

Execution Report

Title: **EXIM's Exit: The Real Effects of Trade Financing
by Export Credit Agencies**

Authors: **Adrien Matray, Karsten Müller, Chenzi Xu & Poorya Kabir**

Full reference: Matray et al. "EXIM's Exit: The Real Effects of Trade Financing by Export Credit Agencies" Working paper, February 2025.

The structure and contents of this execution report provided by **cascad** for the certification are similar to those recommended by the [AEA Data Editor](#).

1. DATA DESCRIPTION

This study uses five main data sources: (1) loan authorizations by EXIM; (2) an annual panel of origin country-by-product-by-destination country-level exports; (3) firm balance sheets and outcomes from Compustat; (4) firm-level transaction-level export data from Datamyne, and (5) additional firm level variables from various sources.

For a thorough description of the data, please refer to section 3.1 of the main paper and section C of the Appendix.

2. CODE DESCRIPTION

The replication materials only contain one folder, *dofile*, with 16 Stata scripts in it:

- *0_launcher.do* runs all the code: it defines global variables, creates folders, extracts data, cleans data, assembles the final datasets and generates all tables and figures in the manuscript.
- *00a_own programs.do* contains programs that are used later.
- *00c_extract_data.do* downloads the publicly available data and saves it into a *data* folder that had previously been created.
- *01_ComplementDatasets.do* pens and simplifies a series of datasets related to Compustat.
- *02_Xwalks_industry_hs.do* creates crosswalks for NAICS and HS data.
- *03_EXIM_datasets.do* cleans EXIM's loan authorizations data.
- *04a_BACI.do* cleans custom BACI data, and creates a dataset at the origin product level
- *04b_destinationCharacteristics.do* assembles a dataset with exports' destinations country characteristics for cross-sectional analysis.
- *05_Datamyne.do* cleans Datamyne export data.
- *06a_Clean_Compustat_CRSP.do* cleans Compustat Fundamentals annual

- *06b_main_sample_firm* merges all the firm data together into a working file.
- *07_Tables.do* produces all the tables in the main body of the paper.
- *08_Graphs.do* produces all the figures in the main body of the paper.
- *09a_Compustat_wedge_construction.do* computes the different measures of firm capital cost wedges needed for robustness analysis of the effect of EXIM on misallocation.
- *09b_AppendixResults.do* produces all the tables and figures in the Appendix of the paper.
- *10_DatamyneResults.do* produces all the results that rely on the Datamyne data.

3. VERIFICATION STEPS

The verification materials were received as a zip file on February 17 and run as per readme, using Stata 18 on a computer with 256 GB RAM, Intel Xeon Silver 4210R 2.40GHz (32 cores), NVIDIA RTX™ A5000 and Windows 10 OS.

We noticed one typo in *08_Graphs.do* and one in *09b_AppendixResults.do*. The code initially creates several folders, including one called *results*. But those two scripts try saving some of their output in a *result* folder, without the *s*:

```

36  *** Make time series graphs
37  twoway connected amt yrqtr, mcolor("navy%80") lcolor("navy%80") ///
38  xtitle("", margin(top)) ytitle("", margin(right)) graphregion(color(white) margin(medium)) ylab(0(2.
39  xlabel(2007(2)2022, nogrid) ///
40  xline(2015.4, lcolor("maroon%90") lpattern(dash)) ///
41  text(14 2014.8 "EXIM" "shuts" "down", justification(left) color("maroon%90")) ///
42  xline(2019.3, lcolor("maroon%90") lpattern(dash)) ///
43  text(14 2020.25 "EXIM" "regains" "board" "quorum", justification(left) color("maroon%90")) xsize(8)
44  gr export "$result/time_series_total_new_EXIM_loans.pdf", replace

412  foreach Y in Y K Kint L cf_Y {
413      eststo: reghdfe `growth'`Y' DiD , a($fixed_effect) cluster($cluster_firm)
414  }
415  esttab using "$result/firm_other_outcomes_noweight.tex", ///
416  $table_clean2 ///
417  mgroups(\vspace{-.3cm}) nonumber noobs

```

This would result in error messages. We simply added an *s* to those lines, and the scripts worked as intended.

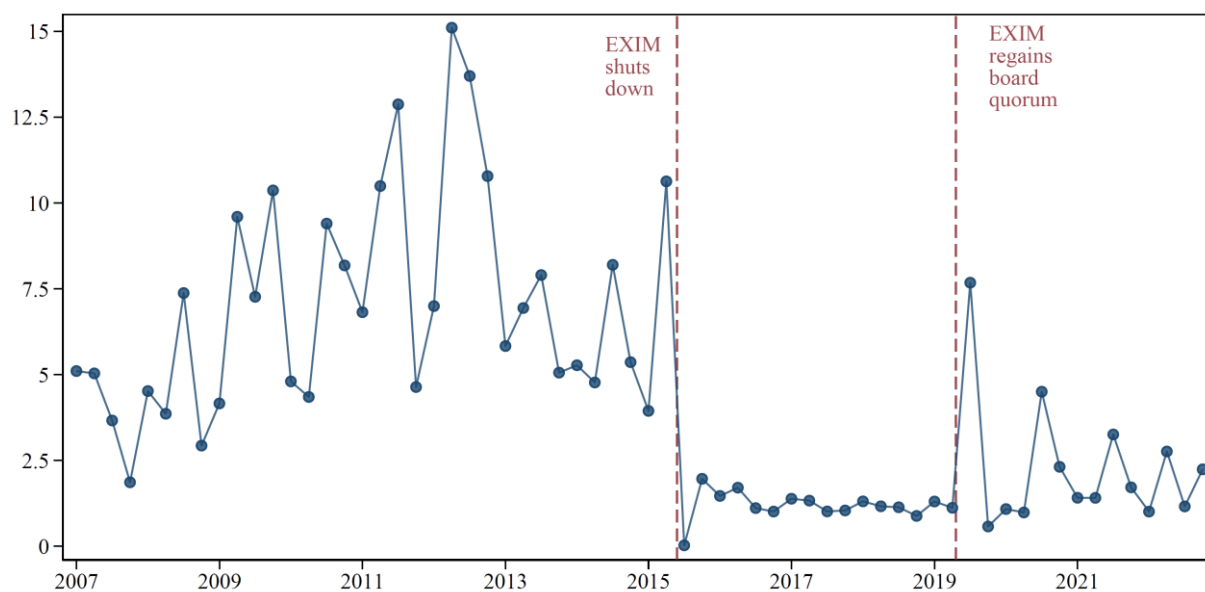
Apart from that, we did not encounter any issues.

4. FINDINGS

We have been able to generate all the results of the paper. In particular, we reproduced Figures 1-7, B1-B6, C1, D1-D4 and Tables 1-9, A1-A8, D2-D3 with accuracy.

Note that Figures D4-D6 are illustrations and that Table D1 does not contain any numerical results. Therefore, they are outside the scope of this verification.

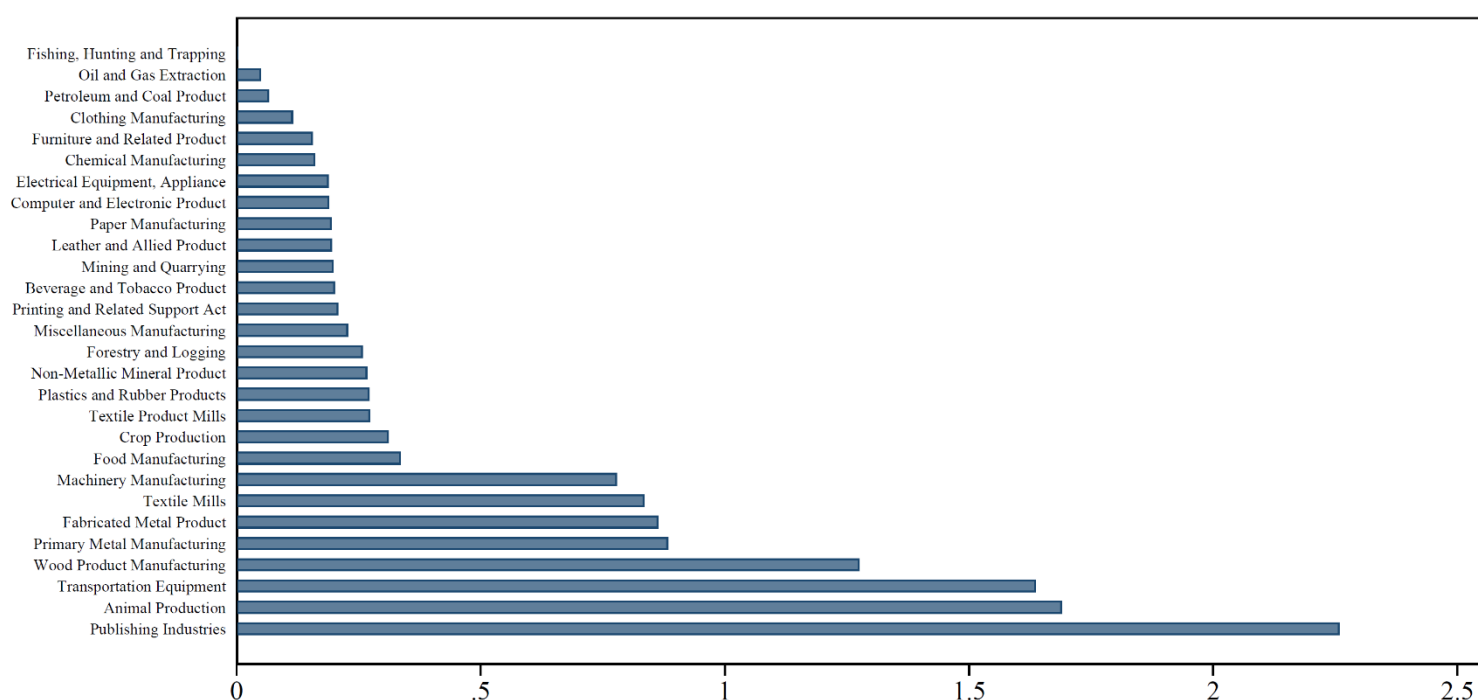
4.1. FIGURE 1: EXIM'S SUPPLY OF TRADE FINANCING



