

# *Import competition and congressional voting behaviour*

**Liam Tay Kearney**

MIA '22, QMSS '22 | Columbia University

All data and code are available from my github: [ltk2118/congress\\_trade](https://github.com/ltk2118/congress_trade)

# Theoretical Framework

- **Central question**

- What is the effect of greater import competition on congressional voting behaviour on legislation aimed at enhancing free trade?
- If there is an effect, how long does it persist?

- **Hypothesis to be tested**

- Members representing congressional districts with higher import penetration intensity will exhibit a lower propensity to vote for free trade agreements, controlling for legislator ideology and regional/demographic/economic characteristics of the district

- **Caveats**

- Internal validity: does not take into account legislator's voting history, small sample size of roll calls
- External validity: focus period is almost entirely under Republican presidency and Republican House majority – threat to generalizability

# Data

- **Import penetration intensity - community zone (CZ) level**
  - Average change in Chinese import penetration in that CZ's industries, weighted by the share of each industry in initial employment, from 2002 to 2010
  - Derived from Acemoglu et al. (2016) and Autor et al. (2014, 2020)
  - Instrumented with growth in Chinese imports to 8 other countries
- **House roll call votes**
  - Rvoteview API (in R)
  - Searched for free-trade agreements and filtered manually
  - Code Yea=1, Nay=0, abstentions removed
- **Controls**
  - Demographic composition: age, race, gender, education, foreign born
  - Labor market composition: manufacturing share, female employment, routine occupations, offshorability index
  - Data from Autor et al. (2020)
  - Data at county x district cell level collapsed to districts using population shares

