

Predicting the Economic Effects of Vietnam's International Integration

Evidence from the 2018 Vietnam Provincial Competitiveness Index
Foreign and Domestic Surveys

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The Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP)



United States' Tariffs on Chinese Products



Exhibit 1: Potential Sectors Facing US Tariffs on Imports from China

	US Imports from China 2017	Relative Trade Share	Tariff Rate	Imports for Year 2020	Imports from China as Share of Total Imports	China 2020
Plaster, Gypsum	2.2	-2.2	7.6	20.1	14.3	
Iron and Steel Articles	17.1	-16.8	7.6	60.1	35.0	
Textiles and Apparel Goods	8.3	-7.9	6.0	60.8	73.9	
Shoe, Text and Luggage	16.4	-16.3	4.1	60.1	36.9	
Jewelry and Silverware	6.8	-4.4	10.8	60.3	33.9	
Trucks and Equipment	22.3	-22.2	14.4	60.6	34.4	
Tractor and Commercial Recreational Instruments	0.9	-0.7	2.0	31.4	6.8	
Furniture	14.7	-14.3	4.0	30.2	20.2	
Pharmaceuticals and Medicinal Products	2.3	-0.2	4.0	30.1	13.1	
Mail Equipment and Shipping	0.9	-0.8	4.3	27.9	24.6	
Major Household Appliances (Refrig., Ovens, Washers)	8.6	-7.9	7.0	64.4	35.0	
Proteins, Hides and Leather Goods	29.3	-28.5	0.0	31.1	10.9	
Medicines and Other Pharmaceutical Goods	0.4	-0.4	0.0	7.0	7.7	
Skateboard	0.9	-0.9	3.0	31.5	6.0	
Apparel	20.2	-20.0	4.4	60.0	34.1	
Other Machinery	14.7	-14.2	3.9	60.4	37.7	
Other Iron, Manufactured Goods	9.4	-8.7	7.0	60.0	36.8	
Medical Equipment	0.5	-0.2	3.0	10.0	3.4	
Fruit and Vegetable Canning	0.7	-0.6	0.0	40.0	40.0	
Paper and Construction Machinery	16.4	-14.2	7.0	64.7	37.2	
Paper	2.4	-1.4	0.2	30.2	6.0	
Telephone Apparatus	4.5	-4.5	4.0	43.7	33.0	
Composites and Plastics	0.4	-0.4	0.0	40.0	33.0	
Other Trains, Bikes	0.4	-0.4	0.0	40.0	33.0	
Ball Bearings	1.2	-1.0	0.0	40.0	33.0	
Rollers	1.7	-1.0	0.0	31.0	13.4	
Design and Switchboard Apparatus	1.9	-1.0	0.0	40.7	33.0	
Resistor Units	2.7	-2.0	0.0	30.1	10.8	
Wires & Cables	4.3	-3.3	7.0	31.2	11.6	
Printed Circuit Boards	6.1	-4.4	3.0	30.1	6.1	
Integrated Circuits	32.0	-28.4	0.0	71.4	36.0	
Computer Storage Devices	3.1	-2.9	0.0	30.1	10.9	
Engines and Turbines	4.2	-3.2	3.0	28.1	23.0	
Lighting Equipment	7.8	-7.0	11.0	30.1	20.4	
Trucks	16.1	-15.0	2.7	31.0	17.4	
Lighting Equipment	7.7	-6.4	3.0	30.1	15.4	
Cables, Cords and Wires	8.4	-7.9	0.0	30.2	6.1	
Medical, Plastic and Glass	10.5	-10.1	0.4	30.1	6.1	
Printing	2.5	-2.0	4.0	23.0	10.8	
Metal Industry Control	0.2	-0.2	0.0	1.0	0.4	
Wires & Paper Products	7.2	-2.0	0.0	4.3	3.1	
Auto Components	12.0	-8.7	0.0	6.4	5.1	
Polymers and Plastics	36.0	-22.7	0.0	19.9	10.5	
Other Plastics	34.0	-20.0	0.0	18.0	10.5	
Cars, Trucks and Bikes	0.1	-0.2	0.0	0.1	0.0	
Refrigerators and Dishwashers	1.3	0.7	2.7	0.4	1.1	
Beer, Wine and Liqueur	0.9	2.1	0.0	70.0	10.0	
Electronic Devices and Instruments	0.7	1.8	2.0	0.0	7.0	
Iron and Steel	0.0	0.0	0.0	0.0	0.0	
Wine, Mineral Water	1.9	0.7	0.7	0.0	0.0	
Chemicals and Pharmaceuticals	10.9	0.0	0.0	0.0	0.0	
Other Agriculture	1.5	3.0	0.0	0.0	0.0	
Chemicals	0.0	7.7	0.0	0.0	0.0	
Shoes and Luggage	0.0	0.0	0.0	0.0	0.0	
China and Minerals	0.2	1.1	0.0	0.0	0.0	
Wool, Silk and Leather	0.0	1.0	0.0	0.0	0.0	
Wool, Silk and Leather	0.0	1.0	0.0	0.0	0.0	
Wool, Silk and Leather	0.0	1.0	0.0	0.0	0.0	