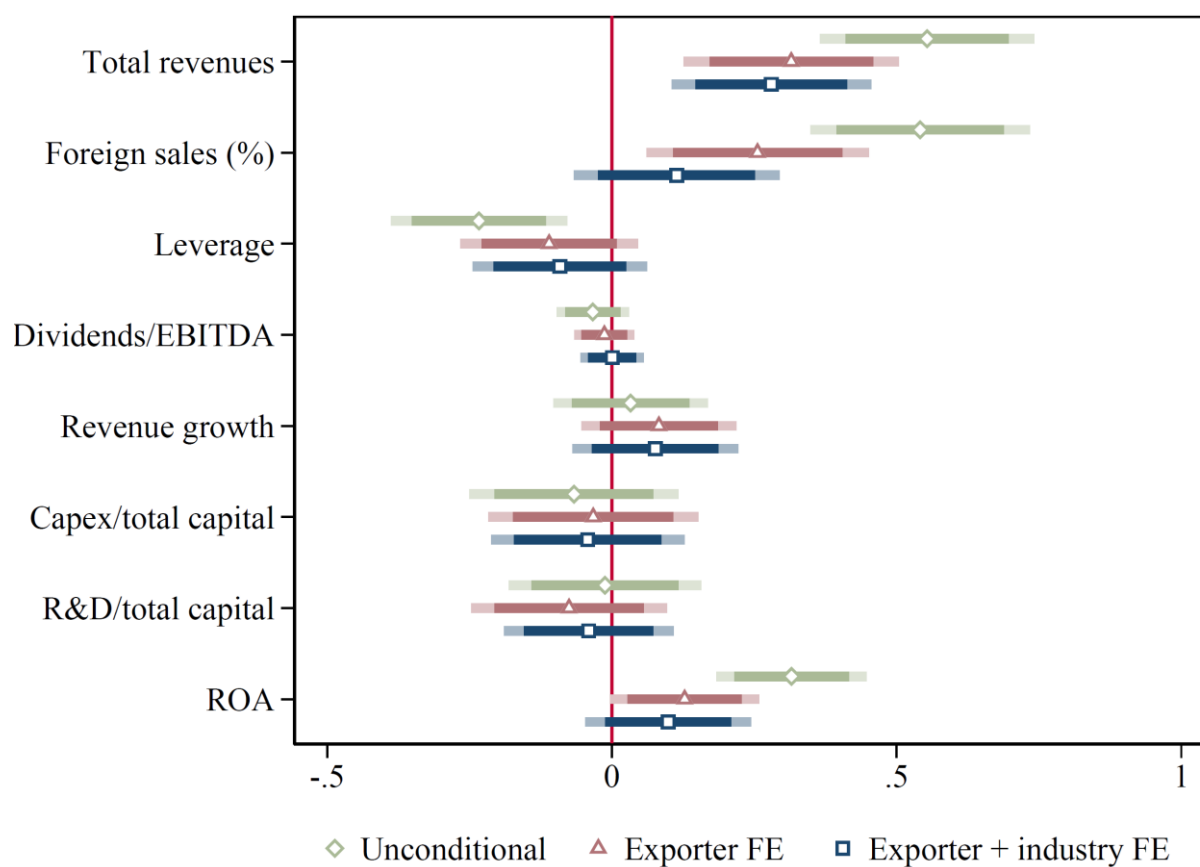
4.2. TABLE 1: SUMMARY STATISTICS

	Mean	Std. Dev.	p25	Median	p75
EXIM	0.05	0.22	0.00	0.00	0.00
Exporter	0.73	0.44	0.00	1.00	1.00
Total revenues	3,946.31	17,142.27	49.62	430.18	2,085.41
Employees	12.29	56.94	0.16	1.37	7.08
Tangible Capital	2,720.56	15,032.01	17.93	172.72	1,040.00
Intangible Capital	2,483.42	11,337.79	43.25	243.15	1,123.51
Total assets	4,754.64	19,424.28	68.31	489.75	2,360.14
Share foreign sales	0.26	0.28	0.00	0.17	0.45
MRPK	4.28	5.02	1.14	2.51	4.91
Profit margin	-0.45	1.58	-0.05	0.06	0.13
ROA	-0.05	0.29	-0.05	0.06	0.11
Dividend intensity	0.11	3.26	0.00	0.00	0.11
Leverage	0.29	0.29	0.03	0.22	0.44
Observations	28,468				

4.3. FIGURE 2: EXIM FINANCING INTENSITY BY INDUSTRIES (%)



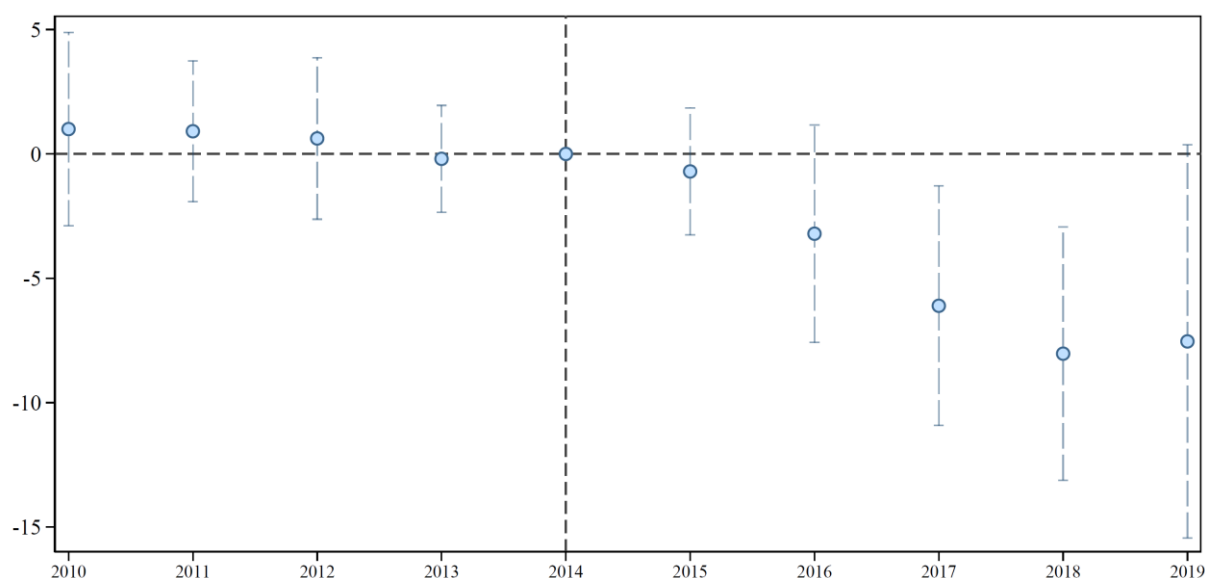
4.4. FIGURE 3: FIRM COVARIATE BALANCE



4.5. TABLE 2: IMPACT ON US PRODUCTS EXPORTS

	(1)	(2)	(3)	(4)	(5)	(6)
$EXIM_{p,o} \times Post_t$	-4.49 (1.60) [0.0050]	-4.49 (1.60) [0.0050]	-4.49 (1.60) [0.0050]	-4.20 (1.67) [0.012]	-5.13 (2.28) [0.024]	
$EXIM_{p,o \geq 0.45\%} \times Post_t$						-0.061 (0.019) [0.0017]
<i>Fixed Effects</i>						
Origin \times Year	✓	✓	✓	✓	✓	✓
Product (4-digit) \times Year	✓	✓	✓	—	—	—
Product (6-digit) \times Year	—	—	—	✓	—	—
Product (6-digit) \times Destination \times Year	—	—	—	—	✓	✓
Observations	109,208	8,541,850	24,143,761	24,143,761	24,143,761	24,143,761

