Additional file 1

Descriptive Statistics and Tables

Table A1: Summary Statistics

Variable	Mean	Std. Dev.	Min.	Max.
Nationality Acquisition$_i$	0.06	0.491	-0.9	0.8
Expulsion$_i$	-0.161	0.489	-1	0.88
Marriage Migration$_i$	0.507	0.481	-1	1
Anti-Discrimination$_i$	0.151	0.553	-1	1
Political rights$_i$	-0.252	0.375	-1	0.75
Individual Equality Dimension$_i$	0.045	0.389	-0.690	0.570
Cultural and Religious Rights$_i$	-0.148	0.327	-0.67	0.560
Cultural Dimension$_i$	-0.105	0.306	-0.58	0.46
Real Effective Exchange Rate$_i$	102.407	13.474	86.183	156.87
MRER$_{ij}$	0.597	0.113	0.339	0.848
Linguistic Proximity between i and j	1.655	0.566	0.945	3.444
Colonial Migration % from j in i	0.214	0.234	0	0.736
Immigrant Electorate$_i$	4.643	3.45	0.2	11.9
Right-Wing Populist Vote Share$_i$	5.656	6.558	0	26.25
Trade Union Density$_i$	43.552	21.247	7.697	81.032
Polity Score$_i$	2.493	1.51	-1.679	4.977
GDP per Capita$_j$ (US$ in Thousands)	10.159	5.295	2.481	24.934
GDP per Capita$_j$ (US$ in Thousands, Non-EEA)	4.13	1.785	1.630	7.397
ln(Population)$_i$	16.487	1.043	15.198	18.228
Population Share of Immigrants$_i$	0.091	0.04	0.03	0.211
Immigration Policy$_i$	-1.38	0.682	-2.707	-0.282
GDP per Capita$_i$ (US$ in Thousands)	22.251	5.095	14.45	35.581
Migrant Voting Rights in National Elections$_i$	0.908	0.263	0	1
Immigrant Rights$_i$	3.666	0.954	1	5

Table A2: Indicators of Immigrant Rights by Policy Field and Theoretical Dimension [1]

	Theoretical Dimension	
Policy Field	Individual Equality	Cultural Difference
Nationality Acquisition	Number of years of residence before naturalization can be requested	Allowance of dual nationality
	Welfare and social security dependence as an obstacle to naturalization	Cultural requirements for naturalization (e.g., language skills, oaths of allegiance, evidence of cultural and social assimilation)
	Automatic attribution or facilitated naturalization for the second generation	
Expulsion	Years of criminal conviction leading to expulsion for short-term residents	
	Years of criminal conviction leading to expulsion for long-term residents	
	Possibility for expulsion of immigrants socialized or born in the country	
	Welfare dependence as a reason for expulsion	
Marriage migration	Age limits for incoming spouses	cultural requirements for incoming spouses (e.g., language tests abroad)
	Income requirement for the sponsoring spouse	
	Further criteria of eligibility for the sponsoring spouse: type of resident permit or minimum duration of stay	
Access to public service employment	Access of third-country nationals to the civil service: schools	Existence of quotas or preferential hiring for minority groups for public-sector jobs
	Access of third-country nationals to the civil service: administration	
	Access of third-country national to the civil service: police	
Anti-discrimination	Implementation of basic provisions of the International Conventional against Ethnic and Racial Discrimination in national criminal law: racial hatred	
	Inclusion of discrimination next to explicit racism in such laws	

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[1] Data and descriptions are from Koopmans, Michalowski and Waibel (2012).

