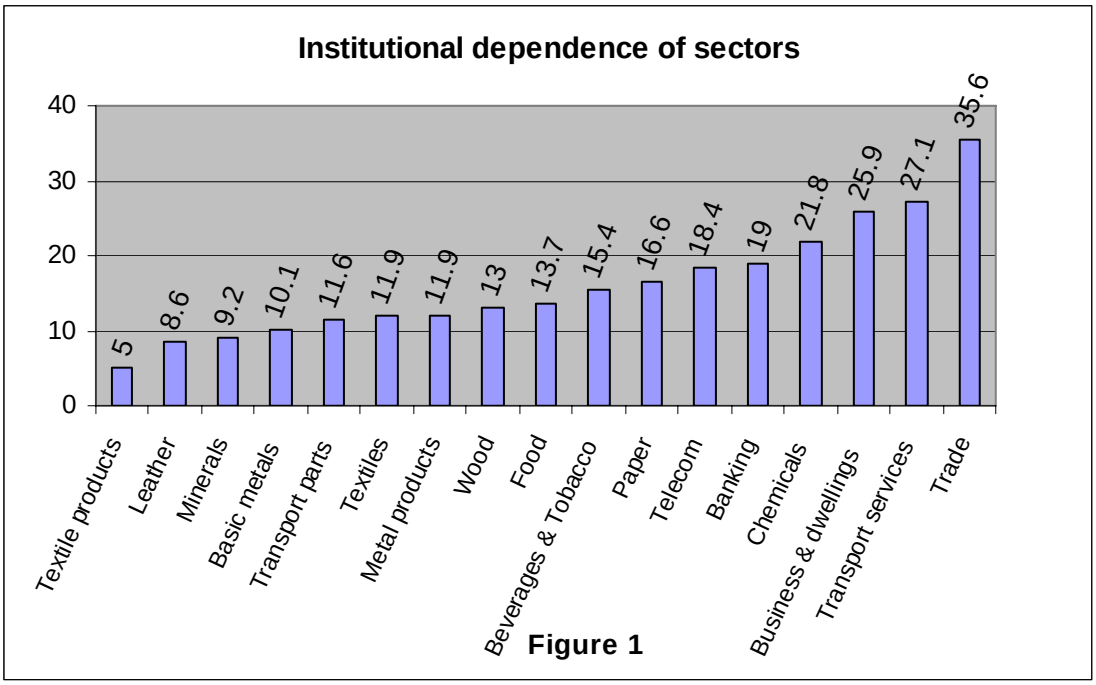

Figure 1

The second reason for the relatively greater institutional dependence of services is the greater incidence of market failures due to asymmetric information. For example, Holmstrom (1985, p. 183) singles out the difficulty in assessing the quality of the service by one party (typically, the buyer) as the critical distinguishing attribute of services. He concludes that "Characteristics like these suggest that the determinants of supply and demand in the service sector will be somewhat different from those in the goods sector and also that *institutions* facilitating economic exchange and production of services will exhibit idiosyncratic features." (p. 183, italics added) While Holmstrom focuses on "reputation building" as the key solution or institution, our focus is on institutions concerned with regulation and contract enforcement. Theory too suggests that the use of explicit contracts such as contingent fee schedules or warranties is an important remedy

for information related market failures. However, to enforce such contracts in an efficient, cheap and impartial way requires the existence of appropriate institutions.[4]

Our argument is not affected by the usual concern that measured differences in the size of the services sector could simply reflect "splintering" without any real change in the value of services output. Splintering occurs when industrial firms make greater use of specialist sub-contractors to provide services that were previously provided by the firms themselves (Bhagwati, 1984). Since splintering creates a more complex economy and is likely to exacerbate the problem of asymmetric information, splintering itself is likely to be a consequences of institutional development. The recent growth of the service sector in many parts of the world is, however, unlikely to be primarily due to splintering. For example, Gordon and Gupta (2004) find that splintering played a fairly limited role in the services boom in India in the 1990s, contributing only about 0.25 percentage points to the 3.1 % annual growth rate of the services value added.[5]

Consider also how institutions are defined and measured in the literature. North (1990, p. 3) sates that institutions are "the rules of the game in a society, or more formally, are the humanly devised constraints that shape human interaction." In a detailed study, Kaufmann et al. (2003) measure the quality of institutions across countries by looking at a large number of factors which in the sense of North capture "rules of the game". We use their Rule of Law index (for 2002) as a measure of institutional

[4] A related point here is that dissemination of information is crucial in mitigating informational asymmetries. Better institutions in the sense describe above are likely to have better channels for sharing and dissemination of information.

[5] Another concern is that better institutions may lead to a transfer of activity from the informal to the formal sector thereby affecting the measured services to GDP ratio. It is difficult to control for this effect because there is no reliable data available on the size of the informal services sector. This problem is not specific to our paper but applies more broadly to the literature on the impact of institutions on GDP, trade and sub-sectors.

development across countries. The index varies between -1.86 (Congo, DR) and 2.05 (Luxembourg) and its main focus is on assessing the degree to which contracts (public and private) are enforced and the ease and impartiality of the enforcement process. The findings in Blanchard and Kremer and the problem of asymmetric information discussed above suggest that the Rule of Law measure is the most appropriate measure of institutions in the context of the present paper.

The key difficulty in estimating the impact of institutions on the service sector is the problem of endogeneity. For example, Rule of Law is likely to be positively correlated with GDP per capita and the stock of the highly educated in a country. Thus, it becomes difficult to isolate the effect of institutions on the service sector. One way to resolve the problem is to generate exogenous variations in the Rule of Law variable. We draw on the literature concerning the political determinants of institutions to this end. Political determinants are deeply rooted in historical factors and are exogenous to the current economic structure of a country. We use two such historical factors, a country's legal origin and ethnolinguistic fractionalization, as instruments for Rule of Law.

The plan of the remaining sections is as follows. In section 1 we discuss our data sources and provide summary measures of the variables used. This is followed by an outline of the empirical methodology and OLS level regressions. The endogeneity problem is addressed in Section 2 using the two stage instrumental variable method. In section 3 we focus on growth regressions. Our main findings and suggestions for future work are stated in the conclusion of the paper.

