Analysis of the COVID-19 Shock, Technology and Trade

Regression Results with Lagged Technology Variables - Indonesia and India

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1. Firm-Product Level Regressions

1.1 Does Tech Adoption Affect Trade Outcomes?

Results for eBay-tradable products/products in China e-commerce tax lists

Table 1: Indonesia - Regression Results for Log. Imports and Log. Exports: e-Bay tradable and China e-commerce products. 1-Lag in technology variable

	Dependent Variables									
	Log.Imports	Log.Exports	Log.Imports	Log.Exports	Log.Imports	Log.Exports	Log.Imports	Log.Exports	Log.Imports	Log.Exports
E-payment or E-commerce (t-1)	0.02	0.066	-0.035	0.030	0.018	0.075	-0.006	0.021	0.007	0.038
	(0.028)	(0.075)	(0.038)	(0.087)	(0.031)	(0.086)	(0.035)	(0.101)	(0.030)	(0.081)
E-payment or E-commerce (t-1) × eBay-tradable			0.231**	0.168						
			(0.090)	(0.279)						
E-payment or E-commerce (t-1) × China e-commerce					0.009	-0.031				
					(0.061)	(0.158)				
E-payment or E-commerce (t-1) × China e-commerce upd.							0.060	0.111		
							(0.059)	(0.173)		
E-payment or E-commerce (t-1) × Diff. China e-commerce									0.092	0.229
									(0.088)	(0.255)
Num. Obs.	1,029,108	210,437	1,029,107	210,436	1,029,107	210,436	1,029,107	210,436	1,029,107	210,436
R-squared	0.388	0.586	0.388	0.586	0.388	0.586	0.388	0.586	0.388	0.586
Adj.R-squared	0.383	0.573	0.383	0.573	0.383	0.573	0.383	0.573	0.383	0.573
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Product FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Month FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Clustered-standard errors at the firm-product level.

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

Table 2: Indonesia - Regression Results for Log. Imports and Log. Exports: e-Bay tradable and China e-commerce products. 2-Lag in technology variable

	Dependent Variables									
	Log.Imports	Log.Exports	Log.Imports	Log.Exports	Log.Imports	Log.Exports	Log.Imports	Log.Exports	Log.Imports	Log.Exports
E-payment or E-commerce (t-2)	0.031	0.033	-0.026	-0.004	0.028	0.043	0.004	-0.018	0.017	0.001
	(0.027)	(0.077)	(0.037)	(0.090)	(0.029)	(0.086)	(0.033)	(0.101)	(0.029)	(0.084)
E-payment or E-commerce (t-2) × eBay-tradable			0.234**	0.173						
			(0.091)	(0.287)						
E-payment or E-commerce (t-2) × China e-commerce					0.010	-0.035				
					(0.062)	(0.161)				
E-payment or E-commerce (t-2) × China e-commerce upd.							0.063	0.123		
							(0.059)	(0.176)		
E-payment or E-commerce (t-2) × Diff. China e-commerce									0.096	0.258
									(0.089)	(0.260)
Num. Obs.	1,001,951	205,001	1,001,950	205,000	1,001,950	205,000	1,001,950	205,000	1,001,950	205,000
R-squared	0.388	0.587	0.388	0.587	0.388	0.587	0.388	0.587	0.388	0.587
Adj.R-squared	0.382	0.573	0.382	0.573	0.382	0.573	0.382	0.573	0.382	0.573
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Product FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Month FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Clustered-standard errors at the firm-product level.

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

Table 3: Indonesia - Regression Results for Log. Imports and Log. Exports: e-Bay tradable and China e-commerce products. 3-Lag in technology variable