	Existence of specific anti-discrimination legislation in civil law	
	Existence of specific anti-discrimination legislation in civil law	
	Existence and powers (capacity to take individual legal action, investigative powers, decision making on complaints) of state-sponsored anti-discrimination agencies	
Political rights	Voting rights for foreign residents (local and national)	Immigrant consultative bodies on the national level
		Immigrant consultative bodies on the local level
		Muslim consultative bodies

Table A3: Emigration and Exchange Rate Movements

	(A1)	(A2)
ΔREER_{it}	-0.0009*	-0.0008$^+$
	(0.0003)	(0.0004)
GDP per Capita (log)$_{it}$		-0.472
		(1.177)
GDP Growth$_{it}$		0.011
		(0.017)
Population (log)$_{it}$		0.600
		(1.443)
Country Fixed Effects	✓	✓
Year Fixed Effects	✓	✓
Observations	1042	1039
Countries	53	51

Note: Ordinary least square analysis of Emigration (log). The constant is included, but not reported in the table. Standard errors clustered on country are in parentheses. ***, **, *, and + indicate statistical significance levels of .1, 1, 5, and 10 percent, respectively.

Individual Indicators

To assess the relationships between MRER and other measures of migrant rights, I regress Nationality Acquisition and Expulsion on MRER, and report the results in Tables A4 and A5, respectively. These two sub-dimensions of migrant rights are important policy instruments for

migrants as they provide them with long-term political and social security. The results presented in Table A4 support the hypothesis that MRER is positively correlated with the ease of acquiring citizenship. The results in Table A5 corroborate that MRER is positively correlated with a higher degree of legal protection against expulsion. The coefficients of other explanatory variables are also consistent with pre-analysis expectations, but with more mixed support. The size of the immigrant electorate is positively correlated with Nationality Acquisition and Expulsion, while higher right-wing populist vote shares are negatively correlated with these policy measures.

MRER also explains variation in Anti-discrimination and Political Rights in some models as shown in Tables A6 and A7. However, the hypothesis is not supported when using Marriage Migration as the dependent variable (Table A8). Note that Marriage Migration is not exclusively about the ease at which migrant workers can invite their spouses to their host states. While it incorporates the income and residency requirements of sponsoring spouses, it also includes age limits for incoming spouses. Except for the residency requirement, these criteria (i.e., the income and age requirements) of marriage migration apply to native citizens as well.

For non-European Economic Area (EEA) migrants, cultural and religious rights can influence their migration incentives in addition to the rights that make up the Individual Equality Dimension. To evaluation the relationships between MRER and cultural security, I have constructed a new MRER variable by using migrant stocks from non-EEA sending states. Although this is a crude way to capture migrant groups who are sensitive to the cultural dimension of rights, it is important to note that any noise in this variable is likely to bias against finding a statistically significant relationship. That is, to the extent that the sample of non-EEA states contains migrant sending states where cultural distinctions are irrelevant, the effect of the new MRER variable on cultural and religious rights will trend toward zero. For the dependent variable, I use the Cultural Dimension constructed by Koopmans, Michalowski and Waibel (2012). This variable includes cultural elements from relevant policy fields. For instance, cultural requirements for naturalization and for incoming spouses (e.g., language tests abroad) are included in this dimension, as well as the availability of

immigrant consultative bodies.[2] All models in Table A9 yield strong support for the hypothesis that the MRER of non-EEA countries is positively correlated with Cultural Dimension. When tested with the MRER of all sending states, the evidence is weaker suggesting that migrant rights included in the Cultural Dimension matter more to migrants from non-EEA states.

Table A10 reports the results of the analysis with Cultural and Religious Rights as the dependent variable. This variable includes specific cultural and religious rights, such as the availability of mother tongue teaching in public schools and cultural requirements for granting residence permits (e.g., language skills). The results in Table A10 are similar to those in Table A9. The coefficient of right-wing populist vote share also conforms to the expectation that a higher vote share for right-wing populist parties is negatively correlated with these cultural or religious measures of migrant rights.