4.6. FIGURE 4: EVENT STUDY OF IMPACT OF EXIM'S SHUTDOWN ON US PRODUCT EXPORTS



4.7. TABLE 3: DECOMPOSING IMPACT ON EXPORTS INTO INTENSIVE AND EXTENSIVE MARGINS

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
$EXIM_{p,o} \times Post_t$	-4.49 (1.60) [0.0050]		-4.04 (1.47) [0.0060]		0.51 (0.43) [0.24]		-0.96 (0.47) [0.043]	
$EXIM_{p,o \geq 0.45\%} \times Post_t$		-0.054 (0.019) [0.0035]		-0.044 (0.016) [0.0082]		0.00000051 (0.0036) [1.00]		-0.011 (0.0059) [0.072]
<i>Fixed Effects</i>								
Origin \times Year	✓	✓	✓	✓	✓	✓	✓	✓
Product (4-digit) \times Year	✓	✓	✓	✓	✓	✓	✓	✓
Observations	109,208	109,208	109,208	109,208	109,208	109,208	109,208	109,208

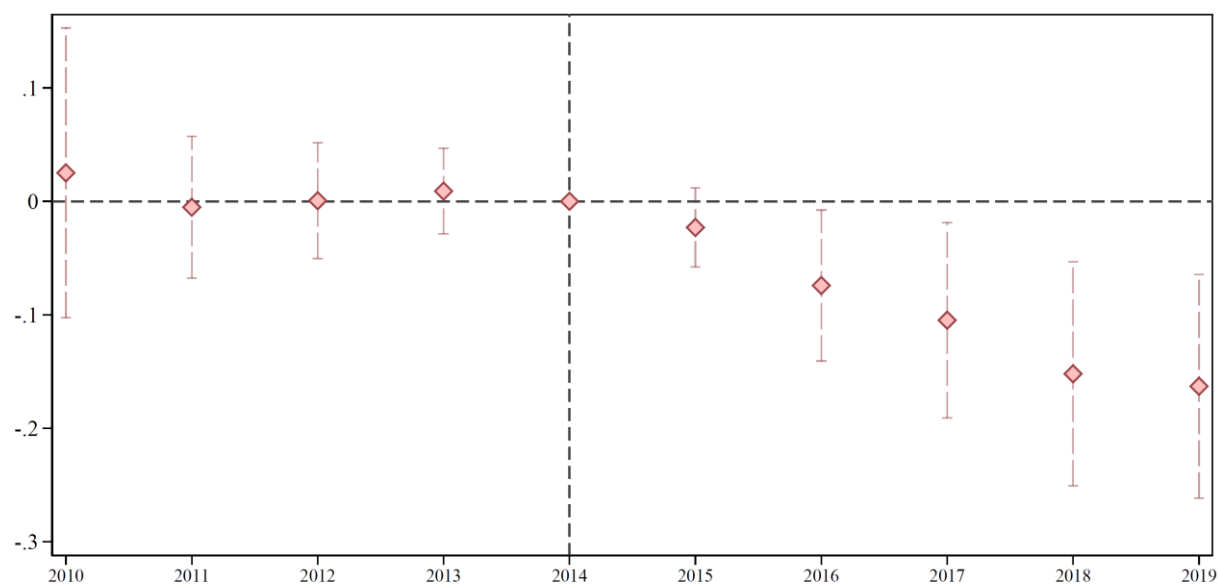
4.8. TABLE 4: IMPACT ON FIRM MARITIME EXPORTS

	(1)	(2)	(3)	(4)	(5)
$EXIM_i \times Post_t$	-0.19 (0.023) [6.7e-16]	-0.18 (0.022) [8.9e-16]	-0.19 (0.022) [2.0e-17]	-0.17 (0.021) [2.3e-15]	-0.25 (0.046) [0.000000071]
<i>Fixed Effects</i>					
Post	✓	—	—	—	—
Product \times Post	—	✓	—	—	—
Destination \times Post	—	—	✓	—	—
Product \times Destination \times Post	—	—	—	✓	✓
Observations	1,979,189	1,979,189	1,979,189	1,979,189	153,977

4.9. TABLE 5: IMPACT ON FIRM TOTAL REVENUES

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
$EXIM_i \times Post_t$	-0.17 (0.033) [0.00000012]	-0.13 (0.035) [0.00028]	-0.12 (0.035) [0.00072]	-0.10 (0.035) [0.0045]	-0.12 (0.036) [0.0010]	-0.12 (0.035) [0.00079]	-0.11 (0.041) [0.0050]	
$EXIM (Large\ loans)_i \times Post_t$								-0.096 (0.045) [0.032]
<i>Fixed Effects</i>								
Year	✓	—	—	—	—	—	—	—
Exporter×Year	—	—	✓	✓	✓	✓	✓	—
Industry×Year	—	✓	✓	✓	✓	✓	✓	—
Fiscal month×Year	—	—	—	✓	—	—	—	—
Size×Year	—	—	—	✓	—	—	—	—
Balance sheet controls×Year	—	—	—	✓	—	—	—	—
Lobbying×Year	—	—	—	✓	—	—	—	—
EXIM×Industry×Year	—	—	—	—	—	—	—	✓
EXIM×Exporter×Year	—	—	—	—	—	—	—	✓
Observations	25,174	25,174	25,174	24,511	18,438	25,109	20,151	25,174

4.10. FIGURE 5: EVENT STUDY IMPACT OF EXIM'S SHUTDOWN ON FIRM TOTAL REVENUES



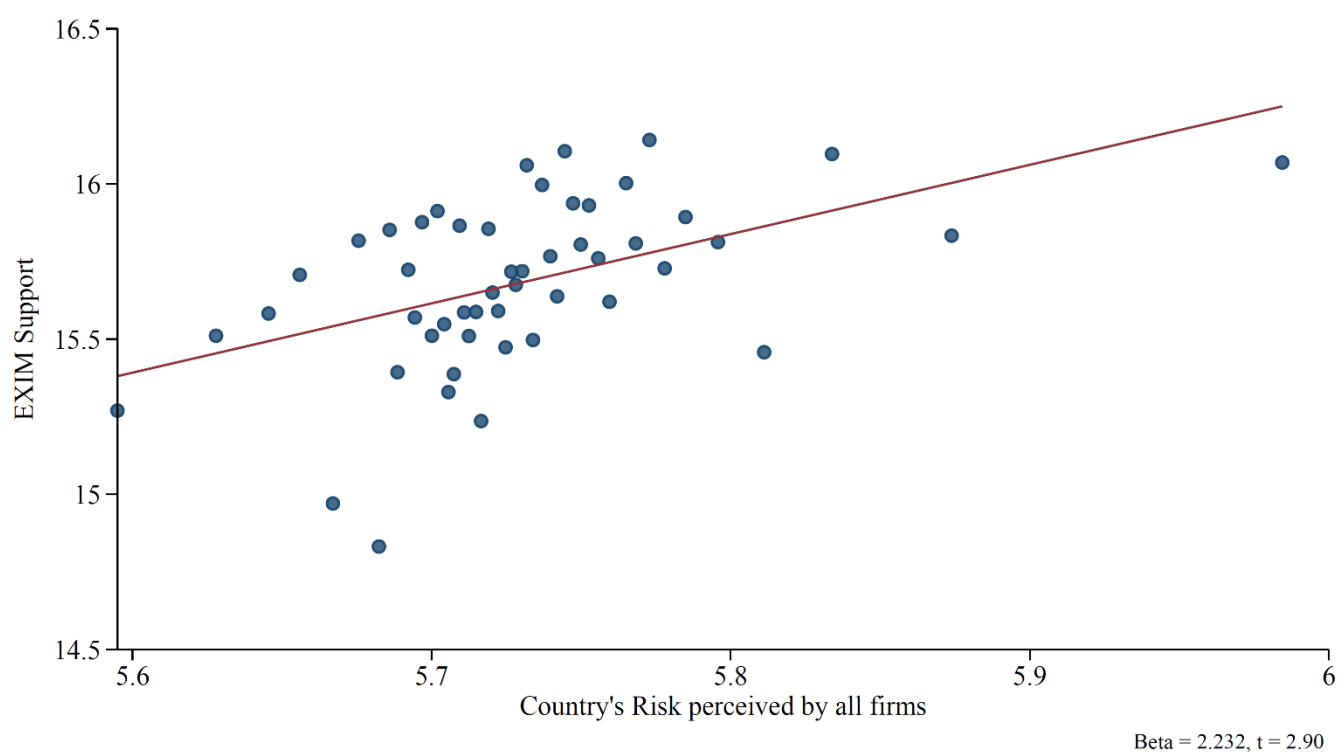
4.11. TABLE 6: IMPACT ON EMPLOYMENT, CAPITAL ACCUMULATION, AND PRO_T RATES

	(1)	(2)	(3)	(4)	(5)
$EXIM_i \times Post_t$	-0.12 (0.035) [0.00072]	-0.14 (0.044) [0.0014]	-0.19 (0.047) [0.000042]	-0.098 (0.032) [0.0025]	0.00024 (0.0062) [0.97]
<i>Fixed Effects</i>					
Exporter×Year	✓	✓	✓	✓	✓
Industry×Year	✓	✓	✓	✓	✓
Observations	25,174	24,635	25,015	22,902	25,174

