Immigration, Justice Remittances, and US Courts

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Online Appendix

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Descriptive statistics

[Table needed here after APSA]

Sensitivity analysis

We examine how large an unobserved confounder would need to be to change our results using the procedure in Cinelli and Hazlett (2020). Assume that there is an unobserved confounder such that our estimate of the effect of Immigrant Stock is greater than 0 but the true effect is 0. In this case, our estimated coefficient would be biased. Cinelli and Hazlett (2020) show that this bias can be calculated from the amount of variation (R^2) that the confounder explains in both the outcome and explanatory variables. Their procedure then allows us to calculate how much variation this confounder must explain such that the bias in our estimate is large enough that the true estimate is 0. It also allows us to examine how large a hypothetical confounder would need to be in comparison to other variables.

Table A1 below report a few different statistics to understand how large an effect a variable would have to have to take our estimates to zero. The first, $R^2_{Y\sim D|\mathbf{X}}$, shows how much of the residual variation in the treatment (Immigrant Stock) an an extreme confounder that explains 100% of the residual variance of the outcome (Judgments) would have to explain to take the coefficient on Immigrant Stock to zero, The second, $RV_{q=1}$, shows the percentage of the residual variation of both the treatment and outcome that a confounder would need to explain to bring the point estimate to zero and the third, $RV_{q=1,\alpha=.05}$, shows the percentage of the residual variation needed to bring the estimate to a range where it is no longer "statistically different" from 0.

As we can see, in no cases is the percent of residual variation needed to take the estimate to zero very large; however, in most cases our R^2 is quite small. Thus an unobserved confounder would need to explain a great deal of the remaining variation to take our point estimate to 0.

Table A1: Minimal sensitivity analysis reporting.

Treatment: Immigrant Stock	Est.	S.E.	t(H0=0)	$R^2_{Y\sim D\|\mathbf{X}}$	$RV_{q=1}$	$RV_{q=1,\alpha=.05}$
Outcome: Judgment (Any)	0	0	6.173	.01%	.91 %	.62%
Outcome: Judgment (Count)	0	0	4.252	0%	.63 %	.34%
Outcome: Judgment (First)	0	0	6.494	.01%	1.1 %	.77%

Alternative estimation methods

Table A2: Regression of Judgments on Immigration and Controls using Logit and Zero-Inflated Negative Binomial

	(1) Any	(2) Count
Main Model		
Immigrant Stock (5 yr lag)		
Immigrant Stock (log)	0.22***	0.20***
	(0.061)	(0.059)
Atrocities (10 yr average)		
PTS	0.93***	1.00***
	(0.090)	(0.089)
Democracy	0.28+	0.48**
	(0.17)	(0.17)
Costs (5 yr lag)		
Alliance	0.38	0.25
	(0.23)	(0.24)
Major Power	1.62***	1.73***
	(0.36)	(0.35)
English Speaking	0.84***	1.02***
	(0.18)	(0.18)
Prior ATS Judgment	1.84***	1.53***
	(0.19)	(0.23)
District Attributes (5 yr lag)		
Education	0.54	0.055
	(0.37)	(0.74)
Income	0.98***	1.09***
	(0.18)	(0.30)
Population (log)	0.78***	0.027
	(0.066)	(0.20)
Constant	-10.2***	-8.32***
	(0.33)	(0.59)
Inflate Model		
Population (log)		-2.68***
		(0.72)
Constant		1.85**
		(0.57)
/		
lnalpha		3.07***
		(0.26)
Observations	459515	459515
Pseudo R^2	0.22	
Dependent Variable Mean	0.00092	0.0011

+ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$
Robust standard errors clustered by district-sending country dyad in parentheses. Models 1 is a logit model and Model 2 is a zero-inflated negative binomial model. All continuous variables have been standardized.

Alternative lag structures

Table A3: Regression of Judgments on Immigration and Controls, 3-year lag

	(1) Any	(2) Count	(3) First
Immigrant Stock (3 yr lag)			
Immigrant Stock (log)	0.00030*	0.00026	0.56***
	(0.00014)	(0.00017)	(0.17)
Atrocities (5 yr average)			
PTS	0.00078***	0.0010***	0.73***
	(0.00012)	(0.00017)	(0.18)
Democracy	0.00033**	0.00061**	-0.40
	(0.00012)	(0.00019)	(0.30)
Costs (3 yr lag)			
Alliance	0.00020	-0.000030	1.51**
	(0.00020)	(0.00026)	(0.54)
Major Power	0.0014*	0.0014*	1.46*
	(0.00069)	(0.00069)	(0.64)
English Speaking	0.00087***	0.0014***	0.91*
	(0.00025)	(0.00038)	(0.38)
Prior ATS Judgment	0.0038***	0.0046***	
	(0.00043)	(0.00058)	
District Attributes (3 yr lag)			
Education	-0.00017***	-0.00026***	-0.47
	(0.000050)	(0.000067)	(0.51)
Income	-0.0000081	-0.000056	-0.56***
	(0.000076)	(0.000084)	(0.082)
Population (log)	0.00042***	0.00053***	0.91***
	(0.000069)	(0.000097)	(0.11)
Observations	435838	435838	334079
R^2	0.0040	0.0033	
Pseudo R^2			0.13
Dependent Variable Mean	0.00088	0.0011	0.00011