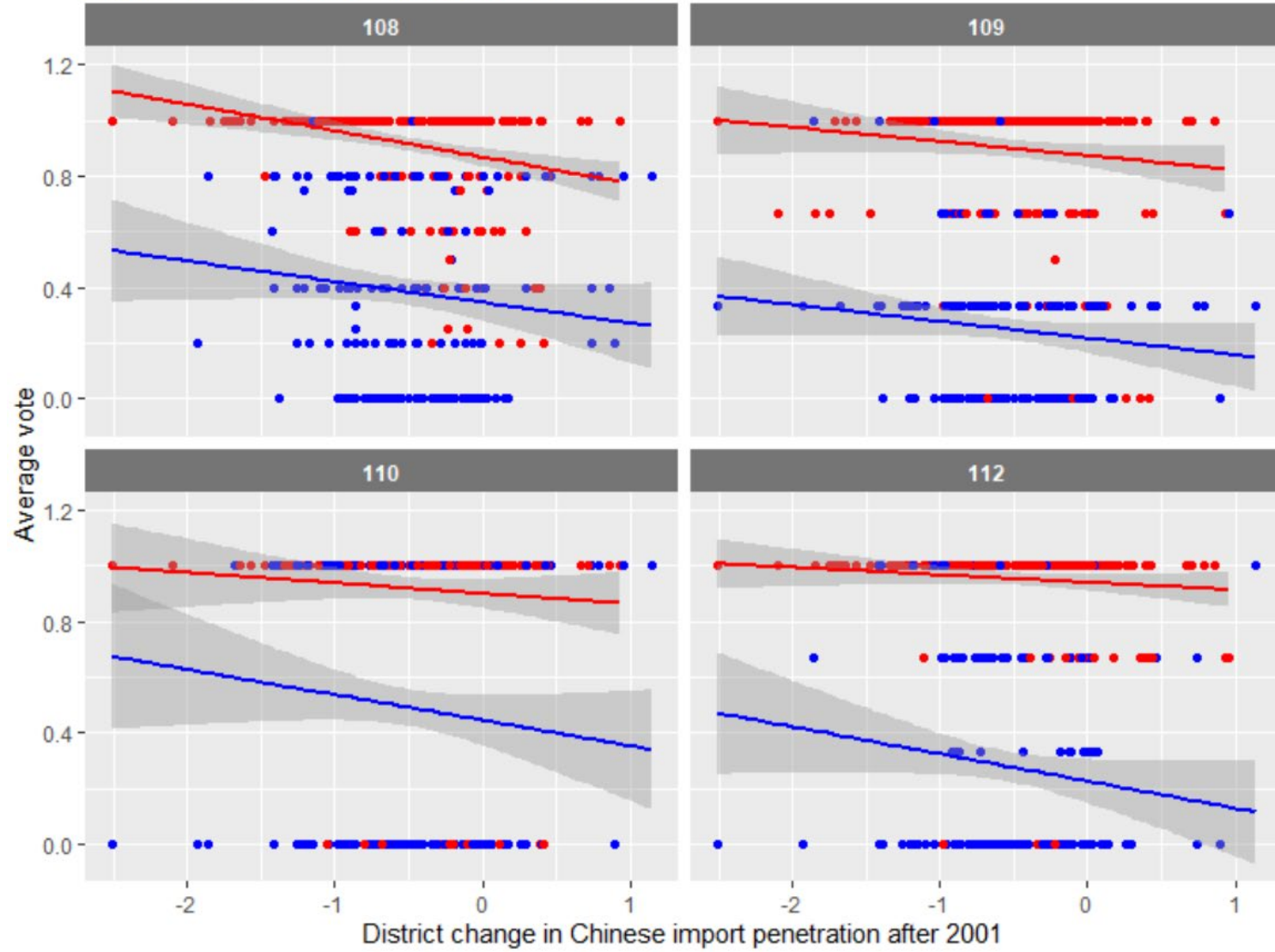
# House roll call votes, FTAs

Bill	Congress	Date	Yea	Nay	Result	Description
HR2799	108	2003-07-23	231	198	Passed	CENTRAL AMERICA FREE TRADE AGREEMENT
HR2739	108	2003-07-24	273	155	Passed	FREE TRADE WITH SINGAPORE (PASS)
HR2738	108	2003-07-24	271	156	Passed	FREE TRADE WITH CHILE (PASS)
HR4759	108	2004-07-14	315	109	Passed	FREE TRADE WITH AUSTRALIA (PASS)
HR4842	108	2004-07-22	324	99	Passed	FREE TRADE WITH MOROCCO (PASS)
HR3045	109	2005-07-28	218	215	Passed	FREE TRADE WITH CENTRAL AMERICA (PASS)
HR4340	109	2005-12-07	328	95	Passed	FREE TRADE WITH BRITAIN (PASS)
HR5684	109	2006-07-20	222	205	Passed	FREE TRADE WITH OMAN (PASS)
HR3688	110	2007-11-08	286	132	Passed	FREE TRADE WITH PERU (PASS)
HR3078	112	2011-10-12	263	167	Passed	FREE TRADE WITH COLOMBIA (PASS)
HR3079	112	2011-10-12	301	129	Passed	FREE TRADE WITH PANAMA (PASS)
HR3080	112	2011-10-12	279	151	Passed	FREE TRADE WITH SOUTH KOREA (PASS)
HR5430	116	2019-12-19	385	41	Passed	UNITED STATES-MEXICO-CANADA AGREEMENT

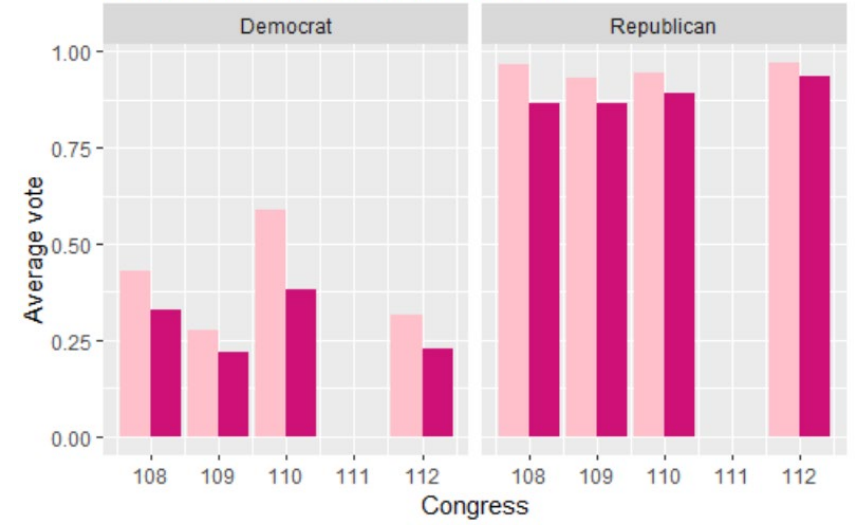
**435 congressional districts (all other data are aggregated to congressional district level for analysis)**



