Country-Specific Investments and the Rights of Non-Citizens

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In a 2007 article, Adam Cox and Eric Posner developed a "Second Order" theory of immigration law that offered predictions about when countries are likely to provide non-citizens with strong legal protections from removal. They argued that states benefit when migrants make "country-specific" investments, but that migrants are only willing to make those investments when they are afforded strong legal protections that would secure their place in the host country. One implication of this theory was that because countries with less common national languages require greater country-specific investments from migrants, those countries are likely to provide migrants with strong legal protections. In this short paper, we empirically test that hypothesis. Consistent with the theory, we find that countries with less common national languages are more likely to provide a right to asylum in their constitution or sign bilateral labor agreements.

I. INTRODUCTION

In an article published in the *Stanford Law Review* in 2007, Adam Cox and Eric Posner developed a theory about when countries would provide non-citizens with legal protections from deportation.[1] They argued that countries would typically like to reserve the right to deport non-citizens when either those non-citizens reveal themselves to be undesirable residents or when economic and security conditions worsen. Potential migrants, on the other hand, would prefer to be granted strong legal protections that ensure they will not be deported after they have made the investments required to move to a country.

The theory suggests that countries balance these considerations when determining the strength of legal protections for non-citizens, and that countries that require migrants to make larger country-specific investments will provide greater legal protections to attract potential migrants than will other countries. Country-specific investments are investments—like learning an uncommon foreign language—that require continued residence in a specific country to gain a return.[2] The theory thus suggests that, when a country's national language is relatively uncommon, the country will provide potential migrants greater legal protections to attract them to make the investment required to move to their country.[3]

To our knowledge, no one has previously tried to test this hypothesis. To do so, we have collected data on the prevalence of countries' national languages and two measures of the legal protections countries offer to non-citizens: whether countries offer the constitutional right to asylum and the number of bilateral labor agreements a country has signed. Although there are limitations to the generalizations we can make from the data, our results are consistent with the hypothesis: countries with less common national languages are more likely to have a constitutional right to asylum and more likely to sign bilateral labor agreements.

This short paper proceeds as follows. In Part II, we explain the theory developed by Cox and Posner (2007) and the hypothesis that derives from the theory. In Part III, we explain the data that we have collected on countries' national languages and the measures we use of the legal protections given to migrants. In Part IV, we present bivariate and regression results that test the theory. Because of data limitations, our results are tentative and offered in an exploratory spirit.

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1 Adam B. Cox & Eric A. Posner, *The Second Order Structure of Immigration Law*, 59 STAN. L. REV. 809 (2007) [hereinafter *Second Order*]. *Cf.* Adam B. Cox & Eric A. Posner, *The Rights of Migrants: An Optimal Contract Framework*, 84 N.Y.U L. REV. 1403 (2009) (discussing the optimal migration contract between the state and the migrant).

2 *Second Order*, *supra* note 1, at 828.

3 *Id.* at 834.

II. THEORY

A. Country Specific Investments & Migrant Rights

Cox and Posner (2007) examine the conditions under which a rational, self-interested state will give immigrants and migrant workers legal protections against deportation.[4] They argue that states benefit when migrants make country-specific investments but also want to retain the power to deport migrants when economic or security conditions change for the worse. The generosity of the legal protections given to migrants should balance these two factors.

The argument is loosely based on signaling models in economics. In signaling models, parties resolve information asymmetry problems by taking an action that sends private information (e.g., workers can send potential employers a signal that they are a *good* type by investing in education that distinguishes them from *bad* types who would have more difficulty gaining the educational credential).[5]

Imagine that a state must decide whether to admit or exclude a migrant at time 0. Migrants come in two types: *low* types generate low, zero, or negative value for the state because they have few skills, or criminal propensities. *High* types generate high value for the state. The type of a migrant depends not only on skills, but also her ability to follow the laws, make connections, and in other ways assimilate. A state gains from admitting high types because they earn money and pay taxes, and because they provide services to citizens; a state loses from low types because they earn little money and pay few taxes, cause congestion, may become dependent on public services, and may commit crimes.[6]

At time 1, the state experiences either a continuation of normal economic and security conditions, or it undergoes an economic downturn or security crisis. Depending on the severity of the downturn or crisis, the state may want to deport high types as well as low types. Even in good times, a state may, because of errors in the deportation process, mistakenly identify a high type as a low type and deport him. For these reasons, migrants will benefit from procedural protections that reduce the risk of error in removal proceedings at time 1. However, all else equal, the state will want to deny them procedural protections so as to enjoy maximum flexibility to determine the foreign-born composition of the population.