$^{+}$ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Robust standard errors clustered by district-sending country dyad in parentheses. Models 1 is a logit model and Model 2 is a zero-inflated negative binomial model. All continuous variables have been standardized.

Table A4: Regression of Judgments on Immigration and Controls, 7-year lag

	(1) Any	(2) Count	(3) First
Immigrant Stock (7 yr lag)			
Immigrant Stock (log)	0.00021^{+}	0.00015	0.57***
	(0.00012)	(0.00015)	(0.17)
Atrocities (20 yr average)			
PTS	0.0011***	0.0014***	1.10***
	(0.00016)	(0.00022)	(0.20)
Democracy	0.00036**	0.00066**	-0.34
	(0.00013)	(0.00021)	(0.35)
Costs (7 yr lag)			
Alliance	0.00034^{+}	0.00013	1.68***
	(0.00019)	(0.00026)	(0.51)
Major Power	0.0015*	0.0015*	1.60*
	(0.00073)	(0.00073)	(0.66)
English Speaking	0.00082***	0.0013***	1.15**
	(0.00024)	(0.00035)	(0.43)
Prior ATS Judgment	0.0037***	0.0044***	
	(0.00044)	(0.00057)	
District Attributes (7 yr lag)			
Education	-0.00012**	-0.00019**	0.71
	(0.000047)	(0.000063)	(0.65)
Income	0.000019	-0.000037	0.13
	(0.000046)	(0.000059)	(0.93)
Population (log)	0.00054***	0.00067***	0.83***
	(0.000076)	(0.00011)	(0.099)
Observations	481490	481490	354217
R^2	0.0042	0.0036	
Pseudo R^2			0.15
Dependent Variable Mean	0.00093	0.0011	0.00011

$^{+}$ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Robust standard errors clustered by district-sending country dyad in parentheses. Models 1 is a logit model and Model 2 is a zero-inflated negative binomial model. All continuous variables have been standardized.

Random selection of the filing district

Table A5: Regression of Judgments on Immigration and Controls with a Random Selection of Districts

	(1) Any	(2) Count	(3) First
Immigrant Stock (5 yr lag)			
Immigrant Stock (log)	0.00056**	0.00063**	0.60**
	(0.00019)	(0.00020)	(0.20)
Atrocities (10 yr average)			
PTS	0.0015***	0.0017***	0.71***
	(0.00025)	(0.00029)	(0.20)
Democracy	0.00035^{+}	0.00046*	-0.92**
	(0.00019)	(0.00021)	(0.33)
Costs (5 yr lag)			
Alliance	0.00045	0.00040	2.44***
	(0.00034)	(0.00037)	(0.64)
Major Power	0.0026^{+}	0.0024^{+}	1.87**
	(0.0014)	(0.0014)	(0.68)
English Speaking	0.0010**	0.0012**	0.77
	(0.00039)	(0.00045)	(0.48)
District Attributes (5 yr lag)			
Education	0.00016	0.00014	0.86
	(0.00011)	(0.00012)	(1.09)
Income	0.00071***	0.00075***	1.02
	(0.00011)	(0.00012)	(1.10)
Population (log)	0.00087***	0.00093***	0.30
	(0.00014)	(0.00015)	(0.37)
Prior ATS Judgment (Random)			
Observations	225181	225181	125977
R^2	0.0027	0.0026	
Pseudo R^2			0.18
Dependent Variable Mean	0.0015	0.0016	0.00027

$^{+}$ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Robust standard errors clustered by district-sending country dyad in parentheses. All continuous variables have been standardized. Models 1 and 2 are OLS models. Model 3 is a logit with years after the first judgement dropped, which prevents the inclusion of the Prior Judgment variable, and years since 1980, its square, and cube are included.