Section 1

OLS regression results in this section are based on the following equation

$$S_i = \alpha + \beta\, Institutions_i + \beta_1\, Geography_i + \beta_2\, Infrastructure_i + \beta_3 X_i + u_i \quad \ldots (1)$$

where *i* denotes country, *S* is (logged) value added in the service sector in 2000 expressed as percentage of GDP in constant 2000 USD and PPP adjusted.[6] The *Institutions* variable captures the level of institutional development in a country and is proxied by the Rule of Law index (henceforth, *Law*) as discussed above. *Geography* includes the *Latitude* or the absolute distance of country from equator and *Continent* which is a set of dummy variables indicating the region (or continent) to which a country belongs. There are six regions: *Africa*, *Asia*, *Europe*, Latin America and Caribbean (*LAC*), *North America* and the residual category called *Others*. The *Infrastructure* variable includes per capita generation of electricity (*Power*) and per capita road length (*Roads*). *X* is a vector of additional controls including population (*Pop*), per capita GDP (*GDP*), PPP adjusted and in constant 2000 USD, and an endowment variable (*Skill*) which is the stock of tertiary educated (per capita) in the country taken from Barro and Lee dataset. Unfortunately, data on *Skill* is missing for about 30% of the countries in our sample and hence regressions using *Skill* are reported separately. We use logged values of all variables other than *Law* and *Latitude*. Values of *GDP*, *Pop*, *Power* and *Roads* relate to year 2000

[6] To smooth out temporary annual fluctuation we use the average values for S_i over 1999-2001 period.

while the *Skill* measure is for year 1995.[7] For more details and data sources, see Appendix A2.[8]

Our initial sample consists of 141 countries for which data is available for all the variables discussed above (except for *Skill*). Countries in the sample are listed in Appendix A3 and summary statistics by continents are reported in Appendix A4. The direct correlations between the size of the service sector and explanatory variables are provided in Appendix A4. *Law* is most highly correlated with *S* (.59) followed by *Power* (.52) and *GDP* (.50). *Pop* shows the weakest and a negative correlation with *S* (-.09).

OLS regression results for equation (1) are reported in Table 1 below. Significance levels are denoted by *** (1% or less), ** (5% or less) and * (10% or less) and this convention is followed throughout.

[7] As for S_i, we take average values over 1999-2001 period for *GDP*, *Pop*, *Power* and *Roads*. For the *Skill* measure we experimented with data for 2000 also but the results were almost unchanged.

[8] In regressions not reported here we also used a measure of teledensity as an additional control. The variable did not produce any noticeable change in the *Law* coefficient and we decided to drop it because it is highly correlated with *GDP*, *Power* and *Roads*. For example, the direct correlation between teledensity and *GDP* is 0.91 in our sample.

Table 1: OLS

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Law	.209***	.166***	.221**	.219**	.229**	.228**	.224**
	(.000)	(.000)	(.026)	(.015)	(.010)	(.012)	(.013)
Continent		Yes	Yes	Yes	Yes	Yes	Yes
GDP			-.071	-.122	-.127	-.128	-.115
			(.513)	(.388)	(.348)	(.342)	(.388)
Power				.053	.064	.065	.048
				(.280)	(.213)	(.198)	(.339)
Roads					-.067	-.068*	-.074*
					(.108)	(.098)	(.073)
Pop						-.002	-.002
							(.896)
Latitude							.306*
							(.098)
Sample Size	141	141	141	141	141	141	141
R^2	.35	.45	.47	.49	.51	.51	.52

p values in brackets.

The table shows that *Law* has a strong and positive effect on the performance of the service sector which is statistically significant at well below 5% level in all the cases. *Roads* has a negative while *Latitude* a positive effect. But neither of these effects are highly significant. Dummies for *Africa* and *Asia* (with the one for *North America* dropped) are negative and statistically significant at less than 10% level in some cases and at less than 5% level in the remaining cases. Other continental dummies are insignificant. An important result in Table 1 is that the estimated coefficient of *Law* is

quite robust to the inclusion of *Power*, *Roads*, *Pop* and *Latitude*. In particular *Latitude* has very little effect on the coefficient which suggests that our *Law* variable is not picking up the effect of missing variables which are known to covary with Latitude.[9]

We performed a number of robustness checks and found that the results in Table 1 remained largely unchanged. That is, the estimate of the *Law* coefficient remained roughly unchanged and significant at less than 5% level. We discuss some of these results below.

Firstly, the sample used in the regressions above includes 31 countries with *Socialist* legal origin. These countries were subject to central planning and are still in the process of economic, social and legal transition. The transition is particularly biased in favor of the service sector. For example, the share of services in GDP for these countries increased from about 36% in 1990 to over 50% in 2000. The 14 percentage point change far exceeds that for the remaining countries which saw changes of about 2 percentage points. The average value of *Law* for *Socialist* countries stood at -.34 compared to .08 for the rest of the countries in the sample. To ensure that the peculiarities of central planning do not affect our results above we dropped all the *Socialist* countries from our sample. Regression results for the reduced sample are reported in Table 2, Appendix A5 and these are roughly similar to the ones above but slightly stronger in terms of the significance level of the *Law* coefficient.

Secondly, our sample includes some extremely small countries mainly in the Caribbean region. Most of these countries have much higher levels of services to GDP ratios and *Law* when compared to the rest of the world. For example, for the ten smallest

[9] One such variable is our *Skil*l measure. For 82 countries for which data is available, the direct correlation between *Latitude* and *Skill* is 0.53.

countries in terms of population in 2000[10], the services to GDP ratio stood at 67% and the value of *Law* at .347 which is about the 75th percentile level. To ensure that our results are not driven by the specifics of small countries we dropped all these ten countries from our sample. Regression results in the reduced sample were roughly similar to the ones in Table 1. For example, the estimated *Law* coefficient corresponding to column 1 was .200 and .230 for column 7. Both these estimates were significant at less than 1% level.

Lastly, we consider whether an improvement in *Law* has a stronger effect in countries which have low values of *Law* to begin with. This is important for developing countries which typically have poor quality of institutions to begin with. To test for this we allow the coefficient to vary between two groups of countries - those below and above a critical value of *Law*. The critical value was chosen at the 25th, 50th and 75th percentile values of *Law* in separate regressions. In all these cases we found that the estimated coefficient of *Law* was much higher for countries with low initial values of *Law* as compared to the rest of the countries.[11] Results for the 75th percentile critical value are reported in Table 3, Appendix A5. These results suggest that the service sector is particularly sensitive to the quality of institutions in the poorer developing countries.

We now proceed to the next section where we attempt to generate exogenous variation in *Law* to address endogeneity related concerns with the findings reported above.

[10] These countries are as follows: St. Kitts & Nevis, Dominica, Antigua & Barbuda, Seychelles, Tonga, Grenada, St. Vincent & Grenadines, St. Lucia, Vanuatu and Belize.
[11] These results hold even when we drop the *Socialist* legal system countries from the sample.

Section 2

In the previous section we found a strong correlation between *Law* and the size of the service sector. Although we controlled for a number of variables, we cannot interpret the correlation as causal. First, there could be a feedback effect. That is, higher *S* values could trigger improvements in *Law*. Second, the *Law* variable could be picking up the effects of unobservable covariates. A solution to these problems is to generate truly exogenous variations in *Law*. This will be our goal in this section.

