

# Analysis of the COVID-19 Shock, Technology and Trade

## Foreign Trade Partners Analysis - Indonesia and USA

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The ‘Rest’ industry category comprises several industries, including Agriculture, Construction and Mining, Services, Finance, Insurance and Real Estate, as well as Transport and Utilities. Domestic industries refers to Indonesian industries, and Foreign industries to US industries.

## Bilateral Industry Trade Patterns

Table 1: Export Dynamics: Indonesia Industries Trading with USA Industries

IDN Industry	USA Industry	No. IDN Firms in Industry	No. USA firms in Industry	Avg. Export Value per IDN Firm to US Industry (\$)	Avg. No. US Importers per IDN firm	Avg. Value of Firm-to-Firm Exports (\$)
Manufacturing	Wholesale/Retail	410	892	9,536,206.2	8.77	11,214,160
Wholesale/Retail	Wholesale/Retail	60	126	3,072,197.4	7.81	4,386,546
Manufacturing	Manufacturing	344	628	3,004,652.5	4.20	8,114,669
Manufacturing	Rest	268	441	6,588,883.5	3.95	11,572,592
Wholesale/Retail	Manufacturing	68	97	874,309.9	3.90	3,390,215
Rest	Wholesale/Retail	52	140	3,438,822.7	7.03	10,262,395
Wholesale/Retail	Rest	46	66	3,566,696.5	1.81	45,761,465
Rest	Rest	50	126	10,017,740.7	9.02	104,612,693
Rest	Manufacturing	48	122	1,178,998.1	12.34	2,964,961

Table 2: Import Dynamics: Indonesia Industries Trading with USA Industries

IDN Industry	USA Industry	No. IDN Firms in Industry	No. USA firms in Industry	Avg. Import Value per IDN Firm to US Industry (\$)	Avg. No. US Exporters per IDN firm	Avg. Value of Firm-to-Firm Imports (\$)
Manufacturing	Manufacturing	571	950	1,441,186.6	7.50	2,695,360
Manufacturing	Wholesale/Retail	386	451	2,508,059.2	4.75	3,497,246
Rest	Wholesale/Retail	137	257	2,213,546.2	8.62	7,464,762
Rest	Rest	140	236	1,231,300.5	4.80	6,732,695
Manufacturing	Rest	304	330	1,011,391.4	3.49	11,222,054
Wholesale/Retail	Manufacturing	402	722	598,163.6	3.36	4,011,931
Wholesale/Retail	Wholesale/Retail	227	314	590,717.9	2.60	8,865,073
Wholesale/Retail	Rest	175	227	398,500.7	2.14	1,173,555
Rest	Manufacturing	229	449	728,989.3	9.12	2,200,993

# Bilateral Industry Trade Patterns: Dissaggregated by Product Category

## Consumable Goods

Table 3: Exports Dynamics for Consumable Goods: Indonesia Industries Trading with USA Industries

IDN Industry	USA Industry	Consumable Goods				Non-Consumable Goods			
		No. IDN Firms in Industry	Avg. Export Value per IDN Firm to US Industry (\$)	Avg. No. US Importers per IDN firm	Avg. Value of Firm-to-Firm Exports (\$)	No. IDN Firms in Industry	Avg. Export Value per IDN Firm to US Industry (\$)	Avg. No. US Importers per IDN firm	Avg. Value of Firm-to-Firm Exports (\$)
Manufacturing	Manufacturing	104	1,902,540.2	2.31	4,233,560.54	282	2,963,603.9	4.61	9,287,303
Manufacturing	Rest	119	1,702,187.6	3.31	3,630,192.23	199	7,855,580.2	4.16	17,261,286
Manufacturing	Wholesale/Retail	148	10,007,250.4	9.09	11,002,936.20	340	7,143,445.5	7.58	9,914,710
Rest	Manufacturing	5	2,575,763.9	2.87	4,336,305.09	46	950,284.6	13.44	2,787,662
Rest	Rest	3	163,854.8	3.56	141,135.49	49	10,212,152.5	9.04	111,066,767
Rest	Wholesale/Retail	6	411,658.0	8.95	374,958.97	50	3,526,976.7	6.56	11,842,896
Wholesale/Retail	Manufacturing	12	101,471.6	2.57	90,473.41	62	939,280.9	3.99	3,585,391
Wholesale/Retail	Rest	7	350,926.1	1.24	419,619.22	42	3,847,894.2	1.87	47,875,736
Wholesale/Retail	Wholesale/Retail	12	923,307.6	3.34	704,527.10	55	3,150,039.2	9.43	5,752,401