Source: World Trade Organization, Department of Commerce, Substantive Trade Global Investment Research

Key Predications from PCI Data

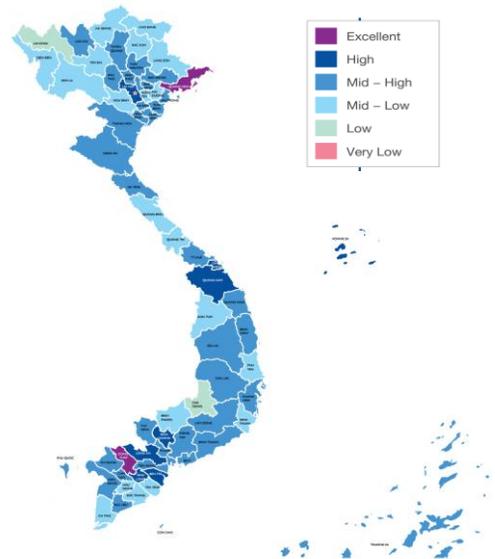
- Vietnam's entry into CPTPP will have a positive impact on the country's integration into global value chains.
 - **Why?** Both foreign and domestic companies feel more confident about dispute resolution procedures and are more likely to engage in long term contracting.
 - Both foreign and domestic companies will increase sales by 4%, above and beyond current partnerships
 - Increases will most likely occur in partnerships with companies in international supply chains (MNCs, 3rd Party Buyers)
- Ironically, United States' 10% across the board tariffs on Chinese products are likely to lead to a significant improvement in labor conditions in Vietnam factories.
 - **Why?** To take advantage of new export opportunities to United States, companies need to recruit higher skilled labor, managers, and technicians.
 - Labor conditions improvements will primarily occur in increased wages and social benefits.

Brief Methodology



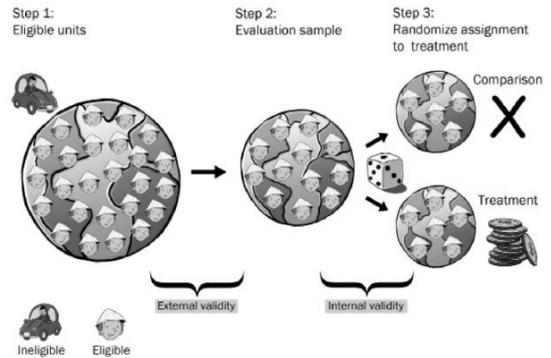
Data Used in Special Investigations

- Survey of Private, Domestic Investors in 2018
 - 10,681 private, domestic businesses
 - 2,000 newly registered businesses
 - Used to create index, stratified to represent province
 - Response Rate 30% (Corrected 60%)
- Survey of Foreign Direct Investors in 2018
 - 1,577 foreign firms
 - 36 countries
 - 20 provinces, nationally representative



What is a Survey Experiment?

- Use random assignment
- Manipulate at least one variable to evaluate response
- Generates a cause-effect relationship, because I know exactly what was manipulated.
- We use “priming” experiments, meaning I manipulate a small piece of information to prime respondents to unconsciously think in a certain way.
- I then evaluate those response against a control treatment.

