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INSTITUTIONS AND VISA REGIMES

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We study the impact on visa restrictions of institutions and social norms in a sending country. To this purpose, we unbundle institutions into "institutions-services", which complement productive activities and serve as public production inputs, and "institutions-rules", which strengthen the rule of law and constrain unproductive behavior. We propose a theoretical model which incorporates spillover effects of domestic institutional changes and shows that while stronger institutions-services reduce visa barriers, stronger institutions-rules have the opposite effect. Furthermore, visa barriers are affected by norms and values, which complement formal institutions as factors of visa regimes. We use various empirical models to test and confirm the above conjectures.

Keywords: visa barriers, institutions, norms and values, institutional complementarity

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1. Introduction

Over the last few decades the world witnessed increased mobility of goods, services, technologies, and capital across national borders. Mobility of people was also on the rise as part of this globalization trend, but not quite as rapidly, and visa regimes restricting international travel by and large remained in place and, not infrequently, grew tighter. Countries are highly selective and discretionary in their visa regimes – they welcome citizens of some nations with few if any hurdles and formalities, while raising formidable obstacles to others. This strikingly unequal mobility (Mau, 2015) begs the question as to what is behind such phenomenon.

A vast literature on visa regimes which emerged mainly in political science, political geography and migration studies addresses the issue from the perspectives of human rights and freedoms vs. national sovereignty and remote exercise of eminent domain (Neumayer, 2006). More pragmatically, visa regimes are explained as tradeoffs weighing costs and benefits of unimpeded international travel, and as outcomes of complex public choice process reflecting at times conflicting views of various stakeholders in visa policy-making.

The standard inventory of factors affecting visa regimes includes wealth of nations, tourism flow and bilateral trade, geography, history, and ethnic or cultural affinity. Other considerations which feature prominently on this list include concerns about terrorism, politically motivated violence and illegal migration. Empirical studies confirm that all of these factors are statistically significant in explaining cross-country variations of visa policies, although of uneven explanatory power.

Surprisingly, national institutions (with the exception of political ones, measured by e.g. democratic quality) so far have been conspicuously absent from the list. This is particularly odd, given the well-established centrality of institutions for just about any aspect of economic, social and political life. To be sure, institutions were studied in the literature as factors explaining migration flows, but to the best of our knowledge not as drivers of visa regimes regulating such mobility. The present paper seeks to address this gap.

We are interested in how the quality of institutions, formal and informal, of a sending country affects visa regimes for the country's nationals traveling abroad. While it is expected that national institutions should matter for mobility barriers (if nothing else, because they matter for nearly everything), the mechanism linking institutions and visas is less obvious. After all, institutions, according to the famous definition, are *domestic* rules of the game (North, 1990) – why should they remain relevant for international travel?

A short answer is that institutions cause spillovers felt beyond national borders. Such spillover effect is a common theme in fiscal federalism and international economics, whereby

jurisdictions compete for mobile resources by their institutional regimes. Strong institutions create enabling conditions for private sector and market development and are usually associated with high quality public services. Hence such "institutions-services" have a retention effect, making emigration less likely (and in fact attracting immigrants from the rest of the world). This alleviates other countries' concerns about possible illegal immigration, which is a major reason for tighter visa regimes. Such reasoning makes one expect that improved institutions-services tend to lower visa barriers (which can be illustrated e.g. by EU's institutional conditionalities for prospective member states).

However, good institutions could cause another kind of spillover with an opposite effect for visa regimes. A key tenet of institutional economics has it that institutions affect individual choices between productive and unproductive activities (a.k.a. rent-seeking) – better institutions protect property rights and hence make rent-seeking less profitable in comparison with value-creating economic activities. Property rights protection falls in the category of "institutions-rules", and in a closed economy improvement of such institutions would cause a reallocation of efforts and other resources from rent-seeking to production, which is essentially why property rights matter for economic growth and welfare. However, with international mobility, improvement of *domestic* protection of property rights could lead to a spillover of rent-seeking abroad.

The above logic leads to the hypothesis that, unlike institutions-services, an improvement in institutions-rules could make other countries increasingly concerned about the true intentions of visa applicants from a nation which raises the quality of its institutions, and this could lead to an *increase* of visa barriers in response to stronger domestic institutions. This logic is based on the assumption that visa rules (and decisions on visa applications) are made under the conditions of informational asymmetry, and such decisions are known to weigh heavily on the priors about the pool of applicants from a given country. An increase in such pool of likely violators of visa rules makes the priors less favorable, which leads to tighter visa requirements and higher rejection rates of visa applications.

Essential for this logic is idiosyncratic preference for socially unproductive behavior per se, since an improvement in institutions-rules makes such behavior less attractive in relation to domestic productive activities, and if individuals still carry on with it abroad as a second-best option (which existed earlier), then some other non-economic considerations must be involved.

These arguments point out to another group of factors heretofore absent, to the best of our knowledge, from the literature on visa regimes, i.e. norms and values in the society. Norms and values, often jointly referred to as culture, or informal institutions, are commonly associated with social capital which is shown to matter to a broad array of outcomes, including the state of

economy, quality of governance, state of formal institutions, etc. (see e.g. Halpern, 2004 for a survey). Furthermore formal and informal institutions interact with each other (Tabellini, 2008), and the same should be expected in the case of visa regimes.

Important ingredients of norms and values are trust and trustworthiness in the society, respect and trust (or lack thereof) in public institutions, law-abidance, morale, etc., and all of the above should strongly matter for how foreign states view and treat nationals of a given country. If norms and values of morality and compliance with law are prevalent domestically, then the same could be expected from the country's nationals abroad, which leads ceteris paribus to more favorable and lenient visa regimes, including possible visa waivers. In the same vein, the impact on visa regimes of the quality of institutions-rules is mediated by norms and values, as those would affect the strength of the above described spillover effect.

In this paper we build a theoretical model of migration and occupational choice that makes the above intuition precise by linking institutional set-ups in sending countries to visa-issuing decisions by foreign consulates. We proceed by empirically testing the predictions of our model for various measures of mobility barriers and by employing several identification strategies. We find robust and consistent confirmation of the expected role of different types of formal institutions, as well as norms and values, in explaining visa barriers.

This paper contributes to the literature in several ways. First, it shows relevance of domestic institutions for international mobility barriers. Second, it demonstrates that different types of institutions might have opposite impacts for visa regimes, which is an example of "unbundling institutions", similarly to Acemoglu and Johnson (2005). Third, we find that informal institutions, represented by norms and values in the society, are also essential for understanding visa regimes, and furthermore could moderate (in the sense of Baron and Kenny, 1986) the impact of formal institutions.

The rest of the paper proceeds as follows. In the following section we review the literature on mobility barriers in the modern world. In section 3 we proceed by building our theoretical model of visa restrictions in relation to formal and informal institutions, where we unbundle institutions into institutions-services and institutions-rules. In section 4 we explain our empirical methodology and identify data sources. Main empirical results are presented in Section 5. To ensure robustness, we employ alternative data models and empirical strategies (Section 6). Section 7 concludes.