	Dependent Variables									
	Log.Imports	Log.Exports	Log.Imports	Log.Exports	Log.Imports	Log.Exports	Log.Imports	Log.Exports	Log.Imports	Log.Exports
E-payment or E-commerce (t-3)	0.026	0.023	-0.030	-0.013	0.025	0.029	0.002	-0.034	0.013	-0.010
	(0.029)	(0.082)	(0.037)	(0.097)	(0.032)	(0.088)	(0.037)	(0.104)	(0.031)	(0.089)
E-payment or E-commerce (t-3) × eBay-tradable			0.232**	0.166						
			(0.094)	(0.295)						
E-payment or E-commerce (t-3) × China e-commerce					0.003	-0.019				
					(0.064)	(0.163)				
E-payment or E-commerce (t-3) × China e-commerce upd.							0.056	0.140		
							(0.061)	(0.178)		
E-payment or E-commerce (t-3) × Diff. China e-commerce									0.092	0.264
									(0.090)	(0.262)
Num. Obs.	973,333	199,380	973,332	199,379	973,332	199,379	973,332	199,379	973,332	199,379
R-squared	0.387	0.588	0.387	0.588	0.387	0.588	0.387	0.588	0.387	0.588
Adj.R-squared	0.382	0.574	0.382	0.574	0.382	0.574	0.382	0.574	0.382	0.574
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Product FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Month FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Clustered-standard errors at the firm-product level.
* p < 0.1, ** p < 0.05, *** p < 0.01

Results for BEC products classification

Table 4: Indonesia - Regression Results for Log. Imports and Log. Exports: BEC products classification. 1-Lag in technology variable

	Dependent Variables													
	Log.Imports	Log.Exports	Log.Imports	Log.Exports	Log.Imports	Log.Exports	Log.Imports	Log.Exports	Log.Imports	Log.Exports	Log.Imports	Log.Exports	Log.Imports	Log.Exports
E-payment or E-commerce (t-1)	-0.020	0.010	0.020	0.046	0.007	0.068	0.006	0.045	0.022	0.048	0.009	0.048	-0.064	-0.087
	(0.053)	(0.117)	(0.028)	(0.079)	(0.030)	(0.076)	(0.030)	(0.081)	(0.027)	(0.079)	(0.030)	(0.081)	(0.053)	(0.125)
E-payment or E-commerce (t-1) × Parts	0.059	0.083											0.098*	0.178
	(0.064)	(0.155)											(0.060)	(0.154)
E-payment or E-commerce (t-1) × Consumable and Durable			0.012	0.575									0.253	-0.782
			(0.375)	(0.417)									(43,356.328)	(66,814.897)
E-payment or E-commerce (t-1) × Consumable and Semi-durable					0.214	-0.034							0.271	-0.565
					(0.134)	(0.296)							(345,119.831)	(114,737.313)
E-payment or E-commerce (t-1) × Consumable							0.196	0.234					0.011	0.739
							(0.131)	(0.273)					(345,119.821)	(114,737.301)
E-payment or E-commerce (t-1) × Durable									-0.210	0.476			-0.161	0.761
									(0.343)	(0.396)			(338,696.611)	(132,871.838)
E-payment or E-commerce (t-1) × Semi-durable											0.157	0.199		
											(0.134)	(0.265)		
E-payment or E-commerce (t-1) × Transport													-0.895	-1.425
													(338,696.607)	(132,871.828)
Num. Obs.	1,029,107	210,436	1,029,107	210,436	1,029,107	210,436	1,029,107	210,436	1,029,107	210,436	1,029,107	210,436	1,029,107	210,436
R-squared	0.388	0.586	0.388	0.586	0.388	0.586	0.388	0.586	0.388	0.586	0.388	0.586	0.388	0.586
Adj.R-squared	0.383	0.573	0.383	0.573	0.383	0.573	0.383	0.573	0.383	0.573	0.383	0.573	0.383	0.573
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Product FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Month FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Clustered-standard errors at the firm-product level.
* p < 0.1, ** p < 0.05, *** p < 0.01

Table 5: Indonesia - Regression Results for Log. Imports and Log. Exports: BEC products classification. 2-Lag in technology variable