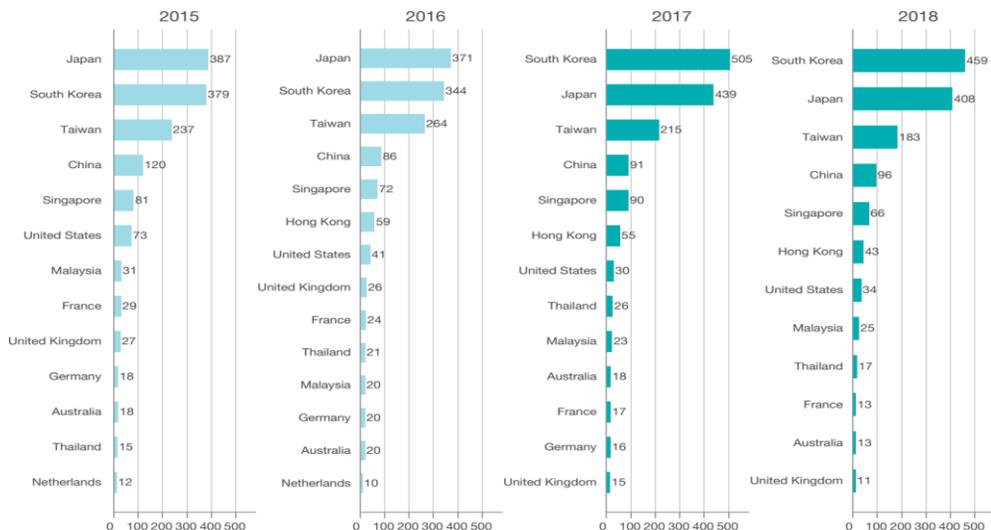


Analysis 1: The Impact of the Trump Administration's Tariffs on China.

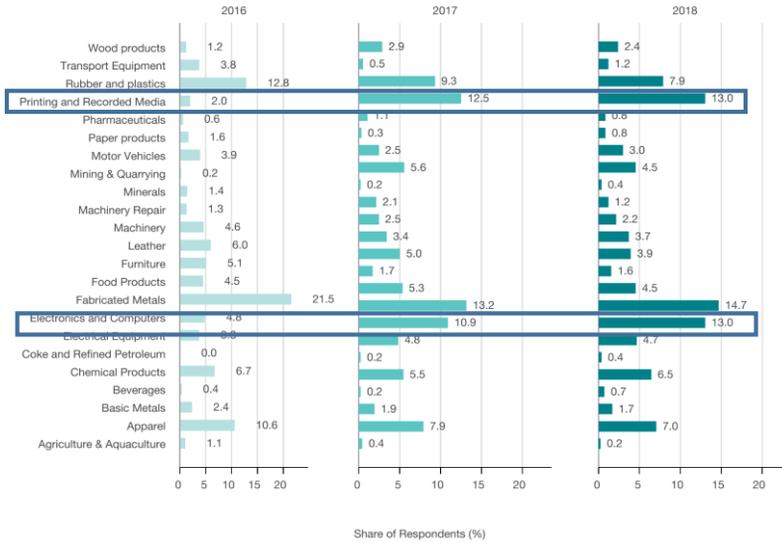
Global Value Chains in Vietnam

- 50 to 60% value added generated via global value chains (GVCs)
- Vietnam ranks highly in GVC participation index
- Vast majority of manufacturing exports from FIEs
- FIEs in Vietnam often follow **China Plus One** strategy.
 - Typically small and export-focused.
 - Historically, played least value role in supply chains
 - assembly, low-tech production in garments and plastics
 - Sectoral composition is now changing.

Who Are the Foreign Investors in Vietnam/PCI?



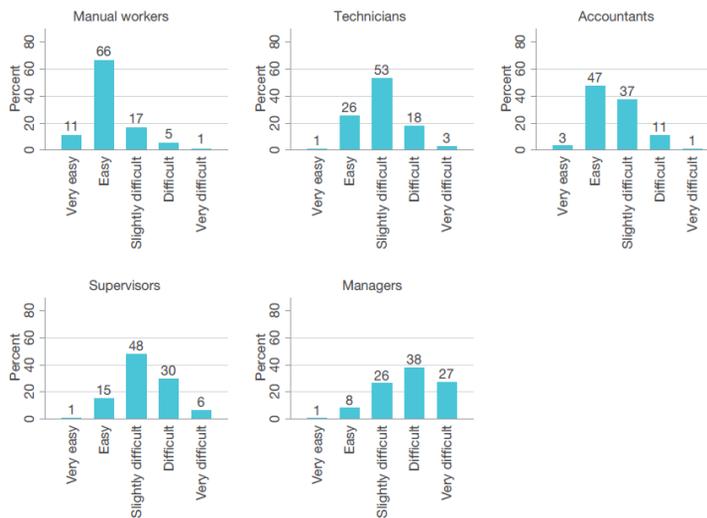
What Sectors Do Foreign Investors Operate In?