Stepwise regressions

Table A6: Stepwise regression of Judgments (Any) on Immigration and Controls

	(1)	(2)	(3)	(4)
Immigrant Stock (5 yr lag)				
Immigrant Stock (log)	0.00051***	0.00057***	0.00043***	0.00033*
	(0.00011)	(0.00013)	(0.00012)	(0.00013)
Atrocities (10 yr average)				
PTS		0.00089***	0.00080***	0.00092***
		(0.00012)	(0.00012)	(0.00014)
Democracy		0.00041***	0.00022*	0.00029*
		(0.000098)	(0.000096)	(0.00012)
Costs (5 yr lag)				
Alliance			0.00014	0.00023
			(0.00017)	(0.00020)
Major Power			0.0013*	0.0016*
			(0.00068)	(0.00078)
English Speaking			0.00078***	0.00086***
			(0.00022)	(0.00025)
Prior ATS Judgment			0.0042***	0.0038***
			(0.00046)	(0.00044)
District Attributes (5 yr lag)				
Education				-0.00016**
				(0.000051)
Income				0.000065
				(0.000048)
Population (log)				0.00048***
				(0.000071)
Observations	588167	554594	523355	459515
R^2	0.00033	0.0012	0.0039	0.0042
Dependent Variable Mean	0.00079	0.00081	0.00081	0.00092

$^{+}$ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

All models are OLS regressions with robust standard errors clustered by district-sending country dyad in parentheses. All continuous variables have been standardized.

Table A7: Stepwise regression of Judgments (Sum) on Immigration and Controls

	(1)	(2)	(3)	(4)
Immigrant Stock (5 yr lag)				
Immigrant Stock (log)	0.00052***	0.00054***	0.00044**	0.00030+
	(0.00013)	(0.00015)	(0.00014)	(0.00016)
Atrocities (10 yr average)				
PTS		0.0011***	0.00100***	0.0012***
		(0.00016)	(0.00015)	(0.00018)
Democracy		0.00062***	0.00043**	0.00056**
		(0.00015)	(0.00015)	(0.00019)
Costs (5 yr lag)				
Alliance			-0.000066	0.00000052
			(0.00023)	(0.00026)
Major Power			0.0013+	0.0016*
			(0.00068)	(0.00078)
English Speaking			0.0012***	0.0013***
			(0.00033)	(0.00036)
Prior ATS Judgment			0.0049***	0.0045***
			(0.00060)	(0.00057)
District Attributes (5 yr lag)				
Education				-0.00024***
				(0.000069)
Income				0.000040
				(0.000056)
Population (log)				0.00060***
				(0.00010)
Observations	588167	554594	523355	459515
R^2	0.00019	0.00094	0.0031	0.0034
Dependent Variable Mean	0.00093	0.00096	0.00096	0.0011

+ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

All models are OLS regressions with robust standard errors clustered by district-sending country dyad in parentheses. All continuous variables have been standardized.

Table A8: Stepwise regression of Judgments (First) on Immigration and Controls

	(1)	(2)	(3)	(4)
Immigrant Stock (5 yr lag)				
Immigrant Stock (log)	0.88***	0.98***	0.89***	0.69***
	(0.13)	(0.13)	(0.14)	(0.16)
Atrocities (10 yr average)				
PTS		0.83***	0.89***	0.88***
		(0.16)	(0.18)	(0.18)
Democracy		-0.0038	-0.60^{+}	-0.57
		(0.24)	(0.36)	(0.35)
Costs (5 yr lag)				
Alliance			1.58**	1.63**
			(0.59)	(0.58)
Major Power			1.32*	1.45*
			(0.65)	(0.67)
English Speaking			1.06**	1.07**
			(0.39)	(0.38)
District Attributes (5 yr lag)				
Education				0.87
				(0.68)
Income				0.18
				(0.99)
Population (log)				0.83***
				(0.11)
Prior ATS Judgment				
Observations	447863	424633	407415	345160
Pseudo R^2	0.070	0.11	0.13	0.15
Dependent Variable Mean	0.000089	0.000092	0.000096	0.00011

$^{+}$ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

All models are logits with years after the first judgement dropped, which prevents the inclusion of the Prior Judgment variable, and years since 1980, its square, and cube are included. Regressions include robust standard errors clustered by district-sending country dyad in parentheses. All continuous variables have been standardized.