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4 *See id.* at 824–35.

5 *See* Michael Spence, *Job Market Signaling*, 87 Q.J. ECON. 355 (1973).

6 Thus, they do not assume that the high/low type dichotomy matches high/low skills. Low-skilled workers who assimilate may be high types, especially in countries where native workers refuse to take low-skill jobs.

The final piece of the puzzle is the concept of the country-specific investment. When migrants decide whether to migrate, they anticipate that they will need to make an investment in time and money that will be partly or fully lost if they are removed from the country before a substantial period of time has passed. The country-specific investment may encompass a number of costs: transporting oneself and one's belongings to the host country; developing networks and support systems in the new country; or learning a new language. Country-specific investment is a matter of degree. Some investments, like learning to navigate a foreign bureaucracy, can be useful in multiple countries. Other investments, like the cost of moving to the host country, are more clearly at the country-specific end of the spectrum because the cost can be recovered only through work in the host country.

We can now see why the host country faces a complex problem when it calibrates the legal protections that it offers migrants. If legal protections are too great, the host country may have trouble deporting undesirable (low-type) migrants who make it through the initial screening procedure, or either type of migrant if a crisis strikes. If legal protections are too weak, the host country will have trouble attracting desirable (high-type) migrants and encouraging them to make country-specific investments.

B. Hypothesis

If countries are rational, one clear prediction of this theory is that countries that require migrants to make greater country-specific investments will offer greater legal protections.[7] As previously noted, one example of a highly salient country-specific investment is the acquisition of language skills. Learning a language can be costly, time consuming, and frustrating.[8] But gaining at least some proficiency is often required to navigate life in a new country. In other words, gaining language skills can be a necessary investment when moving to a new country.

Not all investments in language are equally country-specific. Consider the difference between English and German. English is the national language in fifty-four countries, and serves as a lingua franca, especially in business, in dozens more. A Russian who migrates to the United States and learns English but is then forced to leave will be able to use her English-

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7 It is worth noting that there are other predictions that can be generated from this theory. For example, countries that seek low-skilled migrants may offer less generous legal protections than countries that seek high-skilled migrants. This is because countries do not need to offer legal protections to low-skilled migrants because there is a large supply of such migrants and because low-skilled migrants can typically generate wealth without making significant country-specific investments. *See Second Order, supra* note 1, at 834–35.

8 *Id.* at 834.

language skills all over the world. By contrast, German is an official language in only six European countries, and is spoken by minorities in a few other places. Accordingly, migrants to Germany will (largely) lose the benefit of their German language skills if they are deported. Therefore, if Germany and the United States otherwise benefit to the same degree from attracting migrants, the theory predicts that Germany is likely to offer greater legal protections than the United States will. More specifically: *countries with less common native languages offer more generous legal protections than countries with more common native languages.*

III. DATA

A. Legal Protections for Non-Citizens

A major obstacle to testing this hypothesis is finding measures of legal protections that are provided for non-citizens that are available for a cross section of countries. In principle, we want a dependent variable that generally measures all the rights offered to migrants, including their practical effectiveness. Because of data limitations, we use two dependent variables that only loosely approximate this ideal.

First, we use the variable of whether countries have a constitutional right to asylum as a measure of the legal protections that countries offer to non-citizens. The right to asylum does not apply to all migrants, but only refugees. Still, for this class of migrants, the right offers significant protections and may reflect a country's overall generosity toward migrants. Mila Versteeg has coded the contents of 186 of the world's constitutions,[9] and according to her data, roughly 35% of countries have an explicit provision in their constitution that provides refugees with a right to asylum.[10] We use whether a country had a *Right to Asylum*—coded as 0 if no, or 1 if yes—in their constitution in 2010 as our first dependent variable.