To generate exogenous variations in *Law* we follow the literature on what shapes institutions. At a broad level, determinants of institutional performance can be grouped into three categories: economic, political and cultural (La Porta, et al. 1999). Economic theories of institutional development suggest that institutions are created when it is efficient to create them, that is, when the social benefit from building institutions exceeds the cost of doing so (Demsetz 1967, North 1981). Clearly, economic determinants are likely to be endogenous themselves and hence are poor candidates for generating exogenous variations in *Law*. For example, technological advances in telecommunications contributed to better banking services and this in turn could have triggered institutional reforms.

Political determinants present a more promising option in this context. These determinants focus on redistribution rather than efficiency and the underlying idea is that policies and institutions are shaped by those in power to stay in power and to transfer resources to themselves (Marx 1872, North 1990, Olson 1993). Existing work in this area

suggests that the political determinants are deeply rooted in historical factors such as the country's legal origin (*LO*) and the degree of ethnolinguistic fractionalization (*ELF*) and that these historical factors are exogenous to the current economic structure of the country. We use *LO* and *ELF* to generate exogenous variations in *Law*. Of course, these variables are not exhaustive in explaining the current level of institutional development. However, all we need is that they be a source of exogenous variation in *Law*.

Several studies have used *ELF* as an important exogenous determinant of institutional quality (Mauro 1995, La Porta et al.). There are a number of reasons why *ELF* may have a negative effect on *Law*. Shliefer and Vishny (1993) suggest that more homogenous societies are likely to come closer to joint bribe maximization which is less harmful than non-collusive bribe-setting. Alesina, Baqir and Easterly (1999) argue that disagreements over the nature of preferred public goods (including institutions) lead ethnically diverse societies to demand fewer of those goods. Presence of different ethnolinguistic groups is also significantly associated with worse corruption as bureaucrats may favor members of their own group (Mauro 1995). Such an environment is hardly conducive to institutional development. Furthermore, the adverse effect of ethnic diversity may not be restricted to the development of the legal framework but also affect the ability of the government to implement the laws in an efficient, impartial and reliable manner.[12]

Data on *ELF* used in this paper are taken from La Porta et al. It is a summary measure of five indices which broadly measure the probability that two randomly selected individuals from a given country do not belong to the same ethnolinguistic

[12] We note that our Law variable is a summary measure of a large number of governance indicators including the efficiency and impartiality with which they are implemented and observed.

group. *ELF* lies between 0 and 1 with higher values implying a more fragmented country. Data used to construct *ELF* belong to the early 1960s and details are provided in Appendix A2. Figure 2 shows the relationship between *Law* and *ELF* which is along expected lines.

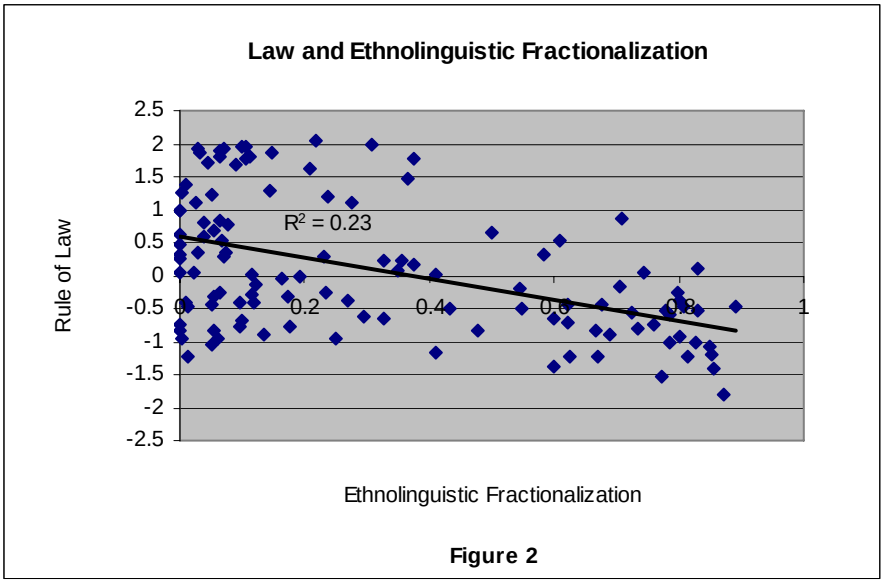

Figure 2

Countries in our sample have one of the following legal origins: *English*, *French*, *German*, *Scandinavian* and *Socialist*. There is some work which suggests that *LO* may be an important and exogenous determinant of *Law*. Broadly, legal systems can be viewed as proxies for the relative power of the state vis-a-vis property owners. The *English* common law has developed to some extent as a defense of Parliament and property owners against the attempts of sovereign to regulate and expropriate rents from private agents either directly or indirectly by favoring interest groups. The *French* civil law, in contrast, developed more as an instrument used by the government for state building and controlling economic life. The *Socialist* system represents the extreme case of control

over economic life by the state. These differences suggest that the *English* legal system is most conducive to the Rule of Law followed by the *French* and then the *Socialist*. Figure 3 clearly supports such thinking.

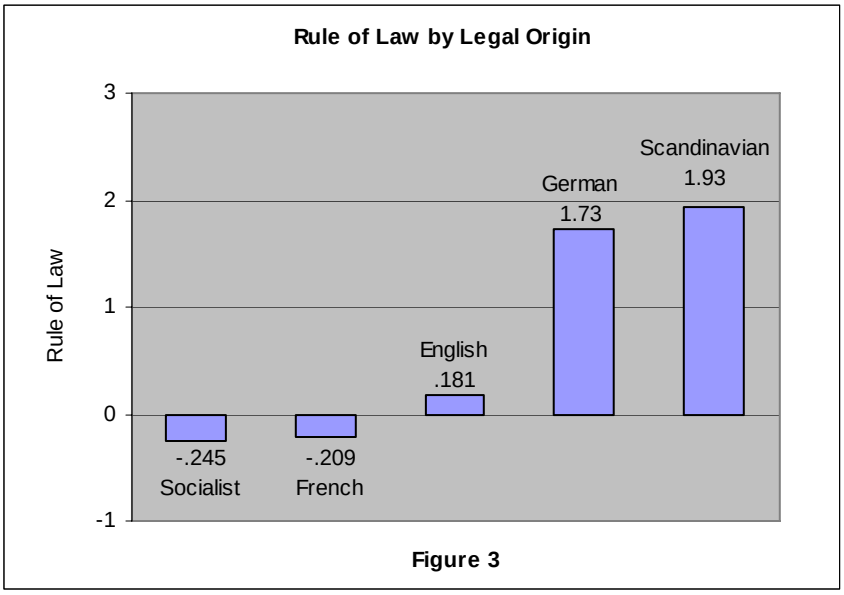

Figure 3

The average value of *Law* is -.245 for *Socialist* countries which are the worst performers, followed by the *French* (-.209) and the *English* (.181). *German* and *Scandinavian* systems outperform all others by a wide margin. It is not clear exactly how the *German* and *Scandinavian* systems affect the Rule of Law. The general understanding is that these two systems are not directly comparable to the other systems as the distinctions involved are rather subtle (La Porta et al. p. 231). There are some endogeneity related concern too with the *German* and *Scandinavian* system countries. Table 4 helps illustrate the point.[13]

[13] The sample in Table 4 is smaller than the one in section 1 due to missing data on *ELF* and lagged values of the endogenous variables which are used in the later regressions.