Influential judicial districts and sending countries

Table A9: Regression of Judgments on Immigration and Controls, Including the DC Circuit

	(1) Any	(2) Count	(3) First
Immigrant Stock (5 yr lag)			
Immigrant Stock (log)	0.00031*	0.00029+	0.61***
	(0.00013)	(0.00016)	(0.17)
Atrocities (10 yr average)			
PTS	0.0010***	0.0013***	0.85***
	(0.00014)	(0.00019)	(0.17)
Democracy	0.00030*	0.00057**	-0.44
	(0.00013)	(0.00020)	(0.36)
Costs (5 yr lag)			
Alliance	0.00031	0.000077	1.48*
	(0.00021)	(0.00027)	(0.58)
Major Power	0.0021*	0.0022*	1.67*
	(0.00090)	(0.00097)	(0.67)
English Speaking	0.00088***	0.0014***	0.97**
	(0.00026)	(0.00037)	(0.37)
Prior ATS Judgment	0.0046***	0.0053***	
	(0.00046)	(0.00058)	
District Attributes (5 yr lag)			
Education	-0.00013*	-0.00022**	0.85
	(0.000057)	(0.000076)	(0.63)
Income	0.000061	0.000043	0.38
	(0.000050)	(0.000058)	(0.92)
Population (log)	0.00034***	0.00046***	0.83***
	(0.000082)	(0.00011)	(0.11)
DC Included?	Yes	Yes	Yes
Observations	465145	465145	357884
R^2	0.0046	0.0038	
Pseudo R^2			0.14

$^{+}$ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Robust standard errors clustered by district-sending country dyad in parentheses. All continuous variables have been standardized. Models 1 and 2 are OLS models. Model 3 is a logit with years after the first judgement dropped, which prevents the inclusion of the Prior Judgment variable, and years since 1980, its square, and cube are included.

Table A10: Regression of Judgments on Immigration and Controls, Removing Influential Disticts

	(1) Any	(2) Count	(3) First	(4) Any	(5) Count	(6) First	(7) Any	(8) Count	(9) First
Immigrant Stock (5 yr lag)									
Immigrant Stock (log)	0.00032*	0.00030+	0.60***	0.00035**	0.00034*	0.60***	0.00034**	0.00030*	0.59***
	(0.00013)	(0.00015)	(0.17)	(0.00013)	(0.00016)	(0.18)	(0.00012)	(0.00015)	(0.18)
Atrocities (10 yr average)									
PTS	0.00077***	0.00095***	0.84***	0.00085***	0.0011***	0.87***	0.00082***	0.0010***	0.85***
	(0.00012)	(0.00016)	(0.17)	(0.00014)	(0.00018)	(0.17)	(0.00014)	(0.00018)	(0.17)
Democracy	0.00023*	0.00044*	-0.66+	0.00028*	0.00052**	-0.59+	0.00026*	0.00052**	-0.58
	(0.00011)	(0.00018)	(0.36)	(0.00012)	(0.00019)	(0.36)	(0.00012)	(0.00019)	(0.36)
Costs (5 yr lag)									
Alliance	0.00023	0.000058	1.80**	0.00018	-0.000039	1.73**	0.00022	-0.000018	1.73**
	(0.00018)	(0.00024)	(0.59)	(0.00018)	(0.00024)	(0.58)	(0.00019)	(0.00026)	(0.58)
Major Power	0.0011	0.0011	1.60*	0.0012+	0.0012+	1.89**	0.0013+	0.0013+	1.88**
	(0.00070)	(0.00071)	(0.74)	(0.00069)	(0.00069)	(0.66)	(0.00076)	(0.00076)	(0.66)
English Speaking	0.00062**	0.00100**	0.82*	0.00079***	0.0012***	0.93*	0.00083***	0.0013***	0.91*
	(0.00021)	(0.00032)	(0.39)	(0.00024)	(0.00035)	(0.38)	(0.00024)	(0.00036)	(0.38)
Prior ATS Judgment	0.0030***	0.0034***		0.0035***	0.0041***		0.0035***	0.0041***	
	(0.00040)	(0.00051)		(0.00044)	(0.00056)		(0.00044)	(0.00058)	
District Attributes (5 yr lag)									
Education	-0.00012**	-0.00018**	0.66	-0.00015**	-0.00022***	0.78	-0.00015**	-0.00022***	0.67
	(0.000046)	(0.000061)	(0.80)	(0.000048)	(0.000063)	(0.77)	(0.000050)	(0.000067)	(0.74)
Income	0.000079+	0.000061	0.56	0.000041	0.000016	0.35	0.000092*	0.000064	0.49
	(0.000045)	(0.000053)	(0.91)	(0.000045)	(0.000053)	(0.97)	(0.000046)	(0.000055)	(0.94)
Population (log)	0.00044***	0.00056***	0.84***	0.00043***	0.00055***	0.84***	0.00038***	0.00052***	0.84***
	(0.000071)	(0.00010)	(0.10)	(0.000070)	(0.00010)	(0.10)	(0.000063)	(0.00010)	(0.10)
Dropped District	SDNY	SDNY	SDNY	NDCA	NDCA	NDCA	CDCA	CDCA	CDCA
Observations	453885	453885	356941	453885	453885	356533	453885	453885	356805
R^2	0.0034	0.0027		0.0039	0.0031		0.0037	0.0030	
Pseudo R^2			0.14			0.15			0.14

+ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Robust standard errors clustered by district-sending country dyad in parentheses. All continuous variables have been standardized. Models 1 and 2 are OLS models. Model 3 is a logit with years after the first judgement dropped, which prevents the inclusion of the Prior Judgment variable, and years since 1980, its square, and cube are included.

