Supplementary Material

for

Winners and Losers in U.S.-China Trade Disputes: A Dynamic Compositional Analysis of Foreign Direct Investment

OUTLINE

Summary Statistics

Table A1: Summary Statistics - China Dataset

	Mean	S.D.	Min	Median	Max
Compositional Dependent Variable					
US	0.2481	0.0475	0.1623	0.2480	0.3913
EU	0.3655	0.0779	0.2066	0.3697	0.5595
East Asia	0.2521	0.0878	0.0725	0.2537	0.4693
India	0.0128	0.0118	0.0000	0.0103	0.0617
Americas (except US)	0.0227	0.0156	0.0000	0.0201	0.0654
Rest of the World	0.0988	0.0299	0.0403	0.0951	0.1935
Predictors					
Number of WTO Disputes (US-China)	3.4211	2.5574	0.0000	3.0000	7.0000
GDP per capita (logged)	8.3192	0.4493	7.5509	8.3751	8.9629
Growth (annual %)	9.2137	2.0623	6.7498	9.2662	14.2309
Population (logged)	21.0109	0.0273	20.9637	21.0118	21.0545
Political Constraints	0.1848	0.0063	0.1710	0.1855	0.1940
N			76		

Table A2: Summary Statistics - VMP (Southeast Asia) Dataset

	Mean	S.D.	Min	Median	Max
Compositional Dependent Variable					
US	0.1595	0.0706	0.0308	0.1530	0.3750
China	0.0491	0.0408	0.0000	0.0460	0.1837
EU	0.2389	0.0716	0.0952	0.2391	0.4091
Advanced Economies in East Asia	0.0616	0.0410	0.0000	0.0525	0.2041
Canada & Switzerland	0.2496	0.0841	0.0930	0.2519	0.5439
Developing Economies in Top 20	0.0505	0.0311	0.0000	0.0476	0.1194
Rest of the World	0.1908	0.0612	0.0769	0.1765	0.4000
Predictors					
Number of WTO Disputes (US-China)	3.4211	2.5574	0.0000	3.0000	7.0000
GDP per capita (logged)	8.3435	0.1832	8.0478	8.3241	8.6593
Growth (annual %)	5.6063	1.2587	1.7776	5.9387	7.0609
Population (logged)	20.5410	0.0732	20.4174	20.5426	20.6559
Political Constraints	0.5304	0.1474	0.3130	0.5085	0.7570
N			76		

List of Home Countries

Table A3: Home Countries - China Dataset

Home country	Volume (mil. USD)	Number of Jobs Created	Number of Projects
United States	201619.6	660236	2810
Germany	150295.9	433085	1416
Japan	134205.3	543615	2002
Taiwan	114878.5	432615	770
South Korea	81960.01	205760	431
France	34589.72	106773	504
Netherlands	29650.44	62900	270
United Kingdom	24313.57	86386	464
Switzerland	22144.74	73892	411
Italy	14190.3	58048	253
Finland	11823.02	46377	160
Singapore	11525.56	46528	113
Canada	10478.54	38689	188
Kuwait	9000	3000	1
Indonesia	8645.86	13291	14
Saudi Arabia	8081.8	8000	24
Spain	8079.792	39231	223
India	8047.926	26795	121
Sweden	8028.473	33429	203
South Africa	7476.2	8616	21
Malaysia	6068.64	24312	97
Denmark	5888.657	29553	135
Belgium	5255.339	17110	109
Austria	4702.444	21087	116
Russia	4486.2	8372	37
Australia	4017.7	18068	78
Thailand	2509.401	9082	26
Israel	2426.88	9493	46
Brazil	2229.68	7873	36
Norway	2058.39	10390	54
Luxembourg	1553.94	6660	38
Ireland	1538.28	7859	42
Iran	1167.6	2917	3
New Zealand	1049.26	4956	34
UAE	751.312	1880	23
Belarus	677.9	2054	5
Samoa	600	1257	1
Philippines	562.45	2087	8
Venezuela	522.8	608	4
Mexico	521.7	2900	10
Turkey	426.328	1471	11
Slovenia	381.12	1952	6
Portugal	373.78	1414	7

Greece	327.63	2081	12
Poland	307.94	2433	13
Cyprus	301.4	231	4
Qatar	280.7	319	8
Croatia	210.3	549	4
Latvia	200	988	1
Chile	199.6	403	7
Cuba	151.98	250	2
Vietnam	138.7	602	5
Egypt	125.1	101	1
Oman	125.1	101	1
Estonia	122.5	1030	5
Tunisia	108.8	426	2
Ukraine	95.4	359	6
Slovakia	92.4	495	3
Iceland	87.86	1585	6
Hungary	86.2	276	2
Argentina	80.1	343	3
Armenia	74.5	274	2
Monaco	71.4	499	2
Nigeria	55.5	267	1
Georgia	38	14	2
Czech Republic	33.734	274	5
Liechtenstein	30.9	159	2
Morocco	29.6	110	2
Ghana	27.3	23	2
Mongolia	19	7	1
Peru	13.6	8	1
Kazakhstan	11.2	61	2
Lebanon	10	35	1