4.12. TABLE 7: ROLE OF FINANCING FRICTIONS

	(1)	(2)	(3)	(4)	(5)
$EXIM_i \times Post_t$	-0.12 (0.032) [0.00017]				
$EXIM_i \times Post_t \times I_i^{Constrained}$		-0.16 (0.044) [0.00034]	-0.10 (0.039) [0.010]	-0.12 (0.047) [0.0097]	-0.071 (0.039) [0.068]
<i>Fixed Effects</i>					
Exporter×Year	✓	—	—	—	—
Industry×Year	✓	—	—	—	—
EXIM×Year	—	✓	✓	✓	✓
<i>Fixed Effects (interacted)</i>					
Exporter×Year	—	✓	✓	✓	✓
Industry×Year	—	✓	✓	✓	✓
Observations	24,635	23,994	23,963	22,294	24,635

4.13. FIGURE 6: EXIM SUPPORT AND COUNTRY RISK



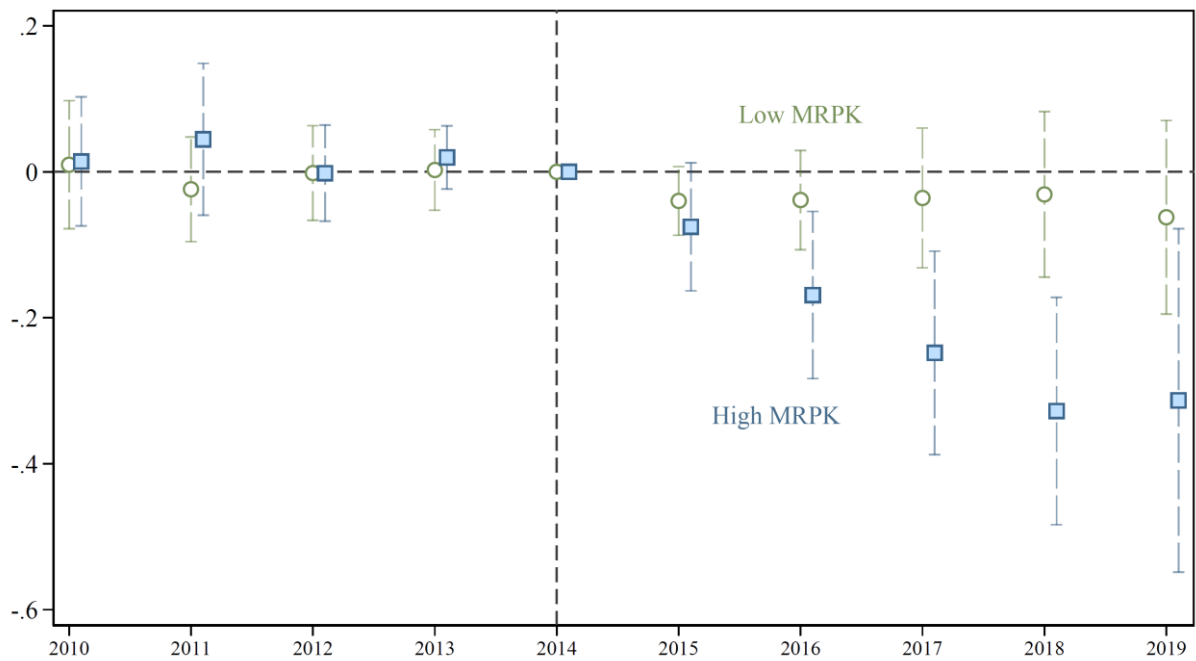
4.14. TABLE 8: ROLE OF IMPORTER MARKET FRICTIONS

	(1)	(2)	(3)	(4)	(5)
$EXIM_{p,o} \times Post_t \times I_d^{Constrained}$	-2.08 (0.96) [0.030]	-3.10 (1.21) [0.010]	-2.28 (1.05) [0.030]	-1.55 (0.90) [0.085]	-2.05 (0.98) [0.037]
<i>Fixed Effects</i>					
Product (6-digit) \times Destination \times $Post_t$	✓	✓	✓	✓	✓
Origin \times $Post_t \times I_d^{Constrained}$	✓	✓	✓	✓	✓
$EXIM_{p,o} \times Post_t$	✓	✓	✓	✓	✓
$EXIM_{p,o} \times Post_t \times Controls_{p,d}$	✓	✓	✓	✓	✓
Observations	1,677,054	1,677,054	1,677,054	3,471,365	3,275,185

4.15. TABLE 9: IMPACT ON CAPITAL MISALLOCATION

	(1)	(2)	(3)	(4)	(5)	(6)
$EXIM_i \times Post_t$	-0.056 (0.038) [0.14]	-0.17 (0.055) [0.0016]		-0.041 (0.042) [0.33]	-0.22 (0.062) [0.00042]	
$EXIM_i \times Post_t \times I_i^{High\ MRPK}$			-0.12 (0.067) [0.072]			-0.18 (0.074) [0.017]
<i>Fixed Effects</i>						
Exporter×Year	✓	✓	—	✓	✓	—
Industry×Year	✓	✓	—	—	—	—
Industry×Size quartile×Year	—	—	—	✓	✓	—
EXIM×Year	—	—	✓	—	—	✓
<i>Fixed Effects (interacted)</i>						
Exporter×Year	—	—	✓	—	—	✓
Industry×Year	—	—	✓	—	—	—
Industry×Size quartile×Year	—	—	—	—	—	✓
Observations	13,226	10,784	24,010	14,988	9,022	24,010

4.16. FIGURE 7: EXIM'S SHUTDOWN AMPLIFIES CAPITAL MISALLOCATION



4.17. TABLE A.1: IMPACT ON US PRODUCT EXPORTS: ROBUSTNESS TO ALTERNATIVE CONTROL GROUP

	(1)	(2)	(3)	(4)	(5)	(6)
$EXIM_{p,o} \times Post_t$	-3.14 (1.79) [0.079]	-3.14 (1.79) [0.079]	-3.14 (1.79) [0.079]	-2.45 (1.56) [0.12]	-2.72 (1.76) [0.12]	
$EXIM_{p,o \geq 0.45\%} \times Post_t$						-0.058 (0.017) [0.00051]
<i>Fixed Effects</i>						
Origin \times Year	✓	✓	✓	✓	✓	✓
Product (4-digit) \times Year	✓	✓	✓	—	—	—
Product (6-digit) \times Year	—	—	—	✓	—	—
Product (6-digit) \times Destination \times Year	—	—	—	—	✓	✓
Observations	65,862	6,808,567	20,528,380	20,528,380	20,528,380	20,528,380

4.18. TABLE A.2: IMPACT ON US PRODUCT EXPORTS: ROBUSTNESS TO ALTERNATIVE WEIGHTING

	(1)	(2)	(3)	(4)
$EXIM_{p,o} \times Post_t$	-3.72 (1.89) [0.049]	-5.77 (2.57) [0.025]	-5.36 (2.32) [0.021]	-5.24 (2.41) [0.030]
<i>Fixed Effects</i>				
Origin \times Year	✓	✓	✓	✓
Product (6-digit) \times Destination \times Year	✓	✓	✓	✓
Observations	24,143,761	24,143,761	24,143,660	24,143,660

4.19. TABLE A.3: IMPACT ON FIRM-LEVEL MARITIME EXPORTS: ROBUSTNESS TO DIFFERENT MEASURES

EXIM _i ×Post _t	-0.20 (0.022) [6.6e-18]	-0.19 (0.021) [4.1e-18]	-0.20 (0.022) [1.6e-19]	-0.18 (0.020) [1.3e-17]	-0.26 (0.051) [0.00000026]
EXIM _i ×Post _t	-0.18 (0.023) [1.9e-15]	-0.17 (0.022) [3.0e-15]	-0.19 (0.022) [5.2e-17]	-0.16 (0.021) [6.0e-15]	-0.25 (0.045) [0.00000020]
EXIM _i ×Post _t	-0.17 (0.021) [7.5e-15]	-0.16 (0.020) [2.2e-15]	-0.17 (0.020) [7.4e-17]	-0.15 (0.018) [1.3e-16]	-0.28 (0.034) [7.0e-16]
<i>Fixed Effects</i>					
Post	✓	—	—	—	—
Product×Post	—	✓	—	—	—
Destination×Post	—	—	✓	—	—
Product×Destination×Post	—	—	—	✓	✓
Observations	1,855,542	1,855,542	1,855,542	1,855,542	144,404

