

Trade competitiveness, constituency interests, and legislators' attitudes towards trade agreements

Article

Supplemental Material

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Contents

A	Used statistical software	A1
B	Sample information	A1
C	District-Level Trade Competitiveness Measures	A3
D	Descriptive Statistics	A6
E	Regression tables and additional evidence	A6
F	Data quality	A17
F.1	Representativeness of the legislator data	A17
F.2	Data quality of competitiveness data	A18
F.3	Representativeness of the labour survey data	A22

A Used statistical software

We use the statistical software *R* (R Core Team 2020a) for all analyses. We use the following packages to process and analyze the data: *car* (?), *countrycode* (Arel-Bundock, Enevoldsen, and Yetman 2018), *data.table* (Dowle and Srinivasan 2019), *foreign* (R Core Team 2020b), *ggrepel* (Slowikowski 2020), *ggthemes* (Arnold 2019), *ipumsr* (?), *janitor* (Firke 2020), *lmtest* (Zeileis and Hothorn 2002), *margins* (Leeper 2018), *mgsub* (Ewing 2019), *plm* (Croissant and Millo 2008), *prediction* (Leeper 2019), *questionr* (?), *readstata13* (Garbuszus and Jeworutzki 2018), *readxl* (Wickham and Bryan 2019), *texreg* (?), *tidyverse* (Wickham et al. 2019), *viridis* (Garnier 2018), and *zoo* (Zeileis and Grothendieck 2005).

B Sample information

Table A1: Samples Included in Analyses and Sources for Trade Competitiveness Data

Leg. period	Survey year	Coding	Level	Department	Source
ARG 2005	2004	CAES		Agglomeration	INDEC (2004)
ARG 2007		CAES		Agglomeration	INDEC (2005)
ARG 2009	2008	CAES		Agglomeration	INDEC (2008)
ARG 2011		CAES		Agglomeration	INDEC (2009)
BOL 2006					INE-BOL (2004)
BOL 2010	2007				INE-BOL (2007)
BOL 2015	2014				INE-BOL (2014)
CHL 2006	2003	ISIC 2			MDSF (2003)
CHL 2010	2009	ISIC 2			MDSF (2009)
CHL 2014	2011				MDSF (2011)
COL 2006		ISIC 3 COL	Division	8/32 missing	DANE (2004)
COL 2010		ISIC 3 COL		8/32 missing	DANE (2008)
COL 2014		ISIC 3 COL		8/32 missing	DANE (2012)
COL 2018		ISIC 3 COL		8/32 missing	DANE (2016)
CRI 2006		ISIC 3 CRI			INEC-CRI (2004)
CRI 2010		ISIC 3 CRI			INEC-CRI (2008)
CRI 2014				Birth	INEC-CRI (2012)
CRI 2018				Birth	INEC-CRI (2016)

DOM 2010	2010		Group	Birth	ONE (2010)
DOM 2016	2015				ONE (2015)
ECU 2007	2006			1/22 missing	INEC-ECU (2006)
ECU 2009	2008			1/24 missing	INEC-ECU (2008)
ECU 2013				1/24 missing	INEC-ECU (2011)
ECU 2017					INEC-ECU (2015)
SLV 2009			Group		DIGESTYC (2007)
SLV 2012					DIGESTYC (2010)
SLV 2015					DIGESTYC (2013)
SLV 2018					DIGESTYC (2016)
GTM 2008			Division		INE-GTM (2006)
GTM 2012	2011		Division		INE-GTM (2011)
GTM 2016			Division		INE-GTM (2014)
HND 2014	2013				INE-HND (2013)
MEX 2006	2005	SCIAN			INEGI (2005)
MEX 2009		SCIAN			INEGI (2007)
MEX 2012		SCIAN			INEGI (2010)
MEX 2015		SCIAN			INEGI (2013)
MEX 2018		SCIAN			INEGI (2016)
NIC 2007					INIDE (2005)
NIC 2012	2012				INIDE (2012)
NIC 2017	2014				INIDE (2014)
PAN 2009	2008		Division		INEC-PAN (2008)
PAN 2014	2010				INEC-PAN (2010)
PAN 2019					INEC-PAN (2017)
PRY 2008	2007			11/17 missing	DGEEC (2016)
PER 2011					INEI (2009)
PER 2016					INEI (2014)
URY 2010	2007				INE-URY (2007)
URY 2015					INE-URY (2013)

Notes: Cells are empty if no caveats apply. This means that the household survey year is t_{-2} , the coding scheme is either ISIC rev.3, rev.3.1, or rev.4, the coding level is ISIC class, the geographical information is the department of residency.

Table A2: Samples excluded from Analyses

Leg. period	Survey year	Coding	Level	Department	Source
DOM 2006	2010		Group	Birth	ONE (2010)
SLV 2006	2007		Group		DIGESTYC (2007)
HND 2006	2001				INE-HND (2001)
HND 2010	2001				INE-HND (2001)
HND 2018	2013				INE-HND (2013)
PRY 2013	2007			11/17 missing	DGEEC (2016)
VEN 2016	2001		Group		INE-VEN (2001)

Notes: Cells are empty if no caveats apply. This means that the household survey year is t_{-2} , the coding scheme is either ISIC rev.3, rev.3.1, or rev.4, the coding level is ISIC class, the geographical information is the department of residency.

C District-Level Trade Competitiveness Measures

The following equations describe the calculation process for the two measures of subnational trade competitiveness for both the partner and the world variation.

$$RCA(Partner)_{ijpt} = \frac{\frac{exp_{ijpt}}{exp_{jpt}}}{\frac{exp_{iwpt}}{exp_{wpt}}}$$

$$EX/IM(Partner)_{ijpt} = \frac{exp_{ijpt}}{imp_{ijpt}}$$

$$RCA(World)_{ijt} = \frac{\frac{exp_{ijt}}{exp_{jt}}}{\frac{exp_{iwt}}{exp_{wt}}}$$

$$EX/IM(World)_{ijt} = \frac{exp_{ijt}}{imp_{ijt}}$$

Here, i refers to the product, j to the country, p to the partner (US, EU, or Pacific Alliance), t to a specific year, and w to the world.

The following example from the leather industry in Uruguay illustrates these procedures. The leather industry is included in the ISIC rev.4 class 1511, which is ‘Tanning and dressing of leather; dressing and dyeing of fur’. This ISIC class contains two SITC product groups: ‘Leather’ (SITC 611) and ‘Furskins, tanned or dressed’ (SITC 613). We add the trade data for both product groups together to obtain the total trade of ISIC class 1511 and then calculate the RCA and EX/IM values using this combined trade data. Table C1 shows the resulting competitiveness values for a worker in the leather and fur industry in Uruguay for the case of an agreement with the United States as well as vis-à-vis the world, according to both RCA and EX/IM. It becomes evident that the leather and fur industry in Uruguay is very competitive in comparison with the USA. The RCA and EX/IM measures strongly correlate $r(6, 552) = 0.754, p = 0.000$.

Table C1: Competitiveness of ISIC class 1511 in Uruguay (2013)

	USA	World
RCA	4.90	2.88
EX/IM	2.39	1.27

Notes: Tables C2 and C3 in the Appendix demonstrate the calculation of our competitiveness measures for ISIC class 1511 in Uruguay in greater detail.

In the following tables, we demonstrate the calculation process of our different operationalizations of competitiveness. We use the leather industry in Uruguay as an example. The leather industry is represented by the ISIC rev.4 class 1511, which is ‘Tanning and dressing of leather; dressing and dyeing of fur’. Note that this class also includes some activities related to fur,

which is why we need to consider two different trade codes in our calculations. These are SITC product groups 611 ('Leather') and 613 ('Furskins, tanned or dressed').

Table C2: Calculation of EX/IM Competitiveness Measure

Partner	Prod	Ctry Prod Exp	Ctry Prod Imp	Raw EX/IM	Log & Final EX/IM
USA	611	34.60	3.23		
	613	0.74	0.01		
	Sum	35.34	3.24	10.9	2.39
World	611	266.58	77.68		
	613	10.73	0.27		
	Sum	277.31	77.95	3.56	1.27

Table C3: Calculation of RCA Competitiveness Measure

Partner	Prod	Ctry Prod Exp	Ctry Totl Exp	Wrld Prod Exp	Wrld Totl Exp	Raw RCA	Log & Final RCA
USA	611	34.60	647.03	989.94	2574468.25		
	613	0.74	647.03	53.68	2574468.25		
	Sum	35.34	647.03	1043.63	2574468.25	134.72	4.9
World	611	266.58	12397.07	26079.35	23055897.63		
	613	10.73	12397.07	2858.84	23055897.63		
	Sum	277.31	12397.07	28938.20	23055897.63	17.82	2.88

D Descriptive Statistics

Table D1: Descriptive Statistics

Variable	N	Mean	SD	Min	Max
Trade support	6,361	6.12	2.62	1	10
RCA	6,361	0.46	0.31	0	1
EX/IM	6,361	0.43	0.31	0	1
District Magnitude	6,361	14.35	13.5	1	63
Political Ideology	6,258	3.84	2.42	0	9
Gender (Female)	6,322	0.28	0.45	0	1
Agreement (US)	6,361	0.53	0.50	0	1
Agreement (EU)	6,361	0.27	0.44	0	1
Agreement (PA)	6,361	0.20	0.40	0	1
First Term	6,191	0.67	0.47	0	1
Hypothetical Agreement	6,361	0.36	0.48	0	1
RCA Partner (Endogeneity)	4,408	0.46	0.30	0	1
EX/IM Partner (Endogeneity)	4,408	0.45	0.31	0	1
RCA World	6,361	0.44	0.30	0	1
EX/IM World	6,361	0.44	0.32	0	1
Distict GNIpc	6,361	9.24	0.53	7.28	10.11
District Density (log)	6,333	4.78	1.80	-0.12	9.59
District Education (High)	6,361	0.54	0.50	0	1
Education (Pri.)	6,273	0.01	0.11	0	1
Education (Sec.)	6,273	0.07	0.25	0	1
Education (Ter.)	6,273	0.92	0.27	0	1
Income	5.696	3.05	1.02	2	5

E Regression tables and additional evidence

Table E1: Subnational Trade Competitiveness and Trade Attitudes (Partner Competitiveness)

	RCA	EX/IM
Subnational Trade Competitiveness	0.27*** (0.10)	0.21** (0.10)
Political Ideology	0.45*** (0.03)	0.45*** (0.03)
Female	0.09 (0.07)	0.09 (0.07)
Pacific Agreement	-0.48*** (0.11)	-0.48*** (0.10)
US Agreement	-0.73*** (0.05)	-0.74*** (0.05)
(Intercept)	2.93*** (0.12)	3.05*** (0.13)
R ²	0.28	0.28
Adj. R ²	0.27	0.27
Num. obs.	6253	6253

*** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$. Entries are unstandardized coefficients from a linear regression model. Standard errors in parentheses are clustered on the district-year. RCA or EX/IM refers to the revealed comparative advantage measure and trade balance (net-trade) measure of subnational trade competitiveness. RCA or EX/IM measures are calculated vis-a-vis the respective partner (US, EU or Pacific Alliance). Country-wave fixed effects omitted.