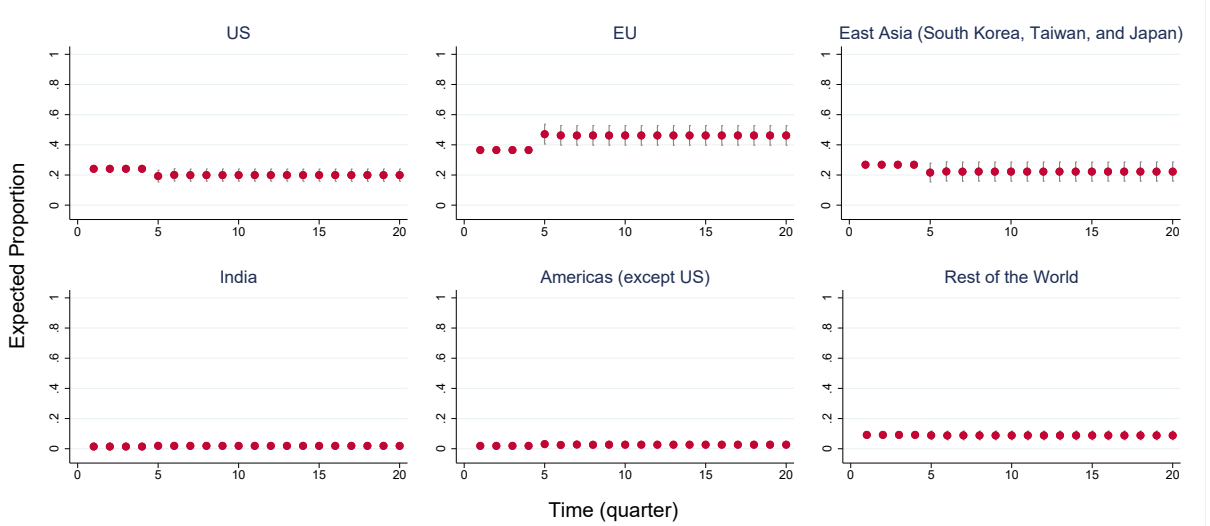
Table A4: Home Countries - VMP (Southeast Asia) Dataset

Home country	Volume (mil. USD)	Number of Jobs Created	Number of Projects
Japan	53380.7	421292	949
South Korea	44185.94	208000	242
United States	34825.12	193497	598
China	32398.11	134259	192
Taiwan	28952.11	189211	202
Germany	16221.4	70161	314
Kuwait	14035	3873	4
Thailand	7754.743	17694	74
United Kingdom	7207.613	29081	138
Singapore	6721.709	26702	94
Switzerland	6308.895	41367	140
Russia	5951.34	16001	30
Philippines	4277.6	4928	22
Qatar	4015	3072	5
Netherlands	3917.63	13017	97

France	3645.708	19985	107
Malaysia	3558.94	18011	75
India	2826.74	12619	63
Australia	2558.57	10980	62
Brazil	2366.5	3744	6
Canada	2131	7407	32
Spain	2065.514	5119	40
Italy	1135.563	9980	57
Mexico	1111.8	3566	9
Finland	960.07	5103	29
Denmark	955.1	6073	40
Sweden	880.872	7559	33
Norway	761.89	4647	26
UAE	661.3	3214	15
Czech Republic	576.12	2358	6
New Zealand	526.68	2576	15
Belgium	507	2009	14
Austria	443.76	3706	15
Saudi Arabia	348.39	1038	12
Israel	283.9	3307	5
Luxembourg	237.48	803	7
Indonesia	181.5	607	8
Bulgaria	180	332	2
Lebanon	176.02	1000	1
Belarus	118.1	4455	5
Turkey	110	593	5
Vietnam	103	1000	1
Ireland	100.8	1029	8
Argentina	67.22	186	4
Bahrain	64.5	115	1
Bangladesh	56.1	199	1
Hungary	40.85	285	2
Portugal	38.2	173	2
Ukraine	32.7	1133	2
Romania	27.3	129	2
Egypt	21	24	1
Myanmar	20	75	1
Cyprus	19.7	61	2
Iceland	16.3	75	2
Latvia	12.8	65	1
Poland	10.2	80	1
South Africa	8.3	20	1
Venezuela	6.5	8	1
Liechtenstein	5.8	30	1
Seychelles	3	200	1
Mauritius	2	13	1
Greece	1.8	16	1
Lithuania	.7	3	1