Second, we use the number of *Bilateral Labor Agreements* that a country has signed as an alternative dependent variable. Bilateral labor agreements are agreements that pairs of countries sign to govern the migration of their citizens between each country. These treaties typically create a process for regulating the flow and return of the migrants, establish commitments to help screen potential migrants, create a process for regulating the flow and return of the migrants, and specify the rights that countries will provide to

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9 This data has been used and discussed in a number of previous studies. *See, e.g.*, David S. Law & Mila Versteeg, *The Evolution and Ideology of Global Constitutionalism*, 99 CAL. L. REV. 1163 (2011); Adam Chilton & Mila Versteeg, *Do Constitutional Rights Make a Difference?*, 60 AM. J. POL. SCI. 575 (2016).

10 Lucas Kowalczyk & Mila Versteeg, *The Political Economy of the Constitutional Right to Asylum*, 102 CORNELL L. REV. 1219, 1219 (2017).

non-citizens.[11] Although comprehensive data on the number of bilateral labor agreements that countries have signed has not been available for empirical research, we have recently created a new dataset of these agreements.[12] The number of agreements that countries have signed serves as a good proxy for the rights of non-citizens because signing the agreements typically requires the government to agree to give the migrants specific protections that they otherwise would not have.[13]

B. Independent Variables

For our measure of the country-specific investment required by each country, we developed a measure of how common a country's national language is around the world. To do so, we first recorded the national language of countries around the world by drawing on a number of sources. We drew most heavily from the CIA World Factbook. We then found the estimates of the number of people in the world that are believed to speak that language and divided the estimates by the world's population in that year.[14] For example, our estimate was that 12.91% of the world's population speaks English, so the United Kingdom and the United States were both coded as 12.91 for this variable. Through this process, we produced an estimate of whether 193 countries around the world had a *Common National Language*.[15]

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11 *See generally* Piyasiri Wickramasekara, *Bilateral Agreements and Memoranda of Understanding on Migration of Low Skilled Workers: A Review*, International Labour Organization [ILO] (July 2015) (analyzing developments of bilateral agreements and formulating advice based on findings).

12 *See* Adam S. Chilton & Eric A. Posner, *Why Countries Sign Bilateral Labor Agreements*, J. Leg. Stud. (forthcoming).

13 It is worth noting that many bilateral labor agreements designate a host state and a source state, and the host state may be the only country that commits to providing additional rights to migrants. For this analysis, we simply use the total number of bilateral labor agreements a country has signed, which includes agreements the country has signed as either a host or source state.

14 *See* Ethnologue, https://www.ethnologue.com/ (last visited Feb. 2, 2017) for our primary source of information.

15 We attempted to use estimates from 2010, but when this information was unavailable, we used the closest available year.

Table 1: Summary Statistics

	Obs.	Mean	Std. Dev.	Min.	Max.
Measures of Legal Protection					
Right to Asylum	183	0.34	0.48	0	1
Bilateral Labor Agreements (#)	193	5.36	10.62	0	86
Independent Variables					
Common National Language	193	0.04	0.05	0	0.15
GDP Per Capita (ln)	193	9.03	1.23	6.31	11.72
Population (ln)	193	2.21	1.51	0.01	7.20
Polity Score	164	3.87	6.26	-10	10
Constitutional Rights (#)	180	40.47	14.69	1	76
Foreign Born Population (%)	192	0.09	0.14	0.00	0.88

Our variable for common national language is unavoidably crude. Someone who learns Chinese in order to work in China may not have many opportunities to use his Chinese language skills if he is expelled from China. There are other ways to construct this variable: for example, common national language could be set equal to the number of countries with a particular national language divided by the number of countries in the world. However, this alternative would under weigh languages that are used in minority linguistic communities—and Chinese is an important example. On balance, we prefer our approach because it is simple and seems reasonably accurate.