Table 4: Summary statistics by legal origin

	All countries	*English*	*French*	*Socialist*	*German*	*Scandinavian*
Services share	3.97	4.01	3.94	3.82	4.22	4.17
Law	.103	.225	-.192	-.180	1.73	1.93
ELF	.319	.422	.331	.102	.099	.073
Latitude	.279	.224	.236	.427	.503	.683
GDP	8.54	8.52	8.33	8.28	10.22	10.25
Power	6.92	7.00	6.42	7.32	9.05	9.77
Roads	-5.46	-5.38	-5.72	-5.27	-4.82	-3.84
Pop	16.0	15.5	16.2	16.7	17.1	15.0
Sample size	112	35	58	10	4	5

All variables other than *Law*, *ELF* and *Latitude* are in log terms.

Compared to the rest of the world, *German* and *Scandinavian* system countries have very high levels of *Law*, services share, *Power*, *Roads*, etc. *ELF* is also low for these countries. In actual values, the size of the service sector in *Scandinavian* system countries equals 65% of GDP as compared to 54% for the rest of the world and power generation per capita in these countries is almost 8 times that in the rest of the world. These features can lead to identification problems in that our instruments can easily pick up the effects of *Power*, *Roads*, etc. The identification problem is not solved by dropping *LO* as an instrument because *ELF* is also much lower in these countries relative to the rest of the world. The same holds for the *German* system countries but to a lesser extent. In light of these concerns, we follow the broad literature by dropping the *German* and *Scandinavian* legal origin countries from our sample in the remainder of the paper. In regression results not reported here we did not drop these countries and found that our overidentification

tests for the exogeneity of instruments failed as soon we introduced *German* and *Scandinavian* system countries in the sample. However, this problem was eliminated when we controlled for *Roads* and the estimated coefficient of *Law* was significant at less than 5% level in all these regressions.

There are many advantages of using legal origin to predict *Law*. Firstly, the roots of the current legal systems go far back in history and the feedback effect (reverse causality) is unlikely to be an issue with them.[14] Secondly, different legal systems offer not only different legal frameworks but also the ease with which they can be implemented and subsequently modified. This has direct bearing on our long-run measure of institutional quality. Thirdly, as Acemoglu and Johnson (2005) demonstrate, legal origin does not seem to have a significant effect on economic outcomes other than through its impact on the quality of institutions. Thus, the "exclusion" principle necessary for the validity of instruments is likely to hold for *LO*. Our overidentification tests support this view.

Two Stage Instrumental Variable Regression results

We use a simple structure for our base Two Stage Instrumental Variable (IV) regressions. The estimated equation is:

$$S_i = \alpha + \beta\, Law_i + u_i \quad \ldots (2)$$

with *ELF* and *LO* as the instrumental variables for *Law*. The maintained null hypothesis is that *ELF*, *LO* are not included in u_i. That is, legal origin and ethnolinguistic

[14] Further, for former European colonies, the legal system can be thought of as exogenous because it was imposed by colonial powers.

fractionalization affect the relative size of the service sector only through their impact on *Law* and not otherwise. Hansen's overidentification test statistics for this null hypothesis are reported for all the IV regressions. Failure to reject the hypothesis lends credibility to the instruments. We also check for the robustness of our results with respect to the remaining variables discussed above (*Power*, *Roads*, etc.).

Dropping observations for which data on *ELF* are missing, we are left with 103 observations. IV regression results for equation 2 are reported in Table 5 below.

Table 5: IV regression results

	(1)	(2)
Second stage regressions		
	English & French	*English,French & Socialist*
Law	.339***	.351***
	(.000)	(.000)
Sample Size	93	103
R^2	.28	.28
Hansen test	2.13	4.13
p-value	**.145**	**.127**
Shea partial corr for *Law*	.313	.301
First stage regressions: Dependent variable is *Law*		
ELF	-1.53***	-1.53***
	(.000)	(.000)
French	-.555***	-.555***
	(.001)	(.001)
Socialist		-.893***
		(.001)
R^2	.31	.30

All variables other than *Law*, *ELF* and *Latitude* are in log terms.

The table shows that *Law* has a statistically significant and positive impact on the performance of the service sector. *ELF* and the dummies for the *French* and *Socialist* legal systems have the expected signs and are significant at less than 1% level. The Hansen test statistics are small and insignificant implying that the exogeneity of instruments cannot be rejected at any reasonable level of significance. As our first robustness check we dropped the 10 smallest countries (as in Section 1) mostly belonging to the Caribbean region. The estimated *Law* coefficient changed only slightly. For example, for the *English & French* legal origin countries, the estimate changed from the base value of .339 (Table 5, column 1) to .324 (significant at less than 1% level). Dropping all the *LAC* countries we found the estimated coefficient value to be .309 (p value of .00).

Another variable widely used in the literature to instrument the quality of institutions is the settler mortality rate. This is the mortality rate of soldiers, missionaries and sailors stationed in the colonies between the 17th and 19th centuries and is largely based on the work of historian Philip D. Curtin. The problem with this instrument is that it is not available for a number of countries in our sample. However, for the 58 countries for which data is available, we found that the results presented in Table 5 hardly changed when (logged) settler mortality was used to instrument *Law*. Specifically, the estimated coefficient of *Law* was 0.333 (significant at less than 1% level). The corresponding figure using *ELF* and *LO* as instruments is 0.304 (significant at less than 1% level).

Robustness of IV regression results

Although the overidentification test statistics support the exogeneity of our instruments, it will be useful to check how the results change when we include the remaining variables. We focus here on the set of all countries since the results for the subset of *English* and *French* legal origin countries are roughly similar.

The immediate problem with including the remaining variables is that these variables (*GDP*, *Roads*, etc.) are themselves potentially endogenous which tends to bias the estimate of the *Law* coefficient. In fact we found that the Hansen test clearly rejected the exogeneity of all our variables other than *Pop* and *Continent* even when we used 10-15 year lagged values. The results suggest that our controls are picking up the effect of some variable(s) absorbed in the error term. On closer inspection we found that the key "missing variable" is the *LAC* (Latin America & Caribbean) dummy. That is, once we control for "*LAC* vs. the rest" the endogeneity problem completely disappears.

We define the benchmark case as the base regression for equation (2) with *LAC* as an additional regressor. Starting with this benchmark case we add the remaining controls individually and simultaneously. The results are summarized in Table 6 below. The table shows the second stage IV regression results with various controls added. Each row represents a separate regression. *LAC* and *Law* (instrumented as above) are included in all the regressions. The left most column indicates the included variable(s) other than *LAC* and *Law*. Column (1) provides the estimated coefficients of these controls, column (2) the estimated *Law* coefficients while column (3) reports the same for the *LAC* dummy. Overidentification test statistics are reported in column (4).