	Dependent Variables													
	Log.Imports	Log.Exports	Log.Imports	Log.Exports	Log.Imports	Log.Exports	Log.Imports	Log.Exports	Log.Imports	Log.Exports	Log.Imports	Log.Exports	Log.Imports	Log.Exports
E-payment or E-commerce (t-2)	-0.015	-0.014	0.031	0.012	0.017	0.034	0.016	0.008	0.033	0.013	0.019	0.011	-0.063	-0.122
	(0.056)	(0.120)	(0.027)	(0.081)	(0.029)	(0.078)	(0.029)	(0.083)	(0.027)	(0.081)	(0.029)	(0.083)	(0.054)	(0.125)
E-payment or E-commerce (t-2) × Parts	0.067	0.071											0.110*	0.178
	(0.065)	(0.158)											(0.060)	(0.155)
E-payment or E-commerce (t-2) × Consumable and Durable			0.023	0.625									0.608	-1.041
			(0.384)	(0.417)									(78,794.335)	(79,857.087)
E-payment or E-commerce (t-2) × Consumable and Semi-durable					0.224	-0.011							0.236	-0.389
					(0.139)	(0.305)							(307,402.536)	(144,683.040)
E-payment or E-commerce (t-2) × Consumable							0.206	0.273					0.064	0.594
							(0.136)	(0.280)					(307,402.523)	(144,683.029)
E-payment or E-commerce (t-2) × Durable									-0.202	0.533			-0.548	1.222
									(0.352)	(0.397)			(356,001.446)	(164,265.656)
E-payment or E-commerce (t-2) × Semi-durable											0.167	0.242		
											(0.138)	(0.272)		
E-payment or E-commerce (t-2) × Transport													-0.471	-1.750
													(356,001.441)	(164,265.651)
Num. Obs.	1,001,950	205,000	1,001,950	205,000	1,001,950	205,000	1,001,950	205,000	1,001,950	205,000	1,001,950	205,000	1,001,950	205,000
R-squared	0.388	0.587	0.388	0.587	0.388	0.587	0.388	0.587	0.388	0.587	0.388	0.587	0.388	0.587
Adj.R-squared	0.382	0.573	0.382	0.573	0.382	0.573	0.382	0.573	0.382	0.573	0.382	0.573	0.382	0.573
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Product FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Month FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Clustered-standard errors at the firm-product level.
* p < 0.1, ** p < 0.05, *** p < 0.01

Table 6: Indonesia - Regression Results for Log. Imports and Log. Exports: BEC products classification. 3-Lag in technology variable

	Dependent Variables													
	Log.Imports	Log.Exports	Log.Imports	Log.Exports	Log.Imports	Log.Exports	Log.Imports	Log.Exports	Log.Imports	Log.Exports	Log.Imports	Log.Exports	Log.Imports	Log.Exports
E-payment or E-commerce (t-3)	-0.026	-0.017	0.026	0.000	0.012	0.024	0.013	-0.004	0.028	0.002	0.015	-0.001	-0.072	-0.130
	(0.058)	(0.127)	(0.029)	(0.085)	(0.030)	(0.082)	(0.03)	(0.086)	(0.028)	(0.085)	(0.030)	(0.086)	(0.056)	(0.127)
E-payment or E-commerce (t-3) × Parts	0.076	0.061											0.117*	0.172
	(0.067)	(0.161)											(0.062)	(0.155)
E-payment or E-commerce (t-3) × Consumable and Durable			-0.021	0.672									1.101	-0.822
			(0.387)	(0.432)									(73,470.937)	(106,914.281)
E-payment or E-commerce (t-3) × Consumable and Semi-durable					0.215	-0.003							-0.046	-0.032
					(0.144)	(0.316)							(150,587.260)	(89,294.234)
E-payment or E-commerce (t-3) × Consumable							0.192	0.300					0.341	0.249
							(0.14)	(0.292)					(150,587.274)	(89,294.220)
E-payment or E-commerce (t-3) × Durable									-0.244	0.564			-1.359	1.395
									(0.353)	(0.413)			(127,354.716)	(174,372.511)
E-payment or E-commerce (t-3) × Semi-durable											0.153	0.262		
											(0.142)	(0.284)		
E-payment or E-commerce (t-3) × Transport													0.358	-2.081
													(127,354.722)	(174,372.504)
Num. Obs.	973,332	199,379	973,332	199,379	973,332	199,379	973,332	199,379	973,332	199,379	973,332	199,379	973,332	199,379
R-squared	0.387	0.588	0.387	0.588	0.387	0.588	0.387	0.588	0.387	0.588	0.387	0.588	0.387	0.588
Adj.R-squared	0.382	0.574	0.382	0.574	0.382	0.574	0.382	0.574	0.382	0.574	0.382	0.574	0.382	0.574
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Product FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Month FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Clustered-standard errors at the firm-product level.
* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Results for time-sensitive products