2. Mobility Barriers and Their Causes

The unprecedented rise in the wealth of nations after WWII has been related to steep growth in bilateral and multilateral exchanges in goods, services, capital, information and people (see e.g. Grossman and Helpman, 1990; Wacziarg and Welch, 2008). However mobility of people, while also on the rise, was considerably more restrictive and often confined to certain "clubs" of countries, reflecting a global hierarchy of the freedom of migration and international travel (Mau 2010; Neumayer 2006). While industrialized market democracies were increasingly opening up their borders to each other, and their nationals more often than not were welcomed elsewhere in the world (unless visa barriers were kept for the reasons of reciprocity), citizens of poorer countries plagued by political instability and other obstacles to development, were faced with formidable and often growing obstacles when traveling abroad. In 1969 citizens of OECD and non-OECD countries were on the average able to travel without a visa to resp. 47 and 18 countries, whereas in 2010 these figures went up to, resp., 74 and 22; such highly uneven progress is an evidence of a "global mobility divide" (Mau, 2015).

It is well established in the literature that strict visa policies may entail massive economic losses due to suppressed trade, investments, tourism etc. Neumayer (2010, 2011) estimates the cost of requesting a visa as a 19-28% reduction in FDI and trade, and a 52-63% loss in bilateral travel. And yet strict visa regimes persist, reflecting the concerns about economic, social and national security of receiving nations (Neumayer, 2006; Boehmer and Pena, 2012; Avdan, 2012, 2014; Docquier et al., 2014; Hobolth 2014).

Security considerations include risks of terrorism and crime by visitors and migrants, pressure on the labor market and social security systems, threats to political and cultural integrity, risks of ethnic conflicts and other possible consequences of accepting undesirable people. In selecting the strictness of visa policies, countries balance the economic benefits of mobility and exchanges against the perceived costs in terms of lost security. In practice visa regimes are outcomes of political processes reflecting at times conflicting preferences of various stakeholders – employers, trade unions, tourism and transportation industries, ethnic groups, security agencies, political parties etc. (see e.g. Epstein, Hillman, 2003; Epstein, Nitzan, 2006; Freeman, 2006).

Neumayer (op. cit.) pioneered empirical analysis of factors affecting such tradeoffs. Prominent among those are economic welfare of sending countries, measured by their GDP per capita, bilateral trade volumes, tourism, and historical, regional and civilization links between countries – all of the above make visa restrictions ceteris paribus less likely. At the same time threats of terrorism and political instability raise security concerns and are positively correlated

with visa barriers. Subsequent studies highlighted the role of distance between countries, type of borderland, existing migrant population, religious and ethnic composition, dictatorial regimes and civil conflict etc. (Neumayer, 2008; Mau, 2010; Boehmer and Pena, 2012; Hobolth, 2012; Docquier et al., 2014).

All of the above factors in predictable and intuitive ways affect the benefits and risks of human mobility, and hence the tradeoff between those, reflected in visa rules and issuance policies and practices. Visas are waived if citizens of a given country due to the above reasons are considered, with a few exceptions, desirable and low-risk visitors, in which case the costs of visa requirements would have vastly exceeded the benefits. Such decisions reflect expectations about a nation at large; if those expectations are less favorable, visas are imposed and admission decisions are made on a case-by-case basis – granting a visa means that the applicant is not deemed undesirable and high risk (Neumayer, 2006).[5]

As for national institutions, only political ones were considered in the prior literature as factors affecting visa regimes – democracies are more likely to liberalize visa rules (Neumayer, 2006), especially vis-à-vis each other. In the same vein, Boehmer and Pena (2012) find that political regime differences make visa barriers more likely.

The absence of other institutions, such as property rights, rule of law, quality of governance etc., from the list of factors explaining visa regimes is particularly odd, given the well-established role of such institutions as drivers of international migration. According to the literature (Epstein, 2008; Hatton, 2014; Docquier et al., 2014), migration decisions are outcomes of the interplay of "push" and "pull" factors in home and destination countries, such as incomes, political freedom, ease of adaptation, etc. Such factors are shown to be affected by differences in institutional qualities which play prominently in individuals' decisions to seek better life abroad (Bertocchi, Strozzi, 2008). One should expect that by extension institutions' relevance for migration could not but be observed as well for visa rules regulating international mobility.

Such assumption is further reinforced by the EU accession criteria[6] (see also e.g. Visa Liberalization with Kosovo Roadmap[7]) which stipulate high-quality institutions as necessary conditions for free access to the Schengen area. This should not come as a surprise, since higher institutional quality improves the standards of living in the sending country, rendering illegal migration, overstays and other violations of visa rules less likely. Good institutions also cultivate compliance with laws, which generally means less risks of violating visa rules and other legal norms.

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[5] Notice however that individual visa decisions are also affected by the expectations about the sending country – more on this in the next section.
[6] http://ec.europa.eu/enlargement/policy/glossary/terms/accession-criteria_en.htm
[7] http://eeas.europa.eu/delegations/kosovo/documents/eu_travel/visa_liberalisation_with_kosovo_roadmap.pdf

However available empirical evidence presented later in the paper does not unconditionally point out to a positive associations between institutional quality and reduction of visa barriers. In fact, there are examples in recent history when institutional deterioration was accompanied by a steady reduction of visa restrictions, including more visa waivers and lower visa rejection rates, and vice versa nationals of countries which implemented radical institutional reforms (such as e.g. Georgia) found it more difficult to travel internationally.

In the following section we present a theoretical model that explains the impact of formal and informal institutions on the pool of those intended to travel abroad, and how the composition of such pool affects expectations of those processing visa applications and hence the visa rejection rates.

3. The Model

3.1 Equilibrium

An economy comprises a unit continuum of agents who choose between three types of economic activities: (i) productive activities; (ii) domestic rent-seeking; and (iii) rent-seeking abroad. Numbers (shares) of those engaged in the above activities are, resp., $d, r_1,$ and r_2; $d + r_1 + r_2 = 1$.

Government supplies two kinds of institutions – institutions-services (public goods and production inputs), which enhance the returns to productive activities, and institutions-rules, which protect the fruits of production from private expropriation.

Each agent is characterized by two idiosyncratic parameters – innate propensity to rent-seeking $a \in \mathbb{R}$, and personal cost of relocation abroad $c \in \mathbb{R}_+$. These parameters are distributed independently from each other with C.D.F. and density functions, respectively, $F(a), f(a)$ and $G(c), g(c)$. We assume that $F(\mu\sigma) > 0$.

Payoffs to the three above activities are as follows:

- Productive activities: $\mu\sigma$
- Domestic rent-seeking: $\mu(1 - \sigma)d/r_1 + a$
- Foreign rent-seeking: $\Delta - c + a$

Here $\sigma \in [0,1]$ is the share of output generated by productive activities and shielded from expropriation, reflecting the quality of institutions-rules protecting property rights, and $\mu > 0$ is an output multiplier reflecting the quality of institutions-services. In what follows σ and μ are

considered as measures of respected institutions.[8] It is assumed that the output expropriated from producers is shared evenly between domestic rent-seekers. We further assume that foreign rent-seeking earns a fixed payoff $\Delta > 0$.