Table E2: Subnational Trade Competitiveness, Boundary Conditions, and Trade Attitudes

	RCA	EX/IM
Subnational Trade Competitiveness	2.29*** (0.56)	1.09** (0.49)
Log. District Magnitude	0.67** (0.28)	0.22 (0.26)
Log. District Magnitude Sq.	-0.14** (0.06)	-0.06 (0.05)
Political Ideology	0.51*** (0.04)	0.48*** (0.04)
Comp. x Log. Dst. Magnitude	-1.63*** (0.49)	-0.77 (0.48)
Comp. x Dst. Log. Magnitude Sq.	0.35*** (0.11)	0.18* (0.11)
Comp. x Pol. Ideology	-0.12* (0.06)	-0.06 (0.05)
Female	0.10 (0.07)	0.09 (0.07)
Pacific Agreement	-0.49*** (0.11)	-0.50*** (0.11)
US Agreement	-0.74*** (0.05)	-0.74*** (0.05)
(Intercept)	2.13*** (0.26)	2.80*** (0.27)
R ²	0.28	0.28
Adj. R ²	0.27	0.27
Num. obs.	6253	6253

*** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$. Entries are unstandardized coefficients from a linear regression model. Standard errors in parentheses are clustered on the district-year. RCA or EX/IM refers to the revealed comparative advantage measure and trade balance (net-trade) measure of subnational trade competitiveness. RCA or EX/IM measures are calculated vis-a-vis the respective partner (US, EU or Pacific Alliance). Country-wave fixed effects omitted.

Table E3: Subnational Trade Competitiveness, Trade Attitudes and Agreement Status

	RCA	EX/IM
Subnational Trade Competitiveness	0.29*** (0.11)	0.25*** (0.10)
Hypothetical	-1.16*** (0.15)	-1.01*** (0.13)
Comp. x Hypothetical	0.11 (0.20)	-0.12 (0.20)
Political Ideology	0.45*** (0.03)	0.45*** (0.03)
Female	0.09 (0.07)	0.08 (0.07)
Pacific Agreement	0.02 (0.09)	0.01 (0.09)
US Agreement	-0.74*** (0.05)	-0.74*** (0.05)
(Intercept)	4.01*** (0.15)	4.10*** (0.15)
R ²	0.29	0.29
Adj. R ²	0.28	0.28
Num. obs.	6253	6253

*** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$. Entries are unstandardized coefficients from a linear regression model. Standard errors in parentheses are clustered on the district-year. RCA or EX/IM refers to the revealed comparative advantage measure and trade balance (net-trade) measure of subnational trade competitiveness. RCA or EX/IM measures are calculated vis-a-vis the respective partner (US, EU or Pacific Alliance). Country-wave fixed effects omitted.

Table E4: Subnational Trade Competitiveness and Trade Attitudes (Only First Term)

	RCA	EX/IM
Subnational Trade Competitiveness	0.28** (0.14)	0.18 (0.14)
Political Ideology	0.45*** (0.03)	0.45*** (0.03)
Female	0.08 (0.08)	0.08 (0.08)
Pacific Agreement	-0.37*** (0.11)	-0.37*** (0.11)
US Agreement	-0.83*** (0.04)	-0.84*** (0.03)
(Intercept)	3.04*** (0.18)	3.18*** (0.14)
R ²	0.29	0.29
Adj. R ²	0.28	0.28
Num. obs.	4073	4073

*** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$. Entries are unstandardized coefficients from a linear regression model. Standard errors in parentheses are clustered on the district-year. RCA or EX/IM refers to the revealed comparative advantage measure and trade balance (net-trade) measure of subnational trade competitiveness. RCA or EX/IM measures are calculated vis-a-vis the respective partner (US, EU or Pacific Alliance). Country-wave fixed effects omitted.

Table E5: Endogeneity Tests

	RCA	EX/IM
(Intercept)	0.22*** (0.03)	0.48*** (0.04)
Trade Support	-0.00 (0.00)	0.00 (0.00)
Subnational Trade Competitiveness	0.76*** (0.03)	0.79*** (0.03)
Political Ideology	-0.00 (0.00)	-0.00 (0.00)
Female	-0.00 (0.01)	-0.01 (0.00)
Pacific Agreement	0.01 (0.02)	0.07*** (0.02)
US Agreement	-0.01 (0.02)	-0.00 (0.01)
R ²	0.69	0.72
Adj. R ²	0.69	0.72
Num. obs.	4323	4323

*** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$. Entries are unstandardized coefficients from a linear regression model. Standard errors in parentheses are clustered on the district-year. RCA or EX/IM refers to the revealed comparative advantage measure and trade balance (net-trade) measure of subnational trade competitiveness. RCA or EX/IM measures are calculated vis-a-vis the respective partner (US, EU or Pacific Alliance). Country-wave fixed effects omitted.

Table E6: Subnational Trade Competitiveness and Trade Attitudes (World Competitiveness)

	RCA	EX/IM
Subnational Trade Competitiveness	0.43*** (0.12)	0.25** (0.13)
Political Ideology	0.45*** (0.03)	0.45*** (0.03)
Female	0.09 (0.07)	0.09 (0.07)
Pacific Agreement	-0.46*** (0.10)	-0.46*** (0.10)
US Agreement	-0.74*** (0.05)	-0.74*** (0.05)
(Intercept)	2.84*** (0.12)	3.02*** (0.12)
R ²	0.28	0.28
Adj. R ²	0.27	0.27
Num. obs.	6253	6253

*** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$. Entries are unstandardized coefficients from a linear regression model. Standard errors in parentheses are clustered on the district-year. RCA or EX/IM refers to the revealed comparative advantage measure and trade balance (net-trade) measure of subnational trade competitiveness. RCA or EX/IM measures are calculated vis-a-vis the world. Country-wave fixed effects omitted.

Table E7: Subnational Trade Competitiveness and Trade Attitudes (District Characteristics)

	RCA	EX/IM
Subnational Trade Competitiveness	0.31** (0.13)	0.24* (0.14)
Political Ideology	0.45*** (0.03)	0.45*** (0.03)
Female	0.07 (0.07)	0.07 (0.07)
Pacific Agreement	-0.49*** (0.08)	-0.49*** (0.08)
US Agreement	-0.73*** (0.05)	-0.74*** (0.05)
GNI per capita	0.54* (0.30)	0.52* (0.30)
Log District Denisty	-0.00 (0.03)	-0.00 (0.03)
District Education	-0.07 (0.08)	-0.07 (0.07)
(Intercept)	-1.50 (2.30)	-1.17 (2.33)
R ²	0.28	0.28
Adj. R ²	0.27	0.27
Num. obs.	6225	6225

*** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$. Entries are unstandardized coefficients from a linear regression model. Standard errors in parentheses are clustered on the district-year. RCA or EX/IM refers to the revealed comparative advantage measure and trade balance (net-trade) measure of subnational trade competitiveness. RCA or EX/IM measures are calculated vis-a-vis the respective partner (US, EU or Pacific Alliance). Country-wave fixed effects omitted.

Table E8: Subnational Trade Competitiveness and Trade Attitudes (Individual Characteristics)

	RCA	EX/IM
Subnational Trade Competitiveness	0.25*	0.23
	(0.14)	(0.15)
Political Ideology	0.44***	0.44***
	(0.03)	(0.03)
Female	0.18***	0.18***
	(0.07)	(0.07)
Pacific Agreement	-0.52***	-0.52***
	(0.08)	(0.08)
US Agreement	-0.77***	-0.77***
	(0.06)	(0.06)
Tertiary Education	0.29*	0.29
	(0.17)	(0.17)
Income (4-7k)	0.27***	0.27***
	(0.10)	(0.10)
Income (7-10k)	0.41***	0.41***
	(0.13)	(0.13)
Income (above 10k)	0.64***	0.64***
	(0.19)	(0.19)
(Intercept)	2.71***	2.81***
	(0.23)	(0.23)
R ²	0.29	0.29
Adj. R ²	0.28	0.28
Num. obs.	5619	5619

*** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$. Entries are unstandardized coefficients from a linear regression model. Standard errors in parentheses are clustered on the district-year. RCA or EX/IM refers to the revealed comparative advantage measure and trade balance (net-trade) measure of subnational trade competitiveness. RCA or EX/IM measures are calculated vis-a-vis the respective partner (US, EU or Pacific Alliance). Country-wave fixed effects omitted.

Table E9: Subnational Trade Competitiveness and Trade Attitudes (Party Characteristics)

	RCA	EX/IM
Subnational Trade Competitiveness	0.18*	0.19
	(0.11)	(0.12)
Political Ideology	0.24***	0.24***
	(0.03)	(0.03)
Female	0.17***	0.17**
	(0.07)	(0.07)
Pacific Agreement	-0.47***	-0.48***
	(0.08)	(0.08)
US Agreement	-0.73***	-0.74***
	(0.05)	(0.05)
(Intercept)	2.53***	2.64***
	(0.40)	(0.42)
R ²	0.38	0.38
Adj. R ²	0.36	0.36
Num. obs.	6253	6253

*** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$. Entries are unstandardized coefficients from a linear regression model. Standard errors in parentheses are clustered on the district-year. RCA or EX/IM refers to the revealed comparative advantage measure and trade balance (net-trade) measure of subnational trade competitiveness. RCA or EX/IM measures are calculated vis-a-vis the respective partner (US, EU or Pacific Alliance). Country-wave and party-fixed effects omitted.

Table E10: Subnational Trade Competitiveness and Trade Attitudes (US Agreement)

	RCA	EX/IM
Subnational Trade Competitiveness	0.28** (0.13)	0.15 (0.19)
Political Ideology	0.64*** (0.03)	0.64*** (0.03)
Female	-0.10 (0.08)	-0.11 (0.08)
(Intercept)	1.60*** (0.19)	1.74*** (0.17)
R ²	0.39	0.39
Adj. R ²	0.38	0.38
Num. obs.	3313	3313

*** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$. Entries are unstandardized coefficients from a linear regression model. Standard errors in parentheses are clustered on the district-year. RCA or EX/IM refers to the revealed comparative advantage measure and trade balance (net-trade) measure of subnational trade competitiveness. RCA or EX/IM measures are calculated vis-a-vis the respective partner (US, EU or Pacific Alliance). Country-wave fixed effects omitted.

Table E11: Subnational Trade Competitiveness and Trade Attitudes (EU Agreement)

	RCA	EX/IM
Subnational Trade Competitiveness	0.38** (0.17)	0.28** (0.14)
Political Ideology	0.38*** (0.02)	0.38*** (0.02)
Female	0.20*** (0.06)	0.20*** (0.06)
(Intercept)	4.08*** (0.37)	4.04*** (0.38)
R ²	0.25	0.25
Adj. R ²	0.23	0.23
Num. obs.	1663	1663

*** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$. Entries are unstandardized coefficients from a linear regression model. Standard errors in parentheses are clustered on the district-year. RCA or EX/IM refers to the revealed comparative advantage measure and trade balance (net-trade) measure of subnational trade competitiveness. RCA or EX/IM measures are calculated vis-a-vis the respective partner (US, EU or Pacific Alliance). Country-wave fixed effects omitted.