Recent shift toward higher value-added sectors (electronics, solar batteries, recorded media, auto parts)

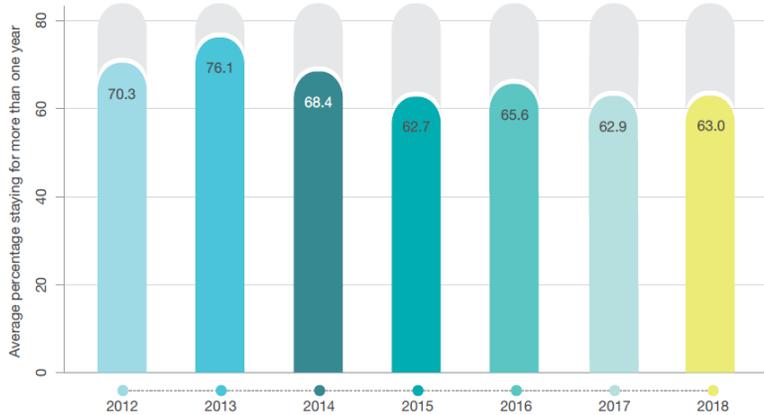
Declines in apparel, rubber & plastics.

The Problem: Foreign Firms Struggle to Recruit Skilled Labor



Source: PCI Survey 2018 Question F1.1.7: "Please evaluate how easy or difficult it is to recruit workers in these specific areas?"

The Problem: FIES Also Struggle to Retain Trained Labor



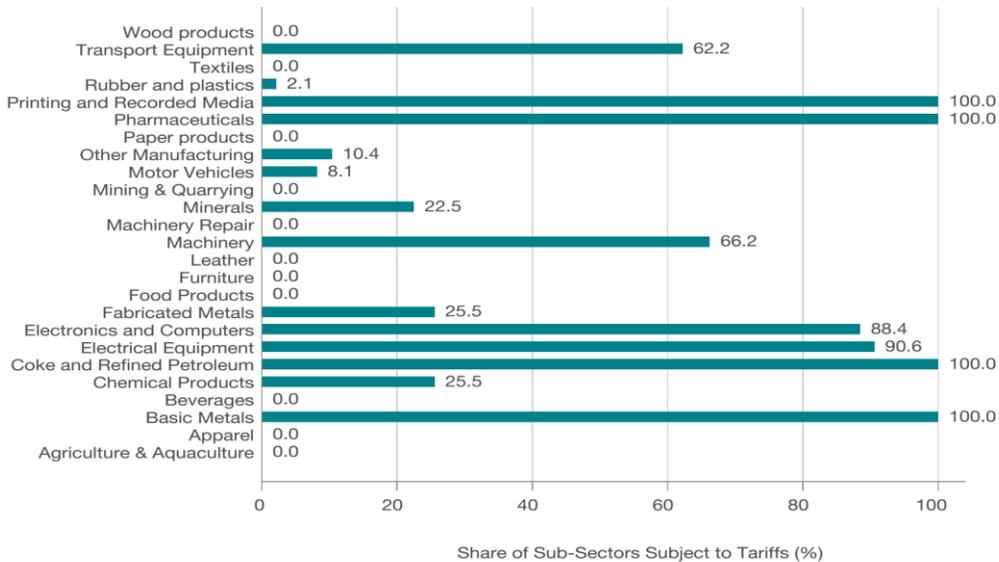
Source: PCI Survey 2018 Question F1.3.2: "On average, what percentage of workers trained by your company remain with the firm for longer than a year?"