In equilibrium each agent (a, c) selects an activity that gives her the highest net payoff. Let $n \equiv d/r_1$; then equilibrium solves the following system of equations:

$$r_1 = (1 - F(\mu(\sigma - (1-\sigma)n)))(1 - G(\Delta - \mu(1-\sigma)n))$$

$$r_2 = \int_0^{\Delta - \mu(1-\sigma)n} dG(c)[1 - F(\mu\sigma - \Delta + c)]$$

$$d = F(\mu(\sigma - (1-\sigma)n))(1 - G(\Delta - \mu(1-\sigma)n)) + \int_0^{\Delta - \mu(1-\sigma)n} dG(c)F(\mu\sigma - \Delta + c);$$

$$n \equiv d/r_1.$$

Proposition 1. Equilibrium exists and is unique.

Proof. Observe that r_1 monotonically increases in n. Furthermore, one has $d'(n) = -\mu(1-\sigma) f(\mu(\sigma - (1-\sigma)n))(1 - G(\Delta - \mu(1-\sigma)n) < 0$, so that d monotonically decreases in n. Both r_1 and d are continuous functions of n, and one can verify that $d/r_1 > n$ when $n = 0$ (we make use of the assumption $F(\mu\sigma) > 0$), and $d/r_1 < n$ when $n \to \infty$. Therefore indeed there is a unique solution of the equation $n \equiv d/r_1$, and hence unique equilibrium. ∎

3.2 Comparative statics

We now explore the impact on equilibrium of institutional quality, measured by μ and σ, and of norms and values of the society, measured by the distribution of a. We are primarily interested in how the above formal and informal institutions affect the number r_2 of foreign rent-seekers pursuing illicit gains abroad, as this is a matter of concern and consideration for consular officers processing visa applications.

We begin with the impact of institutions-services on the attractiveness of foreign rent-seeking. Intuitively, when institutions-services improve, foreign rent-seeking loses its appeal, since domestic alternatives become more rewarding. This is certainly true about productive activities, but also possibly about domestic rent-seeking, since the domestic economy is generating more wealth, a portion of which is available for expropriation. The next proposition makes this intuition precise.

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[8] Notice that institutions-rules could also increase gross returns to productive efforts, irrespective of rent-seeking threats, by delineating property rights, upholding contracts and otherwise reducing uncertainty and cutting the costs of legitimate transactions. We defer studying this aspect of institutions-rules as a factor of visa regimes to future research.

Proposition 2. The number of rent-seekers abroad r_2 declines in the quality of institutions-services μ.

Proof. Observe that the returns to productive activities $\mu\sigma$ increase in μ, whereas the returns to rent-seeking abroad $\Delta - c + a$ remain unaffected by changes in μ. If the payoff to domestic rent-seeking $\mu(1 - \sigma)n + a$ also increases, then in the new equilibrium (with higher μ) alternatives to rent-seeking abroad pay more than in the old one, and therefore fewer individuals will be pursuing this avenue. It is plausible however that the returns to domestic rent-seeking decline due to a drop in $n \equiv d/r_1$, but in such case r_2 could not go up either. Indeed, if this were the case, the number of domestic producers d would stay at least as high as before (since domestic production now pays more, and alternatives pay the same returns or less), and if r_2 goes up, then $r_1 = 1 - d - r_2$ goes down, which contradicts the assumption that d/r_1 declines. ∎

The impact of institutions-rules on the number of rent-seekers is less straightforward. When institutions-rules improve, returns to productive activities go up, and returns to rent-seeking abroad remains unaffected. One could expect that in the meantime an improvement in institutions-rules makes domestic rent-seeking less profitable. In theory, this could lead to reallocation of efforts from both kinds of rent-seeking towards production, in which case r_2 would decline. However, if rent-seeking is in and of itself more profitable than production, and the latter is chosen due to moral qualms, if any, then what matter are *relative* payoffs to both kinds of rent-seeking – domestic and foreign. If the former becomes less profitable due to better-enforced domestic rule of law, one could expect an exit from domestic rent-seeking into the foreign one, in which case r_2 would go up.

We demonstrate such effect by assuming that a takes two values – 0 and $-A$, where $A > 0$ is sufficiently large to avert an agent from rent-seeking of both kinds. We will furthermore assume that gross payoffs to both kinds of rent-seeking (without taking into account idiosyncratic preferences) are higher than in production.[9] These assumptions are kept for the remainder of the section; they ensure that aggregate "supply" of rent-seekers is inelastic, so an increase in rent-seeking abroad reflects exactly the decline of domestic rent-seeking.

Denote $p = 1 - F(0)$; p can be considered a measure of the society's morale (social capital). One obviously has $d = p$; furthermore $r_1 = (1 - p)(1 - G(\Delta - \mu(1 - \sigma)n)$, $r_2 = (1 - p)G(\Delta - \mu(1 - \sigma)n)$.

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[9] Notice that this might not be the case when the number of agents with moral aversion to rent-seeking is small, and hence potential rent-seekers with no such aversion, but high relocation costs, will be engaged in productive activities which earns the same gross payoff as domestic rent-seeking: $\mu\sigma = \mu(1 - \sigma)n$; see Murphy et al. (1993) for similar equilibria where rent-seekers "crowd out" each other.

Proposition 3. The number of rent-seekers abroad r_2 increases in the quality of institutions-rules σ.

Proof. Observe that the gross payoff to domestic rent-seeking $\mu(1-\sigma)n$ decreases in σ– otherwise an improvement of institutions-rules would entail an increase of the ranks of domestic rent-seekers and a matching decrease of rent-seeking abroad (recall that $r_1 + r_2 = 1 - p$). However, in such case the ratio $n \equiv p/r_1$ would decline, and so would the gross payoff to domestic rent-seeking. This contradiction shows that the above payoff indeed decreases in σ, which makes rent-seeking abroad relatively more attractive, and leads to an increase in r_2. ∎

Proposition 4. The number of rent-seekers abroad r_2 decreases in social capital p.

Proof. One has

$$\frac{\partial r_2}{\partial p} = -(1 - G(\Delta - \mu(1-\sigma)n) - (1-p)g(\Delta - \mu(1-\sigma)n)\mu(1-\sigma)\frac{\partial n}{\partial p},$$

and it suffices to show that $\frac{\partial n}{\partial p} > 0$. This follows from $n\big(1 - G(\Delta - \mu(1-\sigma)n)\big) = \frac{p}{1-p}$, and hence

$$\frac{\partial n}{\partial p}[1 - G(\Delta - \mu(1-\sigma)n) + n\, g(\Delta - \mu(1-\sigma)n)\mu(1-\sigma)] = \frac{1}{(1-p)^2}. \ \blacksquare$$

Therefore, an improvement in institutions-rules increases the ranks of rent-seekers abroad, whereas an increase in social capital (which can be considered as improvement of *in*formal institutions) has the opposite effect. Since social capital is directly involved in the link between institutions-rules and foreign rent-seeking, one would wonder what is the joint impact of these factors.