Table E12: Subnational Trade Competitiveness and Trade Attitudes (Pacific Alliance)

	RCA	EX/IM
Subnational Trade Competitiveness	0.66*** (0.16)	-0.09 (0.26)
Political Ideology	0.13*** (0.03)	0.13*** (0.03)
Female	0.42*** (0.14)	0.43*** (0.13)
(Intercept)	6.18*** (0.07)	6.36*** (0.07)
R ²	0.11	0.11
Adj. R ²	0.09	0.09
Num. obs.	1277	1277

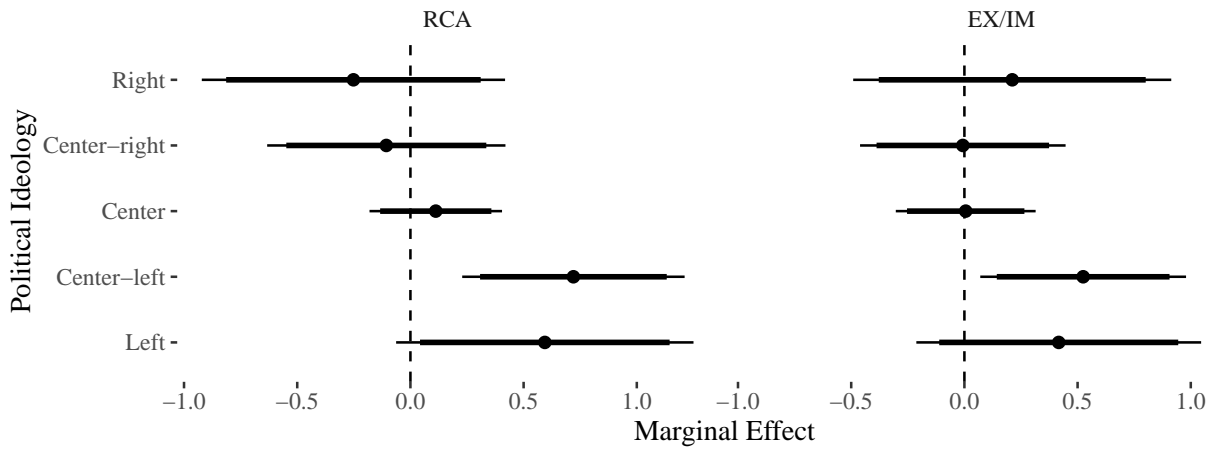
*** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$. Entries are unstandardized coefficients from a linear regression model. Standard errors in parentheses are clustered on the district-year. RCA or EX/IM refers to the revealed comparative advantage measure and trade balance (net-trade) measure of subnational trade competitiveness. RCA or EX/IM measures are calculated vis-a-vis the respective partner (US, EU or Pacific Alliance). Country-wave fixed effects omitted.

Table E13: Subnational Trade Competitiveness, Open List, and Trade Attitudes

	RCA	EX/IM
Subnational Trade Competitiveness	0.14 (0.12)	0.18 (0.11)
Open List	1.69*** (0.26)	1.91*** (0.28)
Comp. x Open List	0.62** (0.28)	0.15 (0.27)
Political Ideology	0.45*** (0.03)	0.45*** (0.03)
Female	0.09 (0.07)	0.09 (0.07)
Pacific Agreement	-0.46*** (0.11)	-0.48*** (0.11)
US Agreement	-0.73*** (0.05)	-0.74*** (0.05)
(Intercept)	3.02*** (0.12)	3.06*** (0.13)
R ²	0.28	0.28
Adj. R ²	0.27	0.27
Num. obs.	6253	6253

*** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$. Entries are unstandardized coefficients from a linear regression model. Standard errors in parentheses are clustered on the district-year. RCA or EX/IM refers to the revealed comparative advantage measure and trade balance (net-trade) measure of subnational trade competitiveness. RCA or EX/IM measures are calculated vis-a-vis the respective partner (US, EU or Pacific Alliance). Country-wave fixed effects omitted.

Figure E1: Alternative Specifications of Political Ideology



Note: Ranges represent 90 and 95 percent confidence intervals using standard errors clustered at the district-year level.

Figure E2: Binning estimator for the interaction of RCA and political ideology

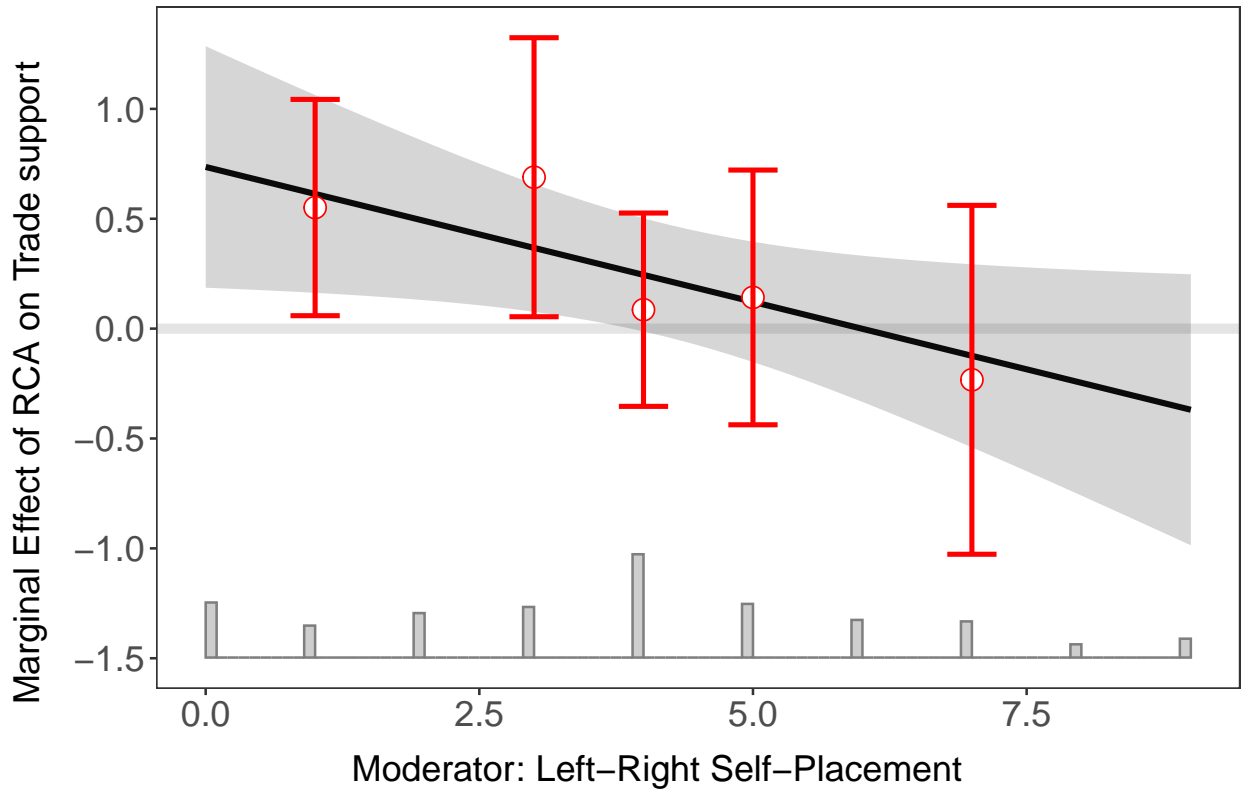


Figure E3: Kernel estimator for the interaction of RCA and political ideology



Figure E4: Binning estimator for the interaction of EX/IM and district magnitude

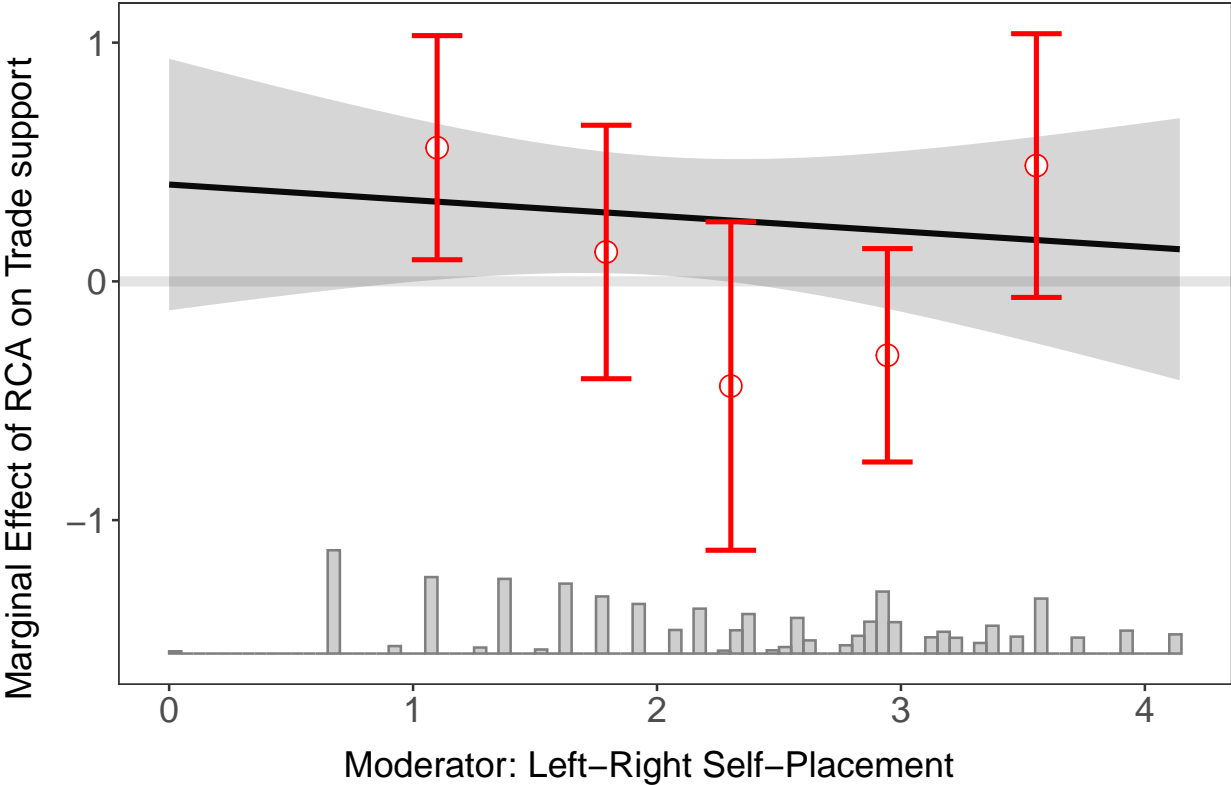
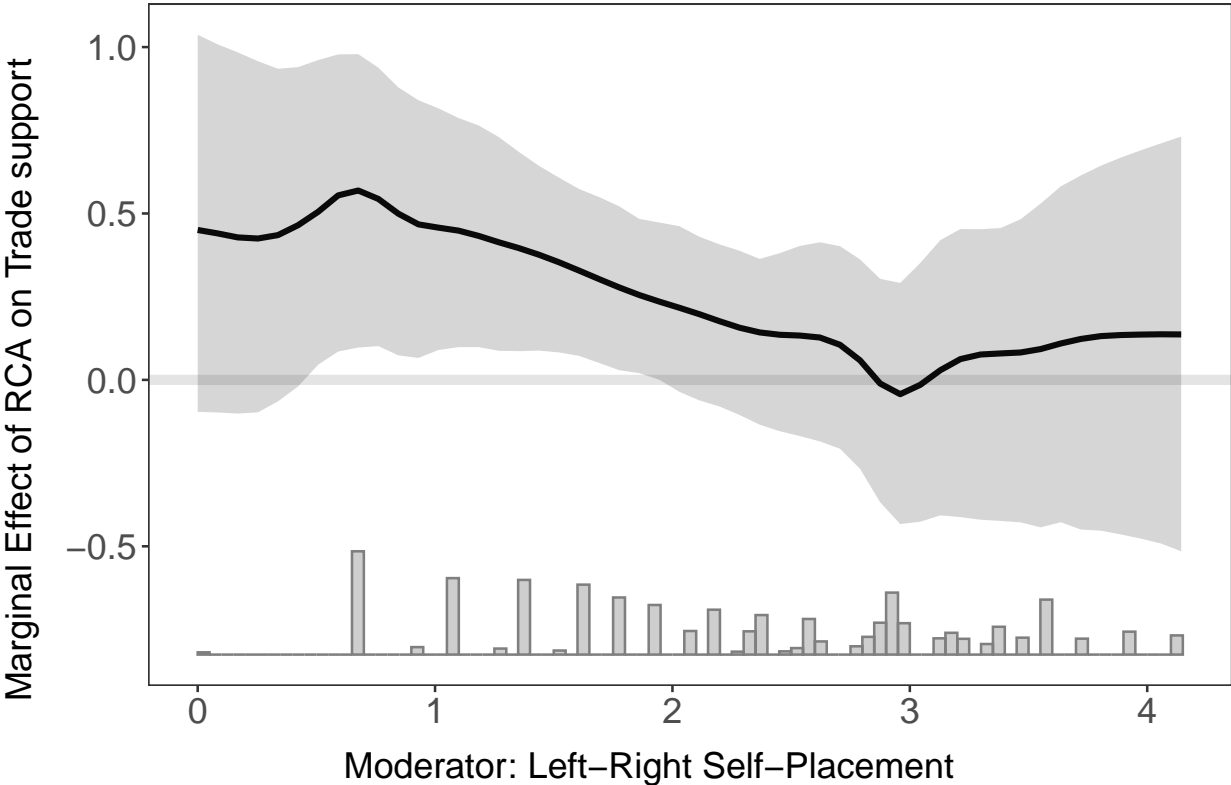