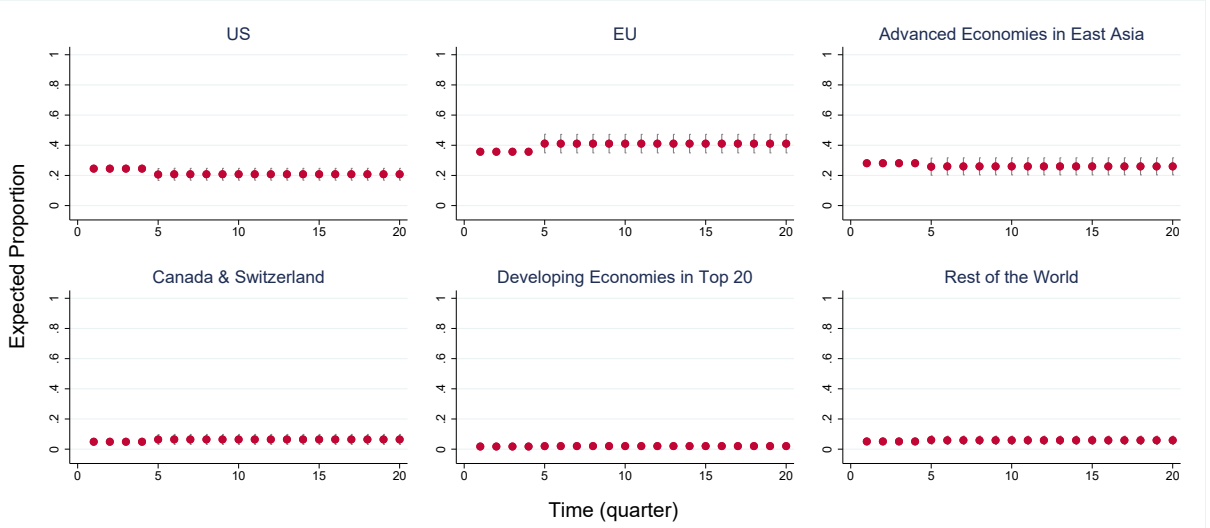
Change-from-baseline Plots

Figure A1: Effects of US-China disputes on relative market shares of inward FDI in Chinese manufacturing industries



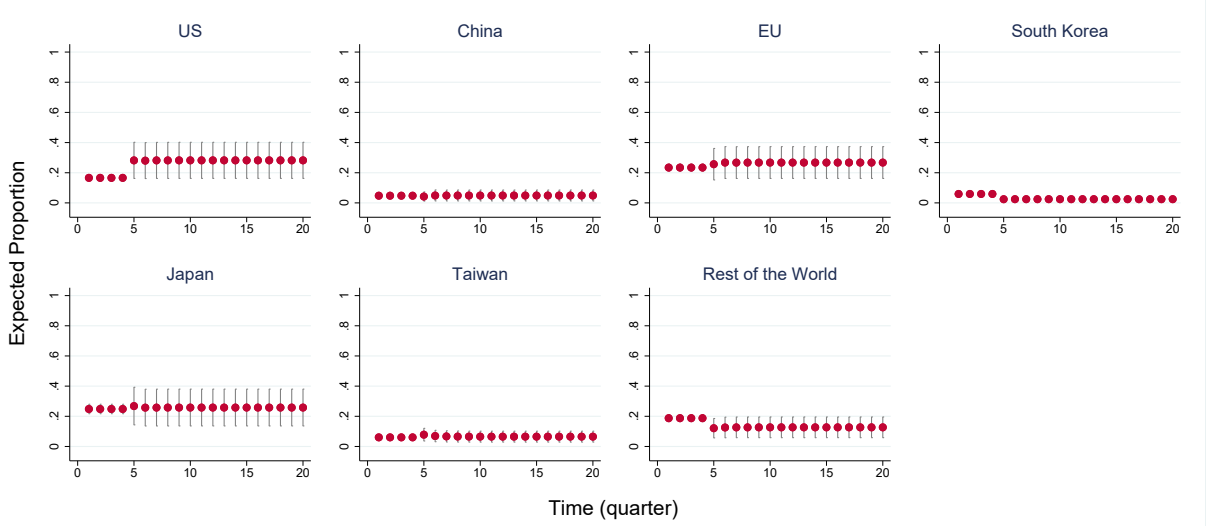
Note. Simulated effect of a 1-SD increase in the average number of U.S.-China trade disputes in the last three years. 95% confidence intervals presented.

Figure A2: Effects of US-China disputes on relative market shares of inward FDI in Chinese manufacturing industries (Top 20 investors)



Note. Simulated effect of a 1-SD increase in the average number of U.S.-China trade disputes in the last three years. 95% confidence intervals displayed. "Advanced Economies in East Asia" includes South Korea, Taiwan, Japan, and Singapore. "Developing Economies in Top 20" includes India, Saudi Arabia, Kuwait, South Africa, and Indonesia.

Figure A3: Effects of US-China disputes on relative market shares of inward FDI in Southeast Asia manufacturing industries



Note. Simulated effect of a 1-SD increase in the average number of U.S.-China trade disputes in the last three years. 95% confidence intervals shown.

SUR Regression Results

Table A5: SUR Results for China Market (Main)

	$ln(\frac{EU}{US})$	$ln(\frac{EastAsia}{US})$	$ln(\frac{India}{US})$	$ln(\frac{America}{US})$	$ln(\frac{ROW}{US})$
Lagged Dependent Variable	-0.106	-0.058	-0.188	-0.492^{***}	-0.286^{**}
	(0.103)	(0.117)	(0.159)	(0.123)	(0.119)
Number of disputes (US-China)	0.183^{***}	-0.010	0.100	0.167	0.062
	(0.052)	(0.083)	(0.145)	(0.158)	(0.082)
GDP per capita (logged)	-2.883^{***}	0.974	-1.280	-1.817	-0.152
	(1.090)	(1.791)	(3.132)	(3.408)	(1.775)
Growth (annual %)	-0.022	-0.137^{***}	-0.119^{**}	-0.156^{**}	-0.059^{*}
	(0.021)	(0.035)	(0.060)	(0.066)	(0.034)
Population (logged)	41.517^{**}	-36.704	33.115	22.684	-5.946
	(16.932)	(28.264)	(48.706)	(52.831)	(27.589)
Political constraints	12.268	-24.510	55.749	51.250	7.398
	(11.741)	(19.708)	(34.135)	(36.827)	(19.282)
Constant	-850.581^{**}	769.036	-698.042	-473.866	123.920
	(347.731)	(580.884)	(1000.417)	(1085.065)	(566.646)
Observations	38	38	38	38	38
R^2	0.512	0.491	0.337	0.225	0.050

Note. Standard errors in parentheses. ROW=Rest of the World;
* $p < .1$. ** $p < .05$. *** $p < .01$.