Table A4: Nationality Acquisition (1980–2008)

	(A3)	(A4)	(A5)	(A6)	(A7)
Nationality Acquisition$_{t-1}$				0.713***	
				(0.147)	
MRER$_{ij}$	2.226***	2.624***	2.140***	0.749	1.827*
	(0.545)	(0.727)	(0.528)	(0.498)	(0.726)
GDP per Capita$_j$ (US\$ in Thousands)		-0.022	-0.030	0.011	0.032
		(0.020)	(0.029)	(0.023)	(0.022)
Immigrant Electorate$_i$			0.043**	0.011	0.060+
			(0.016)	(0.018)	(0.031)
Trade Union Density$_i$			0.007*	-0.001	0.017*
			(0.004)	(0.003)	(0.008)
Right-Wing Populist Vote Share$_i$			-0.023+	-0.016+	-0.000
			(0.013)	(0.008)	(0.010)
Country Fixed Effects					✓
Year Fixed Effects	✓	✓	✓	✓	✓
Observations	40	40	40	30	40
Countries	10	10	10	10	10
R^2	0.289	0.303	0.463	0.832	0.869

Note: Ordinary least square analysis of Nationality Acquisition Dimension. The constant and year fixed effects are included, but not reported in the table. Panel-corrected standard errors are in parentheses. ***, **, *, and + indicate statistical significance levels of .1, 1, 5, and 10 percent, respectively.

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[2]For more information on Individual Equality and Cultural Dimensions, see Table A2. Koopmans, Michalowski and Waibel (2012) note that the cultural dimension of migrant rights has been largely neglected by past research. Such rights include "...exemptions from existing regulations, and state support for their organizations and institution" (Koopmans, Michalowski and Waibel, 2012, p. 1210). Thus, rather than looking at whether immigrants are treated the same as natives, Table A9 looks at whether the MRER affects whether certain religious and ethnic groups are extended additional entitlements or exemptions from the host country's laws.

Table A5: Expulsion (1980–2008)

	(A8)	(A9)	(A10)	(A11)	(A12)
Expulsion$_{t-1}$				0.757***	
				(0.085)	
MRER$_{ij}$	2.581***	2.342***	2.202***	0.631	0.831
	(0.423)	(0.513)	(0.531)	(0.479)	(0.528)
GDP per Capita$_j$ (US$ in Thousands)		0.013	0.005	0.008	0.007
		(0.016)	(0.023)	(0.025)	(0.025)
Immigrant Electorate$_i$			0.005	0.006	0.051**
			(0.019)	(0.010)	(0.019)
Trade Union Density$_i$			0.005$^+$	-0.002	-0.013*
			(0.003)	(0.002)	(0.006)
Right-Wing Populist Vote Share$_i$			-0.016	-0.001	0.009
			(0.010)	(0.006)	(0.006)
Country Fixed Effects					✓
Year Fixed Effects	✓	✓	✓	✓	✓
Observations	40	40	40	30	40
Countries	10	10	10	10	10
R^2	0.378	0.383	0.458	0.805	0.903

Note: Ordinary least square analysis of Expulsion Dimension. The constant and year fixed effects are included, but not reported in the table. Panel-corrected standard errors are in parentheses. ***, **, *, and + indicate statistical significance levels of .1, 1, 5, and 10 percent, respectively.

Table A6: Anti-Discrimination (1980–2008)

	(A13)	(A14)	(A15)	(A16)	(A17)
Anti-Discrimination$_{t-1}$				0.653***	
				(0.153)	
MRER$_{ij}$	0.777	1.033	0.530	0.860***	0.584
	(0.756)	(0.824)	(0.566)	(0.175)	(0.436)
GDP per Capita$_j$ (US$ in Thousands)		-0.014	-0.036$^+$	-0.008	0.018
		(0.023)	(0.021)	(0.013)	(0.018)
Immigrant Electorate$_i$			0.079***	0.024	0.081***
			(0.015)	(0.015)	(0.018)
Trade Union Density$_i$			0.009**	0.002	0.022***
			(0.003)	(0.003)	(0.006)
Right-Wing Populist Vote Share$_i$			-0.010	-0.003	0.016
			(0.014)	(0.010)	(0.010)
Country Fixed Effects					✓
Year Fixed Effects	✓	✓	✓	✓	✓
Observations	40	40	40	30	40
Countries	10	10	10	10	10
R^2	0.391	0.395	0.520	0.832	0.920

Note: Ordinary least square analysis of Anti-Discrimination Dimension. The constant and year fixed effects are included, but not reported in the table. Panel-corrected standard errors are in parentheses. ***, **, *, and + indicate statistical significance levels of .1, 1, 5, and 10 percent, respectively.