Our Research Questions

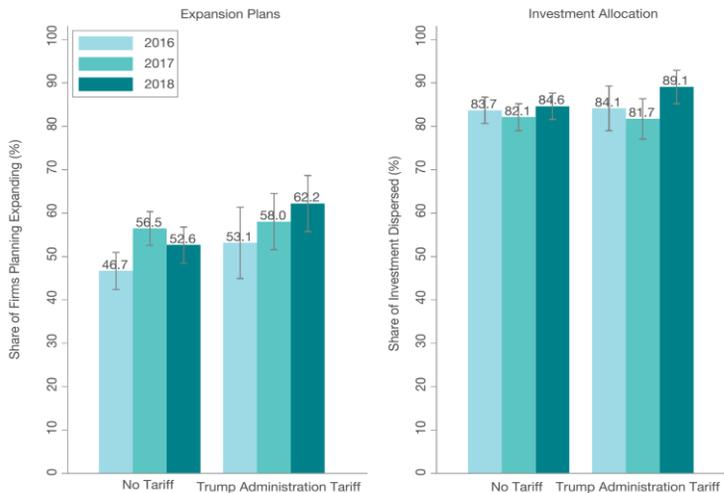
1. Are the United States' tariffs on China causing a foreign firms to shift their higher value-added production to Vietnam?
2. Will they now have to compete harder to hire high quality labor?
3. Will that competition improve labor conditions in Vietnamese factories?



Vietnamese FIEs Affected by Tariffs



Evidence of Increased Foreign Activity in Sectors Affected by Tariffs



In 2018, FIEs producing products that were listed in Trump Administration tariffs increased their willingness to expand to 62% and increased dispersion of existing investment to 89%.

FIEs in other product lines were much less active.

Source: PCI Survey 2016-18 Question A13, "Which statement best characterizes your firm's investment plans over the next 2 years?" We presented the share that answered (1) Considerably expand (2) Expand. PCI Survey 2016-18 Question A4: "What percentage of your licensed investment size have you implemented (disbursed) since your arrival? _____%."

Survey Experiment on Labor Conditions (2016-2018)

F.4a. Imagine the following scenario. A consulting company would like to shortlist your company, along with two other companies in your region, as potential suppliers of your product to a large **[Form A= US-based/Form B =China-based]** company that sells primarily to the **[Form A= US/Form B =China]** market. To be eligible to be included on the shortlist, the company requires that your firm adopt the multinational's Labor Code of Conduct for Suppliers. *This Code of Conduct includes greater representation for workers, limits on overtime work, and regulations to protect the health and safety of workers.* Adopting the Code of Conduct will allow you the possibility of future orders from this multinational and others like it, but it also will increase your operating costs. Please tell us the maximum amount of adjustments (as a share of operating costs) that you would be willing to make in order to comply with the code of conduct and thereby eligible for the contract.

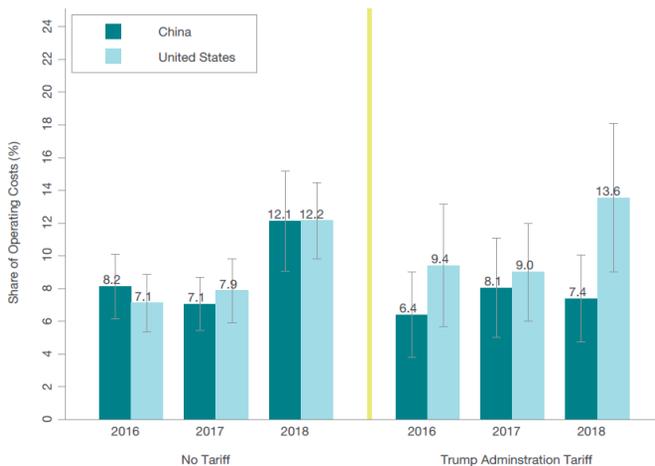
Share of Operating Costs: (Please simply write the highest cost you would be willing to assume)
 _____ % 0%

F.4b. Which types of reforms would your firm be most likely to make?

- Increases in the average wage
- Limits on overtime
- Greater social benefits payments
- Greater safety and health protections
- Greater representation of workers in negotiations with management
- Other _____

F.4c. Which of your products or services do you believe the consulting company is most interested in? Please write it here _____

Greater Willingness to Spend on Labor Recruitment



The increase in FIE's willingness to increase costs for labor is entirely concentrated in the set of goods exposed to the increased tariff lines (6.2 point difference between China and US Treatments).

Note: This figure presents the predicted effects of linear regression results, controlling for the age of the firm, the initial labor size, and two-digit sector fixed effects. Standard errors are clustered among firms from the same home country.