4.20. TABLE A.4: IMPACT ON FIRM-LEVEL MARITIME EXPORTS: ROBUSTNESS TO EQUAL WEIGHTING

EXIM _i ×Post _t	-0.48 (0.030) [4.7e-52]	-0.45 (0.024) [7.2e-69]	-0.46 (0.028) [3.3e-53]	-0.39 (0.023) [9.6e-56]	-0.25 (0.046) [0.00000071]
EXIM _i ×Post _t	-0.49 (0.031) [5.3e-51]	-0.45 (0.024) [4.0e-68]	-0.47 (0.029) [8.2e-52]	-0.39 (0.023) [5.0e-55]	-0.26 (0.051) [0.00000026]
EXIM _i ×Post _t	-0.49 (0.030) [7.5e-53]	-0.45 (0.024) [2.5e-70]	-0.47 (0.029) [3.7e-54]	-0.39 (0.023) [2.6e-57]	-0.25 (0.045) [0.00000020]
EXIM _i ×Post _t	-0.43 (0.028) [2.4e-47]	-0.38 (0.024) [2.1e-53]	-0.40 (0.027) [4.0e-46]	-0.33 (0.023) [1.8e-42]	-0.28 (0.034) [7.0e-16]
<i>Fixed Effects</i>					
Post	✓	—	—	—	—
Product×Post	—	✓	—	—	—
Destination×Post	—	—	✓	—	—
Product×Destination×Post	—	—	—	✓	✓
Observations	1,855,542	1,855,542	1,855,542	1,855,542	144,404

4.21. TABLE A.5: IMPACT ON FIRM REVENUES: ROBUSTNESS TO DIFFERENT INDUSTRY DEFINITIONS

	(1)	(2)	(3)	(4)
$EXIM_i \times Post_t$	-0.13 (0.033) [0.000038]	-0.12 (0.035) [0.00072]	-0.10 (0.032) [0.0017]	-0.13 (0.044) [0.0031]
<i>Fixed Effects</i>				
Exporter \times Year	✓	✓	✓	✓
Industry (1-digit) \times Year	✓	—	—	—
Industry (2-digit) \times Year	—	✓	—	—
Industry (3-digit) \times Year	—	—	✓	—
Industry (4-digit) \times Year	—	—	—	✓
Observations	25,174	25,174	25,174	25,174

4.22. TABLE A.6: IMPACT ON FIRM REVENUES BY SEPARATE EXIM PROGRAMS

	(1)	(2)	(3)	(4)
$EXIM \text{ (working cap)}_i \times Post_t$	-0.15 (0.053) [0.0058]		-0.12 (0.074) [0.10]	
$EXIM \text{ (insurance)}_i \times Post_t$		-0.13 (0.043) [0.0025]		-0.13 (0.049) [0.0095]
<i>Fixed Effects</i>				
Exporter \times Year	✓	✓	✓	✓
Industry \times Year	✓	✓	✓	✓
Size \times Year	✓	✓	✓	✓
Observations	24,448	24,775	24,448	24,775

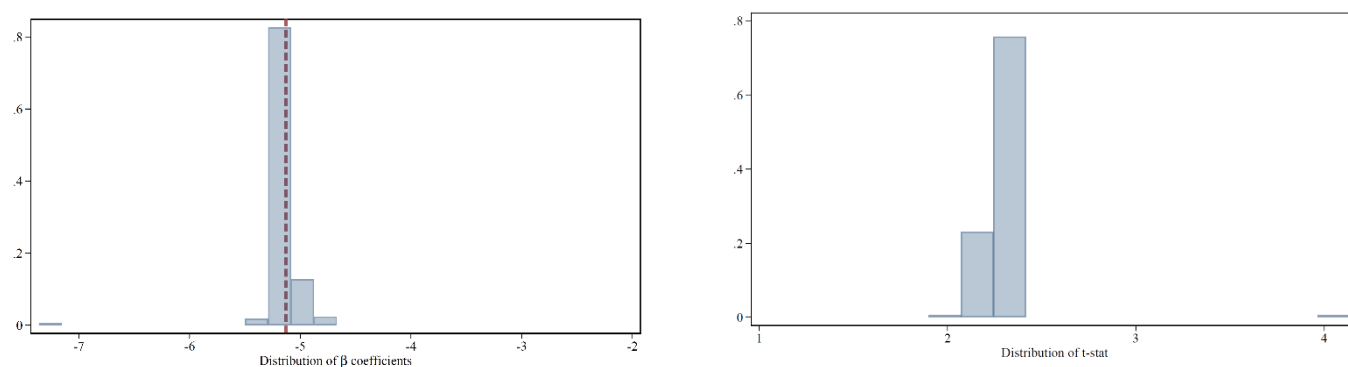
4.23. TABLE A.7: IMPACT ON EMPLOYMENT, CAPITAL, AND PROFIT RATES: ROBUSTNESS TO DIFFERENT WEIGHTING

	(1)	(2)	(3)	(4)	(5)
$EXIM_i \times Post_t$	-0.15 (0.032) [0.0000029]	-0.12 (0.032) [0.00017]	-0.14 (0.034) [0.000060]	-0.077 (0.026) [0.0030]	-0.015 (0.014) [0.29]
$EXIM_i \times Post_t$	-0.098 (0.036) [0.0065]	-0.17 (0.058) [0.0041]	-0.19 (0.066) [0.0042]	-0.088 (0.035) [0.011]	-0.0027 (0.0048) [0.58]
<i>Fixed Effects</i>					
Exporter \times Year	✓	✓	✓	✓	✓
Industry \times Year	✓	✓	✓	✓	✓
Observations	25,174	24,635	25,015	22,902	25,174

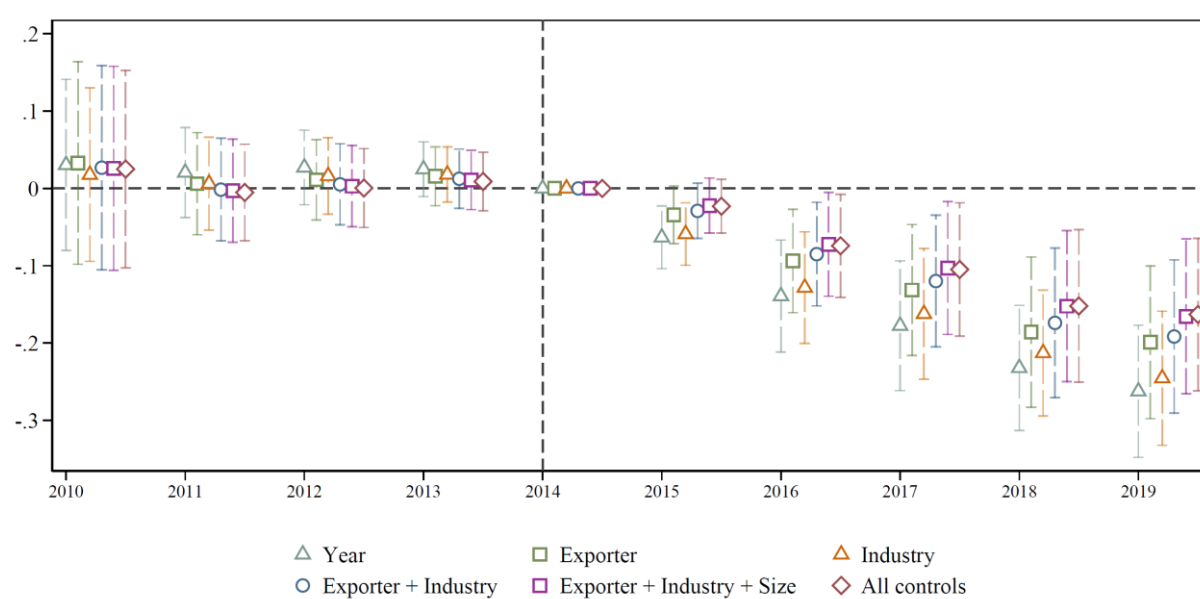
4.24. TABLE A.8: IMPACT ON EMPLOYMENT, CAPITAL, AND PROFIT RATES: ROBUSTNESS TO LHS WINSORIZATION

	(1)	(2)	(3)	(4)	(5)
$EXIM_i \times Post_t$	-0.16 (0.044) [0.00028]	-0.20 (0.059) [0.00079]	-0.29 (0.068) [0.000017]	-0.12 (0.040) [0.0023]	0.00033 (0.0062) [0.96]
$EXIM_i \times Post_t$	-0.10 (0.033) [0.0019]	-0.11 (0.039) [0.0030]	-0.13 (0.038) [0.00069]	-0.092 (0.033) [0.0057]	0.0010 (0.0052) [0.84]
$EXIM_i \times Post_t$	-0.075 (0.032) [0.019]	-0.11 (0.038) [0.0051]	-0.11 (0.035) [0.0013]	-0.056 (0.059) [0.35]	0.0015 (0.0059) [0.80]
Observations	25,174	24,795	25,036	23,605	25,174

