

# Political Risk and Firm Exit: Evidence from the U.S.-China Trade War

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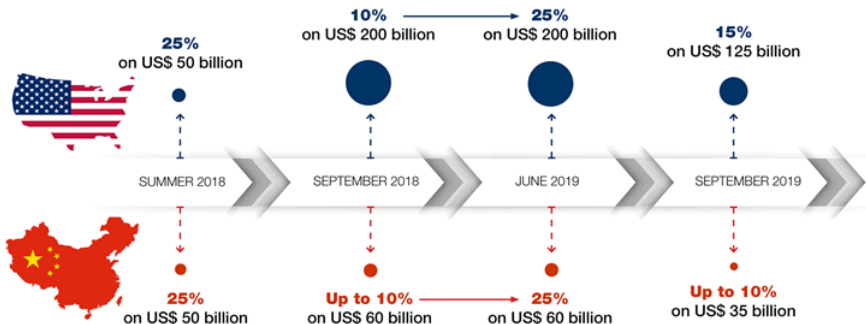
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# Tariffs and the Trade War

## Evolution of the US-China Trade War



Source: UNCTAD

# Trade War Rationale

“The tariffs President Donald Trump imposed to combat the forced transfer of technology from American firms to Chinese ones as a price of doing business in China and other market-distorting Chinese trade practices are a critical component of this strategy [to win our contest with China].

**The notion that all tariffs are bad is foolish and counterproductive.** They have been an effective tool of economic policy since the beginning of the Republic. They can offset unfair subsidies by foreign governments and industrial policy; break reliance on foreign suppliers; **and raise import costs, thus encouraging companies to bring jobs back to this country.**” - Robert Lighthizer, July 2021

# Research Question

Are US multi-national corporations (MNCs) leaving China because of the trade war?

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Are US multi-national corporations (MNCs) leaving China because of the trade war?

- The trade war increased political risks for all MNCs, not just US firms or those exposed to tariffs.
- The “targeted” effect of tariffs is marginal compared to the blunt general effect.
- Not all firms experience political risks equally, with both international and firm heterogeneity mitigating factors.

# Politics of Firm Entry

We know a lot of reasons why firms *enter* a foreign market:

- **IPE literature:** BITs (Kerner 2009, Tobin and Rose-Acherman 2011, Zeng and Lu 2016), PTAs (Kim, Mansfield, and Milner 2016), alliances (Li and Vashchilko 2010), regime type (Li and Resnick 2003, Li et al 2018), political risk (Davis and Meunier 2011) drive FDI inflows
- **CPE literature:** indigenous innovation policy (Chen 2018), market size, infrastructure quality, labor costs, labor quality (Naughton 1996, Sun et al 2002) drive FDI inflows to China

# Politics of Firm Exit

But what causes firms to *exit* a foreign market?

- **Level of Political Risk**
- **Relations between sender and host state**
- **Firm heterogeneity**

# Political Risks and Trade Wars

The US-China Trade War represents a period of elevated political risk.

- Political risk: Risk that political decisions or events will affect business operations including profitability.
- Most important political-economic determinant of firm location decision (Pandya 2016)
- Mixed evidence of political risk affecting aggregate measures of FDI (Davis and Meunier 2011)



# Political Risks and Trade Wars

## Trade Wars...

- ... create uncertain business environments
- ... raise the cost of equity financing
- ... increase risk of canceled of contracts
- ... increase the potential for government pressure on corporate headquarters at home
- ... increase the cost of business through policies such as tariffs, non-tariff barriers to trade, capital restrictions, etc.

# Political Risks and Trade Wars

The effects of trade wars:

- Blunt effect on all businesses operating in a country involved in a trade war
- Targeted effect on businesses directly affected by trade war provisions (tariffs)

H1. Firms exposed to greater amounts of political risk will be more likely to exit.

# Mitigating Factors: Institutions and Entrenchment

H2. Bilateral treaties reduce exit.

- Bi- and multi-lateral agreements reduce political risks  
(Kim, Mansfield, and Milner 2016; Li and Vashchilko 2010; Tobin and Rose-Acherman 2011)
- Limit the potential for state intervention in business operations

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## H3. Firms entrenchment reduces exit.