108th, 109th, 110th and 112th Congress  
 Import intensity vs house voting outcomes on FTAs

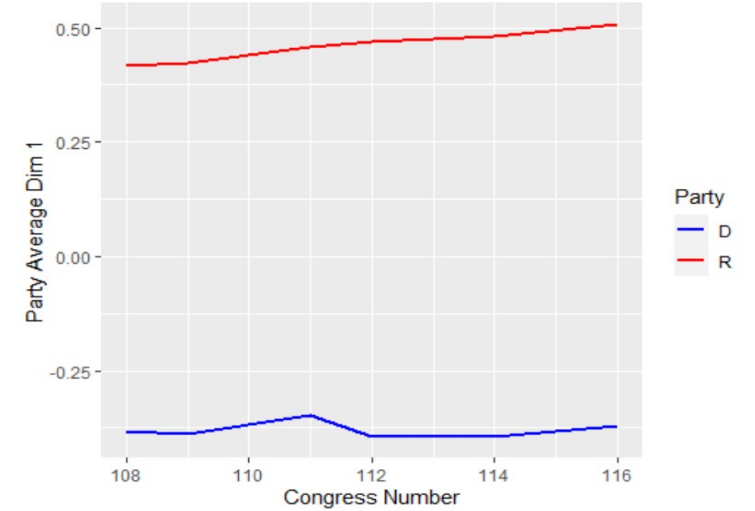


Average FTA vote vs High/Low Import Penetration  
 108th, 109th, 110th and 112th Congresses



Party  
 D  
 R

Change in Party Average Dim 1 (Nominate)



# Estimation and results: OLS

Table 1: Specifications for 108th Congress

	<i>Dependent variable:</i>						
	vote_108						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
log_d_imp	-0.11*** (0.04)	-0.12*** (0.03)	-0.11*** (0.03)	-0.13*** (0.04)	-0.14*** (0.04)	-0.13*** (0.04)	-0.14*** (0.04)
Dim1_108th		0.63*** (0.03)	0.33*** (0.09)	0.33*** (0.09)	0.26*** (0.10)	0.30*** (0.10)	0.26** (0.11)
Party (R)			0.27*** (0.08)	0.27*** (0.08)	0.33*** (0.08)	0.29*** (0.08)	0.32*** (0.08)
log_d_imp x Party (R)				0.02 (0.05)	0.03 (0.05)	0.04 (0.05)	0.03 (0.05)
Regional Controls	No	No	No	No	Yes	No	Yes
Labor Market Controls	No	No	No	No	No	Yes	Yes
Demographic Controls	No	No	No	No	No	Yes	Yes
Adjusted R <sup>2</sup>	0.02	0.51	0.52	0.52	0.53	0.52	0.54
F Statistic	8.82***	217.67***	152.60***	114.28***	40.72***	24.35***	18.82***

Note: \*p<0.1; \*\*p<0.05; \*\*\*p<0.01

Table 2: Outcomes across Congresses

	<i>Dependent variable:</i>		
	vote_108	vote_109	vote_112
	(1)	(2)	(3)
log_d_imp	-0.14*** (0.04)	-0.08** (0.04)	-0.13*** (0.05)
Dim1_kth	0.26** (0.11)	0.30*** (0.10)	0.45*** (0.11)
Party (R)	0.32*** (0.08)	0.40*** (0.08)	0.28*** (0.09)
log_d_imp x Party (R)	0.03 (0.05)	-0.004 (0.05)	0.09 (0.06)
Regional Controls	Yes	Yes	Yes
Labor Market Controls	Yes	Yes	Yes
Demographic Controls	Yes	Yes	Yes
Adjusted R <sup>2</sup>	0.54	0.66	0.63
F Statistic	18.82***	30.74***	26.73***