We also collected several control variables that may influence the number of rights that countries provide to non-citizens. As a measure of a country's wealth and how attractive it would be for potential migrants, we collected the countries' *GDP per capita* in 2010.[16] As a measure of the size of a country, we collected the countries' *Populations* in 2010.[17] As a measure of how democratic a country is, we collected the countries' *Polity Scores* for 2010.[18] As a measure of how many rights a country provides to its citizens, we collected the number of *Constitutional Rights* (out of a maximum of eighty-seven) that were included in its constitution in 2010.[19] Finally, we collected

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16   We use World Bank Data on GDP per Capita. World Bank, https://data.worldbank.org/indicator/NY.GDP.PCAP.CD (last visited Oct. 29, 2017).

17   We also use World Bank data on Population. World Bank, https://data.worldbank.org/indicator/SP.POP.TOTL (last visited Oct. 29, 2017).

18   Polity Scores are a commonly used measure in international relations research that scores countries on a scale from -10 (most autocratic) to +10 (most democratic). We specifically use the Polity2 score from the Polity project. The Polity Project http://www.systemicpeace.org/polityproject.html (last visited February 2, 2017).
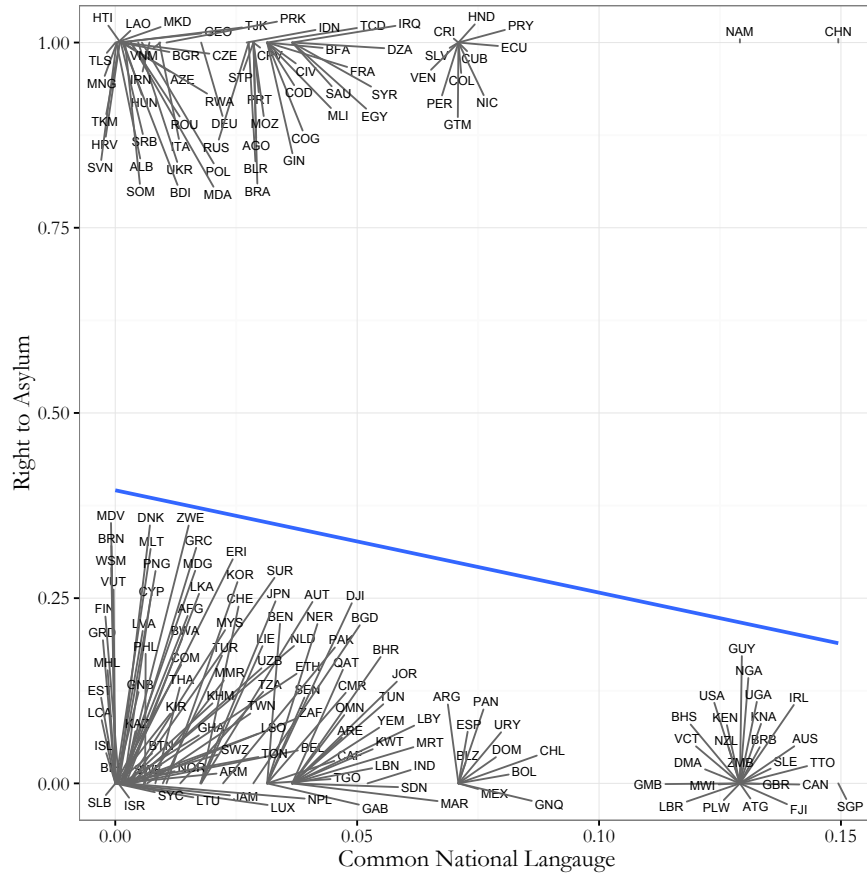
19   *See* Chilton & Versteeg, *supra* note 10, for more information on these eighty-seven rights.

data from the UN Population Division on each country's *Foreign-Born Population*. Table 1 provides summary statistics for each of our variables.

IV. RESULTS

A. Bivariate Results

Figure 1: Common National Language & Right to Asylum

To test the plausibility of our hypothesis, we begin by evaluating the relationship between our key independent variable and our two measures of legal protections for non-citizens. Figure 1 does so by presenting the relationship between *Common National Language* and the *Right to Asylum*. Since many countries occupy identical spaces on the graph—for example, all of the countries without a right to asylum that speak Spanish would appear in an identical location in Figure 1—we use a form of jittering that draws a line from the point where an observation should appear to a space on the graph

that allows for the abbreviation for the country to appear. The bold line shows the correlation between the two variables.