Table 6: Robustness of IV results

	(1)	(2)	(3)	(4)
	Variable coefficient	*Law*	*LAC*	Hansen Test
Initial variables: Law and LAC		.291***	.217***	1.39
		(.000)	(.000)	(.500)
Continent		.297***	.249***	1.40
		(.000)	(.000)	(.497)
Latitude	-.044	.294***	.213***	1.34
	(.810)	(.000)	(.000)	(.512)
GDP	-.045	.325***	.238***	2.47
	(.533)	(.004)	(.000)	(.291)
Power	-.032	.343***	.245***	.856
	(.231)	(.000)	(.000)	(.652)
Roads	-.063**	.318***	.228***	.502
	(.031)	(.000)	(.000)	(.778)
Pop	.002	.293***	.220***	1.39
	(.879)	(.000)	(.000)	(.500)
All variables above		.322***	.173	2.77
		(.003)	(.113)	(.250)
Base regression for *Skill*		.280***	.263***	.184
(Sample=71)		(.000)	(.000)	(.192)
Skill	-.0094	.291***	.275***	.176
	(.853)	(.002)	(.003)	(.916)

p values in brackets. Sample size for each regression in the upper panel is 103. Each row shows the second stage IV results from separate regressions. Column (1) shows the estimates of the various variables; column (2) shows the estimate of *Law* coefficient, column (3) shows the estimated coefficient of *LAC* dummy, column (4) provides the Hansen test statistic. Base regression for *Skill* includes (instrumented) *Law* and *LAC* as explanatory variables.

Important results in the table are as follows.[15]

Firstly, the estimate of the *Law* coefficient is positive and statistically significant in all the regressions. Thus, our findings in Table 5 are robust as far as the sign and the significance level of the *Law* coefficient is concerned. Secondly, with all the variables included, the *Law* coefficient estimate is .322 (last row in the upper panel of Table 6) which is not too different from the .351 estimate in Table 5, column (2).[16] Following Altonji et al. (2000), the small difference between these two estimated coefficient values may be seen as indicating the absence of a significant omitted variable bias problem in the results above.[17] Thirdly, the Hansen test does not reject the exogeneity of the instruments in any of the reported regressions. Fourthly, the *LAC* dummy is significant in all the cases except when we include all the variables simultaneously (last row, upper panel).

We also checked for the robustness of the results in Tables 5 and 6 with respect to the small island Caribbean countries. We did this in two ways. Firstly, we dropped all the small Caribbean countries (as in Section 1) and secondly we split the *LAC* group into two parts: the small Caribbean countries group and the rest of *LAC*. These changes did not have any significant effect on our results. That is, the second stage *Law* coefficient and the rest of *LAC* dummy remained statistically significant at less than 5% level while

[15] We treat the current (2000) values of *GDP*, *Pop*, *Roads* and *Power* as potentially endogenous and use their 1990 values as instrumental variables. The Hansen test statistics shown in Table 6 do not reject the validity of this instrumental approach.

[16] In the last row of the upper panel of Table 6 where we include all the variables the estimated coefficient of *Roads* is -.082 which is significant at less than 1% level. All other variables apart from *Law* are insignificant at 10% level or less including the continental dummies.

[17] Altonji et al. (2000) develop a formal methodology to assess the importance of omitted variable bias. The basic idea is that if the estimate of the coefficient of interest does not change as additional covariates are included in the regression, it is less likely to change if we were able to add some of the missing omitted variables. For a similar interpretation, see for example, Acemoglu (2001, p. 1388).

the dummy for the small Caribbean countries (when included) was statistically insignificant.[18]

Human capital

The lower panel of Table 6 shows the results when we include human capital (*Skill*) as an additional control. The variable is taken from Barro and Lee dataset and is the (logged) per capita stock of the tertiary educated in 1995[19] and instrumented using the 1985 values. We note that the sample size of these regressions is smaller (71 countries) due to missing data on the *Skill* measure. The base regression (using *LAC* and *Law* as the only explanatory variables) yields a value of .280 for the *Law* coefficient (significant at less than 1% level). The corresponding coefficient value with the *Skill* variable included was .291 (less than 1% significant).[20] In all regressions the Hansen test statistics and the *Skill* coefficients were insignificant at 10% or less.

Summarizing our results so far, we found that *Law* has a positive and statistically significant impact on the performance of the service sector relative to the rest of the economy. Overidentification and robustness tests show that it is highly unlikely that our results suffer from endogeneity related problems. The estimated coefficients are

[18] As with *LAC*, the endogeneity problem disappeared when we controlled for rest of *LAC*. However, using the dummy for small Caribbean countries alone or dropping these small countries from the sample did not remove the endogeneity problem discussed above. Thus, the results reported for the *LAC* dummy above are primarily driven by the specifics of the larger countries in the group and not by those of the small Caribbean countries.

[19] We use the 1995 value of *Skill* to allow for any gestation lag between schooling and entry into the labor market. However, our results are almost unchanged if we use the 2000 values as these are highly correlated. Further, we treat *Skill* as potentially endogenous (just like the other controls) and instrument it using its value in 1985.

[20] With *Skill* and all the other controls in the Table included the coefficient of *Law* equalled .312 (p value of .006).

sufficiently large to suggest that a service oriented economy is inconceivable without good institutions.

We now proceed to the next section where we analyze the growth experience of countries and its relationship with the Rule of Law.

Section 3

The level regressions in the previous section show that better institutions have a strong positive impact on the size of the service sector in the long run. In this section we focus on the medium or short run by examining if *Law* has any effect on the change in the size of the service sector. These growth regressions are based on the following base equation:

$$\Delta S_i = \gamma + \gamma_1 Law_i + \gamma_2 S_{i,1990} + u_i \quad \ldots (3)$$

where $S_{i,1990}$ is the value of S_i for 1990 computed as the 3 year average centered on 1990. ΔS_i is value of S_i in 2000 minus the same in 1990. We also used the average of annual change in S_i over the 1990s as alternative measure of ΔS_i but this did not change our results much.[21] The motivation for including $S_{i,1990}$ as a regressor is to control for convergence related effects. In fact, some of our regressions did not pass the exogeneity test without controlling for $S_{i,1990}$. We check for robustness by adding other controls in (3) as discussed below.

[21] That is, the estimated coefficient of *Law* remained positive and significant at roughly the same level as discussed below. The only change was the estimates were slightly lower in value.

IV regression results for equation (3) with and without additional controls are stated in Table 7.