Table A6: SUR Results for China Market (based on Top 20)

	$ln(\frac{EU}{US})$	$ln(\frac{A.E.Asia}{US})$	$ln(\frac{C\&S}{US})$	$ln(\frac{DE20}{US})$	$ln(\frac{ROW}{US})$
Lagged Dependent Variable	-0.043	-0.021	-0.053	-0.126	-0.199
	(0.114)	(0.095)	(0.131)	(0.127)	(0.137)
Number of disputes (US-China)	0.123^{**}	0.032	0.122	0.030	0.106
	(0.054)	(0.067)	(0.120)	(0.153)	(0.101)
GDPpc (logged)	-1.989^{*}	0.152	-2.340	1.871	-2.984
	(1.122)	(1.384)	(2.495)	(3.192)	(2.148)
Growth (annual %)	-0.000	-0.077^{***}	-0.015	-0.123^{*}	0.018
	(0.022)	(0.028)	(0.049)	(0.064)	(0.041)
Population (logged)	29.550^{*}	-26.160	35.162	-27.497	38.821
	(17.359)	(21.299)	(38.524)	(49.250)	(33.242)
Political constraints	1.570	-24.343	26.165	32.622	-8.875
	(12.231)	(15.260)	(27.451)	(35.421)	(23.138)
Constant	-604.660^{*}	553.630	-726.134	554.229	-791.631
	(356.446)	(437.393)	(791.059)	(1011.416)	(682.702)
Observations	47	47	47	47	47
R^2	0.389	0.549	0.033	0.110	0.070

Note. Standard errors in parentheses. A.E.Asia= Advanced Economies in East Asia; C&S= Canada and Switzerland; DE20= Developing Economies in Top 20; ROW=Rest of the World;
* $p < .1$. ** $p < .05$. *** $p < .01$.

Table A7: SUR Results for VMP (Southeast Asia) Market

	$ln(\frac{China}{US})$	$ln(\frac{EU}{US})$	$ln(\frac{Korea}{US})$	$ln(\frac{Japan}{US})$	$ln(\frac{Taiwan}{US})$	$ln(\frac{ROW}{US})$
Lagged Dependent Variable	-0.125	-0.112	-0.024	0.079	0.370^{***}	-0.014
	(0.149)	(0.096)	(0.113)	(0.111)	(0.114)	(0.121)
Number of disputes (US-China)	-0.351^{*}	-0.170	-0.622^{***}	-0.184	-0.132	-0.393^{**}
	(0.207)	(0.133)	(0.182)	(0.166)	(0.167)	(0.173)
GDP per capita (logged)	5.788	-14.589^{**}	-40.820^{***}	-12.090	10.433	-6.330
	(10.985)	(7.220)	(9.857)	(9.030)	(8.810)	(9.389)
Growth (annual %)	0.025	0.213^{*}	0.586^{***}	0.110	-0.150	0.269^{*}
	(0.176)	(0.114)	(0.157)	(0.147)	(0.141)	(0.149)
Population (logged)	3.761	46.833^{**}	128.227^{***}	38.547	-20.496	29.721
	(30.976)	(20.391)	(28.138)	(25.426)	(24.838)	(26.503)
Political constraints	3.689	-0.357	6.720	2.800	5.967	2.323
	(7.775)	(4.978)	(6.577)	(6.199)	(6.203)	(6.503)
Constant	-127.900	-840.334^{**}	-2299.064^{***}	-692.014	331.454	-558.959
	(545.491)	(359.097)	(496.570)	(447.653)	(437.330)	(466.647)
Observations	35	35	35	35	35	35
R^2	0.434	0.386	0.577	0.198	0.342	0.219