As Figure 1 shows, there is a negative relationship between having a common national language and a country's constitution providing a right to asylum. In other words, countries with more common national languages are less likely to have a right to asylum. The correlation between these two variables is -0.13 and the result is statistically significant (p = 0.08). Of countries with a national language spoken by more than 10% of the world, only two provide a constitutional right to asylum: China and Namibia (where the national language is English). It is also worth noting that China's language is common because it is spoken by nearly a billion people in China and not because it is spoken in many countries—which means that moving to China still requires a large country-specific investment. That said, this figure lends support to our hypothesis: countries with more common national languages, which thus require lower country specific investments to move to, are less likely to offer legal protections for non-citizens.

Figure 2: Common National Language & # of Bilateral Labor Agreements Signed
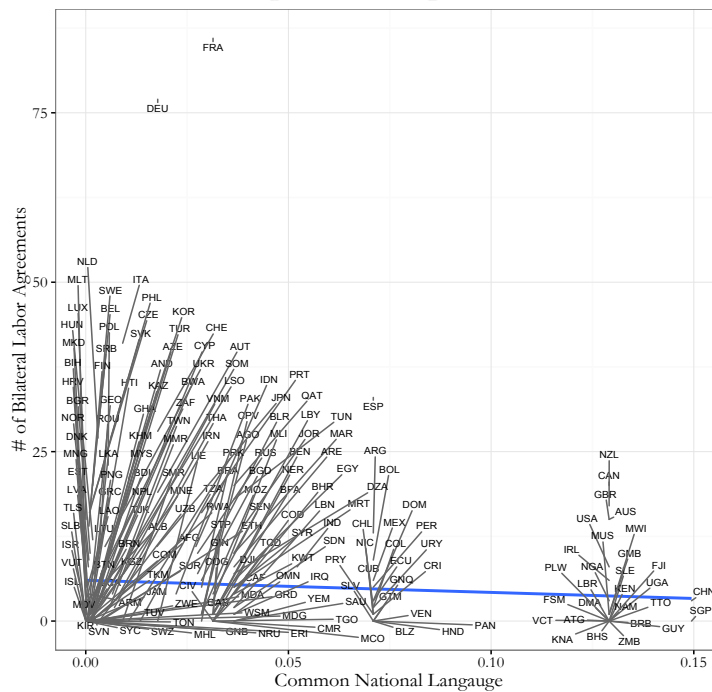

Figure 2 graphs the relationship between having a *Common National Language* and the number of *Bilateral Labor Agreements* that a country has

signed. Once again, there is a negative relationship between our language variable and this measure of legal protection for non-citizens. In other words, countries with a more common national language are less likely to have joined bilateral labor agreements. The correlation is -0.08, but it is not statistically significant at the conventional level (p = 0.29). Interestingly, the largest outliers are European countries with relatively uncommon languages. This includes France and Germany, but Italy and the Netherlands are two other examples of countries with uncommon languages. On the other end of the spectrum, rich destination countries that speak English—like the United States, the United Kingdom, Australia, and New Zealand—have signed relatively few bilateral labor agreements. These results are also consistent with our hypothesis.

B. Regression Results

Table 2: Logit Regressions Predicting Right to Asylum

	(1)	(2)	(3)	(4)	(5)	(6)
Common National Language	-6.59*	-6.41*	-7.94*	-8.04*	-10.29**	-9.83*
	(3.78)	(3.80)	(4.10)	(4.30)	(5.23)	(5.21)
GDP Per Capita (ln)		-0.17	-0.16	-0.12	-0.09	0.15
		(0.13)	(0.13)	(0.14)	(0.16)	(0.21)
Population (ln)			0.36***	0.23*	0.21	0.12
			(0.11)	(0.13)	(0.14)	(0.15)
Polity Score				-0.01	-0.08**	-0.10**
				(0.03)	(0.04)	(0.04)
Constitutional Rights (#)					0.09***	0.08***
					(0.02)	(0.02)
Foreign Born Population (%)						-4.81
						(3.17)
Observations	183	183	183	159	154	153