- Firms vary in their ability to weather political storms  
(Kim and Osgood 2019, Vekasi 2019)
- Resource diversification; local connections; (local) lobbying ability

# Data

## Foreign-Invested Enterprises in China Dataset (2014-2019)

- Census of foreign-invested enterprises operating in China registered with the Ministry of Commerce
- Over 1.5 million firm-year observations, 383,908 unique firms
- Annual reports, including firm business operations, location, registered capital, investors, country of origin, industry class, etc.

# Dependent Variable: Firm Exits

- Firm Exit: dropping from the dataset
- Two panels: 2017-2018 pre-trade war; 2018-2019 post-trade war

Year	Total MNCs			US MNCs		
	Number	Exits	(Exit%)	Number	Exits	(Exit%)
2017	257,404	16,731	(6.50)	16,141		
2018	285,203	21,846	(7.66)	16,670	1,341	(8.05)
2019	308,569	35,238	(11.42)	16,536	1,893	(11.45)

# Measuring Political Risks

## Trade War

- Blunt effect: difference between exits before and after trade war
- Targeted effect: Any tariffs (0/1), Tariff intensity (tariff lines per industry class/industries per industry class)

# Tariff Intensity by Industry Class

Industry Class (n=90)	Industries Per Class	PRC Tariff	PRC Tariff	USA Tariff	USA Tariff
		Lines	Intensity	Lines	Intensity
01 Agriculture	28	332	11.85714286	966	34.5
02 Forestry	10	39	3.9	270	27
03 Animal husbandry	10	43	4.3	19	1.9
<b>04 Fishery</b>	5	442	88.4	631	126.2
05 Agricultural services	15	6	0.4	419	27.93333333
06 Coal mining	3	34	11.33333333	15	5
07 Oil and gas extraction	4	0	0	31	7.75
08 Ferrous metal ore mining	2	18	9	8	4
09 Non-ferrous metal ore mining	14	176	12.57142857	42	3
10 Non-metallic ore mining	10	340	34	113	11.3
11 Resource exploitation services	3	0	0	0	0
12 Other mining services	1	0	0	10	10
13 Agricultural and sideline food processing	21	636	30.28571429	998	47.52380952
14 Food manufacturing	23	751	32.65217391	939	40.82608696
15 Alcohol, beverage, and tea	13	73	5.615384615	339	26.07692308
16 Tobacco manufacturing	2	10	5	60	30
<b>17 Textiles manufacturing</b>	25	5620	224.8	9026	361.04
18 Textile garment and apparel	5	42	8.4	314	62.8
<b>19 Leathers, furs, feathers, and footwear</b>	15	1152	76.8	4487	299.1333333
20 Wood, bamboo, straw processing	16	347	21.6875	706	44.125
21 Furniture manufacturing	5	104	20.8	635	127
<b>22 Papermaking and paper products</b>	6	439	73.16666667	292	48.66666667
23 Printing and recording media equipment	5	344	68.8	167	33.4
<b>24 Stationary; art, sporting, entertainment supplies</b>	30	1322	44.06666667	3635	121.1666667
25 Petroleum processing, coking, nuclear fuel processing	9	597	66.33333333	290	32.22222222
<b>26 Chemical raw materials and products</b>	38	2306	60.68421053	11447	301.2368421
<b>27 Pharmaceuticals</b>	9	142	15.77777778	8052	894.6666667
28 Chemical fibers	9	97	10.77777778	954	106
29 Rubber and plastic products	14	56	4	1708	122
30 Non-metallic mineral products	36	111	3.083333333	1995	55.41666667
<b>31 Ferrous metal smelting and rolling</b>	4	0	0	2764	691
32 Non-ferrous metal smelting and rolling	21	29	1.380952381	1281	61
<b>33 Metal products</b>	28	1068	38.14285714	1567	55.96428571
<b>34 General equipment manufacturing</b>	51	1530	30	3388	66.43137255
<b>35 Special-purpose equipment manufacturing</b>	54	1293	23.94444444	4127	76.42592593
36 Automobile manufacturing	8	20	2.5	506	63.25
37 Transportation equipment	26	255	9.807692308	996	38.30769231
38 Electric machinery and equipment	38	0	0	1782	46.89473684
39 Computers and telecommunications equipment	36	617	17.13888889	1269	35.25
40 Scientific instruments and meters	20	131	6.55	507	25.35