Likelihood of Labor Improvement by Labor Condition (Share of Firms Willing to Engage in Activity)

Type of Labor Reform	USA		China		Difference in Difference (95% CI)		
	No Tariff	Tariff	No Tariff	Tariff	β	Low	High
Increases in average wage	44.7	48.9	48.4	38.6	13.9	5.8	22.0
Limits on overtime	40.7	44.5	43.9	40.0	7.6	-2.8	18.1
Greater social benefits payments	24.9	33.6	26.4	19.7	15.4	-2.7	33.5
Greater safety and health protections.	55.1	53.2	50.2	45.6	2.7	-8.4	13.8
Greater representation of workers in negotiations with management	19.2	19.7	18.4	11.6	7.4	-1.6	16.3
Other	0.6	3.3	2.9	2.1	3.4	-1.4	8.3

Note: This table presents the predicted effects of linear regression results, controlling for the age of the firm, the initial labor size, and two-digit sector fixed effects. Standard errors are clustered among firms from the same home country.

Takeaways

- United States-China trade conflict is producing positive returns for Vietnamese workers.
- Foreign firms in Vietnam increasing business activity in products affected by tariffs on China.
- These firms are willing to offer more attractive wages and benefits to skilled workers in order to export higher value-added products to the United States.
- The increase in FIE's willingness to increase costs for labor is entirely concentrated in the set of goods goods exposed to increased tariff lines raised by the Trump administration.
 - Firms manufacturing goods exposed to the tariffs are willing to spend 6.2 points more to improve labor conditions when they have an opportunity to export to the United States (13.6 percent higher costs) instead of China (7.4 percent higher costs).
 - These expenses are concentrated in higher wages and social benefits. Firms are less enthusiastic about spending resources on labor conditions or worker representation.



Analysis 2: The Impact of CPTPP on Foreign Contracting

Vietnamese Firms Not Integrated into Supply Chains

“Vietnam needs to move to a higher position in global value chains and strengthen the connectivity between Vietnamese and FDI businesses,”

- Prime Minister Nguyễn Xuân Phúc at the World Economic Forum-ASEAN Summit, 9/13/2018

Major Customers of Domestic and Foreign Firms

Year	Domestic Origin			
	SOEs	Government	Private Individual	Private Company
	%	%	%	%
2016	24.7	28.9	61.6	62.1
2017	22.8	27.8	63.9	60.5
2018	23.8	27.8	65.7	63.8
Year	Foreign Origin			
	Foreign Individuals	Foreign Company	Exported Directly	Exported Indirectly
	%	%	%	%
2016	7.8	14.1	9.8	7.5
2017	7.0	13.9	8.4	6.8
2018	7.7	14.6	8.4	7.4

Based on question A11, “Please choose the main customers of your firm (Please check all categories that apply).”

The Problem: Firms Don't Trust Courts

Variable	Private %	Foreign %
Dispute in last two years	3.9	20.2
Would use court in dispute	39.4	2.0
Why didn't you use the courts?		
Takes too long	35.8	7.8
Expensive	23.0	5.1
Bribe required	23.2	3.5
Low capacity of officials	8.3	1.4
Reveals trade secrets	16.0	2.5
Other methods better	40.0	15.4

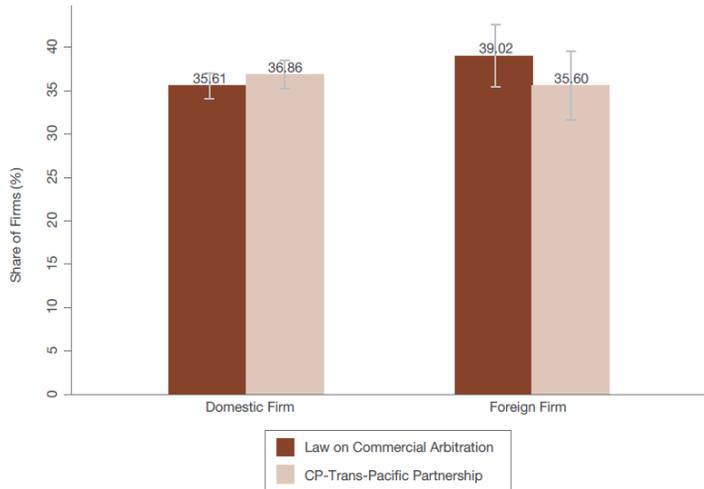
Source: PCI Survey H3-H4; PCI-FDI Survey I1-I3