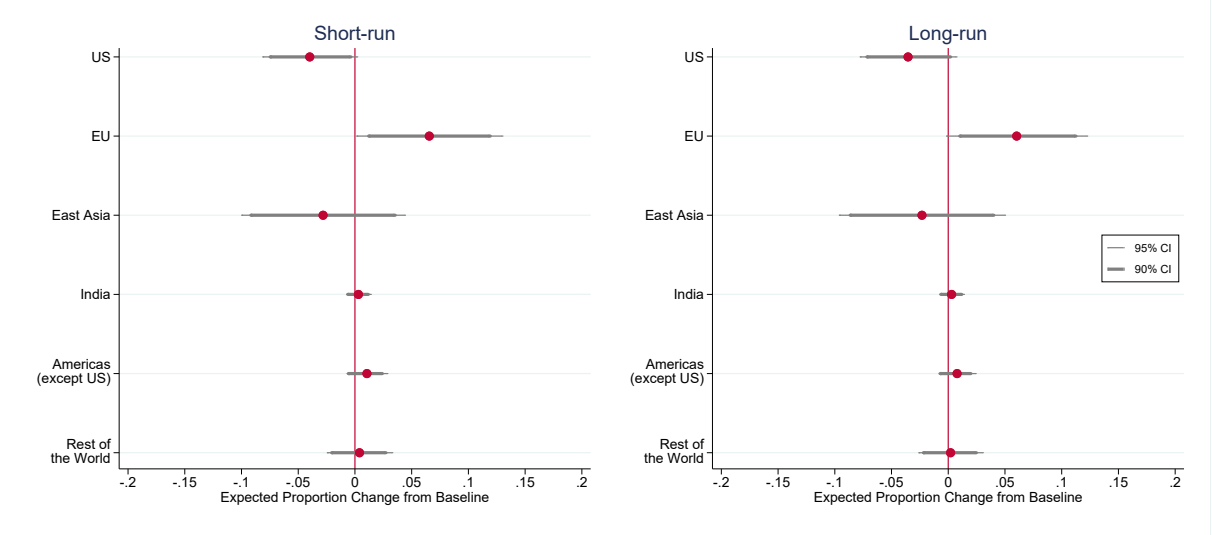
Note. Standard errors in parentheses. ROW=Rest of the World
* $p < .1$. ** $p < .05$. *** $p < .01$.

Robustness Checks

This section details various robustness tests applied to our main findings. First, we tackle the potential influence of time trends on both the dependent variable (relative market share of FDI) and the primary independent variable (trade disputes). We also consider trade volume in our main model, aiming to prevent any omitted variable bias that may occur if trade volume influences the relationship between trade disputes and FDI market share in China's manufacturing sector. Lastly, we recalculate the impact of trade disputes using a milder counterfactual shock.

1. Time Trend

Figure A4: Effect of US-China disputes on FDI with linear time trend

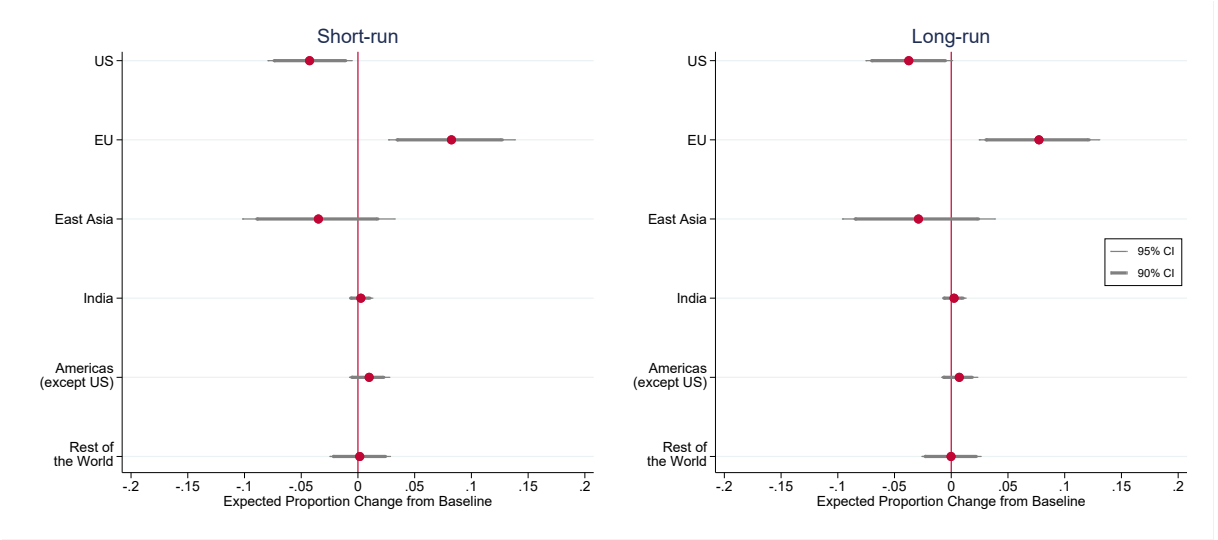


Simulated effect of a 1-SD increase in the number of U.S.-China trade disputes in the last three years.

In addressing potential issues related to time trends, we include a time variable in the main model in two distinct forms: linear (Figure A4) and quadratic trends (Figure A5). Our main findings are consistent across both approaches.[1]

[1] In the model incorporating a linear time trend, the long-term effect of the counterfactual shock is slightly statistically insignificant (p-value $= 0.112$). This might be linked to an increase in inefficiency caused by multicollinearity, stemming from a substantial correlation ($\rho = 0.96$) between the count of ongoing trade disputes and the time trend