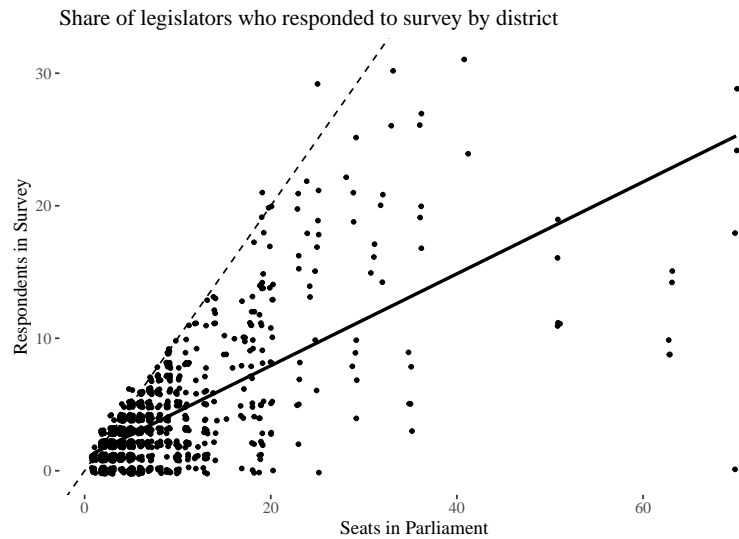
Figure E5: Kernel estimator for the interaction of EX/IM and district magnitude



F Data quality

F.1 Representativeness of the legislator data

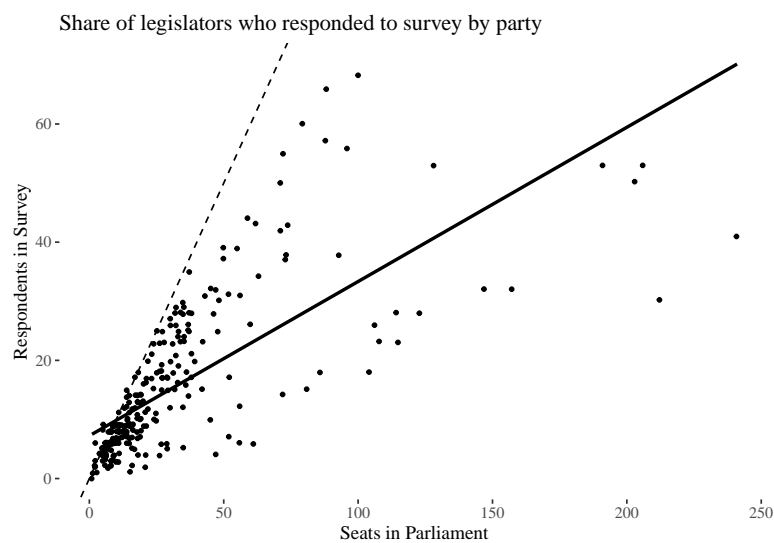
Figure F1: Seats by Party in Data and Parliament



Note: The dashed line has a slope of 1. The black line is a linear fit describing the data.

Figure F1 summarizes the distribution of seats a party holds in parliament (x-axis) and the number of legislators of a party in our data. No party occurs more often in our data than it actually holds seats in parliament. Some data points, such as those below the line and above 100 seats in parliament are substantially underrepresented.

Figure F2: Seats by Districts in Data and Parliament



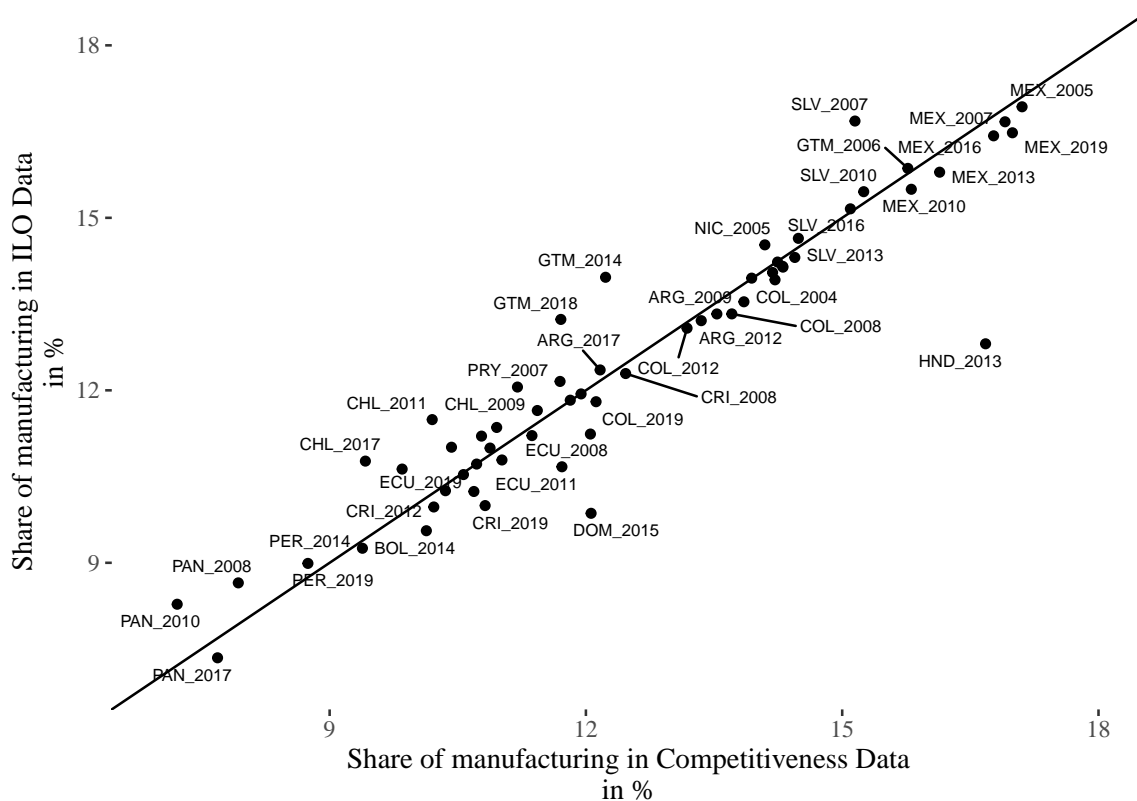
Note: The dashed line has a slope of 1. The black line is a linear fit describing the data.

Figure F2 confirms the general impression of Figure F1. Larger districts generally tend to be underrepresented a bit, however writ large there are no drastic outliers.

F.2 Data quality of competitiveness data

The following Figures (F3, F4, F5, and F6) show the ILO’s official nationwide share of employees by sector compared to our estimates from the labor surveys. Most generally, we clearly observe that our estimates for national shares fit the ILO data.¹⁹ The respective correlations are $r(42) = 0.88$, $p < 0.001$ for manufacturing, $r(42) = 0.96$, $p < 0.001$ for the primary sector, $r(42) = 0.95$, $p < 0.001$ for services, and $r(42) = 0.31$, $p = 0.038$ for other sectors (category rest, which captures energy production).

Figure F3: Estimated Share of Manufacturing vs. ILO Data



¹⁹Data available from https://www.ilo.org/shinyapps/bulkexplorer1/?lang=en&segment=indicator&id=EMP_2EMP_SEX
Last accessed 23 Aug. 2019.