# Mitigating Factors

## International Agreements

- Bilateral Investment Treaties (BIT)
- Defense Cooperation Agreements (DCA)

## Firm Entrenchment

- Firm Age (time operating in China)
- Amount of registered capital

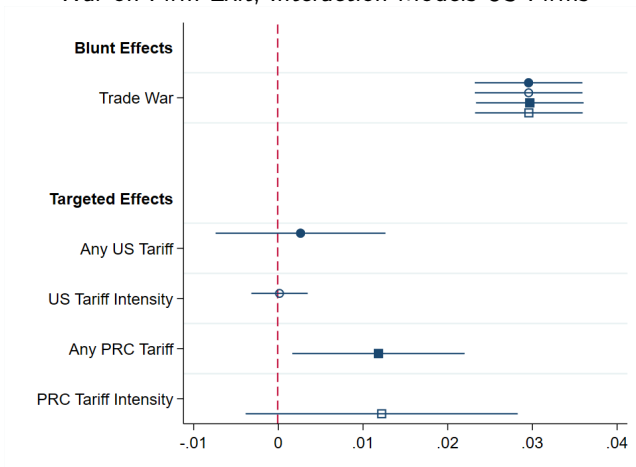
# Modeling

- Hierarchical models, with firms nested by county-of-origin
- Interaction terms to compare pre/post trade war, exposure to tariffs
- Triple interaction to identify US firms, experiencing tariffs, during tradewar
- Sub-sample analysis
- Controls: Firm level: joint venture status, firm size and length, exporter status. Sending level: country GDP, tax haven status, democracy score (Polity), US ally. Provincial fixed effects

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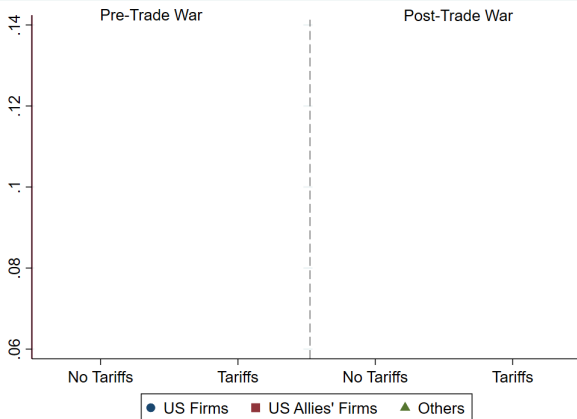
## Marginal Effects of Different Political Risk Measures during the Trade War on Firm Exit, Interaction Models US Firms



All measures of tariffs interacted with trade war to estimate marginal effects of tariff measures during the trade war. Each targeted effect estimated separately because of colinearity. Tariff intensity scaled for visual comparison.

# Are US firms affected by the trade war leaving compared to other countries?

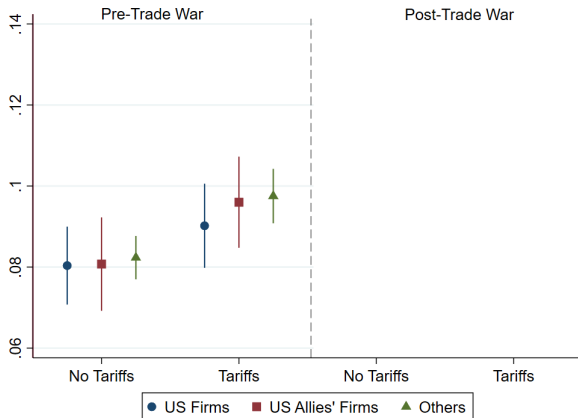
## Predicted Probability of Exit, Calculated from triple difference models



Predicted probability of exit for US, US-Ally, and Non-US/Non-US ally firms, calculated from triple difference models for sending country/tariff/pre- and post-trade war. Tariff measured as tariffs from either the US or China.