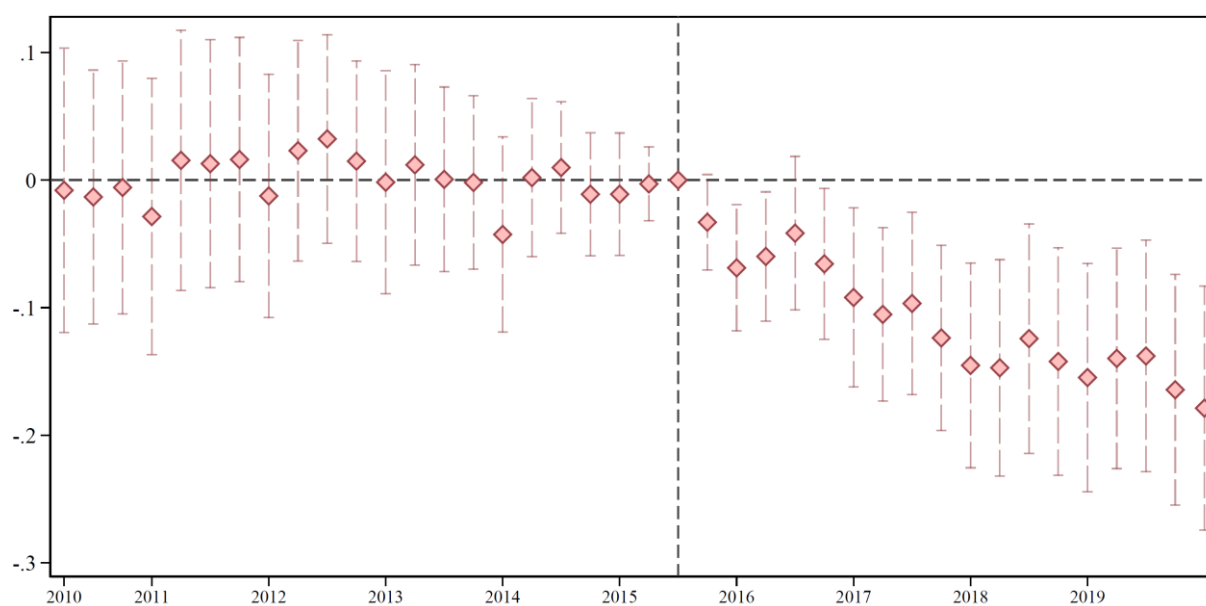
4.25. FIGURE B.1: US EXPORT EFFECTS EXCLUDING PRODUCTS INDIVIDUALLY: DISTRIBUTION OF B AND T-STATS



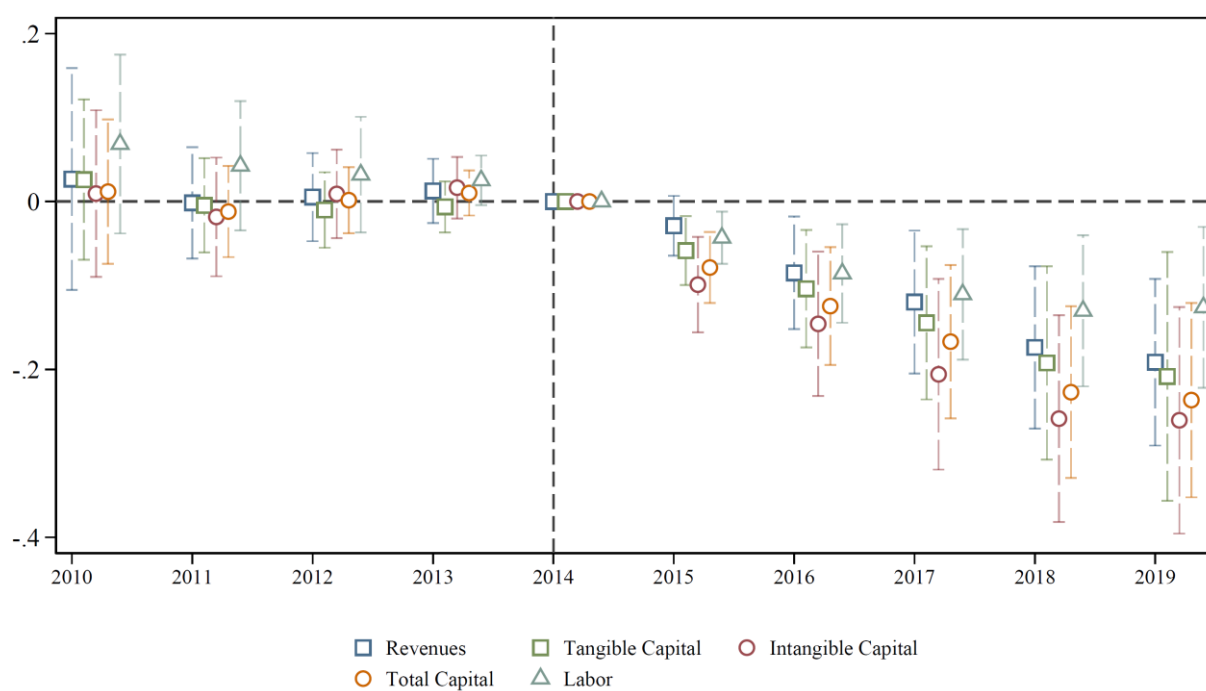
4.26. FIGURE B.2: IMPACT OF EXIM'S SHUTDOWN ON TOTAL REVENUES: ROBUSTNESS TO MULTIPLE SPECIFICATIONS