Figure F4: Estimated Share of Primary Sector vs. ILO Data

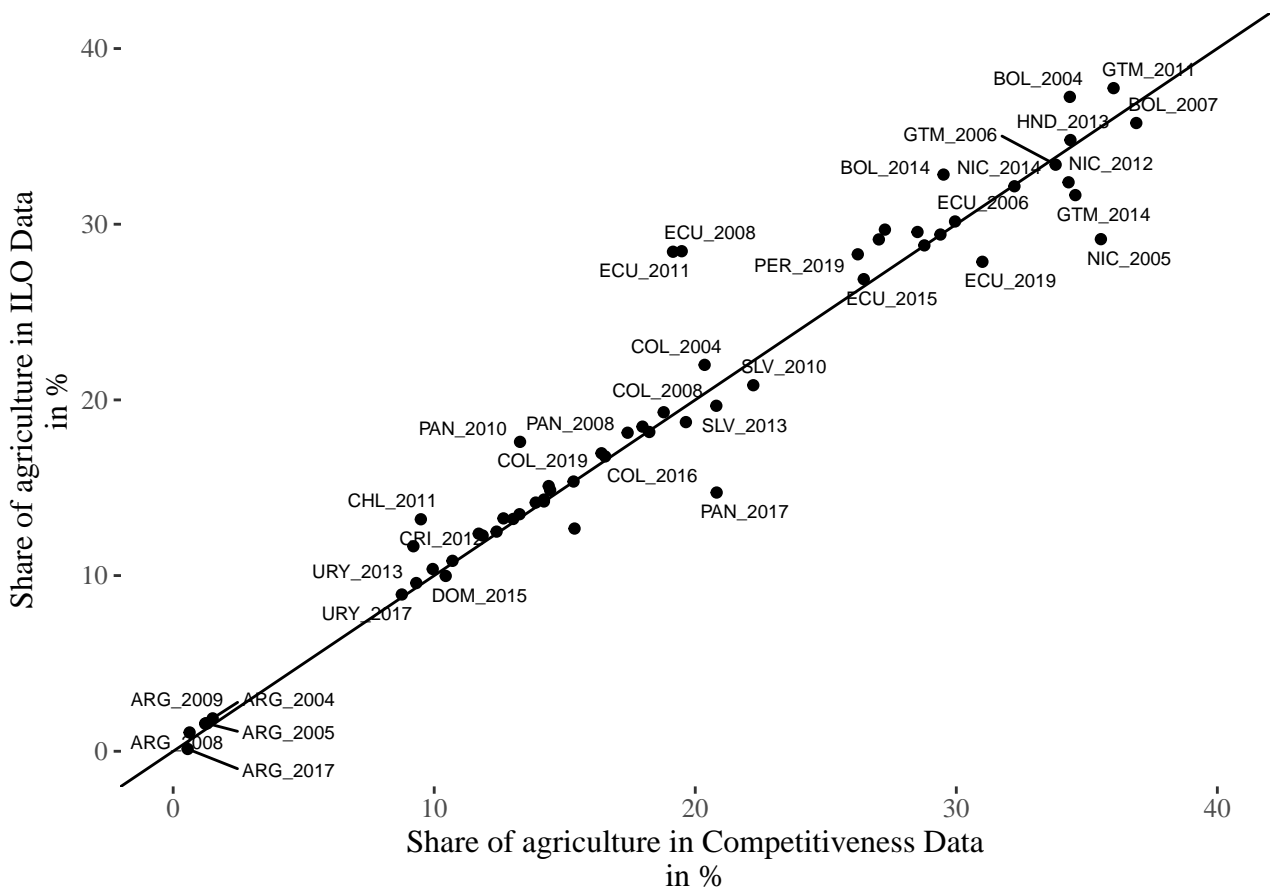


Figure F5: Estimated Share of Services vs. ILO Data

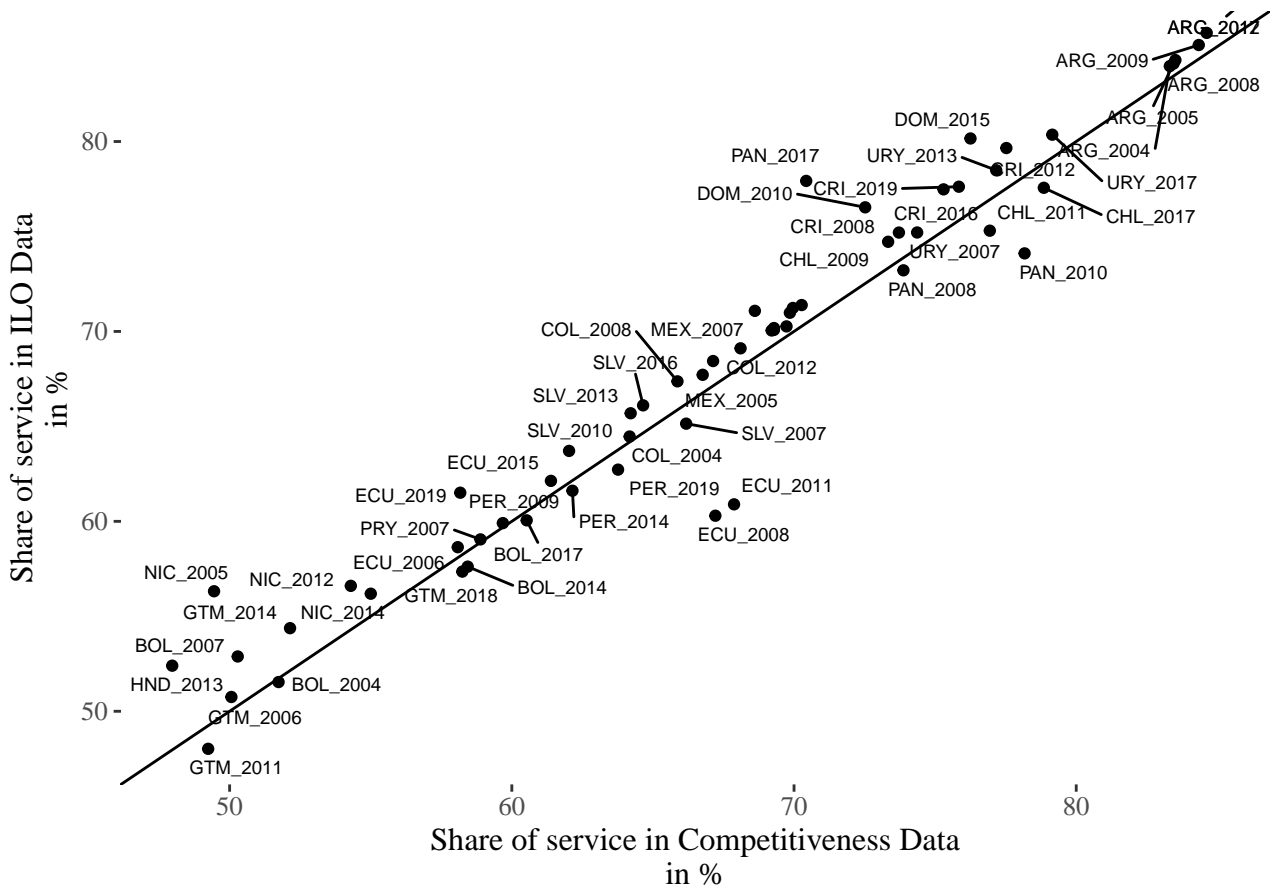
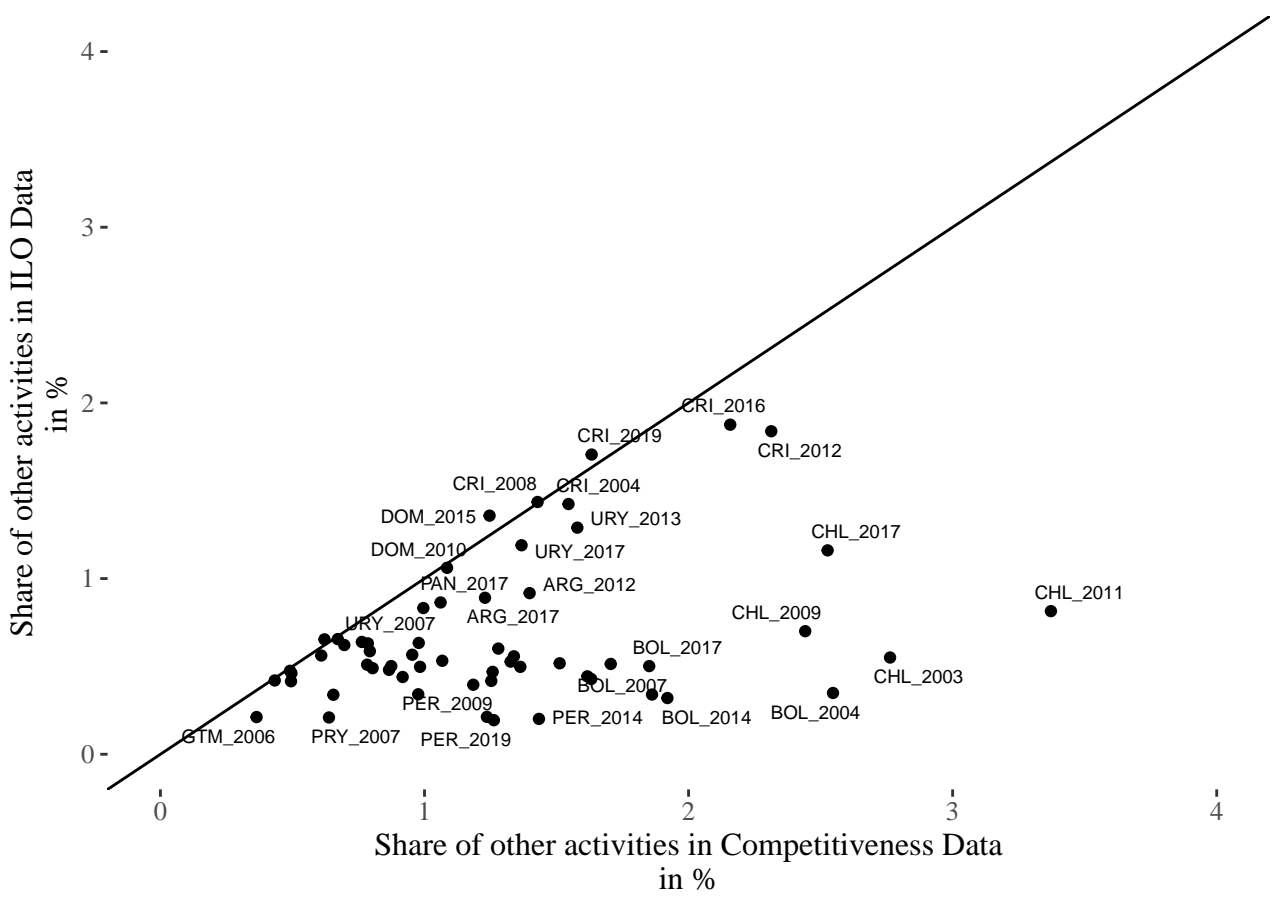


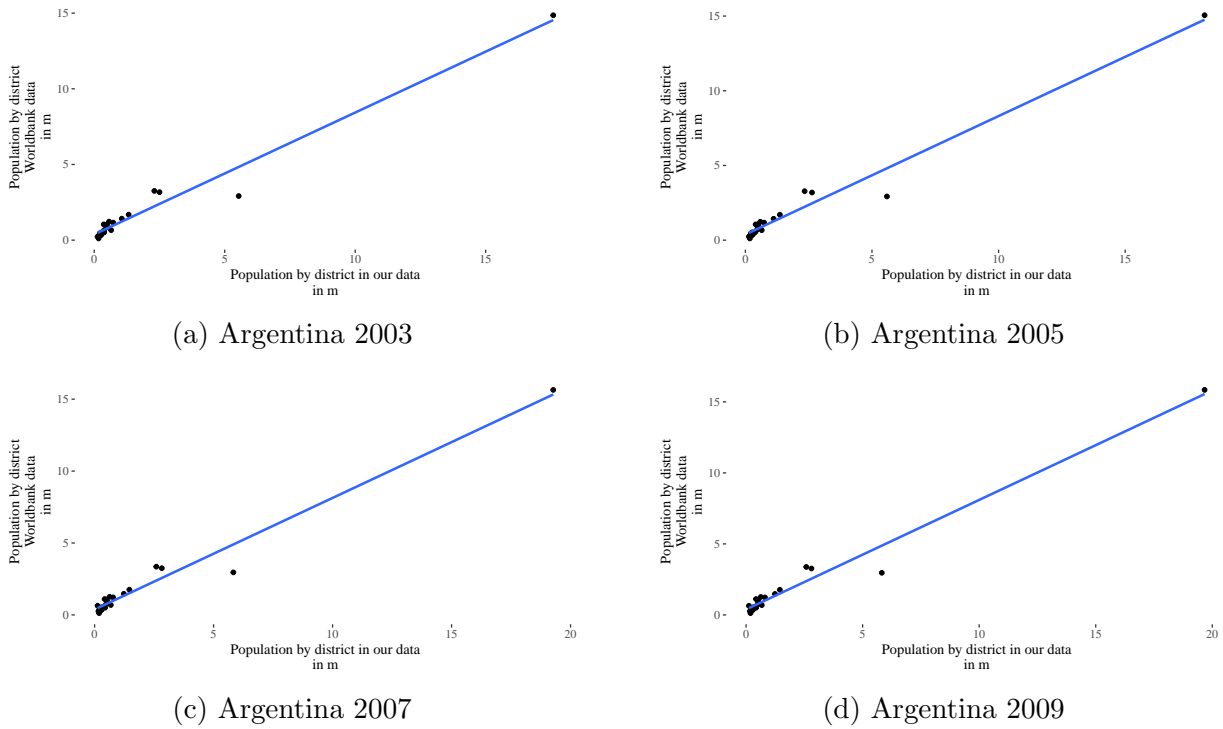
Figure F6: Estimated Share of Other Activities vs. ILO Data