Given that $r_2 = (1-p)G(\Delta - \mu(1-\sigma)n)$, it appears that social capital attenuates the impact of institutions-rules – higher stock of social capital means reallocation of fewer individuals between foreign and domestic rent-seeking. However there is an opposite effect involved: high p implies a low number of domestic rent-seekers, and hence high ratio $n = p/r_1$, and consequently high returns to domestic rent-seeking $\mu(1-\sigma)n$. An improvement of institutions-rules reduces this returns, and this reduction in absolute terms is higher for higher p, which ceteris paribus indicates that an increase in social capital could *in*crease the marginal impact of institutions-rules on foreign rent-seeking. One can verify that for very high stocks of social capital (p close to 1) the second effect dominates, whereas for lower level the first one can take the upper hand.

3.3 Processing visa applications

Visa applicants comprise legitimate short-term visitors (tourists, business travelers, etc.) and foreign rent-seekers. Assume that an agent who is not a foreign rent-seeker becomes a short-term visitor and applies for a visa with a given probability $\alpha \in (0,1)$, whereas all interested in foreign rent-seeking do so with probability 1. The total pool of visa applicants has the size $\alpha + (1 - \alpha)r_2$.

A consular officer processing a visa application knows that with a priory probability $\pi = r_2/(\alpha + (1 - \alpha)r_2)$ an applicant is of "bad type", i.e. is interested in rent-seeking abroad and would violate visa terms and conditions and possibly other laws of the destination country. This prior is updated on a case-to-case basis depending on signals received by the officer while studying an application, interviewing an applicant etc. The officer observes signal $x \geq 0$, which is a matter of concern. Higher signals are more likely for a "bad" type; denote $H_0(x), h_0(x)$ and $H_1(x), h_1(x)$ resp. CDF and density functions for good and bad types, and assume that $H_0(x) > H_1(x)$ ($H_1(x)$ first-degree stochastically dominates $H_0(x)$). In addition, assume a monotone likelihood ratio, i.e. that $h_1(x)/h_0(x)$ monotonically increases in x.

If the officer observes signal x, she updates her prior as follows:

$$P(bad|x) = \frac{\pi h_1(x)}{\pi h_1(x) + (1 - \pi)h_0(x)}.$$

Suppose that the officer has a rejection threshold $p_0 \in (0,1)$ and rejects an application whenever $P(bad|x) \geq p_0$. This translates into

$$\frac{h_1(x)}{h_0(x)} \geq \frac{p_0(1 - \pi)}{(1 - p_0)\pi},$$

and therefore an application is rejected whenever $x \geq x^*(\pi)$, where $x^*(\pi)$ turns the above inequality into equality. Observe that $x^*(\pi)$ is a monotonically decreasing function. The overall acceptance rate is then

$$A(\pi) \equiv (1 - \pi)H_0\big(x^*(\pi)\big) + \pi H_1\big(x^*(\pi)\big).$$

It declines in the a priory probability of bad type: $A'(\pi) = H_1\big(x^*(\pi)\big) - H_0\big(x^*(\pi)\big) + \big[(1 - \pi)h_0\big(x^*(\pi)\big) + \pi h_1\big(x^*(\pi)\big)\big]x^{*\prime}(\pi) < 0.$

Hence the rejection rate $1 - A(\pi)$ increases in π, and therefore in r_2, which immediately leads to the following

Proposition 5. Visa rejection rates increase in the quality of institutions-services and decrease in the quality of institutions-rules and social capital. ∎

4. Data and Empirical Strategy

4.1 Data sources

There are several sources of empirical information on modern visa regimes. One is the International Civil Aviation Association (IATA) database on bilateral visa requirements any two countries of the world (Neumayer, 2006). Henley and Partners use the above data to calculate visa restriction (a.k.a. "passport power") indexes which are counts of the number of foreign states that can be accessed without a visa for a short-term visit by a national passport's holder (Figure 1).[10] A more detailed database of bilateral visa requirements which distinguishes between tourist and business visas is assembled by one of the authors by using international tourism industry resources[11] and whenever necessary information from consular services of various countries (Gracheva, 2014).

Henley and Partners' Visa Restriction Index
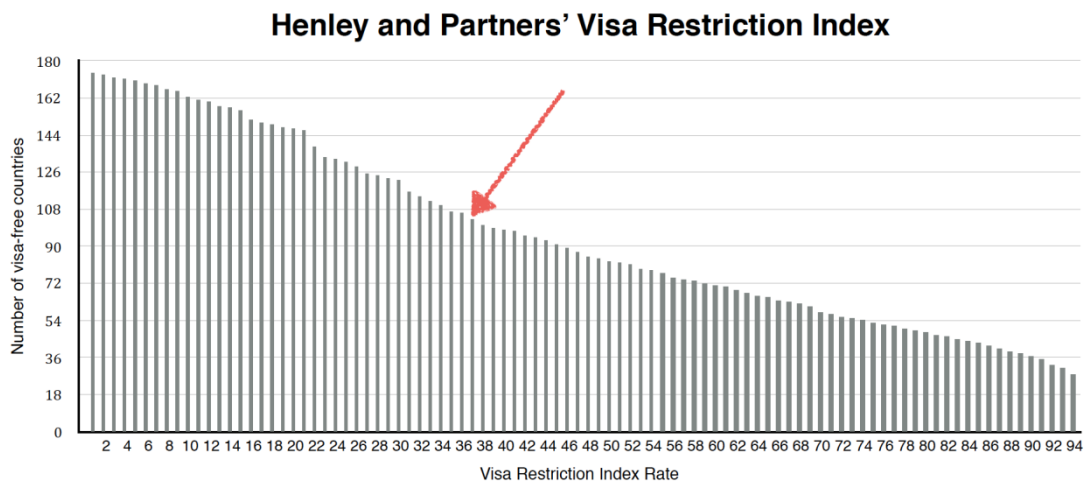
Fig. 1. Distribution across countries of Passport Power. *Arrow indicates the position of the Russian passport. Source: Henley and Partners*

While the above sources characterize visa barriers by binary variables, Hobolth's (2014) European Visa Database contains information, in addition to visa requirements, on the rejection rates of visa applications submitted by nationals of countries outside of the EU/Schengen area to any of the Schengen states.[12] Similar information, is available for US and British visas.[13] The rejection rates provide a quantitative measure of visa barriers; other such measures could be

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[10] https://www.henleyglobal.com/international-visa-restrictions/
[11] https://www.visahq.com/
[12] http://www.mogenshobolth.dk/evd/
[13] Mau (2010) uses State Department's information on US visa refusal rates; such information is essential for granting foreign nations US Visa Waiver status.

based on costs (monetary and others) of applying for a visa, as well as on imputed (opportunity) costs measured by a shortfall of actual applications in comparison to expected levels based on geographic proximity and exchanges potential (Hobolth, op. cit.). The distribution of Schengen visa refusal rates averaged over the 2006-2011 period, and a similar distribution of US visa refusals, are shown on Figure 2.