Table 7: Indonesia - Regression Results for Log.Imports and Log.Exports: Time-sensitive Products. 1-Lag in technology variable

	Dependent Variables													
	Log.Imports	Log.Exports	Log.Imports	Log.Exports	Log.Imports	Log.Exports	Log.Imports	Log.Exports	Log.Imports	Log.Exports	Log.Imports	Log.Exports	Log.Imports	Log.Exports
E-payment or E-commerce (t-1)	0.023	0.044	0.015	0.073	0.015	0.073	0.002	0.028	0.020	0.066	0.027	0.045	0.023	0.048
	(0.028)	(0.083)	(0.028)	(0.077)	(0.028)	(0.077)	(0.034)	(0.086)	(0.028)	(0.075)	(0.029)	(0.082)	(0.028)	(0.084)
E-payment or E-commerce (t-1) × Component	-0.051	0.207											-0.051	0.205
	(0.059)	(0.312)											(0.059)	(0.312)
E-payment or E-commerce (t-1) × Fresh			0.083	-0.631									0.077	-0.623
			(0.203)	(0.778)									(0.204)	(0.780)
E-payment or E-commerce (t-1) × Frozen					0.083	-0.631								
					(0.203)	(0.778)								
E-payment or E-commerce (t-1) × Hummels Time-Sensitive							0.132	0.375						
							(0.140)	(0.467)						
E-payment or E-commerce (t-1) × Agricultural Time-Sensitive									0.208					
									(0.258)					
E-payment or E-commerce (t-1) × Hummels and Schaur Time-Sensitive											-0.048	0.185		
											(0.056)	(0.297)		
Num. Obs.	991,809	198,627	991,809	198,627	991,809	198,627	1,029,107	210,436	1,029,107	210,436	1,029,107	210,436	991,809	198,627
R-squared	0.391	0.589	0.391	0.589	0.391	0.589	0.388	0.586	0.388	0.586	0.388	0.586	0.391	0.589
Adj.R-squared	0.386	0.576	0.386	0.576	0.386	0.576	0.383	0.573	0.383	0.573	0.383	0.573	0.386	0.576
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Product FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Month FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Clustered-standard errors at the firm-product level.
* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Table 8: Indonesia - Regression Results for Log.Imports and Log.Exports: Time-sensitive Products. 2-Lag in technology variable

	Dependent Variables													
	Log.Imports	Log.Exports	Log.Imports	Log.Exports	Log.Imports	Log.Exports	Log.Imports	Log.Exports	Log.Imports	Log.Exports	Log.Imports	Log.Exports	Log.Imports	Log.Exports
E-payment or E-commerce (t-2)	0.034	0.015	0.026	0.045	0.026	0.045	0.014	-0.005	0.031	0.033	0.037	0.010	0.033	0.020
	(0.028)	(0.085)	(0.027)	(0.079)	(0.027)	(0.079)	(0.033)	(0.089)	(0.027)	(0.077)	(0.028)	(0.084)	(0.028)	(0.085)
E-payment or E-commerce (t-2) × Component	-0.050	0.218											-0.050	0.216
	(0.060)	(0.319)											(0.060)	(0.319)
E-payment or E-commerce (t-2) × Fresh			0.112	-0.600									0.106	-0.591
			(0.209)	(0.788)									(0.209)	(0.790)
E-payment or E-commerce (t-2) × Frozen					0.112	-0.600								
					(0.209)	(0.788)								
E-payment or E-commerce (t-2) × Hummels Time-Sensitive							0.127	0.371						
							(0.144)	(0.483)						
E-payment or E-commerce (t-2) × Agricultural Time-Sensitive									0.310					
									(0.239)					
E-payment or E-commerce (t-2) × Hummels and Schaur Time-Sensitive											-0.045	0.199		
											(0.057)	(0.303)		
Num. Obs.	965,642	193,493	965,642	193,493	965,642	193,493	1,001,950	205,000	1,001,950	205,000	1,001,950	205,000	965,642	193,493
R-squared	0.391	0.59	0.391	0.59	0.391	0.59	0.388	0.587	0.388	0.587	0.388	0.587	0.391	0.59
Adj.R-squared	0.385	0.577	0.385	0.577	0.385	0.577	0.382	0.573	0.382	0.573	0.382	0.573	0.385	0.577
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Product FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Month FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Clustered-standard errors at the firm-product level.
* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Table 9: Indonesia - Regression Results for Log.Imports and Log.Exports: Time-sensitive Products. 3-Lag in technology variable