The Problem: Foreign Firms Are Not Confident in Alternative Dispute Resolution

Outside of courts, what other means do you use to ensure the sanctity of contracts in your province? (Check all that apply)	%
International arbitration	18.07
Local arbitration	18.49
Appeal to local government officials	15.97
Appeal to home country embassy/consulate.	10.08
Write contracts with incentive structures and staged-implementation to encourage compliance	41.60
Only do business with close friends and family	2.52
Asking an influential person in the government to handle	5.88
Bring media attention to the case	3.36
Using criminal gangs, mafia groups	0.42

Most Firms Don't Know about Domestic and Foreign Contracting Protections

(Share of Firms Familiar with Legal Documents (%))



Range Bars=95% Confidence Intervals; n=8,693 (D_LCA=4,030; D_CPTPP=3,375; F_LCA=715; F_CPTPP=573)

Our Research Question

If firms were made aware of new protections made available to them in Chapter 28 of the CPTPP agreement, would they feel more comfortable contracting with new partners in Vietnam?

- Protections include:
 - Affirmation of foreign and domestic arbitrations.
 - International dispute settlement procedures (ISDS).



Survey Experiment

5. FORM A: “Vietnam recently passed the **Law on Commercial Arbitration (LCA)**. Articles 2 and 5 of the domestic law give firms in Vietnam more opportunities to address disputes with business partners. *The law allows for disputants to seek binding arbitration over contracts in Vietnamese economic courts, but also in local and international arbitration centers. The article will protect businesses from discrimination, uncompensated seizure of property, denial of justice, intellectual property theft, and ensure free movement of capital.*”

5. FORM B: “Vietnam recently joined the **Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP)**, an international trade and investment arrangement involving eleven countries. Chapter 28 of the international agreement gives firms in Vietnam more opportunities to address disputes with business partners. *The law allows for disputants to seek binding arbitration over contracts in Vietnamese economic courts, but also in local and international arbitration centers. The chapter will protect businesses from discrimination, uncompensated seizure of property, denial of justice, intellectual property theft, and ensure free movement of capital.*”

How Much Will No Agreement Increase Sales?

5.4. “Please estimate the effect of the **[Form A=Domestic Law/Form B=new International Agreement]** on sales growth for your business next year.”

Increase by _____%

Decrease by _____%

No change_0%

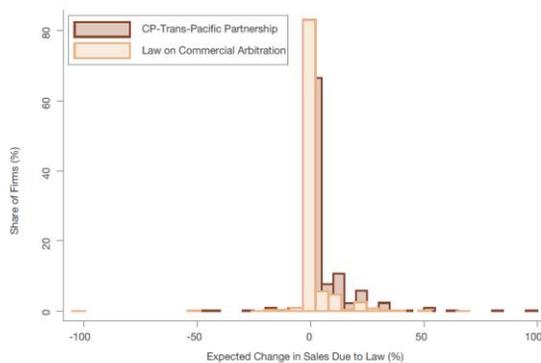
Who Will You Do More Business With?

5.3. “We are interested in how this new [Form A=Domestic Law/Form B=International Agreement] will affect your contracting decisions in Vietnam.” Are you more or less likely to do business with the following partners?”

Partner	<u>Much Less Likely</u>	<u>Less Likely</u>	<u>Somewhat Less Likely</u>	<u>No Change</u>	<u>Somewh at More Likely</u>	<u>More Likely</u>	<u>Much More Likely</u>
	1	2	3	4	5	6	7
5.3.1. Vietnamese Private Firm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.3.2 Vietnamese State Owned Firm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.3.3 Foreign Firm in Vietnam	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.3.4 Branch of Foreign Multinational Corporation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.3.5 Overseas 3rd Party Buyers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

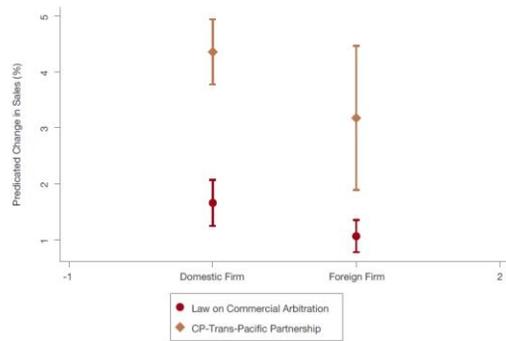
How Much Will No Agreement Increase Sales?