Table 7: IV Growth regression results (1990-2000)

	(1)	(2)	(3)	(4)
	Second stage regressions			
	English & French		*English, French & Socialist*	
Law	.188***	.186***	.209***	.201***
	(.004)	(.007)	(.000)	(.005)
S_{1990}	-.378**	-.355***	-.476***	-.515***
	(.029)	(.003)	(.001)	(.000)
All controls		Yes		Yes
Sample	89	89	94	94
R^2	.01	.25	.01	.24
Hansen test	.057	.062	.181	.399
p-value	**.812**	**.803**	**.913**	**.819**
Shea partial corr. for *Law*	.157	.147	.195	.147
	First stage regressions: Dependent variable is *Law*			
ELF	-1.05***	-.696**	-1.11***	-.684**
	(.001)	(.021)	(.000)	(.023)
French	-.410**	-.358**	-.420**	-.364**
	(.017)	(.020)	(.014)	(.017)
Socialist			.187	-.413
			(.609)	(.211)
R^2	.42	.72	.42	.71

p values in brackets. **All controls** include: *Continent*, *Latitude* and the decadal change (2000 value minus 1990 value) in *GDP*, *Pop*, *Power*, *Roads*.

Column (1) shows the regression results for the set of *English & French* legal origin countries without additional controls while column (3) shows the same with the *Socialist* system countries included in the sample. Both these regressions show a positive and statistically significant effect of *Law* on the (relative to GDP) growth performance of the service sector. There is also a strong evidence of convergence which is particularly strong when the *Socialist* system countries are included in the sample. The lower panel of Table 7 shows the first stage regression results and the findings here are similar to the ones in Section 2 except that the *Socialist* dummy is no longer significant. The Hansen test statistics are sufficiently small so that the exogeneity of the instruments cannot be rejected at 10% or less significance level.

Results in columns (2) and (4) are based on regressions with all the controls included in equation (3). These controls include: *Continent*, *Latitude*, and the decadal change in *GDP*, *Power*, *Roads* and *Pop*. We note that there is hardly any change in the estimated coefficient of *Law* when all these controls are added. The only control significant in columns (2) and (4) was the *LAC* dummy (with the dummy for *Europe* dropped), the *LAC* dummy equaled .205 (p value of .023) in column (4) and .247 (p value of .007) in column (2). The *Asia* dummy was also positive and significant at less than 5% level in column (2) but insignificant in column (4).

The estimated coefficients of *Law* in Table 7 are smaller than the corresponding ones for the level regressions in Section 2 which is expected since level regressions capture long-run effects while the growth regressions capture the short or medium run (decadal) impact. Coupled with a strong convergence effect the results suggest significant

gestation lags for the full (long-run) impact of improvement in *Law* on services to GDP ratio to be realized.

The estimated coefficients of *Law* in Table 7 remain roughly unchanged when we add the controls one by one in separate regressions. Table 8 provides the necessary details for the set of all countries and it is similar in construction to Table 6 with each row representing a separate regression.[22]

[22] Corresponding results for the subset of *English & French* legal origin countries are similar.

Table 8: Robustness of IV Growth results
(Sample: *English*, *French* and *Socialist* countries)

	(1)	(2)	(3)
	Variable coefficient	*Law*	Hansen Test
Initial variables:Law & $S_{i,1990}$		.209***	.181
		(.000)	(.913)
Continent		.176***	.610
		(.007)	(.737)
Latitude	-.259	.214***	1.34
	(.136)	(.002)	(.513)
Δ*GDP*	-.070	.223***	.196
	(.659)	(.003)	(.907)
Δ*Power*	.054	.207***	.107
	(.193)	(.000)	(.948)
Δ*Roads*	.066**	.211***	.285
	(.295)	(.000)	(.867)
Δ*Pop*	.094	.218**	.258
	(.756)	(.011)	(.879)
All variables above		.228***	.00
		(.007)	(.985)
Base regression for Skill (sample=68)		.174***	.785
		(.006)	(.675)
Skill	-.004	.166**	1.18
	(.885)	(.033)	(.554)
Δ*Skill*	-.021	.170***	.818
	(.766)	(.009)	(.664)

p values in brackets. Sample size for the top panel is 94. The lower panel uses the sample for which data on *Skill* is available. Each row shows the second stage IV results from separate regressions. Column (1) shows the estimates of the various variables; column (2) shows the estimate of *Law* coefficient, column (3) provides the Hansen test statistics. "Δ" indicates the value of the relevant variable in 2000 minus the same in 1990; Δ*Skill* is the change in *Skill* over 1985-1995. *Skill* is for year 1995.

In the top panel of the table we start with the base regression estimate of .209 for the *Law* coefficient taken from Table 7, column 3. Column (2) shows the estimated *Law* coefficient as controls are added one by one while column (1) shows the estimated coefficients of the controls. The only significant control (apart from *LAC* dummy and $S_{i,1990}$) is the decadal change in *Roads* but this result does not survive when we add all the controls simultaneously.

The bottom panel of Table 8 shows the impact of including the *Skill* measure in the regressions. Data on *Skill* is available for 68 countries in the sample. For this sample of 68 countries, the base regression (equation 3) estimate of the *Law* coefficient is .174 (first row in the lower panel of Table 8). Starting with this base regression we next added two measures of human capital: the initial stock of human capital (*Skill* in 1985) and the decadal change in human capital ($\Delta Skill$).[23] These variables are insignificant themselves and have a minimal impact on the estimated *Law* coefficient as the Table shows.

Summarizing our results in this section, we found that *Law* has a positive and a statistically significant impact on the growth performance of the service sector. Overall the level and growth regressions suggest that a service led development strategy is unlikely to be successful without significant improvements in the quality of institutions associated with the enforcement of contracts or what is broadly called the Rule of Law.

Conclusion

The present paper looks at the role that institutions play in the development of the service sector. Our findings show a strong and positive effect of institutions in this

[23] $\Delta Skill$ is the change in *Skill* value over 1985-1995 period.

context both in the level and the growth regressions. There are a number of ways in which future work can help improve our understanding of the role of institutions at the sectoral level and especially for the service sector.

Our focus in the study was on whether institutions matter more for the service sector or not. An equally important question relates to why this should or should not be the case. Building on the work of Blanchard and Kremer (1997) we suggested that one reason for the why of it could be that the services sectors are more dependent on institutions due to their greater integration with the rest of the economy. More work is needed to ascertain the validity of these factors. That is, are services sectors more integrated with the rest of the economy than manufacturing and agricultural sectors and if so then does this make them institutionally more dependent? There is very little in the formal or the informal literature on this issue.

The measure of institutional development used above is fairly broad despite its focus on the enforcement of contracts. For example, Acemoglu and Johnson (2005) distinguish between "property rights institutions", which protect citizens against expropriation by the government and powerful elites, and "contracting institutions", which enable private contracts between citizens. They find that the former matter more for long-run economic growth than the latter perhaps because agents can find ways to mitigate the adverse effects of weak contracting institutions but this is much more difficult in case of expropriation by the government. It will be extremely useful to test whether such a distinction applies to the service sector more than the other sectors.