Figure A5: Effect of US-China disputes on FDI with quadratic time trend

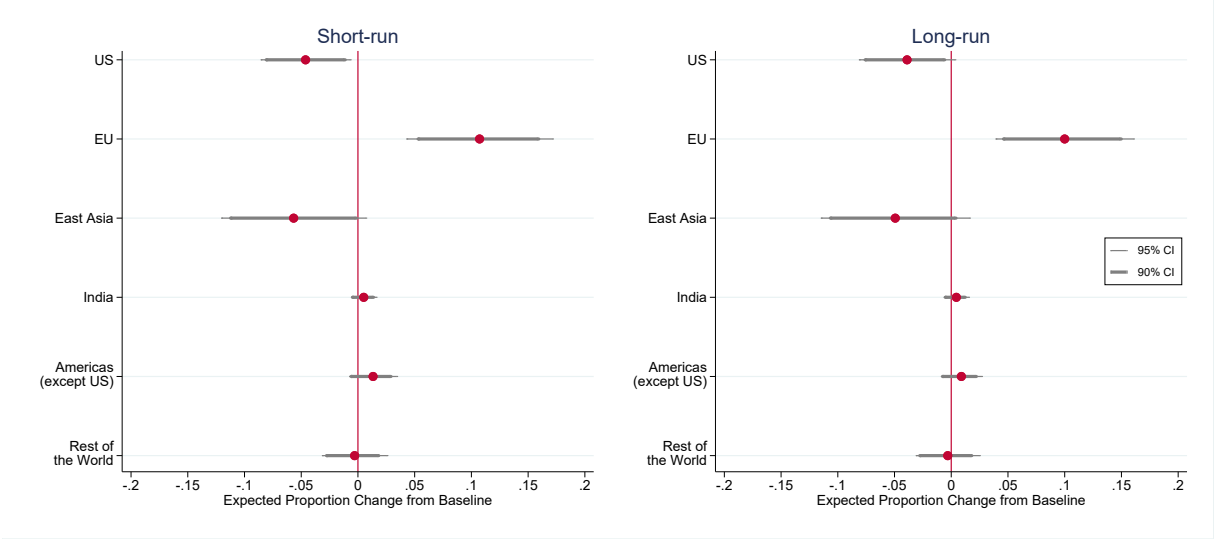


Simulated effect of a 1-SD increase in the number of U.S.-China trade disputes in the last three years.

variable.

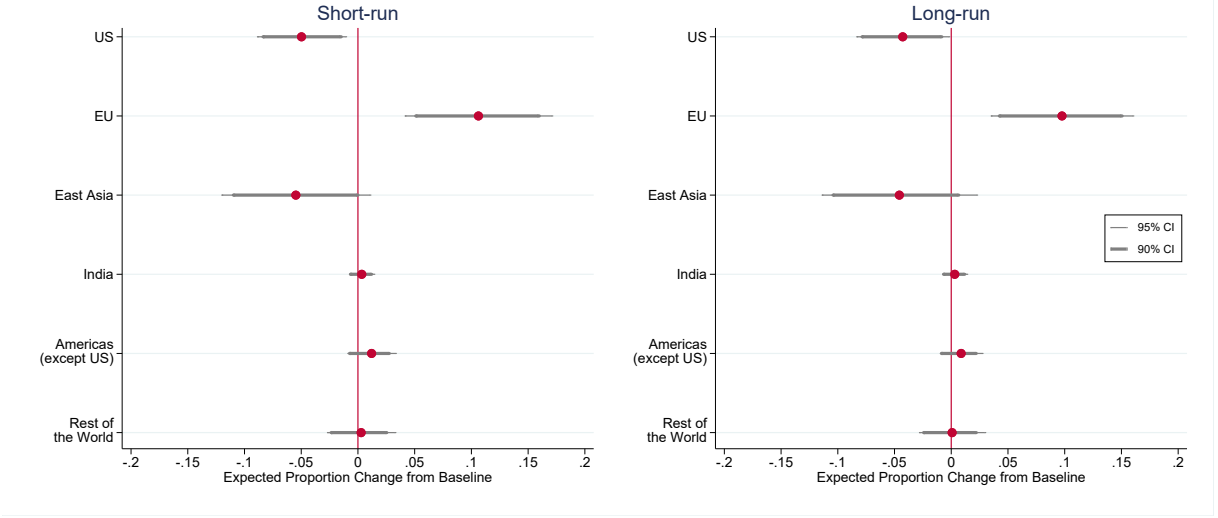
2. Trade Volume

Figure A6: Effect of US-China disputes on FDI with bilateral trade volume



Simulated effect of a 1-SD increase in the number of U.S.-China trade disputes in the last three years.

Figure A7: Effect of US-China disputes on FDI with China's monadic trade volume

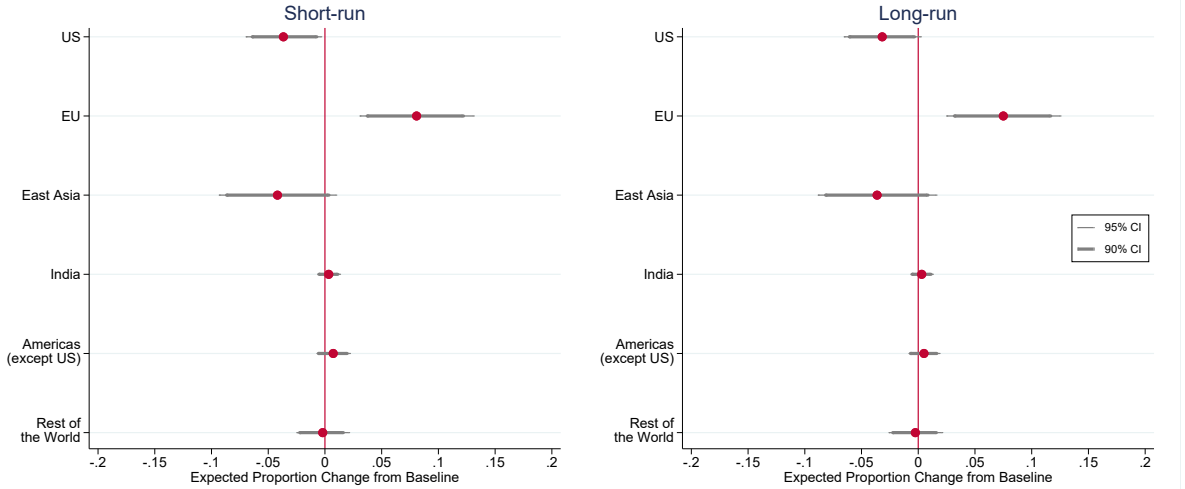


Simulated effect of a 1-SD increase in the number of U.S.-China trade disputes in the last three years.