F.3 Representativeness of the labour survey data

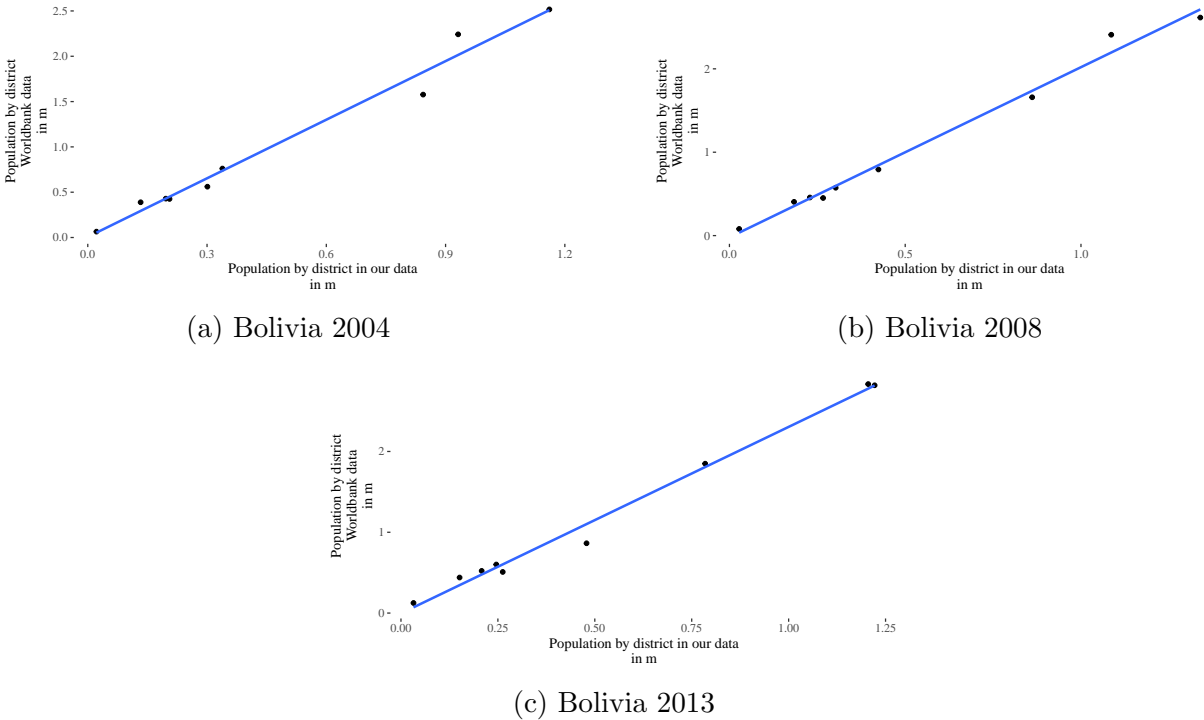
In the subsequent section of figures, we compare the population of a country in the year of the household survey (which ideally is t_{-2}) with Worldbank data on subnational population.

Figure F7: Estimated Population and Worldbank Population – Argentina



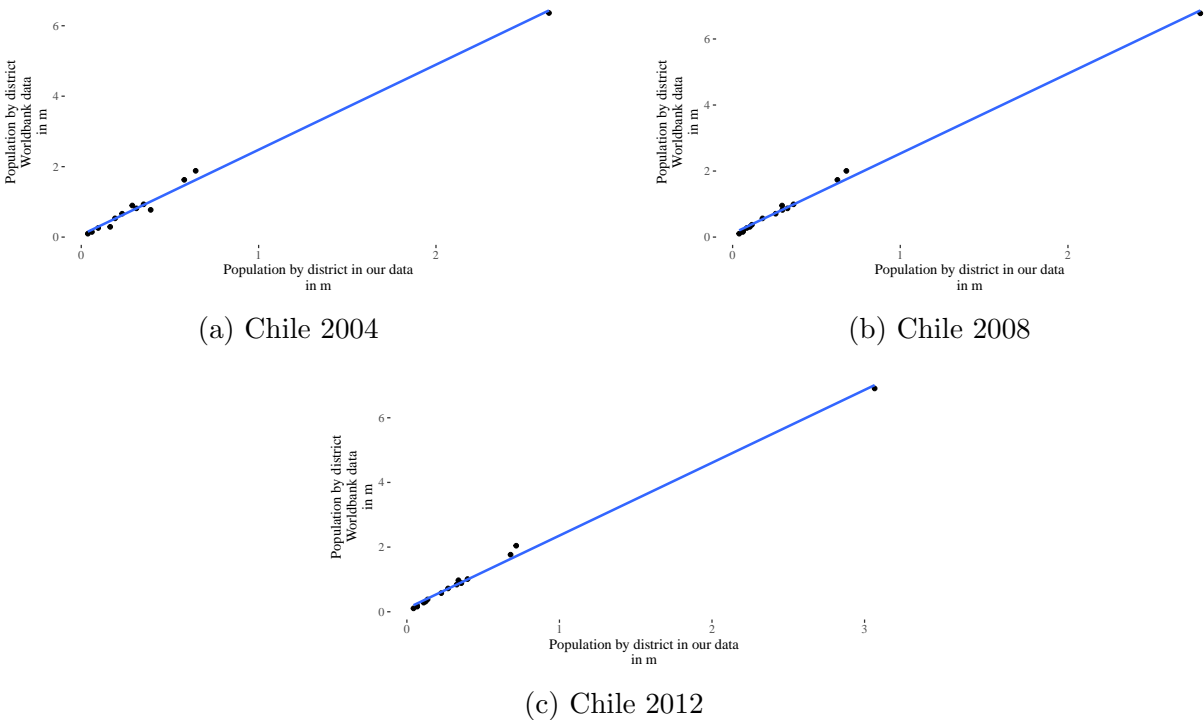
Note: The blue line is a linear fit describing the data.

Figure F8: Estimated Population and Worldbank Population – Bolivia



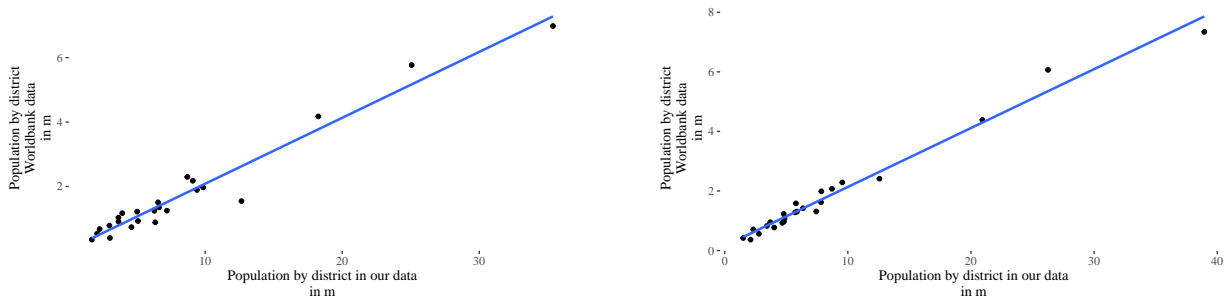
Note: The blue line is a linear fit describing the data.

Figure F9: Estimated Population and Worldbank Population – Chile



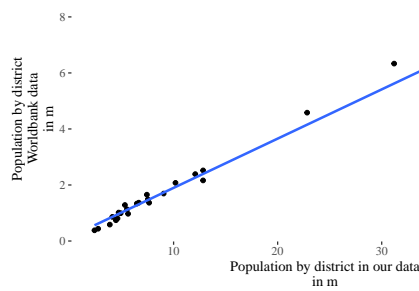
Note: The blue line is a linear fit describing the data.

Figure F10: Estimated Population and Worldbank Population – Colombia



(a) Colombia 2004

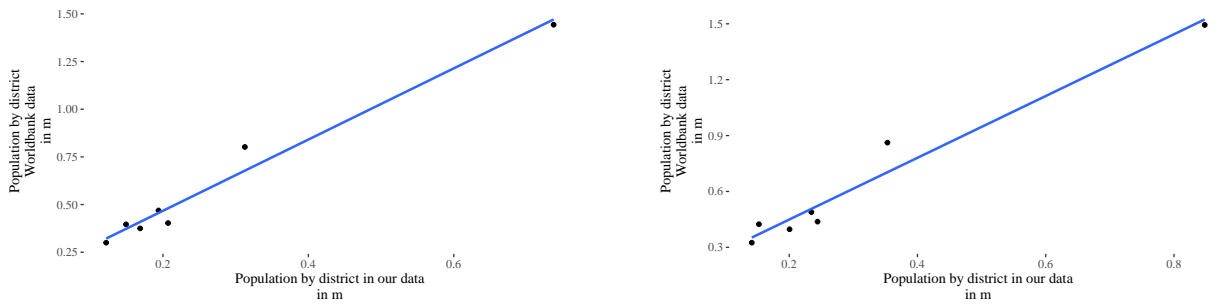
(b) Colombia 2008



(c) Colombia 2012

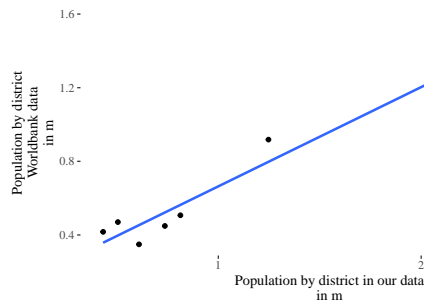
Note: The blue line is a linear fit describing the data.

Figure F11: Estimated Population and Worldbank Population – Costa Rica



(a) Costa Rica 2004

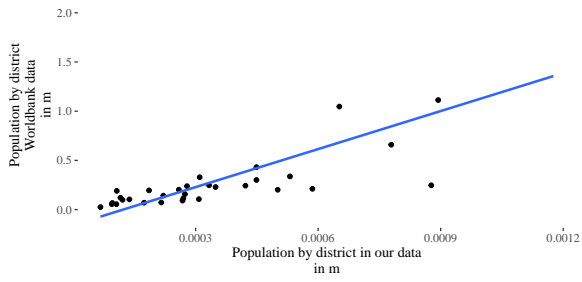
(b) Costa Rica 2008



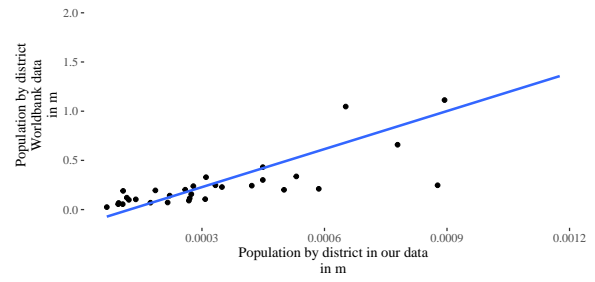
(c) Costa Rica 2012

Note: The blue line is a linear fit describing the data.