Table 4: Import Dynamics for Consumable Goods: Indonesia Industries Trading with USA Industries

IDN Industry	USA Industry	Consumable Goods				Non-Consumable Goods			
		No. IDN Firms in Industry	Avg. Import Value per IDN Firm to US Industry (\$)	Avg. No. US Exporters per IDN firm	Avg. Value of Firm-to-Firm Imports (\$)	No. IDN Firms in Industry	Avg. Import Value per IDN Firm to US Industry (\$)	Avg. No. US Exporters per IDN firm	Avg. Value of Firm-to-Firm Imports (\$)
Manufacturing	Manufacturing	57	502,455.43	1.38	1,989,542.78	564	1,408,293.6	7.55	2,679,071
Manufacturing	Rest	29	18,907.50	1.30	16,606.68	293	1,047,490.3	3.48	11,399,248
Manufacturing	Wholesale/Retail	52	26,334.42	2.11	127,409.02	374	2,584,870.2	4.74	3,641,922
Rest	Manufacturing	32	26,899.56	2.39	86,398.33	227	731,620.1	9.07	2,165,931
Rest	Rest	15	39,882.71	1.57	108,803.99	140	1,227,027.4	4.75	6,694,334
Rest	Wholesale/Retail	22	103,808.49	3.23	428,289.66	136	2,213,029.7	8.57	6,999,165
Wholesale/Retail	Manufacturing	69	143,563.80	2.26	243,928.57	392	588,152.7	3.29	4,056,098
Wholesale/Retail	Rest	24	49,940.06	1.09	136,497.89	172	398,483.0	2.15	1,207,276
Wholesale/Retail	Wholesale/Retail	32	683,501.06	3.42	3,543,704.15	226	496,552.8	2.00	6,123,221

## Durable Goods

Table 5: Exports Dynamics for Durable Goods: Indonesia Industries Trading with USA Industries

IDN Industry	USA Industry	Consumable Goods				Non-Consumable Goods			
		No. IDN Firms in Industry	Avg. Export Value per IDN Firm to US Industry (\$)	Avg. No. US Importers per IDN firm	Avg. Value of Firm-to-Firm Exports (\$)	No. IDN Firms in Industry	Avg. Export Value per IDN Firm to US Industry (\$)	Avg. No. US Importers per IDN firm	Avg. Value of Firm-to-Firm Exports (\$)
Manufacturing	Manufacturing	26	1,641,206.50	1.87	2,021,012.36	330	3,002,815.5	4.34	8,516,421
Manufacturing	Rest	39	1,900,835.84	2.47	6,396,619.44	252	6,713,048.3	4.05	11,717,128
Manufacturing	Wholesale/Retail	60	5,891,264.24	4.74	5,839,733.36	390	9,118,894.1	9.18	11,218,406
Rest	Manufacturing	1	300.00	1.00	300.00	48	1,178,991.9	12.35	2,969,037
Rest	Rest	NA	NA	NA	NA	50	10,017,740.7	9.02	104,612,693
Rest	Wholesale/Retail	3	65,527.00	1.00	65,527.00	51	3,502,396.1	7.03	10,284,206
Wholesale/Retail	Manufacturing	6	80,320.42	1.00	135,770.03	65	907,248.5	3.95	3,440,121
Wholesale/Retail	Rest	3	10,364.43	1.40	11,470.94	46	3,566,020.6	1.80	45,846,940
Wholesale/Retail	Wholesale/Retail	4	345,018.63	2.19	216,223.58	59	3,100,877.5	8.16	4,661,883