To reduce any possible bias due to omitted trade volume, we include two different measures of trade volume in the main model: the US-China bilateral trade volume (depicted in Figure A6) and the monadic level of China's trade volume (presented in Figure A7). Our key findings consistently align with both these measures.

3. Different Shock

Figure A8: Effect of US-China disputes on FDI with a different shock value

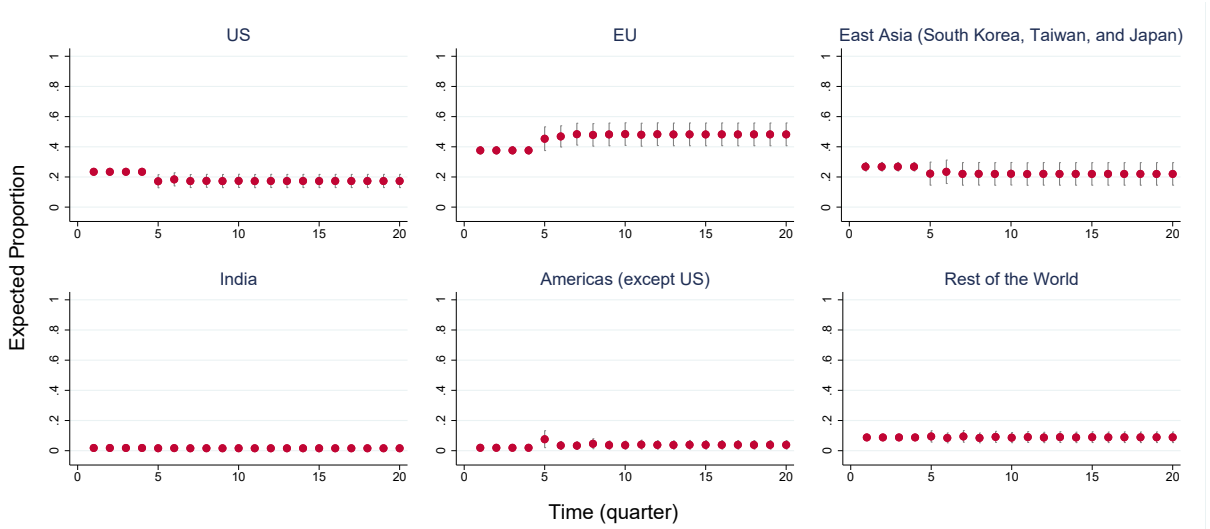


Simulated effect of a two-dispute increase in the number of U.S.-China trade disputes in the last three years.

Results of AR(2) Models

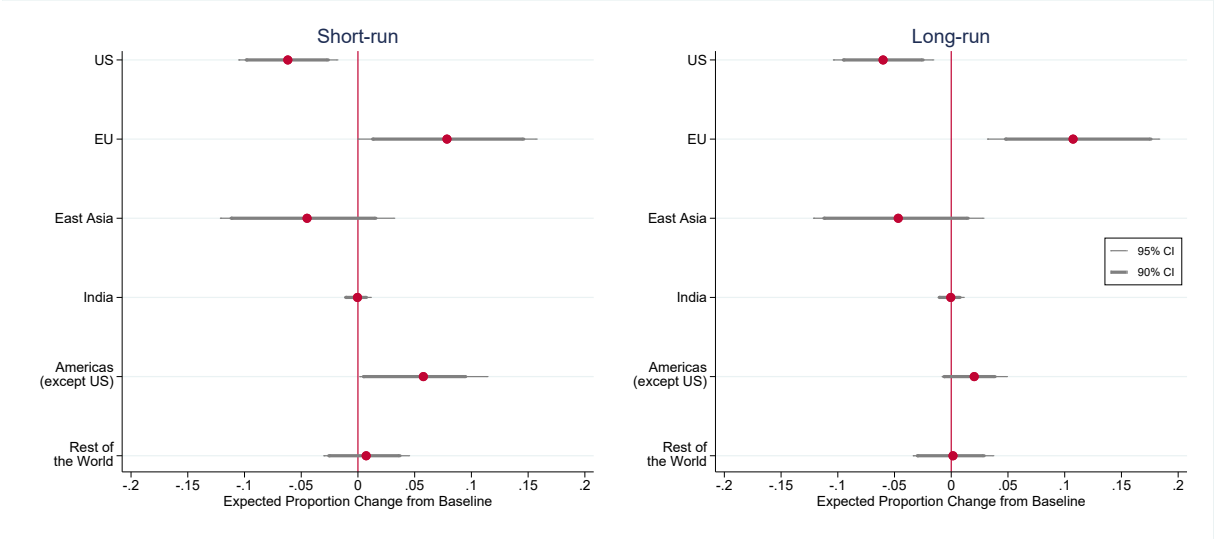
Effects of US-China disputes on relative market shares of inward FDI in China (AR2 Model)

Figure A9: Change-from-baseline plot



Note. Simulated effect of a 1-SD increase in the average number of US-China trade disputes in the last three years. 95% confidence intervals presented.