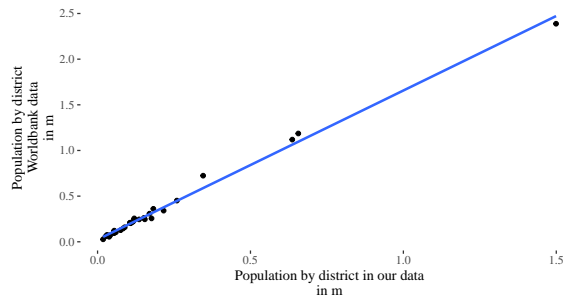
Figure F12: Estimated Population and Worldbank Population – Dominican Republic



(a) Dominican Republic 2004



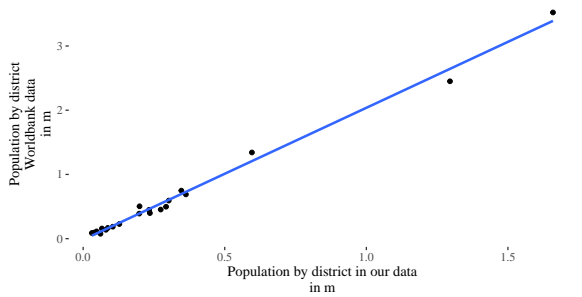
(b) Dominican Republic 2008



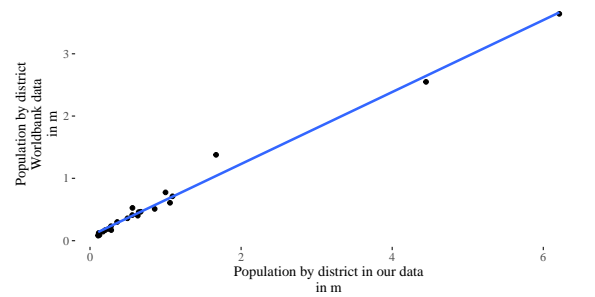
(c) Dominican Republic 2014

Note: The blue line is a linear fit describing the data.

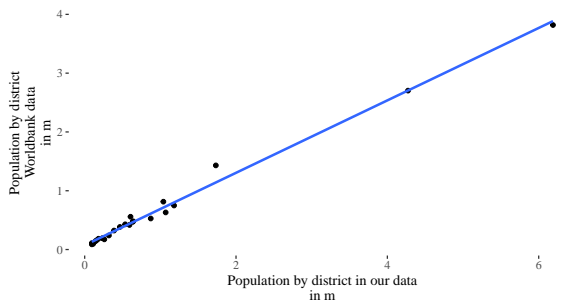
Figure F13: Estimated Population and Worldbank Population – Ecuador



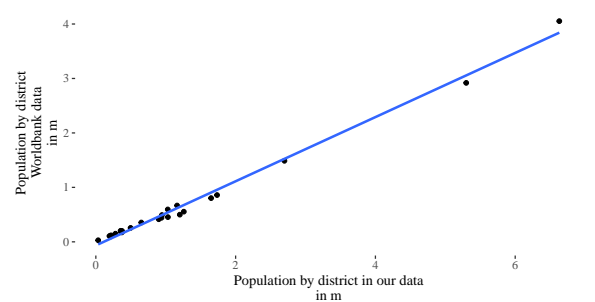
(a) Ecuador 2005



(b) Ecuador 2007



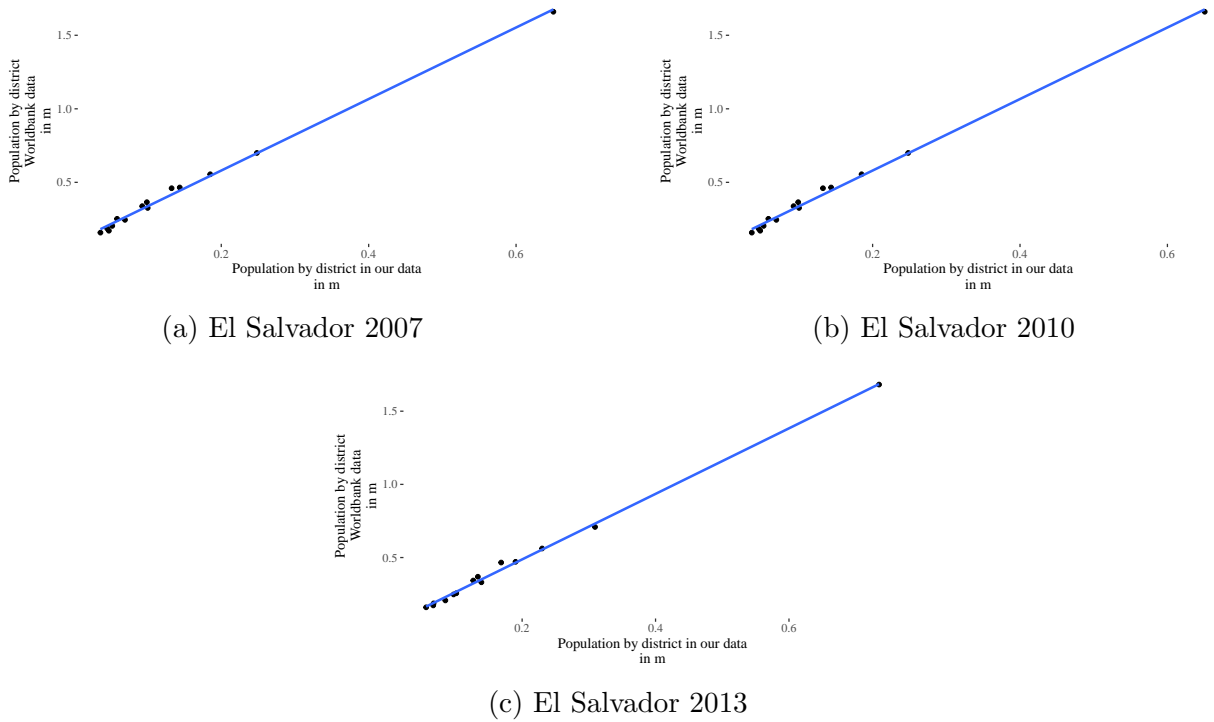
(c) Ecuador 2011



(d) Ecuador 2015

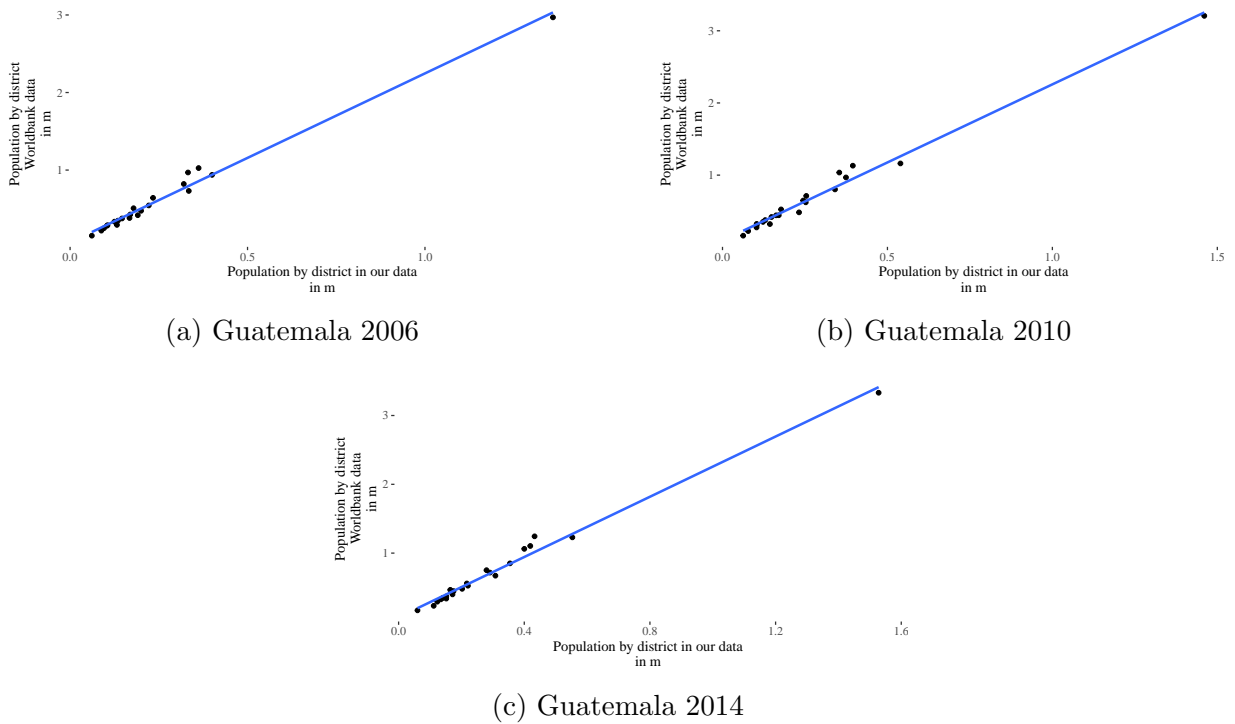
Note: The blue line is a linear fit describing the data.

Figure F14: Estimated Population and Worldbank Population – El Salvador



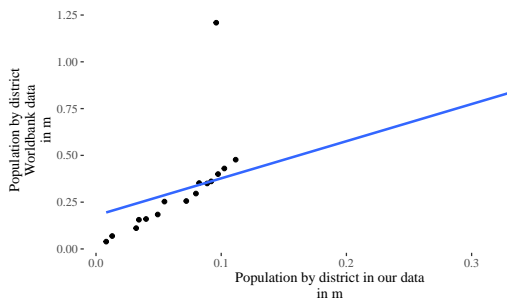
Note: The blue line is a linear fit describing the data.

Figure F15: Estimated Population and Worldbank Population – Guatemala

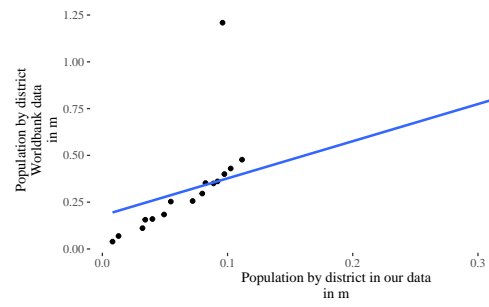


Note: The blue line is a linear fit describing the data.