One way to restate the results we found above is that countries with better institutions have a comparative advantage in the service sector. Implications for the

pattern of trade (share of services trade in total trade) can then be drawn in accordance with the theory of factor proportions. A simple testable hypothesis would be that ceteris paribus countries with better institutions export more and import less services relative to other tradeables. Some work in beginning to emerge in this area but at present it is restricted to within manufacturing trade only. Given the increasing importance of services trade it will be immensely useful to extend this work to trade in services.

Appendix

Appendix A1

Relationship between Rule of Law and the size of the service sector by continents

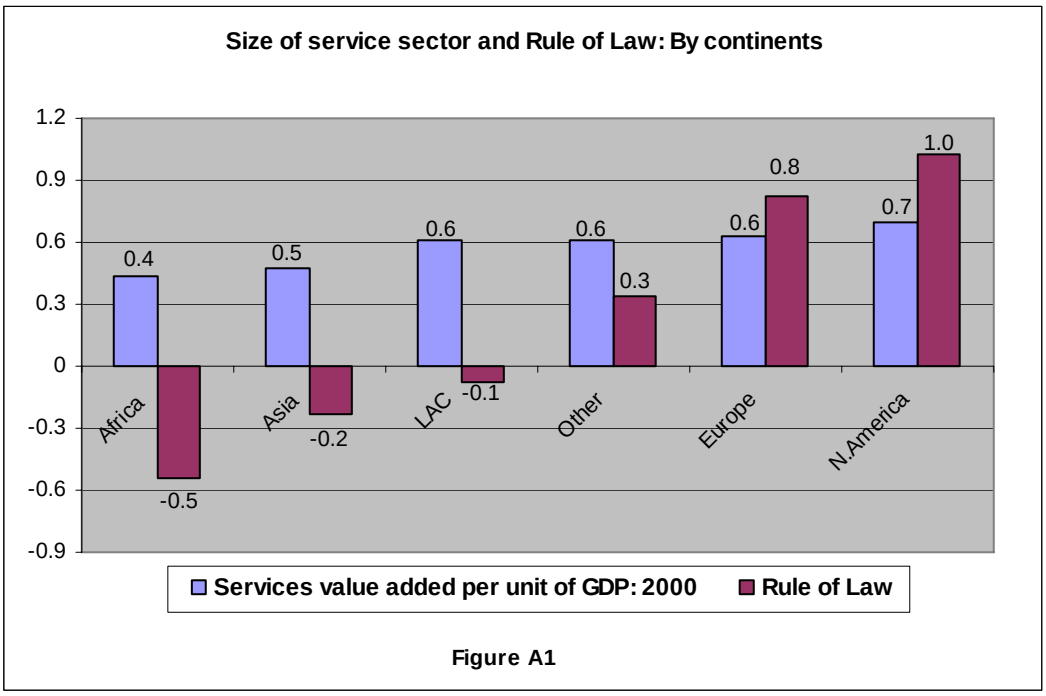

Figure A1

Appendix A2: Data description and sources

1) S_i: we first took the ratio of services to GDP in constant USD 2000 and PPP adjusted for years 1999, 2000 and 2001. The source for this is WDI, World Bank. Next we computed average value of the share over the three years for each country. Taking natural logs over the averaged values gave us S_i values used in the regressions.

2) ΔS_i: Repeating the procedure in 1) above with data for 1989, 1990 and 1991 we obtained S_i values for 1990. ΔS_i was calculated as S_i value for 2000 minus the same for 1990.

3) Law_i: Rule of Law measure for year 2002 compiled by Kaufmann et. al. (2003). The measure is available for years 1996, 1998, 2000, 2002 and 2004. All these are highly correlated and we chose 2002 because it is more comprehensive in its coverage than the earlier years and closer to the years used for our additional controls than the 2004 measure. Kaufmann et. al. also provide other measures of the quality of governance which include: Voice and Accountability, Political Stability, Government Effectiveness, Regulatory Quality and Control of Corruption. We chose Rule of Law because it most closely captures the role of institutions in enforcing contracts discussed in the sections above. The Rule of Law measure is itself a summary measure of a large number of aspects related to law and order in a country. These aspects include: enforceability of private contracts, assessment of the strength and impartiality of the legal system, whether existing laws are actually implemented in a reliable and impartial fashion, quickness of court decisions, trust in police and courts, judicial independence from the state and other powerful groups, impact of crime on business, etc.

4) *Latitude*$_i$: Is the absolute distance of a country from the equator taken from La Porta et al. (1999) and CIA factbook.

5) *Pop*$_i$, *GDP*$_i$: these variables are taken from The World Bank's database are averaged over 1999-2001. Lagged values of the variables are averages over 1989-1991 period.

6) *Power*$_i$: Is the total production of electricity per capita in the same way as variables in 5) above. The data is taken from "Energy Statistics Yearbook, 2001", Table 34, and published by the UN. For some countries for which data was missing we used The World Bank's dataset. Data for countries common in these two datasets are almost identical.

7) *Roads*$_i$: The variable is constructed in the same way as *Power*$_i$. Primary data is taken from The World Bank's dataset and "World Road Statistics" published by the International Road Federation, various years. These data relate to the total (paved plus unpaved) road network in the country. Separate data for paved roads was not easily available for 1989-91 period for a number of countries.

8) Legal Origin: Data for legal origin is taken from La Porta et. al. (1999). This study does not include Comoros. Using information from various sources such as CIA factbook,we assigned the French legal origin to the country.

9) *ELF*: The variable measures the degree of ethnolinguistic fractionalization in the country, it lies between 0 and 1 and higher values indicate a greater degree of fractionalization. The data is taken from La Porta et. al. (1999). ELF is the average value of five different indices compiled for the early 1960s and include: (i) the probability that two randomly selected people from a given country will not belong to the same ethnolinguistic group, (ii) probability of two randomly selected individuals speaking different languages, (iii) probability that two randomly selected agents do not speak the

same language, (iv) percent of population not speaking the official language, (v) percent of population not speaking the most widely used language.

10) *Skill*: The stock of tertiary educated per capita. The data are taken from Barro and Lee dataset.