Table A7: Political Rights (1980–2008)

	(A18)	(A19)	(A20)	(A21)	(A22)
Political Rights$_{t-1}$				0.930***	
				(0.235)	
MRER$_{ij}$	0.541	0.734*	0.548^{+}	0.556	-0.336
	(0.379)	(0.354)	(0.311)	(0.396)	(0.479)
GDP per Capita$_j$ (US$ in Thousands)		-0.011	-0.057***	-0.028	-0.028
		(0.010)	(0.014)	(0.020)	(0.027)
Immigrant Electorate$_i$			0.060***	-0.002	-0.028**
			(0.014)	(0.014)	(0.009)
Trade Union Density$_i$			0.014***	0.001	-0.005
			(0.002)	(0.005)	(0.006)
Right-Wing Populist Vote Share$_i$			-0.007	0.007	0.006
			(0.007)	(0.005)	(0.006)
Country Fixed Effects					✓
Year Fixed Effects	✓	✓	✓	✓	✓
Observations	40	40	40	30	40
Countries	10	10	10	10	10
R^2	0.148	0.154	0.549	0.794	0.918

Note: Ordinary least square analysis of Political Rights Dimension. The constant and year fixed effects are included, but not reported in the table. Panel-corrected standard errors are in parentheses. ***, **, *, and + indicate statistical significance levels of .1, 1, 5, and 10 percent, respectively.

Table A8: Marriage Migration (1980–2008)

	(A23)	(A24)	(A25)	(A26)	(A27)
Marriage Migration$_{t-1}$				0.731*	
				(0.363)	
MRER$_{ij}$	0.691	0.123	-0.587	-0.585	0.208
	(0.526)	(0.547)	(0.695)	(0.427)	(0.769)
GDP per Capita$_j$ (US$ in Thousands)		0.031	0.053	0.067*	0.071***
		(0.021)	(0.037)	(0.030)	(0.018)
Immigrant Electorate$_i$			0.057***	0.024	0.101***
			(0.011)	(0.018)	(0.027)
Trade Union Density$_i$			-0.002	-0.005	0.005
			(0.005)	(0.005)	(0.007)
Right-Wing Populist Vote Share$_i$			-0.015	-0.011	0.006
			(0.014)	(0.008)	(0.005)
Country Fixed Effects					✓
Year Fixed Effects	✓	✓	✓	✓	✓
Observations	40	40	40	30	40
Countries	10	10	10	10	10
R^2	0.280	0.310	0.419	0.652	0.813

Note: Ordinary least square analysis of Marriage Migration Dimension. The constant and year fixed effects are included, but not reported in the table. Panel-corrected standard errors are in parentheses. ***, **, *, and + indicate statistical significance levels of .1, 1, 5, and 10 percent, respectively.

Table A9: Cultural Dimension (1980–2008)

	(A28)	(A29)	(A30)	(A31)	(A32)
Cultural Dimension$_{t-1}$				0.635*	
				(0.282)	
MRER$_{ij}$ (Non-EEA$_j$)	1.551**	1.639*	1.716***	1.051*	1.200***
	(0.586)	(0.701)	(0.385)	(0.448)	(0.338)
GDP per Capita$_j$ (US$ in Thousands, Non-EEA)		0.017	0.012	0.016	-0.036$^+$
		(0.032)	(0.021)	(0.020)	(0.020)
Immigrant Electorate$_i$			0.056***	0.021$^+$	0.020**
			(0.007)	(0.012)	(0.007)
Trade Union Density$_i$			0.007***	0.002	-0.006
			(0.002)	(0.002)	(0.005)
Right-Wing Populist Vote Share$_i$			-0.019***	-0.009*	-0.006*
			(0.004)	(0.004)	(0.003)
Country Fixed Effects					✓
Year Fixed Effects	✓	✓	✓	✓	✓
Observations	40	40	40	30	40
Countries	10	10	10	10	10
R^2	0.325	0.329	0.740	0.841	0.921