	Dependent Variables													
	Log.Imports	Log.Exports	Log.Imports	Log.Exports	Log.Imports	Log.Exports	Log.Imports	Log.Exports	Log.Imports	Log.Exports	Log.Imports	Log.Exports	Log.Imports	Log.Exports
E-payment or E-commerce (t-3)	0.033	0.006	0.023	0.040	0.023	0.040	0.009	-0.014	0.026	0.023	0.034	-0.003	0.032	0.011
	(0.03)	(0.089)	(0.029)	(0.085)	(0.029)	(0.085)	(0.035)	(0.095)	(0.029)	(0.082)	(0.030)	(0.087)	(0.030)	(0.090)
E-payment or E-commerce (t-3) × Component	-0.063	0.258											-0.062	0.256
	(0.06)	(0.327)											(0.060)	(0.328)
E-payment or E-commerce (t-3) × Fresh			0.138	-0.632									0.131	-0.622
			(0.215)	(0.813)									(0.215)	(0.814)
E-payment or E-commerce (t-3) × Frozen					0.138	-0.632								
					(0.215)	(0.813)								
E-payment or E-commerce (t-3) × Hummels Time-Sensitive							0.129	0.361						
							(0.150)	(0.498)						
E-payment or E-commerce (t-3) × Agricultural Time-Sensitive									0.417					
									(0.255)					
E-payment or E-commerce (t-3) × Hummels and Schaur Time-Sensitive											-0.055	0.238		
											(0.058)	(0.312)		
Num. Obs.	938,107	188,197	938,107	188,197	938,107	188,197	973,332	199,379	973,332	199,379	973,332	199,379	938,107	188,197
R-squared	0.39	0.591	0.39	0.591	0.39	0.591	0.387	0.588	0.387	0.588	0.387	0.588	0.39	0.591
Adj.R-squared	0.384	0.577	0.384	0.577	0.384	0.577	0.382	0.574	0.382	0.574	0.382	0.574	0.384	0.577
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Product FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Month FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Clustered-standard errors at the firm-product level.
* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Results for other HS products classification

Table 10: Indonesia - Regression Results for Log.Exports and Log.Imports: COVID impacted Products. 1-Lag in technology variable

	Dependent Variables									
	Log.Imports	Log.Exports	Log.Imports	Log.Exports	Log.Imports	Log.Exports	Log.Imports	Log.Exports	Log.Imports	Log.Exports
E-payment or E-commerce (t-1)	0.006	0.069	-0.357*	0.210	0.367	-0.014	-0.054	-0.087	0.070	0.044
	(0.041)	(0.109)	(0.202)	(0.607)	(0.265)	(0.339)	(0.099)	(0.238)	(0.288)	(0.746)
E-payment or E-commerce (t-1) × Letter Credit Use	-0.159	0.030							-0.193	0.192
	(0.317)	(0.942)							(0.323)	(0.973)
E-payment or E-commerce (t-1) × Mean Remote Work ISIC			2.434*	-0.924					2.076	-2.797
			(1.310)	(4.122)					(1.830)	(4.738)
E-payment or E-commerce (t-1) × Relationship Stickiness					-0.113	0.027			-0.128	0.071
					(0.086)	(0.112)			(0.088)	(0.115)
E-payment or E-commerce (t-1) × Fraction inputs not sold on exchange and not ref priced							0.142	0.321	0.013	0.506
							(0.168)	(0.473)	(0.207)	(0.466)
Num. Obs.	1,024,776	209,380	1,020,400	206,230	1,028,911	210,398	1,014,356	201,436	1,002,773	197,537
R-squared	0.389	0.586	0.386	0.583	0.388	0.586	0.383	0.577	0.381	0.574
Adj.R-squared	0.383	0.572	0.38	0.569	0.383	0.572	0.377	0.564	0.376	0.561
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Month FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Produce FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Clustered-standard errors at the firm-product level.
* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Table 11: Indonesia - Regression Results for Log.Exports and Log.Imports: COVID impacted Products. 2-Lag in technology variable