Table 6: Import Dynamics for Durable Goods: Indonesia Industries Trading with USA Industries

IDN Industry	USA Industry	Durable Goods				Non-durable Goods			
		No. IDN Firms in Industry	Avg. Import Value per IDN Firm to US Industry (\$)	Avg. No. US Exporters per IDN firm	Avg. Value of Firm-to-Firm Imports (\$)	No. IDN Firms in Industry	Avg. Import Value per IDN Firm to US Industry (\$)	Avg. No. US Exporters per IDN firm	Avg. Value of Firm-to-Firm Imports (\$)
Manufacturing	Manufacturing	5	9,126.66	1.00	9,310.74	571	1,441,106.6	7.50	2,696,373
Manufacturing	Rest	3	13,655.93	1.00	23,614.80	303	1,014,594.1	3.46	11,238,063
Manufacturing	Wholesale/Retail	7	10,650.02	1.00	8,786.52	381	2,540,777.7	4.75	3,502,734
Rest	Manufacturing	5	22,170.31	3.28	21,075.12	229	728,505.2	9.10	2,194,188
Rest	Rest	5	59,701.81	1.73	106,971.60	140	1,229,168.3	4.74	6,726,381
Rest	Wholesale/Retail	6	31,395.57	3.93	63,658.92	137	2,212,171.2	8.55	7,430,964
Wholesale/Retail	Manufacturing	19	66,305.87	1.52	121,215.35	399	599,503.7	3.35	4,031,233
Wholesale/Retail	Rest	6	46,925.55	1.00	93,682.70	175	396,891.9	2.14	1,179,108
Wholesale/Retail	Wholesale/Retail	9	642,930.45	2.69	851,328.44	226	567,728.2	2.54	8,279,508

## Products in China E-commerce tax list

Table 7: Exports Dynamics for products in China E-commerce tax list: Indonesia Industries Trading with USA Industries

IDN Industry	USA Industry	China E-commerce Product				Non-China E-commerce Product			
		No. IDN Firms in Industry	Avg. Export Value per IDN Firm to US Industry (\$)	Avg. No. US Importers per IDN firm	Avg. Value of Firm-to-Firm Exports (\$)	No. IDN Firms in Industry	Avg. Export Value per IDN Firm to US Industry (\$)	Avg. No. US Importers per IDN firm	Avg. Value of Firm-to-Firm Exports (\$)
Manufacturing	Manufacturing	174	2,151,757.3	3.50	3,970,016.8	242	2,723,945.0	3.98	8,375,798.0
Manufacturing	Rest	158	1,821,602.5	4.05	3,816,294.9	177	8,350,325.3	3.17	22,366,468.4
Manufacturing	Wholesale/Retail	224	8,590,668.7	9.22	10,915,100.1	295	6,730,626.3	6.66	8,751,950.5
Rest	Manufacturing	15	1,866,486.9	2.56	5,924,143.2	41	697,429.4	14.92	843,399.1
Rest	Rest	19	3,130,625.0	2.78	12,535,390.0	42	10,509,646.7	10.79	97,286,925.5
Rest	Wholesale/Retail	27	508,738.2	6.07	940,706.5	37	4,461,698.6	7.10	13,198,811.8
Wholesale/Retail	Manufacturing	35	282,633.9	4.55	352,242.3	49	1,011,446.7	2.98	3,288,466.6
Wholesale/Retail	Rest	28	2,629,624.0	1.46	22,395,329.1	29	3,118,571.3	1.71	23,376,976.2
Wholesale/Retail	Wholesale/Retail	36	1,145,525.2	3.75	1,446,892.2	42	3,406,974.7	8.35	5,110,093.2

Table 8: Import Dynamics for products in China E-commerce tax list: Indonesia Industries Trading with USA Industries