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

To further test our hypothesis, we also estimate a series of regressions. Since our first dependent variable is binary—countries are coded as either having (0) or not having a right to asylum (1)—we use a logit model.[20] Our results are robust, however, compared to alternatively estimating a standard linear regression (referred to as a linear probability model).[21]

Table 2 presents a series of logit regressions estimating the relationship between *Common National Language* and the *Right to Asylum*. Model 1 begins by excluding control variables and produces a result that is consistent with

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20 *See generally* LEE EPSTEIN & ANDREW D. MARTIN, AN INTRODUCTION TO EMPIRICAL LEGAL RESEARCH 212–19 (2014) (explaining why logit regressions can be preferable to linear models when dependent variables are binary).

21 Although the results are substantively the same, the p-value for our variable of interest, *common national language*, is 0.107 for Model 6 in Table 2 when using a linear probability model.

the hypothesis and our results in the prior section: there is a negative and statistically significant relationship between a country having a common national language and the right to asylum. In Model 2 we add a control for the countries' *GDP per capita*; in Model 3 we add a control for the countries' *Populations*; in Model 4 we add a control for the countries' *Polity Scores*; in Model 5 we add a control for a countries' *# of Constitutional Rights*, and in Model 6 we add a control for the countries' *% of Foreign Born Population*. In all specifications, the results are consistently negative and statistically significant at least at the 0.1 level.

Figure 3: Marginal Effects of Common National Language on Right to Asylum
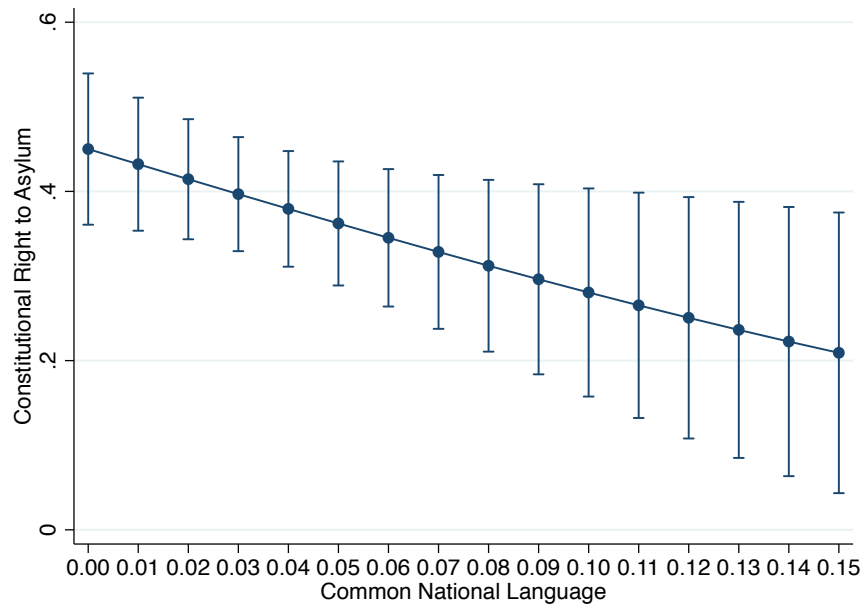
The coefficient for *Common National Language* is not only consistently statistically significant, it is also consistently substantively large. To explain the size of these effects, Figure 3 presents the marginal effect of common national language based on the regression specification of Model 6. The results in Figure 3 show that moving from having a language that is spoken by 0.01 of the world's population to 0.15 of the population is associated with moving from a 43 percent probability of having a right to asylum to a 21 percent probability.

Table 3: Negative Binominal Regressions Predicting # of Bilateral
Labor Agreements Signed

|	(1)	(2)	(3)	(4)	(5)	(6)
Common National Language	-4.41	-5.80**	-6.82***	-6.62***	-6.97***	-7.59***
	(3.14)	(2.81)	(2.30)	(2.25)	(2.41)	(2.42)
GDP Per Capita (ln)		0.88***	0.90***	0.86***	0.82***	0.75***
		(0.10)	(0.04)	(0.08)	(0.09)	(0.11)
Population (ln)			0.64***	0.46***	0.44***	0.47***
			(0.08)	(0.07)	(0.07)	(0.08)
Polity Score				0.02*	0.04**	0.04**
				(0.02)	(0.02)	(0.02)
Constitutional Rights (#)					-0.01	-0.01
					(0.01)	(0.01)
Foreign Born Population (%)						0.83
						(0.88)
Observations	193	193	193	163	156	155