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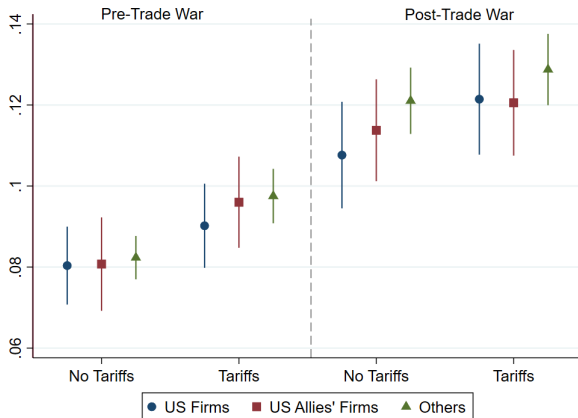
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# Mitigating Political Risk: International Agreements



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## Impact of Bilateral Investment Treaties on the Blunt Effect

VARIABLES	(1) All	(2) No Tariff	(3) US Tariff	(4) PRC Tariff
Trade War	0.392*** (0.00828)	0.456*** (0.0104)	0.355*** (0.00895)	0.363*** (0.00911)
BIT	0.0547 (0.0621)	0.0971 (0.0701)	0.0703 (0.0618)	0.000856 (0.0689)
Trade War X BIT	-0.0692*** (0.0256)	-0.0829*** (0.0283)	-0.0684** (0.0331)	-0.0266 (0.0315)
Observations	452,020	248,069	245,032	272,606
Number of groups	157	154	153	156

Robust standard errors in parentheses.

All models include country of origin controls, firm controls, and province fixed effects. Full results available in the Appendix.

\*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$

# Mitigating Political Risk: International Agreements

## Impact of Defense Cooperation Agreements

VARIABLES	(1) All	(2) No Tariff	(3) US Tariff	(4) PRC Tariff
Trade War	0.354*** (0.0329)	0.408*** (0.0419)	0.330*** (0.0357)	0.363*** (0.0365)
DCA	0.154** (0.0691)	0.154** (0.0752)	0.0914 (0.0939)	0.132* (0.0730)
Trade War X DCA	-0.0421 (0.0407)	-0.0387 (0.0459)	-0.0645 (0.0596)	-0.0513 (0.0488)
Observations	192,607	99,166	109,986	129,298
Number of groups	155	152	151	154

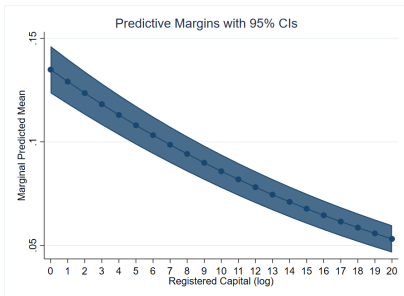
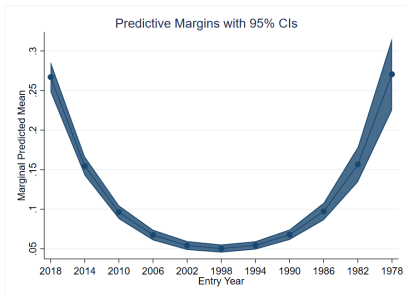
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# Mitigating Political Risk: Firm Entrenchment

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# Summary of Results

- Blunt effect of the trade war increased firm exits.
- Targeted effects of tariffs had little to no impact on firm exit. US firm exit is not significantly higher.
- International investment agreements reduce firm exits in the first year of the trade war, but not security agreements
- Domestic political economy within China and firm-level factors are more significant determinants of decoupling than international factors

# Implications

- Tariffs did not appear to create the specific leverage policymakers were hoping for. No evidence of Pompeo's 'alliance of democracies'
- There are distributional consequences to increasing political risks, with smaller and newer firms bearing the brunt of the trade war costs
- Optimistically for supporters of trade, our analysis suggests concerns of decoupling in the media are overblown and that the 'business as usual' model is likely to continue
- And yet, tariffs still affect outcomes, especially for customers

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