Fig. 2. Schengen and US Visa Refusal Rates. *Source: Hobolth (2014)*

Since our theory predicts the impact of institutions on visa rejection rates, we begin with a core empirical model which explains rejection rates (from the European Visa Database) by institutional quality and control variables reflection earlier empirical work on visa regimes. Detailed description of variables used in the model is presented in the Appendix.

Our institutional variables, both for institutions-services and institutions-rules, are from the Worldwide Governance Indicators (WGI) put together by Daniel Kaufmann and Aart Kraay at the World Bank. The WGI project reports governance indicators for most of the countries of the world over the period 1996–2014 for six dimensions of governance, namely Voice and Accountability, Political Stability and Absence of Violence, Government Effectiveness, Regulatory Quality, Rule of Law and Control of Corruption. The full dataset and an elaborate description of the methodology employed to construct the data are publicly available. We use Rule of Law and Control of Corruption as institutions-rules variables and Regulatory Quality and Government Efficiency as institutions-services variables.

Measures of trust, norms and values are obtained from the World Value Survey, Wave 5.[14] Apart from trust, we are interested in variables that characterize moral traits in the population, and the acceptance of improper (including unlawful) behavior. The list of such variables includes answers to questions on whether it is justifiable to be engaged in bribery, tax avoidance, claim undeserved government benefits etc., as well as on mutual help, obedience and unselfishness (see the Appendix for the full list). Many of these characteristics are strongly correlated with each other, and we compress the set by using the principal component analysis, and retain two first principal components for further use. Inspection of factor loadings suggests the following interpretations for these principal components: amorality (PC1) and acceptance of improper behavior (PC2). Higher values of these aggregates reflect lower stocks of social capital.

Most of the control variables, including GDP per capita, tourist expenditures, and political stability and terrorism/violence, are from the World Bank. We also employ the Polity IV dataset[15] to characterize political regimes. Finally, we use dyadic controls, i.e. distances between sending and receiving countries. The following table presents the summary statistics (with variables averaged over the 2006-2011 observation period).

Table 1: Summary Statistics

VARIABLES	(1) N	(2) mean	(3) sd	(4) min	(5) Max
RefusalRate	1,371	12.30	11.99	0	69.33
DistKm	1,362	5,928	3,577	605.3	18,382
Voice	1,362	-0.318	0.885	-2.217	1.517
RuleLaw	1,362	-0.225	0.856	-1.917	1.867
PolStabTerr	1,362	-0.369	0.879	-2.517	1.267
GDPpc	1,306	16,838	19,105	609	126,781
GovernEff	1,362	-0.0635	0.873	-1.983	2.300
RegQual	1,362	-0.0793	0.888	-2.367	1.933
TourExp	1,280	8.206e+09	1.736e+10	750,000	1.116e+11
ContrCorr	1,362	-0.198	0.879	-1.667	2.367
Polity	1,230	2.083	9.858	-66	10
Help	599	2.320	0.411	1.673	3.415
Properly	599	2.608	0.461	1.620	3.745
Tolerance	652	1.328	0.136	1.085	1.858
Unselfish	652	1.648	0.138	1.388	1.982
Obedience	652	1.590	0.184	1.183	1.978
Claim	658	2.721	0.816	1.464	4.726
Avoid	644	2.682	0.834	1.581	4.505
Cheat	658	2.262	0.774	1	4.742
Bribe	667	1.919	0.714	1.125	4.662
distrust_bin	665	1.744	0.143	1.258	1.962
trust_ord	622	5.625	0.926	3.889	7.948

4.2 Identification

Our theoretical analysis relates visa rejection rates to the quality of formal institutions, norms and values, and possibly interaction thereof. Within the group of formal institutions we distinguish institutions that uphold rules, such as the Rule of Law and Control of Corruption, and institutions that provide a stream of services, such as Government Efficiency and Regulatory Quality. To establish the expected impact of the above variables, we need to include sets of controls representing other factors of potential significance for visa regimes.

As noted above, our core estimations are visa refusal rates by various countries of the Schengen zone. Hence the set is three-dimensional, including time (year), receiving (Schengen) and sending countries, and all three dimensions are sources of potentially valuable variations. Ideally we would like to test our theory by specifying the rejection rate of the visa applications from country i to Schengen country j at time t as follows:

$$R_{ijt} = \alpha_0 + \alpha_1 \, Rule_{it} + \alpha_2 \, Service_{it} + \alpha_3 \, Value_{it} + \alpha_4 \, Rule_{it} \; x \; Value_{it}$$
$$+ \alpha_5 \, X_{it} + \alpha_5 \, X_{ij} + \alpha_j + \alpha_t + \varepsilon_{ijt}$$

where R_{ijt} denotes the rejection rate of the visa applications from country i to Schengen country j at time t, $Rule$ stands for institutions-rules in sending county i, $Service$ for institutions-services in the same country, and $Value$ for the quality of social values in country i. Furthermore X_i is a vector of control variables for country i, X_{ij} is a vector of controls that characterise pairs (dyads) of sending and receiving countries i and j, α_j are Schengen receiving country fixed effects, α_t are time fixed effects and ε_{ijt} the error term.

Since the Schengen rejection rates are available for a relatively short period of time, over which formal institutions and especially norms and values usually did not exhibit drastic changes, we resort to simpler approaches. First, we use weighted average refusal rates over all the receiving Schengen countries as dependent variable for a given sending country and year, and estimate the following panel regression model:

$$\bar{R}_{it}^{j} = \alpha_0 + \alpha_1 \, Rule_{it} + \alpha_2 \, Service_{it} + \alpha_3 \, Value_{it} + \alpha_4 \, Rule_{it} \; x \; Value_{it} + \alpha_5 \, X_{it} + \alpha_6 \, X_{ij} +$$
$$\alpha_t + \varepsilon_i .$$

Second, we average our variables over the observation period and estimate the following dyadic regression model:

$$\bar{R}_{ij}^{t} = \alpha_0 + \alpha_1 \, Rule_i + \alpha_2 \, Service_i + \alpha_3 \, Value_i + \alpha_4 \, Rule_i \; x \; Value_i + \alpha_5 \, X_i + \alpha_6 \, X_{ij} + \alpha_j +$$
$$\varepsilon_{ij} .$$

Given low variation of refusal rates and most of other variables over time, we report below only estimations of the second model. Estimations of the first one (not shown here) are performed as robustness checks and yield qualitatively similar results.

5. Main results

In this section we present our estimates of the model with Schengen receiving country fixed effects and with the visa refusal rate averaged over time. Estimation results of various specifications of such model are presented in Table 2.