IDN Industry	USA Industry	China E-commerce Product				Non-China E-commerce Product			
		No. IDN Firms in Industry	Avg. Import Value per IDN Firm to US Industry (\$)	Avg. No. US Exporters per IDN firm	Avg. Value of Firm-to-Firm Imports (\$)	No. IDN Firms in Industry	Avg. Import Value per IDN Firm to US Industry (\$)	Avg. No. US Exporters per IDN firm	Avg. Value of Firm-to-Firm Imports (\$)
Manufacturing	Manufacturing	251	662,763.1	3.39	1,710,562.6	519	1,265,055.9	7.07	2,616,843.0
Manufacturing	Rest	110	111,248.0	1.66	319,149.5	269	1,097,493.3	3.34	10,044,190.2
Manufacturing	Wholesale/Retail	160	1,196,049.7	2.39	3,126,021.6	333	2,332,561.2	4.64	3,349,437.9
Rest	Manufacturing	129	141,895.4	5.01	354,036.9	204	728,598.2	8.40	2,108,947.3
Rest	Rest	85	553,725.4	2.54	1,539,731.0	111	1,128,967.7	4.67	5,646,905.8
Rest	Wholesale/Retail	73	215,538.9	5.38	1,744,547.4	120	2,396,012.4	7.95	5,849,676.5
Wholesale/Retail	Manufacturing	261	288,440.9	2.64	857,155.9	338	488,694.3	2.99	3,586,313.4
Wholesale/Retail	Rest	106	345,779.5	2.00	830,297.1	131	252,557.3	1.87	852,618.7
Wholesale/Retail	Wholesale/Retail	125	657,031.9	2.75	13,372,983.6	189	274,941.6	2.00	794,275.0

## e-Bay tradable products

Table 9: Exports Dynamics for e-Bay tradable products: Indonesia Industries Trading with USA Industries

IDN Industry	USA Industry	e-Bay tradable product				Non-e-Bay tradable product			
		No. IDN Firms in Industry	Avg. Export Value per IDN Firm to US Industry (\$)	Avg. No. US Importers per IDN firm	Avg. Value of Firm-to-Firm Exports (\$)	No. IDN Firms in Industry	Avg. Export Value per IDN Firm to US Industry (\$)	Avg. No. US Importers per IDN firm	Avg. Value of Firm-to-Firm Exports (\$)
Manufacturing	Manufacturing	134	3,088,171.4	4.65	10,019,365.1	261	2,374,657.1	3.33	4,993,815
Manufacturing	Rest	122	1,922,734.3	4.29	3,167,209.6	190	8,059,195.7	3.01	21,935,277
Manufacturing	Wholesale/Retail	159	11,104,130.0	10.20	13,988,127.4	307	6,984,651.0	6.97	7,771,135
Rest	Manufacturing	20	915,338.5	16.88	1,108,467.3	38	1,007,503.7	4.89	4,999,703
Rest	Rest	20	311,347.4	18.11	267,124.5	37	13,369,191.6	2.69	164,213,810
Rest	Wholesale/Retail	21	383,342.2	9.53	1,585,489.8	41	4,165,087.7	5.57	13,951,743
Wholesale/Retail	Manufacturing	26	314,178.6	4.07	384,825.7	52	986,239.1	3.37	3,346,596
Wholesale/Retail	Rest	16	4,357,485.4	1.11	60,653,797.6	34	2,774,949.2	2.57	6,996,353
Wholesale/Retail	Wholesale/Retail	17	562,581.1	4.02	826,622.9	52	3,360,922.5	8.46	5,084,181

Table 10: Import Dynamics for e-Bay tradable products: Indonesia Industries Trading with USA Industries