Table A11: Regression of Judgments on Immigration and Controls, Removing Influential Countries

	(1) Any	(2) Count	(3) First	(4) Any	(5) Count	(6) First	(7) Any	(8) Count	(9) First
Immigrant Stock (5 yr lag)									
Immigrant Stock (log)	0.00032*	0.00030+	0.59***	0.00032*	0.00030+	0.63***	0.00036**	0.00033*	0.60***
	(0.00014)	(0.00016)	(0.17)	(0.00014)	(0.00016)	(0.18)	(0.00013)	(0.00016)	(0.17)
Atrocities (10 yr average)									
PTS	0.00092***	0.0012***	0.86***	0.00092***	0.0012***	0.84***	0.00090***	0.0011***	0.86***
	(0.00014)	(0.00018)	(0.18)	(0.00014)	(0.00018)	(0.17)	(0.00014)	(0.00018)	(0.17)
Democracy	0.00030*	0.00056**	-0.68+	0.00030*	0.00056**	-0.64+	0.00032**	0.00059**	-0.50
	(0.00012)	(0.00019)	(0.36)	(0.00012)	(0.00020)	(0.35)	(0.00012)	(0.00019)	(0.37)
Costs (5 yr lag)									
Alliance	0.00024	0.0000073	1.86**	0.00023	0.0000040	1.71**	0.00023	-0.0000025	1.55**
	(0.00020)	(0.00026)	(0.59)	(0.00019)	(0.00025)	(0.58)	(0.00020)	(0.00026)	(0.60)
Major Power	0.0016*	0.0016*	1.97**	0.0016*	0.0016*	1.81**	0.00080	0.00073	1.77**
	(0.00078)	(0.00078)	(0.66)	(0.00078)	(0.00078)	(0.66)	(0.00075)	(0.00075)	(0.67)
English Speaking	0.00086***	0.0013***	0.84*	0.00086***	0.0013***	0.91*	0.00089***	0.0014***	0.92*
	(0.00025)	(0.00037)	(0.39)	(0.00025)	(0.00036)	(0.38)	(0.00025)	(0.00036)	(0.37)
Prior ATS Judgment	0.0038***	0.0044***		0.0038***	0.0044***		0.0037***	0.0043***	
	(0.00044)	(0.00057)		(0.00044)	(0.00057)		(0.00043)	(0.00056)	
District Attributes (5 yr lag)									
Education	-0.00017**	-0.00025***	0.58	-0.00016**	-0.00024***	0.81	-0.00017**	-0.00025***	0.66
	(0.000051)	(0.000069)	(0.82)	(0.000051)	(0.000069)	(0.74)	(0.000051)	(0.000069)	(0.69)
Income	0.000069	0.000044	0.57	0.000061	0.000035	0.41	0.000052	0.000026	0.53
	(0.000048)	(0.000056)	(0.90)	(0.000047)	(0.000056)	(0.96)	(0.000047)	(0.000056)	(0.89)
Population (log)	0.00048***	0.00061***	0.85***	0.00048***	0.00061***	0.85***	0.00045***	0.00058***	0.83***
	(0.000072)	(0.00010)	(0.10)	(0.000072)	(0.00010)	(0.10)	(0.000071)	(0.00010)	(0.11)
Dropped Country	Canada	Canada	Canada	Mexico	Mexico	Mexico	China	China	China
Observations	456413	456413	355173	456413	456413	355173	456413	456413	355439
R^2	0.0042	0.0034		0.0042	0.0034		0.0041	0.0033	
Pseudo R^2			0.15			0.15			0.14

+ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Robust standard errors clustered by district-sending country dyad in parentheses. All continuous variables have been standardized. Models 1 and 2 are OLS models. Model 3 is a logit with years after the first judgement dropped, which prevents the inclusion of the Prior Judgment variable, and years since 1980, its square, and cube are included.

References

Cinelli, Carlos and Chad Hazlett. 2020. "Making Sense of Sensitivity: Extending Omitted Variable Bias." *Journal of the Royal Statistical Society: Series B (Statistical Methodology)* 82(1):39–67.