In the first four specifications we add one-by-one various measures of institutional quality. We observe that institutions-rules (Rule of Law and Control of Corruption) have positive coefficients, whereas the coefficients of institutions-services are negative and all of them are statistically significant, most of the time at the 1% level. This is in full agreement with what our theory predicts.

Next we include measures of norms and values (Column 5), and observe that an increase in distrust is associated with higher visa barriers, also in agreement with the theory. However, we do not observe the same agreement for the two aggregates of norms and values, measuring amorality and propensity for improper behaviour.

Finally, we add interactions between the Rule of Law and measures of social capital, to gauge the joint impact of formal and informal institutions. While our theory does not make specific predictions about such interactions for all combinations of factors and parameters, it suggests that for lower stocks of social capital (more common than not for sending countries outside of the Schengen zone) one should expect stronger adverse impact of improvement in institutions-rules on visa barriers. Indeed, in Column 6 we observe highly statistically significant positive coefficients for the interactions of amorality and improper behaviour with the Rule of Law measures: an increase in the visa rejection rate in response to stronger institutions-services is more pronounced when informal institutions are poor, making "export" of rent-seeking behaviour more likely.

Table 2: Schengen Rejection Rates as a Function of Formal and Informal Institutions

	(1)	(2)	(3)	(4)	(5)	(6)
Formal Institutions						
Rule of Law	**2.91***	**6.79***	**7.85***	**4.33***	3.97	-2.73
	(0.561)	-1.187	-1.223	-1.579	-3.106	(3.812)
Government Efficiency		**-4.38***	**-2.38***	**-3.69****	6.25*	6.63*
		-1.219	-1.392	-1.544	-3.456	(3.922)
Regulatory Quality			**-3.61***	**-3.63***	-3.40	7.85**
			-1.140	-1.130	-2.137	(3.736)
Control of Corruption				**5.10***	-1.62	-3.48*
				-1.513	-2.727	(2.072)
Trust						
distrust_bin					**23.60***	2.08
					-3.948	(5.522)
Social Values						
PC1: amorality					-0.16	0.95**
					(0.222)	(0.393)
PC2: improper behavior					-1.01**	-2.72***
					(0.489)	(0.719)

	(1)	(2)	(3)	(4)	(5)	(6)
Interaction Rule of Law x Values						
RoL x PC1 amorality						**3.31*****
						(0.937)
RoL x PC2 impr behav						**2.01*****
						(0.592)
Control Variables						
ln(GDPpc)	-2.85***	-2.52***	-2.28***	-2.73***	-6.37***	-6.34***
	(0.500)	(0.497)	(0.496)	(0.501)	-1.322	(1.287)
ln(DistKm)	-1.45***	-1.16***	-1.18***	-1.74***	-1.33*	-5.17***
	(0.400)	(0.399)	(0.403)	(0.440)	(0.759)	(1.160)
ln(TourExp)	-0.78***	-0.70***	-0.85***	-0.58**	0.42	0.45
	(0.244)	(0.245)	(0.253)	(0.263)	(0.449)	(0.383)
Political Stability & Terrorism	-4.72***	-5.01***	-5.05***	-5.25***	1.50	1.18
	(0.498)	(0.513)	(0.512)	(0.523)	(0.976)	(0.896)
Polity IV	0.02	0.04	0.08**	0.08**	-0.41***	-0.46***
	(0.038)	(0.039)	(0.040)	(0.041)	(0.131)	(0.136)
Country fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1,117	1,117	1,117	1,117	470	470
R-squared	0.267	0.275	0.282	0.291	0.431	0.457

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Alternative specifications for US and UK visa rejection rates, not presented here, produce similar results and are also in agreement with the theory.

6. Alternative Data Models

In this section, we present estimations of alternative data models describing the impact of institutions on the visa barriers, using passport power and countries' places in global visa hierarchies as alternative measures of such barriers. While our theory's predictions about the role of institutions for visa regimes have been obtained for visa rejection rates, we expect that these predictions should by and large hold for other measures. The results reported below show that this is indeed the case, and as such provide valuable robustness check.

In the first data model, we use formal and informal institutions to explain the variations across the globe of Henley and Partners' Visa Restriction (Passport Power) Index. We therefore estimate the following model:

$$S_i = \propto_0 + \propto_1 Rule_i + \propto_2 Service_i + \propto_3 Value_i + \propto_4 Rule_i \, x \, Value_i + \propto_5 X_i + \propto_j + \varepsilon_{it},$$

where S_j is the number of countries that a holder of j's passport can visit without a visa. We include in the standard set of variables a dummy for the Schengen area, since this is a visa union for member countries. Estimation results are presented in Table 3 below.

We observe that the inclusion of institutions significantly improves the explanatory power of the model. Consistent with our hypotheses, institutions-services are positively correlated with passport power, and such correlations are significant statistically and economically (Column 2). For our measures of institutions-rules the results are mixed: stronger rule of law reduces passport power, as we expect, but corruption prevention this time has the opposite effect. However, we observe again the same interaction pattern between formal and informal institutions: an increase in amorality and propensity for unlawful behaviour makes the detrimental effect of improved institutions-rules for the freedom of international travel more pronounced (Column 3).

Table 3: Passport power, institutions and social norms

	(1)	(2)	(3)
Institutions			
Rule of Law		**-54.44*****	1.73
		(3.556)	(5.003)
Control of Corruption		**30.41*****	-5.35
		(3.729)	(4.624)
Government Efficiency		**19.53*****	-4.04
		(3.939)	(3.789)
Regulatory Quality		**26.57*****	16.70***
		(2.898)	(2.200)
Trust			
distrust_bin			154.08***
			(10.796)
Social Values			
PC1: amorality			-0.41
			(0.541)
PC2: improper behavior			12.42***
			(1.052)
Interaction Rule of Law x Values			
RoL x PC1 amorality			**-5.45*****
			(1.409)
RoL x PC2 improper behaviour			**-6.62*****
			(0.913)
Control Variables			
ln(GDPpc)	18.05***	7.64***	9.11***
	(1.239)	(1.346)	(1.697)
ln(DistKm)	5.74***	-2.27**	10.91***
	(1.067)	(1.060)	(2.140)
ln(TourExp)	0.28	1.35**	5.48***
	(0.657)	(0.619)	(0.866)

Political Stability & Terrorism	14.09*** (1.057)	11.11*** (1.016)	20.20*** (1.595)
Polity IV	1.58*** (0.210)	0.90*** (0.147)	2.30*** (0.133)
Schengen country fixed effects	Yes	Yes	Yes
Observations	1,117	1,117	470
R-squared	0.614	0.738	0.947

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

A yet another data model[16] makes use of the bilateral visa requirements database (Gracheva, 2014). We consider such requirements as a network (ordered graph) with nods $i, j, \ldots$ corresponding to countries, where a directed edge from node i to node j represents a visa requirement for travelling from i to j. We can now partition this network by using the stochastic block modelling (SBM) technique (Wasserman, Faust, 1994), and apply the Markov Chain Monte Carlo procedure to find the set of SBM parameters which are most likely to have generated the observed network. Once these parameters are established, we obtain a partition of nodes into blocks, which gives the relational group structure of the network. Countries that are member of the same block have more comparable visa requirements than countries across blocks. The five blocks found by the procedure in the bilateral visa requirement network are presented in Figure 3 and again, on the world map, in Figure 4.