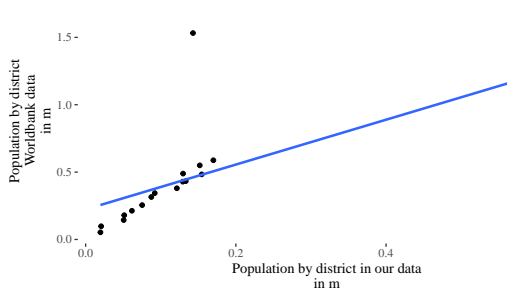
Figure F16: Estimated Population and Worldbank Population – Honduras



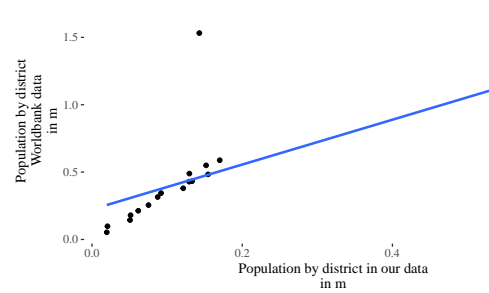
(a) Honduras 2004



(b) Honduras 2008



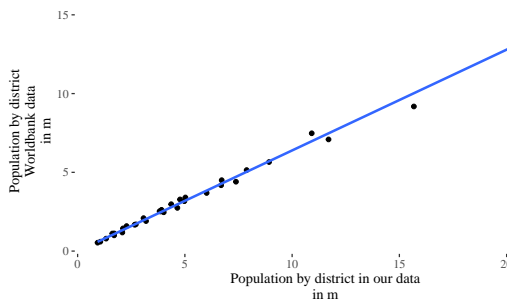
(c) Honduras 2012



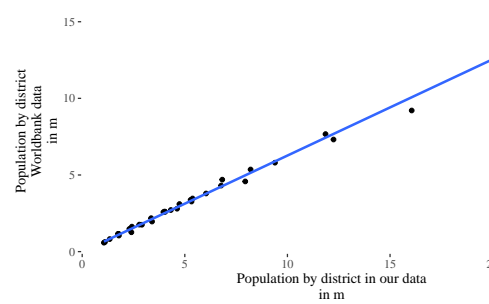
(d) Honduras 2016

Note: The blue line is a linear fit describing the data.

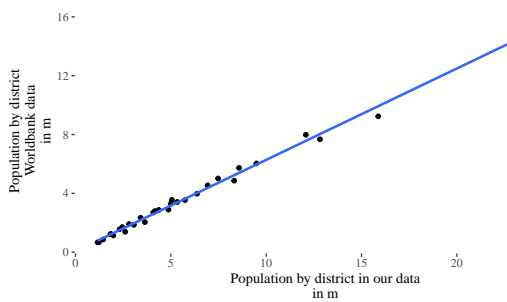
Figure F17: Estimated Population and Worldbank Population – Mexico



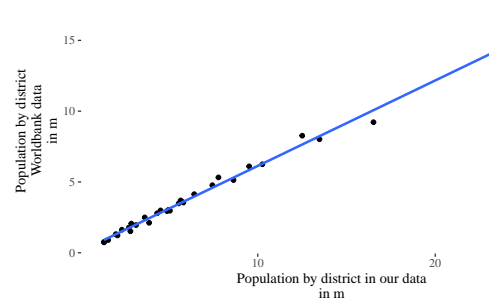
(a) Mexico 2004



(b) Mexico 2007



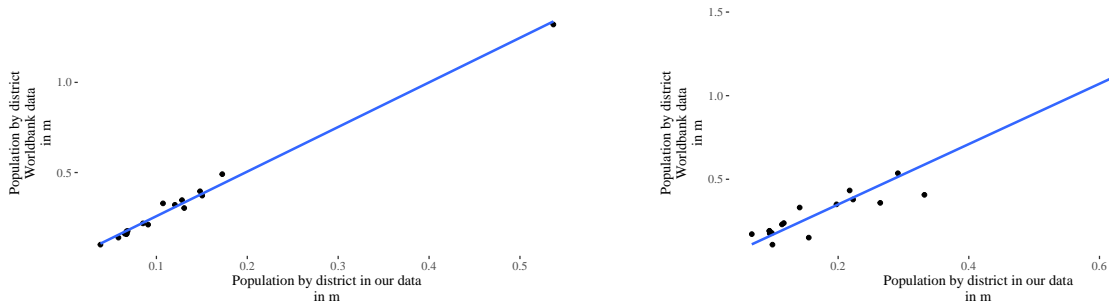
(c) Mexico 2010



(d) Mexico 2013

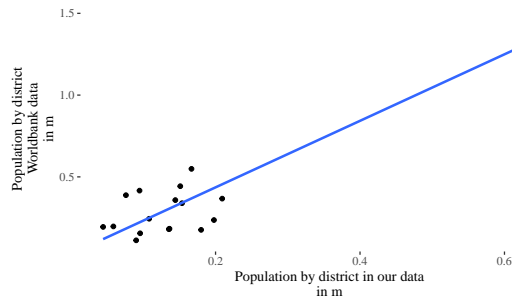
Note: The blue line is a linear fit describing the data.

Figure F18: Estimated Population and Worldbank Population – Nicaragua



(a) Nicaragua 2005

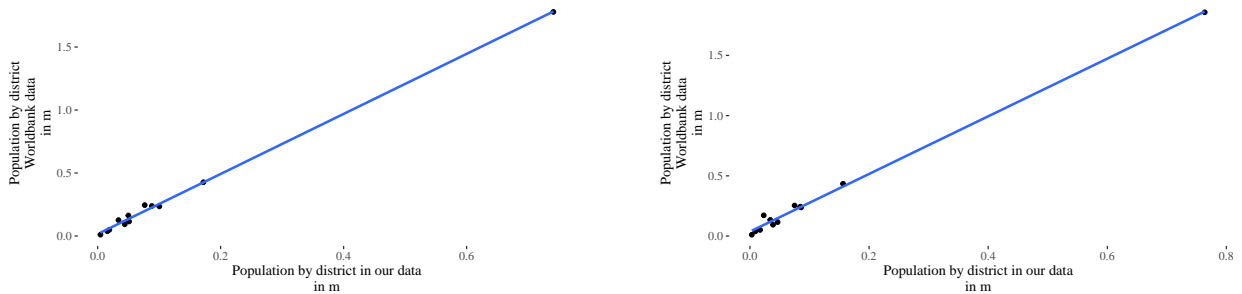
(b) Nicaragua 2010



(c) Nicaragua 2015

Note: The blue line is a linear fit describing the data.

Figure F19: Estimated Population and Worldbank Population – Panama

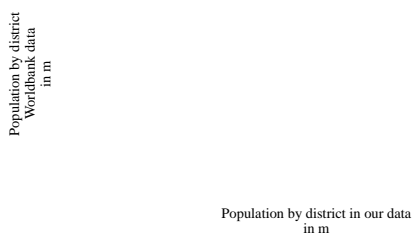


(a) Panama 2007

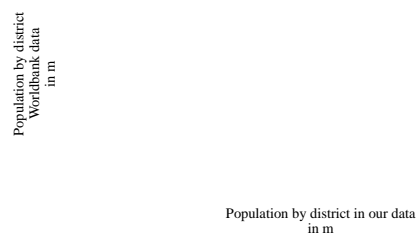
(b) Panama 2012

Note: The blue line is a linear fit describing the data.

Figure F20: Estimated Population and Worldbank Population – Paraguay

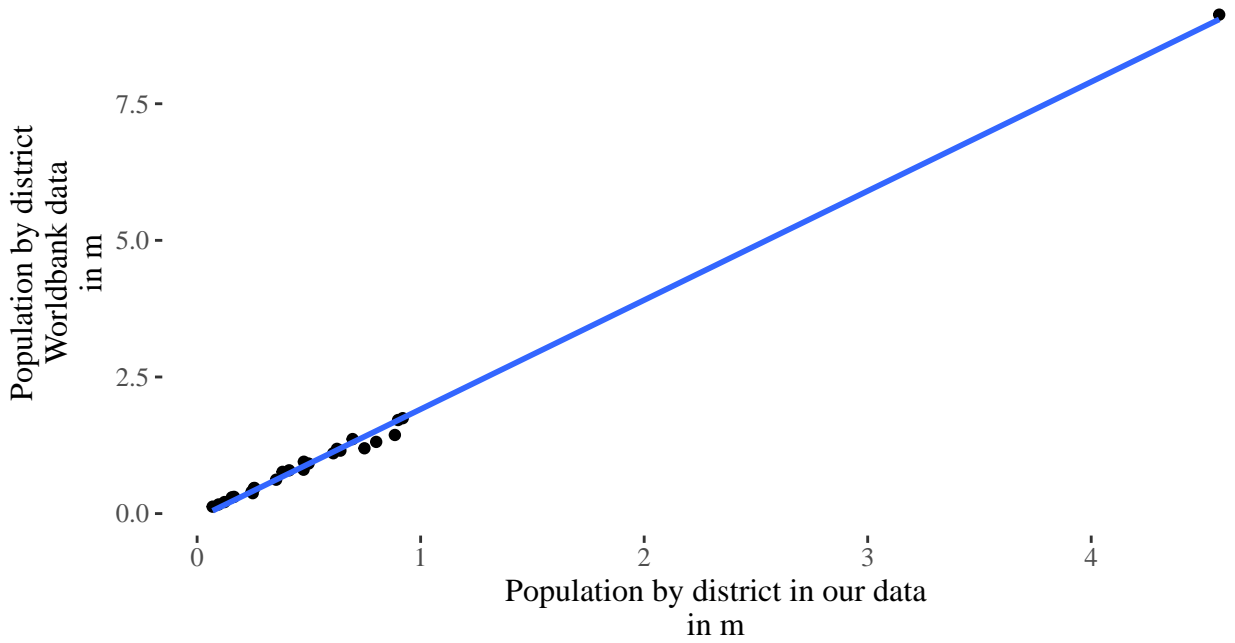


(a) Paraguay 2006



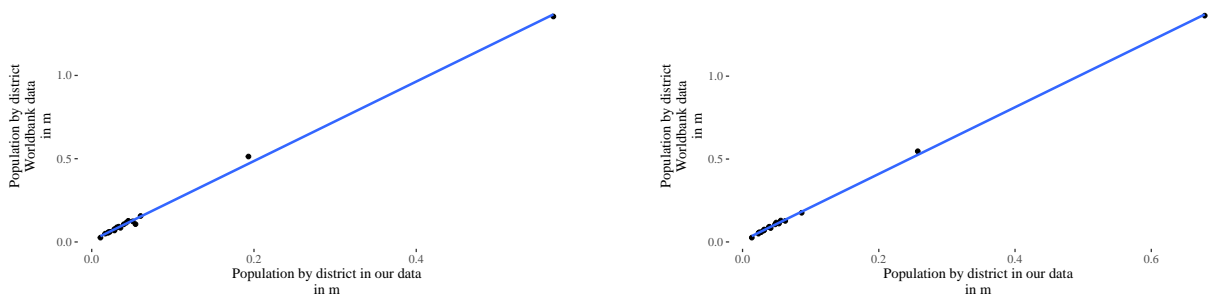
(b) Paraguay 2011

Figure F21: Estimated Population and Worldbank Population – Peru



Note: The black line is a linear fit describing the data.

Figure F22: Estimated Population and Worldbank Population – Uruguay



(a) Uruguay 2007

(b) Uruguay 2013

Note: The blue line is a linear fit describing the data.

7 Appendix References

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