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table 3 presents a series of regressions estimating the relationship between *Common National Language* and the number of *Bilateral Labor Agreements* a country has signed. Since the dependent variable is count data—the number of bilateral labor agreements a country has signed starts at zero and counts up from there—we use negative binomial models for these regressions.[22]

The Models in Table 3 include the same variables as the regressions in Table 2. Consistent with Figure 2, the sign in Model 1 is negative, but the relationship is not statistically significant. After we control for the countries' *GDP per capita* in Model 2, however, the result becomes statistically significant. This result holds in Models 2 through 6.

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22 *See* LEE EPSTEIN & ANDREW D. MARTIN, *supra* note 20 at 219–21. We elected to use a negative binominal model instead of a Poisson model, the other commonly used option for count data, because our data displays signs of over dispersion. The results in Table 3 are substantively the same, however, when using a Poisson model, a linear model, a linear model with the dependent variable as the log+1 of bilateral labor agreements signed, or a zero-inflated negative binomial model.

Figure 4: Marginal Effects of Common National Language on # of
Bilateral Labor Agreements Signed
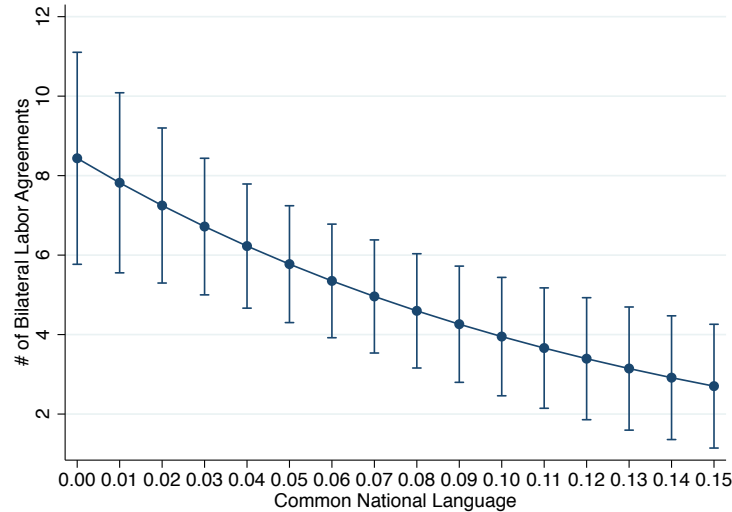
Once again, this result is substantively large. Figure 4 presents the marginal effects for common national language for Model 6 in Table 3. The figure shows that moving from having a language that is spoken by 0.01 of the world's population to 0.15 of the population is associated with moving having signed an average of 7.9 bilateral labor agreements to having signed an average of 2.9 bilateral labor agreements. Since the mean number of bilateral labor agreements signed is 5.4, this is a substantial change.

C. Limitations

Our results are exploratory, and they are subject to a number of limitations and qualifications. First, our results simply demonstrate a correlation between the variables, and they should not be interpreted as causal estimates. However, reverse causation—a country's generous protection of migrant rights causes it to have an uncommon language—is extremely implausible.

Second, omitted variables may explain the correlations we find. For example, it may be the case that countries with less common languages are also more likely to risk international isolation, and as such, enter numerous bilateral labor agreements in order to strengthen relations with other countries.

Third, as noted above, our dependent variables are less than ideal. Future research should test whether common national language is associated with countries' domestic laws governing the rights of non-citizens within a country, and not just the contents of its constitution or the treaties that it has signed.

V. CONCLUSION

Scholars have explored many aspects of migration and migration policy, but have neglected questions of institutional design, including the rights that countries give migrants and the international agreements that they enter into in order to protect migrants. We hope that this paper will stimulate research in this area. Our empirical strategy illustrates a way to connect legal and institutional rules with general demographic features of countries. Our tentative results will, we hope, encourage scholars to further investigate these questions.

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