Block 1 contains countries that impose visa requirements on one another and on most other countries and also need visa to travel to most other countries. These are a large group of relatively isolated and peripheral countries. Block 2 groups a set of countries that are relatively open to one another and to the rest of the world, but whose citizens need visas to travel to most of the rest of the world. Block 3 groups a set of countries around the USA and the Americas. These countries are very open internally and relatively open to Schengen countries, but demand visa from most of the rest of the world. Their citizens can travel to most countries without visa, with the notable exception of the isolated block 1. Block 4 contains most of the Schengen zone plus Cyprus, Bulgaria and the UK, and combines complete internal openness with very high mutual openness towards block 3. Block 4 countries travel freely to block 2 countries, but this freedom is not mutual. Block 5 is the core of the Schengen zone and contains five countries with very comparable visa policies, i.e. Belgium, Luxemburg, the Netherlands, France and Austria.

Since the blocks have a clear and ordered interpretation, we can continue our analysis by estimating an ordered probit regression, where a country's block membership is explained by the institutional variables proposed by our theory:

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[16] This data model was implemented with participation of Benjamin Vandermarliere.

$$B_i = \alpha_0 + \alpha_1 \ Rule_i + \alpha_2 \ Service_i + \alpha_3 \ Value_i + \alpha_4 \ Rule_i \ x \ Value_i + \varepsilon_i.$$

To increase comparability of the results, we omit the Schengen countries (Block 4 and 5), as they represent the receiving countries in our first empirical models.
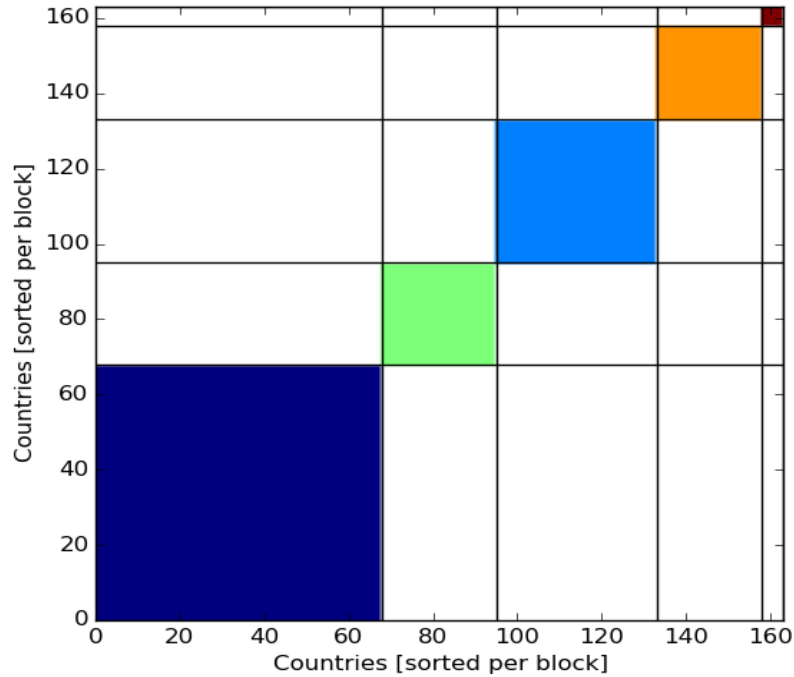

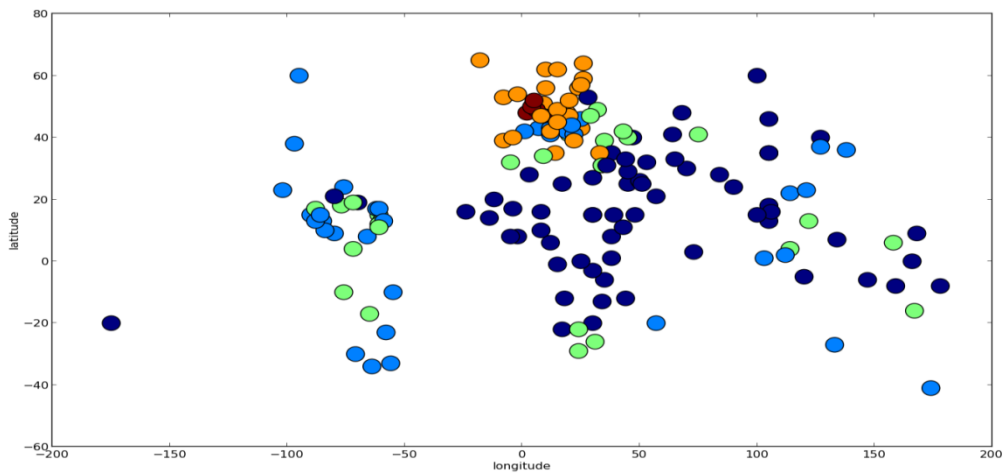Fig. 3. Blocks of Countries by Bilateral Visa Regimes

Fig. 4. Countries from Different Blocks on the World Map

The results from the above regression are presented in Table 4. The specification with social values and interactions with Rule of Law did not converge and had to be dropped. In the

remaining results, we again observe the predicted impact of the regulatory quality as an institution-service, which in general puts a nation higher in the global visa hierarchy, and of the rule of law – an institution-rule, which puts a country lower in such hierarchy. However, the effect of another institution-service – Government Efficiency, while also positive, is statistically insignificant, and the effect of control of corruption is "of the wrong sign", as in the previous data model. This could be due to the interaction with social values, but the ordered probit method does not allow us to put this conjecture to a test, given the limited amount of countries for which we have social value data.

Table 4: Explaining the Membership of Countries in Visa Hierarchy

	(1)	(2)
Institutions		
Rule of Law		**-3.05*****
		(0.695)
Control of Corruption		1.33**
		(0.548)
Government Efficiency		0.62
		(0.687)
Regulatory Quality		**1.92*****
		(0.597)
Control Variables		
ln(GDPpc)	0.34*	0.09
	(0.190)	(0.260)
ln(DistKm)	-0.13	-0.48**
	(0.156)	(0.186)
ln(TourExp)	0.05	0.09
	(0.095)	(0.089)
Political Stability & Terrorism	0.49***	0.60***
	(0.183)	(0.224)
Polity IV		-0.01
		(0.011)
Observations	90	90
Pseudo R-squared	0.137	0.300
P(Chi²)	0.000	0.000

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

7. Conclusion

In this paper we inquire, theoretically and empirically, into whether stronger rule of law, better property rights, higher effectiveness of public executives and better social norms in sending countries lead to lower area visa barriers faced by their citizens. This question is far from trivial since our intuitive expectations about the positive effect of strong institutions on the freedom of international travel are at odds with the paradoxical observation that many sending

countries, having improved the enforcement of their rules and regulations, find themselves faced with higher, rather than lower, visa barriers.