Note: Ordinary least square analysis of Cultural Dimension. The constant and year fixed effects are included, but not reported in the table. Panel-corrected standard errors are in parentheses. ***, **, *, and + indicate statistical significance levels of .1, 1, 5, and 10 percent, respectively.

Table A10: Cultural and Religious Rights (1980–2008)

	(A33)	(A34)	(A35)	(A36)	(A37)
Cultural and Religious Rights$_{t-1}$				0.617**	
				(0.201)	
MRER$_{ij}$ (Non-EEA$_j$)	1.952**	1.905*	1.775***	1.024$^+$	1.136$^+$
	(0.642)	(0.763)	(0.412)	(0.535)	(0.690)
GDP per Capita$_j$ (US$ in Thousands, Non-EEA)		-0.009	0.010	0.011	-0.040
		(0.033)	(0.030)	(0.045)	(0.047)
Immigrant Electorate$_i$			0.058***	0.014	-0.021$^+$
			(0.015)	(0.013)	(0.012)
Trade Union Density$_i$			0.003	0.000	-0.004
			(0.002)	(0.002)	(0.007)
Right-Wing Populist Vote Share$_i$			-0.025***	-0.014***	-0.010*
			(0.005)	(0.002)	(0.004)
Country Fixed Effects					✓
Year Fixed Effects	✓	✓	✓	✓	✓
Observations	40	40	40	30	40
Countries	10	10	10	10	10
R^2	0.263	0.264	0.627	0.776	0.884

Note: Ordinary least square analysis of Cultural and Religion Dimension. The constant and year fixed effects are included, but not reported in the table. Panel-corrected standard errors are in parentheses. ***, **, *, and + indicate statistical significance levels of .1, 1, 5, and 10 percent, respectively.

In addition to analyzing levels of MRER, Table A11 estimates the relationship between migrant rights and *volatility* in MRER. Holding other things constant, exchange rate volatility generates an additional source of uncertainty for migrants when trying to ascertain the future real value of remittances. Using the coefficient variation for MRER, I therefore expect greater volatility in MRER to be associated with more liberal migration policies. Table A11 reveals two important findings. First, though less robust than the main result, the coefficient of variation for MRER is positive and statistically significant at the 0.05 level when including all control variables as well as country and year fixed effects. This result corroborates the core logic of the main argument. Second, the level MRER measure remains positive and statistically significant when controlling for MRER volatility.

Table A11: Individual Equality Dimension and Currency Volatility (1990–2008)

	(A38)	(A39)	(A40)	(A41)	(A42)
Individual Equality Dimension$_{t-1}$				0.795***	
				(0.072)	
MRER$_{ij}$	1.709**	1.704**	1.008**	0.385^{+}	0.735*
	(0.628)	(0.619)	(0.376)	(0.228)	(0.310)
Coefficient of Variation (MRER$_{ij}$)	-1.194	-1.183	1.132	2.625**	3.106***
	(2.980)	(3.420)	(2.883)	(0.829)	(0.917)
GDP per Capita$_j$ (US\$ in Thousands)		0.000	0.014	0.020^{+}	0.055***
		(0.016)	(0.023)	(0.010)	(0.008)
Immigrant Electorate$_i$			0.034***	0.002	0.044***
			(0.007)	(0.009)	(0.013)
Trade Union Density$_i$			0.004	-0.002	0.003^{+}
			(0.003)	(0.001)	(0.002)
Right-Wing Populist Vote Share$_i$			-0.028***	-0.009***	-0.009*
			(0.007)	(0.002)	(0.005)
Year 2002	0.047	0.188***	0.240***	0.117**	0.373***
	(0.048)	(0.051)	(0.065)	(0.043)	(0.041)
Year 2008	0.141	0.140	0.121	-0.110	-0.379***
	(0.102)	(0.118)	(0.189)	(0.095)	(0.057)
Country Fixed Effects					✓
Year Fixed Effects	✓	✓	✓	✓	✓
Observations	30	30	30	30	30
Countries	10	10	10	10	10
R^2	0.303	0.303	0.601	0.928	0.978