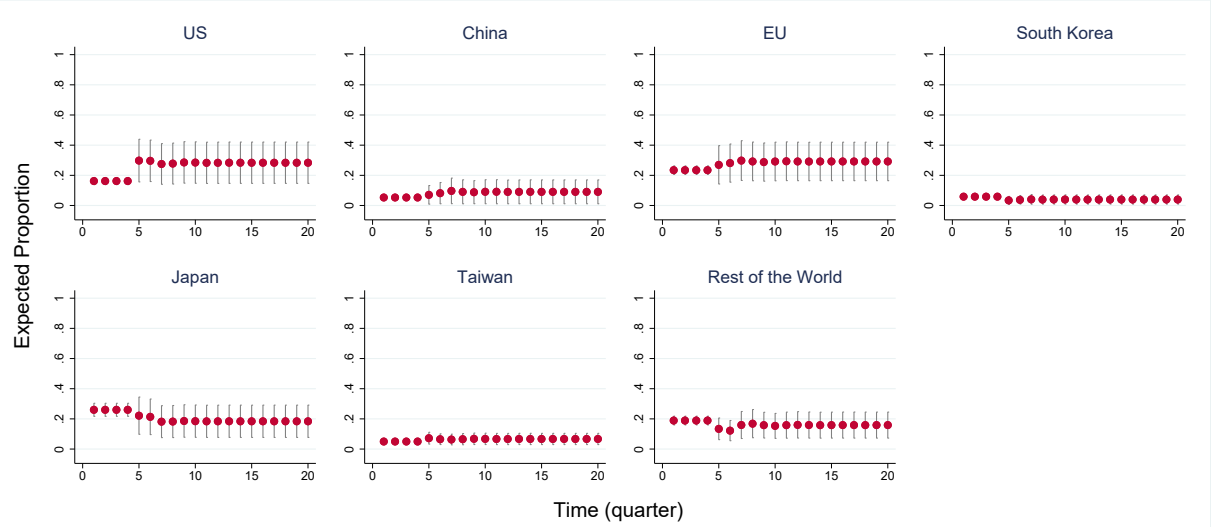
Figure A10: Effects plot



Note. Simulated effect of a 1-SD increase in the average number of US-China trade disputes in the last three years.

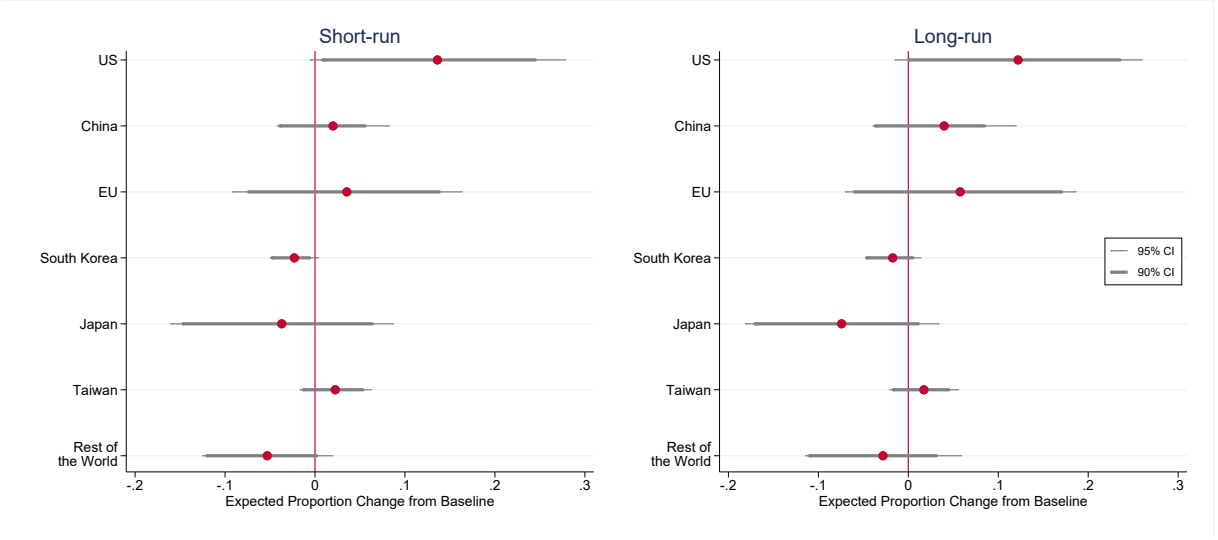
Effects of US-China disputes on relative market shares of inward FDI in Southeast Asia (AR2 Model)

Figure A11: Change-from-baseline plot



Note. Simulated effect of a 1-SD increase in the average number of US-China trade disputes in the last three years. 95% confidence intervals presented.

Figure A12: Effects plot



Note. Simulated effect of a 1-SD increase in the average number of US-China trade disputes in the last three years.