Raw Distribution in Sales



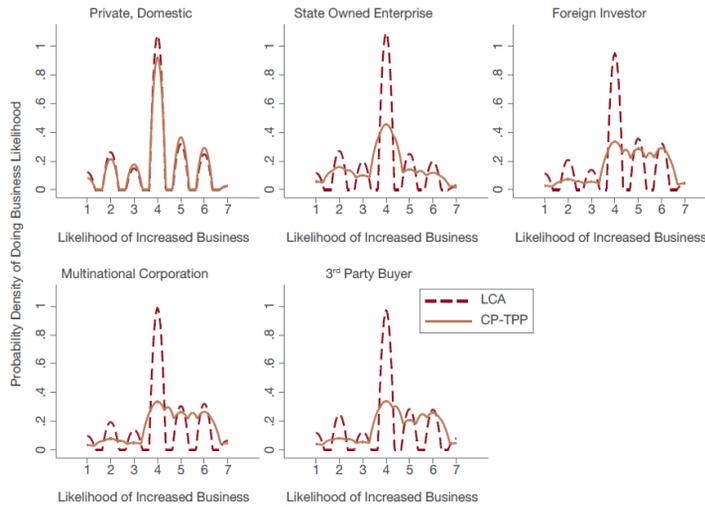
n=2,347; LCA=1,341; CP-TPP=1,006

Regression Results

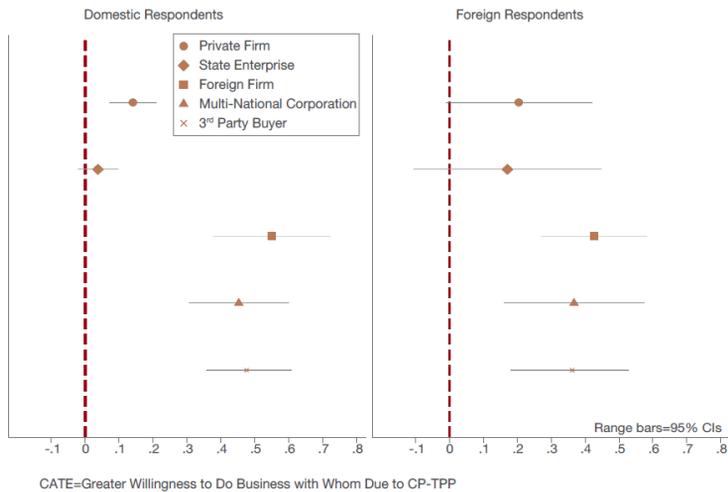


Predicted Effects of Appendix 3.4 (Model 2), OLS with SEs clustered by broad industry with fixed effects for sector at two-digit ISIC level

Who will You Do More Business With? (Raw Distributions in Propensity)



Which Partner You Do More Business With? (Regression Results)



Predicted Effects of OLS with SEs clustered by broad industry with fixed effects for sector at two-digit ISIC level

Takeaways

- Vietnam's entry into CPTPP will have a positive impact on the country's integration into global value chains.
- We find that both LCA and CPTPP encourage greater business partnerships, but the effect is far greater for those receiving the CPTPP treatment.
 - For domestic firms, predicted sales growth is 1.65 percent for those exposed to the LCA and 4.3 percent for those exposed to the CPTPP (a 2.7-point difference).
 - For foreign firms, the difference is smaller at 2.12 percentage points (1.05 v. 3.18 percent), but still statistically significant.
 - The positive effect of internationalization of contract enforcement does not differ dramatically whether the respondent was a private domestic firm or foreign investor
- The most likely business partners for the increased activity are foreign-invested enterprises, multinational corporations (MNCs), and third-party overseas buyers – precisely the actors involved in GVCs.
- While the CPTPP also has a positive effect on potential partnerships with domestic private enterprises, the size of the increase is far less substantial.
- **BUT:** Effects could be higher if firms were more aware of the protections available to them.