	Dependent Variables									
	Log.Imports	Log.Exports	Log.Imports	Log.Exports	Log.Imports	Log.Exports	Log.Imports	Log.Exports	Log.Imports	Log.Exports
E-payment or E-commerce (t-2)	0.015	0.041	-0.328	0.128	0.374	0.059	-0.039	-0.146	0.100	0.048
	(0.042)	(0.113)	(0.212)	(0.618)	(0.275)	(0.347)	(0.10)	(0.243)	(0.303)	(0.764)
E-payment or E-commerce (t-2) × Letter Credit Use	-0.180	0.089							-0.224	0.278
	(0.328)	(0.966)							(0.331)	(0.990)
E-payment or E-commerce (t-2) × Mean Remote Work ISIC			2.327*	-0.597					1.908	-2.301
			(1.372)	(4.213)					(1.910)	(4.832)
E-payment or E-commerce (t-2) × Relationship Stickiness					-0.112	-0.009			-0.127	0.034
					(0.089)	(0.114)			(0.091)	(0.117)
E-payment or E-commerce (t-2) × Fraction inputs not sold on exchange and not ref priced							0.134	0.363	0.015	0.515
							(0.17)	(0.475)	(0.211)	(0.469)
Num. Obs.	997,719	203,970	993,513	200,914	1,001,758	204,962	987,604	196,245	976,351	192,450
R-squared	0.388	0.587	0.385	0.584	0.388	0.587	0.382	0.578	0.381	0.575
Adj.R-squared	0.383	0.573	0.38	0.57	0.382	0.573	0.377	0.565	0.375	0.561
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Month FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Produce FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Clustered-standard errors at the firm-product level.
* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Table 12: Indonesia - Regression Results for Log.Exports and Log.Imports: COVID impacted Products. 3-Lag in technology variable

	Dependent Variables									
	Log.Imports	Log.Exports	Log.Imports	Log.Exports	Log.Imports	Log.Exports	Log.Imports	Log.Exports	Log.Imports	Log.Exports
E-payment or E-commerce (t-3)	0.010	0.038	-0.315	0.101	0.370	0.069	-0.037	-0.178	0.113	0.028
	(0.042)	(0.119)	(0.221)	(0.622)	(0.279)	(0.360)	(0.100)	(0.246)	(0.309)	(0.779)
E-payment or E-commerce (t-3) × Letter Credit Use	-0.194	0.158							-0.234	0.319
	(0.338)	(0.976)							(0.345)	(0.993)
E-payment or E-commerce (t-3) × Mean Remote Work ISIC			2.213	-0.533					1.850	-2.411
			(1.421)	(4.253)					(1.983)	(4.886)
E-payment or E-commerce (t-3) × Relationship Stickiness					-0.112	-0.015			-0.128	0.030
					(0.090)	(0.118)			(0.093)	(0.121)
E-payment or E-commerce (t-3) × Fraction inputs not sold on exchange and not ref priced							0.122	0.410	0.005	0.586
							(0.175)	(0.480)	(0.218)	(0.473)
Num. Obs.	969,215	198,381	965,171	195,415	973,145	199,341	959,446	190,873	948,541	187,188
R-squared	0.388	0.588	0.385	0.585	0.387	0.588	0.382	0.579	0.38	0.576
Adj.R-squared	0.382	0.574	0.379	0.571	0.381	0.574	0.376	0.565	0.375	0.562
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Month FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Produce FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Clustered-standard errors at the firm-product level.