We analyze the decision problem of granting visa to an applicant from a given sending country as a balancing act between the ex-ante potential economic benefits of mobility on the one hand and the ex-ante risk of accepting a rent-seeker on the other. In our theoretical model visa restrictions therefore depend on institutions and social norms in the sending country. We unbundle institutions into institutions-services, which complement productive activities and contribute to the provision of public goods, and institutions-rules, which strengthen the rule of law and constrain unproductive behavior. While stronger institutions-services reduce the incentives to seek a better life abroad and hence reduce the risk of accepting a possible visa regime violator, improved institutions-rules lead to spillover of undesirable behavior abroad and thus raise this risk for receiving countries. Stronger social norms in the sending country are unambiguously related to a lower ex-ante risk of violation of visa rules, and furthermore affect the strength of the impact of institutions-rules.

We test the predictions of the theoretical model in several related contexts. We confirm that Schengen visa rejection rates are indeed negatively related to institution-services and social norms and positively to institution-rules, shedding light on the paradoxical stylized fact that motivates this paper: strengthening the rule of law in one's home country may raise obstacles to his/her international travel, especially when the country in question has a low stock of social capital.

The paper is a yet another effort to "unbundle" institutions and a demonstration of intricate and sometimes counter-intuitive complementarities between formal and informal institutions, which should be kept in mind while predicting social, economic etc. outcomes of institutional change.

Appendix. Description of main variables

1. Dependent Variable

"RefusalRate" – Short Stay Refusal Rate (The European Visa Database project, by Mogens Hobolth, see Hobolth (2014)). For each sending country calculated as the number of visas issued to its members divided by the number of visa applications. Averaged over the time period (2006-2011).

2. Control variables

"GDPpc" – Gross Domestic Product per Capita (World Bank, World Development Indicators, GDP per capita, constant 2005 $ US)

"DistKm" – Distance from sending country to receiving country (The European Visa Database project, by Mogens Hobolth, see Hobolth (2014)). For each sending country calculated as a distance in kilometers to each receiving Schengen country.

"TourExp" – International tourism, expenditures (World Bank, World Development Indicators, current $ US)

"Polity" – Polict variable (The Polity IV project) The "Polity Score" captures this regime authority spectrum on a 21-pont scale ranging from -10 (hereditary monarchy) to +10 (consolidated democracy). The Polity scheme consists of six component measures that record key qualities of executive recruitment, constraints on executive authority and political competition. It also records changes in the institutionalized qualities of governing authority.

"Voice" – Voice and Accountability, estimate (World Governance Indicators (World Bank)). Reflects perceptions of the extent to which a country's citizens are able to participate in selecting their government, as well as freedom of expression, freedom of association, and a free media. Ranges from -2.5 to 2.5.

"PolStabTerr" – Political Stability and Absence of Violence/Terrorism, estimate (World Governance Indicators (World Bank)). Reflects perceptions of the likelihood that the government will be destabilized or overthrown by unconstitutional or violent means, including politically-motivated violence and terrorism. Ranges from -2.5 to 2.5.

3. Formal Institutions

World Governance Indicators (World Bank):

"GovEff" – Government Effectiveness, estimate. Reflects perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy. Ranges from -2.5 to 2.5.

"RegQual" – Regulatory Quality, estimate. Reflects perceptions of the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development. Ranges from -2.5 to 2.5

"RuleLaw" – Rule of Law, estimate. Reflects perceptions of the extent to which agents have confidence in and abide by the rules of society, and in particular the quality of contract enforcement, property rights, the police, and the courts, as well as the likelihood of crime and violence. Ranges from -2.5 to 2.5

"ContrCorr" – Control of Corruption, estimate. Reflects perceptions of the extent to which public power is exercised for private gain, including both petty and grand forms of corruption, as well as "capture" of the state by elites and private interests. Ranges from -2.5 to 2.5

4. Informal institutions (social capital measures)

World Values Survey (wave 5, 2005-2009):

"Tolerance" – refers to the **question V16:** "Here is a list of qualities that children can be encouraged to learn at home. Which, if any, do you consider to be especially important? Please choose up to five! (Code five mentions at the maximum)". 1 – if Tolerance is mentioned, 2 – if Tolerance is not mentioned.

"Unselfish" – refers to the **question V20:** "Here is a list of qualities that children can be encouraged to learn at home. Which, if any, do you consider to be especially important? Please choose up to five! (Code five mentions at the maximum)". 1 – if Unselfishness is mentioned, 2 – if Unselfishness is not mentioned.

"Obedience" – refers to the **question V21:** "Here is a list of qualities that children can be encouraged to learn at home. Which, if any, do you consider to be especially important? Please choose up to five! (Code five mentions at the maximum)". 1 – if Obedience is mentioned, 2 – if Obedience is not mentioned.

"distrust_bin" – refers to the **question V23:** "Generally speaking, would you say that most people can be trusted or that you need to be very careful in dealing with people? (Code one answer): 1 – most people can be trusted; 2 – Need to be very careful".

"trust_ord" – refers to the **question V47:** "Do you think most people would try to take advantage of you if they got a chance, or would they try to be fair? Please show your response on this card, where 1 means that "people would try to take advantage of you," and 10 means that "people would try to be fair" (code one number)" Ranges from 1 (People would take advantage of you) to 10 (People would try to be fair).

"Help" – refers to the **question V84:** "Now I will briefly describe some people. Using this card, would you please indicate for each description whether that person is very much like you, like you, somewhat like you, not like you, or not at all like you? "It is important to this person to help the people nearby; to care for their well-being" – answers ranging from 1 (very much like me) to 6 (not at all like me).

"Properly" – refers to the **question V87:** "Now I will briefly describe some people. Using this card, would you please indicate for each description whether that person is very much like you, like you, somewhat like you, not like you, or not at all like you? "It is important to this person to always behave properly; to avoid doing anything people would say is wrong" – answers ranging from 1 (very much like me) to 6 (not at all like me).

"Claim" – refers to the **question V198:** "Please tell me for each of the following actions whether you think it can always be justified, never be justified, or something in between, using this card. "Claiming government benefits to which you are not entitled" – ranging from 1 (never justifiable) to 10 (always justifiable).

"Avoid" – refers to the **question V199:** "Please tell me for each of the following actions whether you think it can always be justified, never be justified, or something in between, using this card. "Avoiding a fare on public transport" – ranging from 1 (never justifiable) to 10 (always justifiable).

"Cheat" – refers to the **question V200:** "Please tell me for each of the following actions whether you think it can always be justified, never be justified, or something in between, using this card. "Cheating on taxes if you have a chance" – ranging from 1 (never justifiable) to 10 (always justifiable).

"Bribe" – refers to the question **V201:** "Please tell me for each of the following actions whether you think it can always be justified, never be justified, or something in between, using this card. "Someone accepting a bribe in the course of their duties" – ranging from 1 (never justifiable) to 10 (always justifiable).

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