Note: Ordinary least square analysis of Individual Equality Dimension, measuring the extent to which migrants are entitled to various rights other than cultural and religious rights. The constant is included, but not reported in the table. Panel-corrected standard errors are in parentheses. ***, **, *, and + indicate statistical significance levels of .1, 1, 5, and 10 percent, respectively.

Table A12: Individual Equality Dimension and Changes in MRER (1990–2008)

	(A43)	(A44)	(A45)	(A46)
ΔMRER$_{ij}$	-1.845	-1.401	0.017	0.607*
	(2.008)	(2.131)	(1.257)	(0.268)
GDP per Capita$_j$ (US$ in Thousands)		0.025	0.032	0.055***
		(0.018)	(0.021)	(0.016)
Immigrant Electorate$_i$			0.042***	0.044***
			(0.013)	(0.013)
Trade Union Density$_i$			0.004	-0.002
			(0.003)	(0.003)
Right-Wing Populist Vote Share$_i$			-0.032***	-0.002
			(0.009)	(0.005)
Year 2002	0.096	0.029	0.123*	-0.124**
	(0.064)	(0.023)	(0.062)	(0.048)
Year 2008	0.142***	-0.091	-0.138	-0.592***
	(0.009)	(0.174)	(0.213)	(0.162)
Country Fixed Effects				✓
Year Fixed Effects	✓	✓	✓	✓
Observations	30	30	30	30
Countries	10	10	10	10
R^2	0.132	0.186	0.548	0.964

Note: Ordinary least square analysis of Individual Equality Dimension, measuring the extent to which migrants are entitled to various rights other than cultural and religious rights. The constant is included, but not reported in the table. Panel-corrected standard errors are in parentheses. ***, **, *, and + indicate statistical significance levels of .1, 1, 5, and 10 percent, respectively.

Table A13: Individual Equality Dimension and % Changes in MRER (1990–2008)

	(A47)	(A48)	(A49)	(A50)
% Change in MRER$_{ij}$	-0.010	-0.007	-0.001	0.005**
	(0.010)	(0.011)	(0.007)	(0.002)
GDP per Capita$_j$ (US$ in Thousands)		0.024	0.032	0.054***
		(0.019)	(0.021)	(0.015)
Immigrant Electorate$_i$			0.041**	0.048***
			(0.015)	(0.013)
Trade Union Density$_i$			0.004	-0.000
			(0.003)	(0.003)
Right-Wing Populist Vote Share$_i$			-0.031***	-0.002
			(0.009)	(0.005)
Year 2002	0.126***	0.056	0.124	-0.130*
	(0.027)	(0.034)	(0.087)	(0.053)
Year 2008	0.153***	-0.074	-0.130	-0.595***
	(0.020)	(0.195)	(0.235)	(0.159)
Country Fixed Effects				✓
Year Fixed Effects	✓	✓	✓	✓
Observations	30	30	30	30
Countries	10	10	10	10
R^2	0.135	0.183	0.548	0.967

Note: Ordinary least square analysis of Individual Equality Dimension, measuring the extent to which migrants are entitled to various rights other than cultural and religious rights. The constant is included, but not reported in the table. Panel-corrected standard errors are in parentheses. ***, **, *, and + indicate statistical significance levels of .1, 1, 5, and 10 percent, respectively.

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