* p < 0.1, ** p < 0.05, *** p < 0.01

Results for capital - intermediate products classification

Table 13: Indonesia - Regression Results for Log. Imports and Log. Exports: Capital - Intermediate products. 1-Lag in technology variable

	Dependent Variables					
	Log.Imports	Log.Exports	Log.Imports	Log.Exports	Log.Imports	Log.Exports
E-payment or E-commerce (t-1)	-0.015	-0.005	0.046	0.074	0.122	-0.014
	(0.054)	(0.117)	(0.029)	(0.079)	(0.086)	(0.177)
E-payment or E-commerce (t-1) × Intermediate	0.052	0.105			-0.090	0.115
	(0.064)	(0.153)			(0.098)	(0.219)
E-payment or E-commerce (t-1) × Capital			-0.144**	-0.070	-0.222**	0.025
			(0.060)	(0.160)	(0.098)	(0.253)
Num. Obs.	1,029,108	210,437	1,029,108	210,437	1,029,108	210,437
R-squared	0.388	0.586	0.388	0.586	0.388	0.586
Adj.R-squared	0.383	0.573	0.383	0.573	0.383	0.573
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes
Product FE	Yes	Yes	Yes	Yes	Yes	Yes
Month FE	Yes	Yes	Yes	Yes	Yes	Yes

Clustered-standard errors at the firm-product level.

* p < 0.1, ** p < 0.05, *** p < 0.01

Table 14: Indonesia - Regression Results for Log. Imports and Log. Exports: Capital - Intermediate products. 2-Lag in technology variable

	Dependent Variables					
	Log.Imports	Log.Exports	Log.Imports	Log.Exports	Log.Imports	Log.Exports
E-payment or E-commerce (t-2)	-0.01	-0.029	0.059**	0.040	0.129	-0.041
	(0.057)	(0.120)	(0.027)	(0.081)	(0.090)	(0.182)
E-payment or E-commerce (t-2) × Intermediate	0.06	0.093			-0.084	0.105
	(0.065)	(0.156)			(0.101)	(0.225)
E-payment or E-commerce (t-2) × Capital			-0.152**	-0.057	-0.225**	0.030
			(0.061)	(0.157)	(0.102)	(0.256)
Num. Obs.	1,001,951	205,001	1,001,951	205,001	1,001,951	205,001
R-squared	0.388	0.587	0.388	0.587	0.388	0.587
Adj.R-squared	0.382	0.573	0.382	0.573	0.382	0.573
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes
Product FE	Yes	Yes	Yes	Yes	Yes	Yes
Month FE	Yes	Yes	Yes	Yes	Yes	Yes

Clustered-standard errors at the firm-product level.

* p < 0.1, ** p < 0.05, *** p < 0.01

Table 15: Indonesia - Regression Results for Log. Imports and Log. Exports: Capital - Intermediate products. 3-Lag in technology variable

	Dependent Variables					
	Log.Imports	Log.Exports	Log.Imports	Log.Exports	Log.Imports	Log.Exports
E-payment or E-commerce (t-3)	-0.022	-0.035	0.054*	0.028	0.111	-0.053
	(0.058)	(0.127)	(0.029)	(0.085)	(0.094)	(0.193)
E-payment or E-commerce (t-3) × Intermediate	0.070	0.087			-0.067	0.107
	(0.067)	(0.160)			(0.106)	(0.233)
E-payment or E-commerce (t-3) × Capital			-0.155**	-0.039	-0.214**	0.049
			(0.062)	(0.156)	(0.105)	(0.262)
Num. Obs.	973,333	199,380	973,333	199,380	973,333	199,380
R-squared	0.387	0.588	0.387	0.588	0.387	0.588
Adj.R-squared	0.382	0.574	0.382	0.574	0.382	0.574
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes
Product FE	Yes	Yes	Yes	Yes	Yes	Yes
Month FE	Yes	Yes	Yes	Yes	Yes	Yes

Clustered-standard errors at the firm-product level.

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