Note: \*p<0.1; \*\*p<0.05; \*\*\*p<0.01

# Estimation and results: probit

Table 3: Probits for individual FTA bills in 108th Congress

	<i>Dependent variable:</i>				
	RH1080409 CAFTA	RH1080430 Singapore	RH1080434 Chile	RH1081049 Australia	RH1081087 Morocco
log_d_imp	-4.239*** (0.185)	-0.402* (0.236)	-0.469** (0.236)	-0.502** (0.248)	-0.464** (0.235)
Dim1_108th	73.573*** (1.832)	0.635 (0.849)	1.028 (0.885)	1.255 (0.933)	1.182 (0.864)
Party (R)	-0.726 (1.216)	1.410*** (0.535)	1.135** (0.558)	0.681 (0.654)	0.757 (0.545)
log_d_imp x Party (R)	5.062*** (0.962)	-0.934** (0.407)	-0.796** (0.394)	-0.117 (0.362)	-1.262** (0.496)
Regional Controls	Yes	Yes	Yes	Yes	Yes
Labor Market Controls	Yes	Yes	Yes	Yes	Yes
Demographic Controls	Yes	Yes	Yes	Yes	Yes

Marginal Effect	Dom Rep	Singapore	Chile	Australia	Morocco
log_d_imp	0	-0.14*	-0.16**	-0.11**	-0.09**
Dim1_108th	0	0.21	0.35	0.28	0.23
Party (R)	0	0.46**	0.38**	0.16	0.15
log_d_imp x Party (R)	0	-0.31**	-0.27**	-0.03	-0.25**

Table 4: Probits for FTA bills in 110th and 116th Congress

	<i>Dependent variable:</i>	
	vote_110 Peru	vote_116 USMCA
log_d_imp	-0.310 (0.250)	-0.078 (0.242)
Dim1_kth	2.362*** (0.879)	1.682 (1.205)
Party (R)	-0.228 (0.590)	-0.478 (0.781)
log_d_imp x Party (R)	-0.175 (0.389)	0.710 (0.698)
Regional Controls	Yes	Yes
Labor Market Controls	Yes	Yes
Demographic Controls	Yes	Yes

Note: \*p<0.1; \*\*p<0.05; \*\*\*p<0.01



# Policy Implications

- Even a small increase in Chinese import penetration (1bp) in a district was associated with a significant reduction in voting for FTAs in the house (10-15 pps) on average in the 108<sup>th</sup> and 109<sup>th</sup> Congresses; controlling for district characteristics and legislator ideology
- Effect persists to the 112<sup>th</sup> congress; but not to the 116<sup>th</sup>
- Negative effect is much stronger if incumbent representative is Republican (but from a much higher baseline)
- Consistent with Dorn & Autor (2020) findings that import penetration affects political outcomes and differentially by party
- Endogenous relationship between legislating for free trade and its effects on local labour markets → possible backlash

# Thank you

- **Next steps**

- Explore whether import penetration has any effect on legislating for increased protection (as opposed to FTAs)
- Or, how it relates to voting on trade adjustment assistance
- Recalculate import penetration as a continuous variable and utilize panel estimation techniques to confirm findings

- **Contact me**

- [ltk2118@columbia.edu](mailto:ltk2118@columbia.edu)
- Code and data: [https://github.com/ltk2118/congress\\_trade](https://github.com/ltk2118/congress_trade)

# Appendix

Congress	House_maj_R	Sen_maj_R	pres_R	Bush	Obama	Trump	Start date	End date
108	1	1	1	1	0	0	3/01/2003	3/01/2005
109	1	1	1	1	0	0	3/01/2005	3/01/2007
110	0	0	1	1	0	0	3/01/2007	3/01/2009
111	0	0	0	0	1	0	3/01/2009	3/01/2011
112	1	0	0	0	1	0	3/01/2011	3/01/2013
113	1	0	0	0	1	0	3/01/2013	3/01/2015
114	1	1	0	0	1	0	3/01/2015	3/01/2017
115	1	1	1	0	0	1	3/01/2017	3/01/2019
116	0	1	1	0	0	1	3/01/2019	3/01/2021
117	0	0	0	0	0	0	3/01/2021	3/01/2023