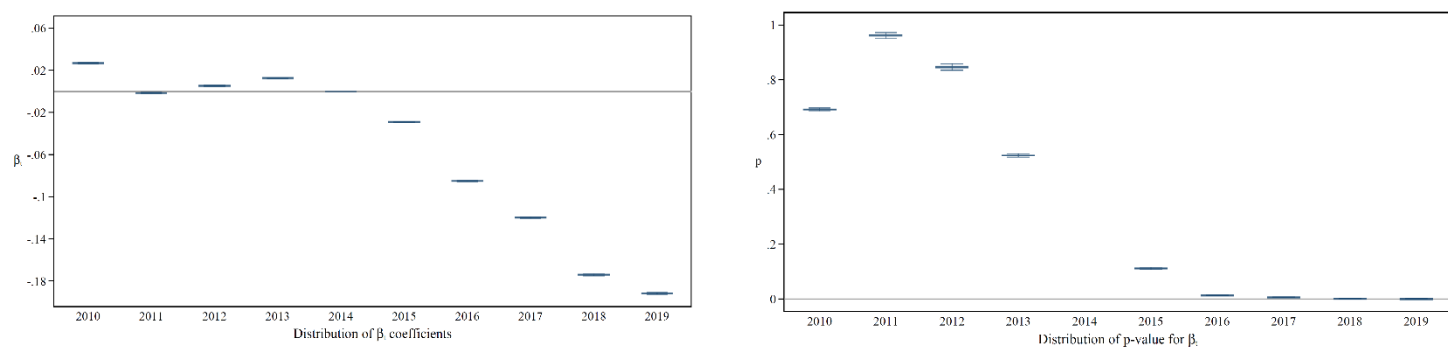
4.27. FIGURE B.3: EXIM'S SHUTDOWN AND QUARTERLY FIRM REVENUES



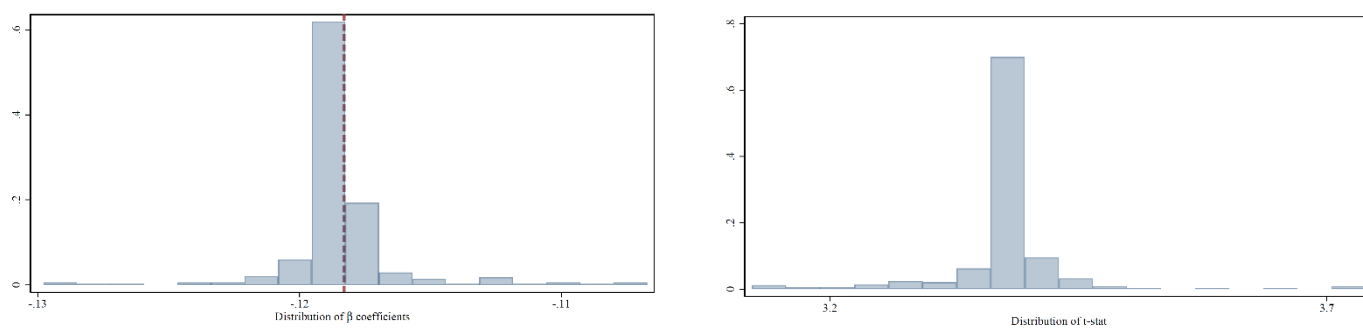
4.28. FIGURE B.4: IMPACT OF EXIM'S SHUTDOWN ON OTHER FIRM OUTCOMES



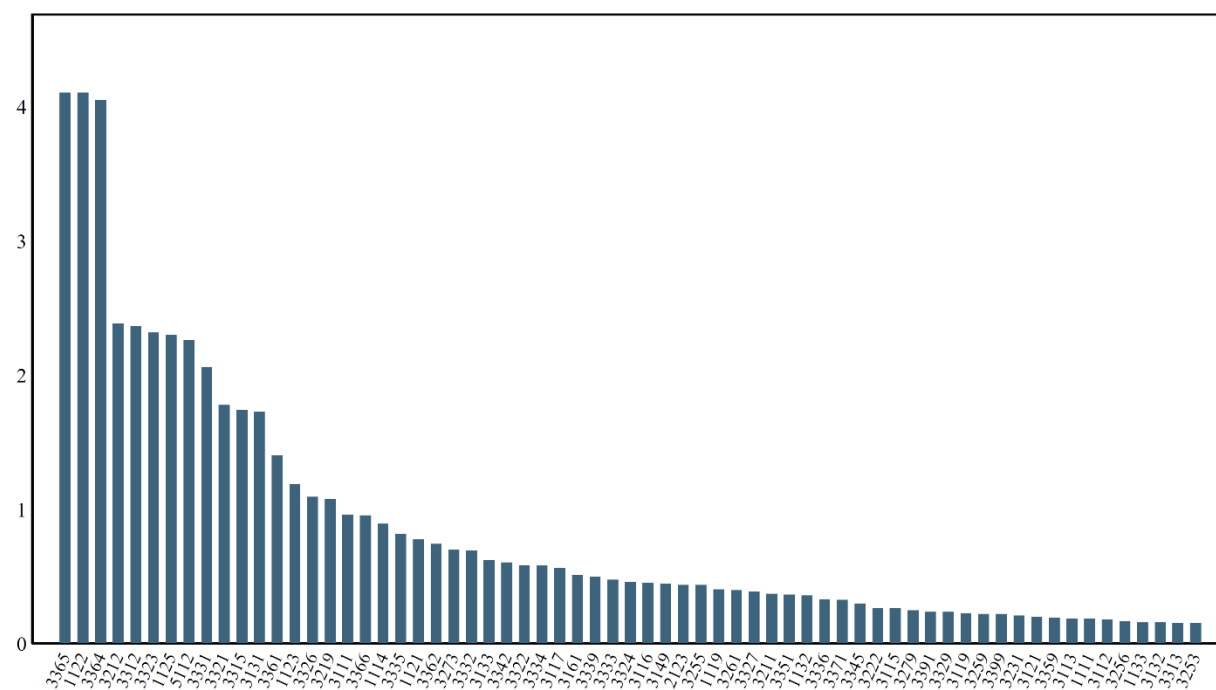
4.29. FIGURE B.5: FIRM-LEVEL EFFECTS EXCLUDING INDUSTRIES INDIVIDUALLY: DISTRIBUTION OF B AND P-VALUES



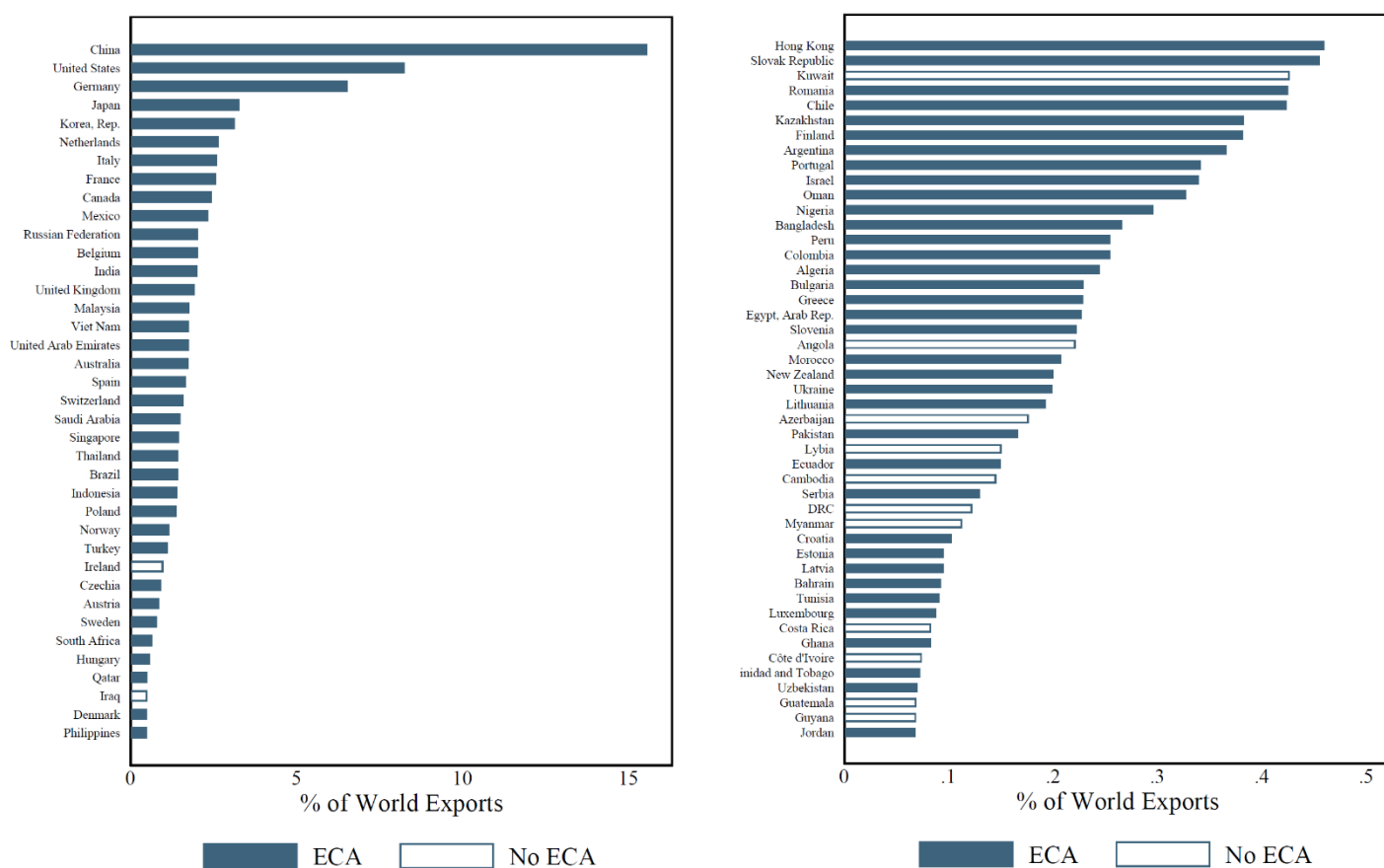
4.30. FIGURE B.6: FIRM-LEVEL EFFECTS EXCLUDING INDUSTRIES INDIVIDUALLY: DISTRIBUTION OF B AND T-STATS



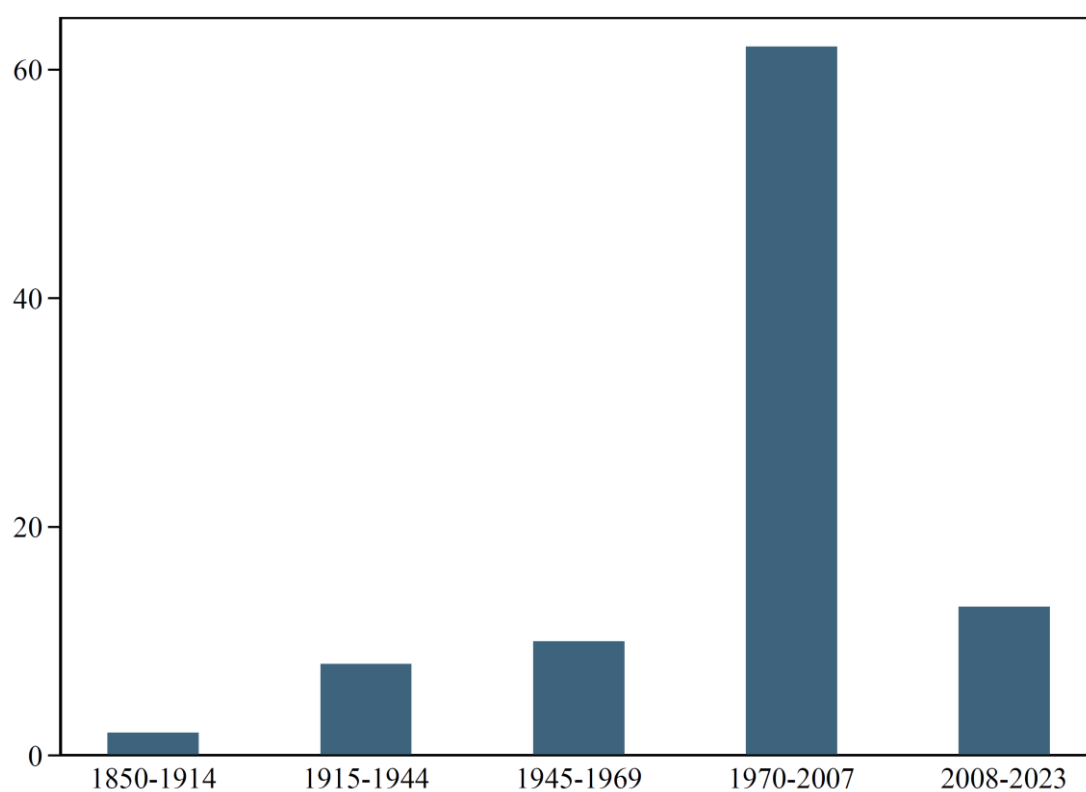
4.31. FIGURE C.1: EXIM FINANCING INTENSITY BY INDUSTRIES (%)