Appendix A3

Countries included in the regressions depending on their legal origin (Services to GDP perecentages in brackets)

Albania (52.9)	Dominican Rep (55)	Jordan (71.9)	Portugal (66.3)
Algeria (35.3)	Ecuador (58.6)	Kenya (51.4)	Puerto Rico (56.8)
Angola (23.4)	Egypt (50.7)	Laos (24.4)	Romania (50.1)
Antigua & Barbuda (76)	El Salvador (57.7)	Lebanon (68.8)	Rwanda (38.3)
Argentina (67.3)	Equatorial Guniea (5.6)	Luxembourg (79.1)	Seychelles (69)
Australia (70.5)	Ethiopia (42.8)	Madagascar (56.5)	South Africa (64.8)
Austria (66.9)	Fiji (57)	Malawi (43.7)	Spain (66.5)
Azerbaijan (38.1)	Finland (62.6)	Malaysia (42.2)	Sri Lanka (52.7)
Bangladesh (49.3)	France (74.3)	Mali (36.8)	St Kitts & Nevis (68.6)
Belgium (70.9)	Gabon (44.4)	Mauritania (42.6)	St.Lucia (73)
Belize (63.1)	Gambia (51.6)	Mauritius (61.5)	St.Vincent & Grenadines (64.8)
Bolivia (55.7)	Germany (68.6)	Mexico (67.7)	Sweden (68.8)
			Switzerland (69.3)
Brazil (61.3)	Ghana (38.5)	Mongolia (48.5)	Syria (46.3)
Bulgaria (55.1)	Greece (69.4)	Morocco (53.5)	Tanzania (39.3)
Burkina Faso (49.1)	Grenada (68.7)	Mozambique (46.6)	Thailand (49.1)
Cameroon (36)	Guatemala (57.4)	Netherlands (70.6)	Trinidad & Tobago (54)
Canada (65)	Guinea (39.7)	New Zealand (66.1)	Tunisia (59.1)
Cape Verde (70.5)	Guinea-Bissau (31.6)	Nicaragua (54.8)	Turkey (60)
Central African Rep. (25.2)	Honduras (52.9)	Niger (43.1)	U.A.E. (44.2)
Chad (46.5)	Hong Kong (85.8)	Nigeria (25.8)	U.K. (70.7)
Chile (57.2)	Hungary (62.4)	Norway (58)	United States (75)
China (39.3)	Iceland (63.9)	Pakistan (51)	Uruguay (68.6)
Colombia (58.9)	India (48.8)	Panama (73.9)	Vanuatu (76.6)
Congo, DR (21.3)	Indonesia (37.7)	Papua New Guinea (28.7)	Venezuela (48.4)
Congo (27.2)	Ireland (54.4)	Paraguay (52.3)	Vietnam (39.1)
Costa Rica (58.1)	Italy (68)	Peru (60.2)	Yemen (40.7)
Denmark (70.6)	Jamaica (61.8)	Philippines (52.7)	Zambia (51.9)
Dominica (59.1)	Japan (66.7)	Poland (63.6)	Zimbabwe (57.9)

Additional countries included in Section 1 only

Armenia (38.7)	Eritrea (58.8)	Latvia (72.1)	Slovenia (59.4)
Belarus (47.9)	Estonia (68.5)	Lithuania (61.3)	Solvak Rep. (65.3)
Bosnia-Herzegovina (56.4)	Georgia (54.2)	Macedonia (55)	Tajikistan (36.8)
Cambodia (38.6)	Iran (51)	Moldova (50.8)	Tonga (54.8)
Comoros (47.2)	Kazakhstan (52.4)	Oman (44.9)	Turkmenistan (29)
Croatia (60)	Kuwait (43.4)	Russia (56.3)	Ukraine (47.6)
Czech Republic (57.4)	Kyrgyz Rep. (34.4)	Saudi Arabia (43.9)	Uzbekistan (42.7)

Appendix A4

Summary statistics by continents

	All countries	Africa	Asia	Europe	N. America	LAC	Others
Services share	3.95 (.333)	3.71 (..456)	3.84 (.251)	4.13 (.131)	4.24 (.074)	4.10 (.114)	4.03 (.354)
Law	.012 (.968)	-.590 (.456)	-.277 (.758)	.845 (.987)	1.03 (1.16)	-.094 (.698)	.363 (1.18)
Latitude	.309 (.195)	.167 (.131)	.319 (.151)	.552 (.077)	.448 (.207)	.171 (.085)	.237 (.131)
GDP	8.53 (1.14)	7.50 (.974)	8.25 (.926)	9.55 (.821)	9.91 (.718)	8.71 (.503)	8.85 (.975)
Power	7.02 (1.79)	4.98 (1.54)	7.24 (1.40)	8.57 (.753)	9.04 (1.13)	7.26 (.787)	6.96 (1.82)
Roads	-5.41 (.968)	-6.01 (.642)	-5.87 (.900)	-4.55 (.680)	-4.33 (1.18)	-5.45 (.792)	-4.68 (.998)
Pop	15.9 (1.90)	15.8 (1.64)	16.9 (1.72)	15.85 (1.33)	18.37 (1.11)	14.85 (2.25)	14.12 (2.04)
Sample size	141	36	34	35	3	27	6

Figures in brackets are standard deviations. All values are in log terms except for *Law* and *Latitude*.

Direct correlation between *S* and regressors

Law	*Power*	*GDP*	*Latitude*	*Roads*	*Pop*
.59	.52	.50	.36	.27	-.09

Appendix A5

Table 2: OLS with Socialist legal origin countries excluded

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Law	.202*** (.000)	.191*** (.000)	.274** (.024)	.257*** (.008)	.260*** (.005)	.254*** (.007)	.240*** (.010)
Continent		Yes	Yes	Yes	Yes	Yes	Yes
GDP			-.109 (.379)	-.174 (.305)	-.174 (.280)	-.181 (.259)	-.174 (.272)
Power				.065 (.326)	.074 (.264)	.079 (.233)	.067 (.305)
Roads					-.073* (.099)	-.076* (.095)	-.077* (.086)
Pop						-.008 (.586)	-.009 (.521)
Latitude							.337 (.141)
Sample Size	110	110	110	110	110	110	110
R^2	0.34	0.44	0.48	0.50	0.52	0.52	0.53

p values in brackets.

Table 3: OLS with different coefficients for *Law*

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Law_Low	.345***	.291***	.329***	.329***	.337***	.342***	.345***
	(.000)	(.000)	(.004)	(.002)	(.001)	(.001)	(.001)
Law_High	.101***	.057**	.106	.102	.113	.111	.097
	(.000)	(.028)	(.231)	(.195)	(.158)	(.157)	(.212)
Continent		Yes	Yes	Yes	Yes	Yes	Yes
GDP			-.057	-.110	-.115	-.113	-.096
			(.586)	(.423)	(.381)	(.380)	(.451)
Power				.055	.066	.064	.043
				(.253)	(.192)	(.188)	(.376)
Roads					-.065	-.061	-.069*
					(.104)	(.113)	(.077)
Pop						.007	.008
						(.603)	(.558)
Latitude							.399**
							(.025)
Sample	141	141	141	141	141	141	141
R^2	.41	.50	.51	.53	.55	.55	.57

Testing for the difference in the law coefficients

Estimated values and significance levels of *Law_Low-Law_High*

.244***	.234***	.223***	.227***	.224***	.232***	.248***
(.001)	(.001)	(.000)	(.000)	(.000)	(.000)	(.000)

p values in brackets. *Law_Low* is the coefficient for countries with *Law* values below the 75th percentile and *Law_High* is the corresponding coefficient for the rest of the countries.

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