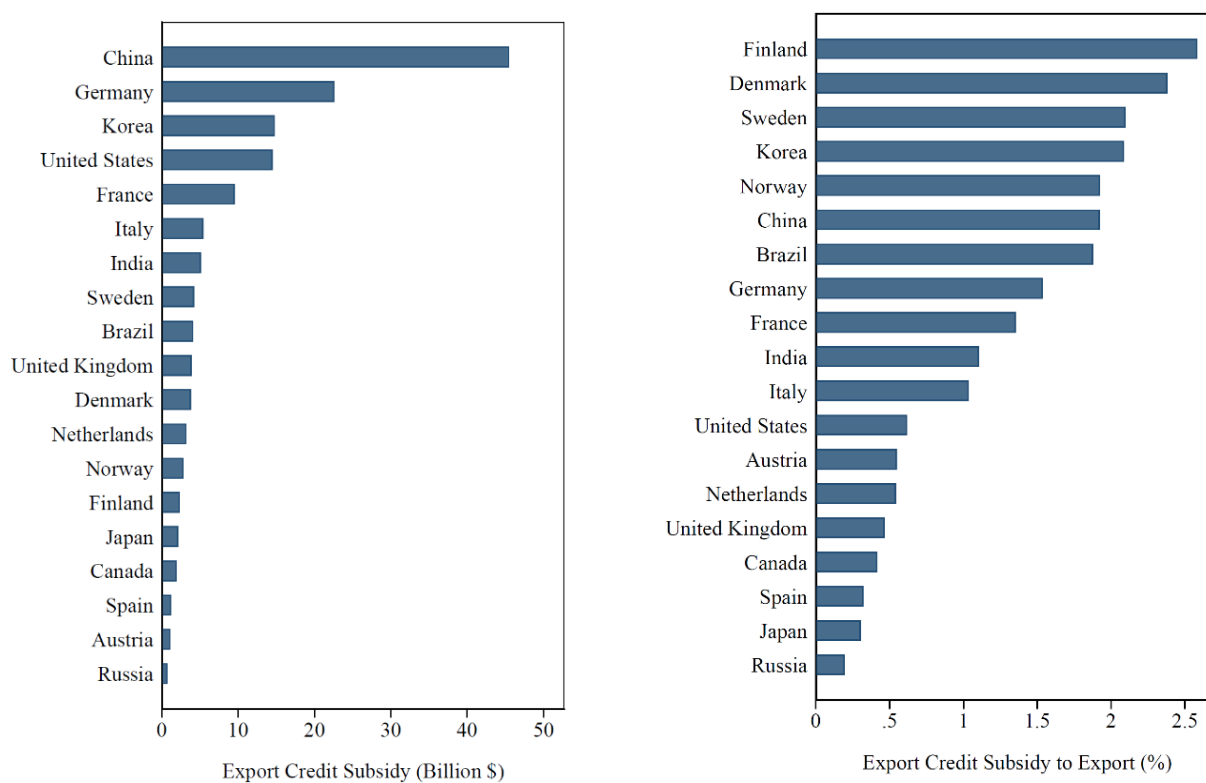
4.32. FIGURE D.1: EXPORT CREDIT AGENCIES AROUND THE WORLD



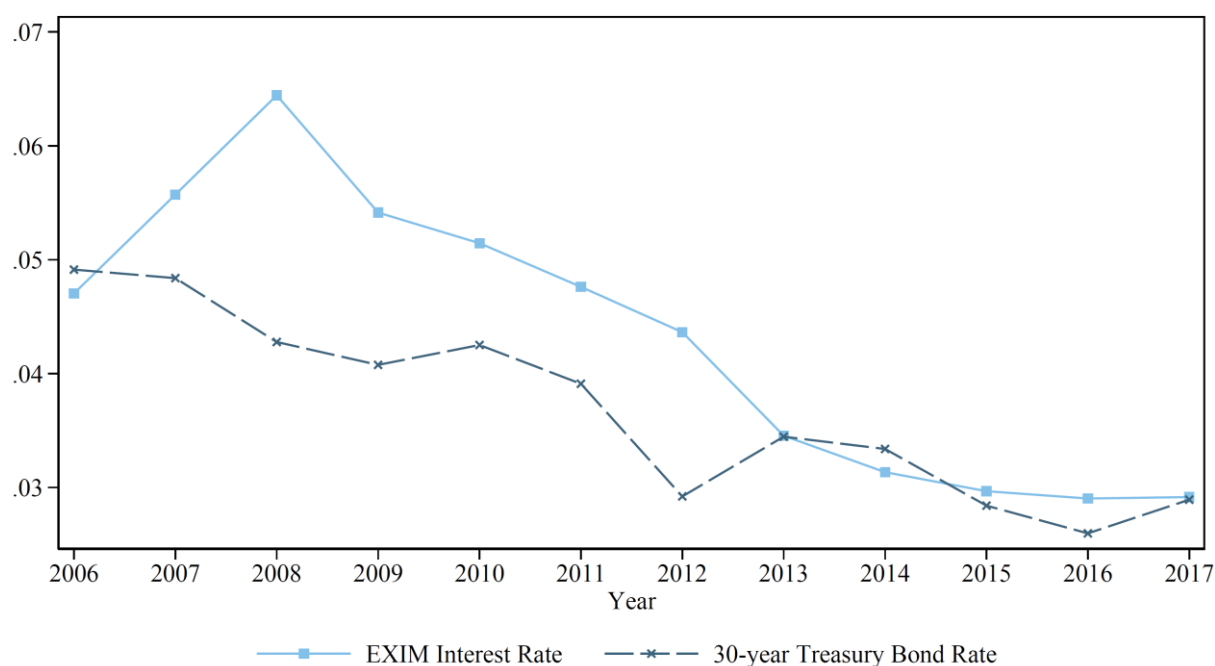
4.33. FIGURE D.2: EXPORT CREDIT AGENCIES: NUMBER FOUNDED BY TIME PERIOD



4.34. FIGURE D.3: EXPORT CREDIT AGENCY SUPPORT BY COUNTRY



4.35. FIGURE D.4: EXIM'S ANNUAL INTEREST EXPENSE



4.36. TABLE D.2: EXIM SUPPORT AND COUNTRY RISK

	(1)	(2)	(3)	(4)	(5)
Risk (by all)	2.23 (0.76) [0.0048]				
Risk (by financial)		1.59 (0.64) [0.016]			
Risk (by foreign)			1.61 (0.93) [0.087]		
Risk (by domestic)				-0.018 (0.069) [0.79]	
Local crisis					0.093 (0.044) [0.038]
<i>Fixed Effects</i>					
Country	✓	✓	✓	✓	✓
Year	✓	✓	✓	✓	✓
Observations	812	812	812	660	812

4.37. TABLE D.3: IMPACT ON CAPITAL MISALLOCATION: ALTERNATIVE MEASURES OF MRPK

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
EXIM _i ×Post _t	-0.064 (0.036) [0.077]	-0.14 (0.078) [0.072]	-0.088 (0.043) [0.042]	-0.15 (0.058) [0.0092]	-0.057 (0.039) [0.14]	-0.18 (0.073) [0.015]	-0.056 (0.037) [0.13]	-0.23 (0.079) [0.0046]	-0.075 (0.040) [0.062]	-0.18 (0.065) [0.0059]
<i>Fixed Effects</i>										
Exporter×Year	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Industry×Size quartile×Year	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Observations	13,420	7,764	14,983	9,010	13,446	7,738	14,420	8,570	14,960	9,050