IDN Industry	USA Industry	e-Bay tradable product				Non-e-Bay tradable product			
		No. IDN Firms in Industry	Avg. Import Value per IDN Firm to US Industry (\$)	Avg. No. US Exporters per IDN firm	Avg. Value of Firm-to-Firm Imports (\$)	No. IDN Firms in Industry	Avg. Import Value per IDN Firm to US Industry (\$)	Avg. No. US Exporters per IDN firm	Avg. Value of Firm-to-Firm Imports (\$)
Manufacturing	Manufacturing	185	371,826.30	7.52	1,538,191.3	533	1,414,877.4	5.91	2,671,620.1
Manufacturing	Rest	79	74,407.94	3.50	392,253.2	278	1,084,837.3	3.08	10,853,482.4
Manufacturing	Wholesale/Retail	136	120,572.96	4.69	313,726.6	328	2,901,563.8	3.61	4,470,176.5
Rest	Manufacturing	126	219,196.67	5.44	673,480.9	183	761,310.2	7.92	1,765,919.6
Rest	Rest	79	989,977.59	3.26	3,224,389.4	106	888,432.5	3.74	5,756,503.6
Rest	Wholesale/Retail	77	628,671.83	5.14	3,560,729.0	114	2,235,509.6	7.56	5,596,681.0
Wholesale/Retail	Manufacturing	194	243,274.82	2.22	686,908.6	349	553,772.1	3.31	3,773,775.6
Wholesale/Retail	Rest	75	319,236.61	2.20	1,072,891.3	146	313,663.6	1.85	836,087.4
Wholesale/Retail	Wholesale/Retail	99	202,382.17	3.09	869,837.2	190	600,300.6	2.01	11,086,673.0

# Bilateral Industry Trade Patterns: Dissaggregated by Technology Adoption

Table 11: Exports Dynamics by Technology Adoption: Indonesia Industries Trading with USA Industries

IDN Industry	USA Industry	E-commerce/E-payment Adopted				E-commerce/E-payment Not Adopted			
		No. IDN Firms in Industry	Avg. Export Value per IDN Firm to US Industry (\$)	Avg. No. US Importers per IDN firm	Avg. Value of Firm-to-Firm Exports (\$)	No. IDN Firms in Industry	Avg. Export Value per IDN Firm to US Industry (\$)	Avg. No. US Importers per IDN firm	Avg. Value of Firm-to-Firm Exports (\$)
Manufacturing	Manufacturing	90	2,244,443.1	4.14	4,973,037.0	254	3,274,018	4.21	9,056,777
Manufacturing	Rest	77	16,767,162.4	4.79	30,307,608.5	191	2,485,598	3.62	4,278,766
Manufacturing	Wholesale/Retail	112	3,518,449.1	6.62	5,919,804.8	298	11,797,914	9.29	12,498,292
Rest	Manufacturing	14	116,149.6	24.74	79,914.6	34	1,616,642	4.65	4,751,248
Rest	Rest	23	7,584,765.9	16.67	5,432,785.4	27	12,090,275	3.53	175,854,599
Rest	Wholesale/Retail	23	479,106.9	6.47	1,841,160.3	29	5,786,184	7.27	13,772,721
Wholesale/Retail	Manufacturing	23	166,526.5	2.48	368,959.6	45	1,236,066	4.02	3,646,809
Wholesale/Retail	Rest	14	6,642,632.9	1.03	65,676,037.3	32	2,220,974	3.31	7,471,611
Wholesale/Retail	Wholesale/Retail	16	815,916.6	1.98	1,342,244.2	44	3,892,663	8.43	4,707,844

Table 12: Import Dynamics by Technology Adoption: Indonesia Industries Trading with USA Industries

IDN Industry	USA Industry	E-commerce/E-payment Adopted				E-commerce/E-payment Not Adopted			
		No. IDN Firms in Industry	Avg. Import Value per IDN Firm to US Industry (\$)	Avg. No. US Exporters per IDN firm	Avg. Value of Firm-to-Firm Imports (\$)	No. IDN Firms in Industry	Avg. Import Value per IDN Firm to US Industry (\$)	Avg. No. US Exporters per IDN firm	Avg. Value of Firm-to-Firm Imports (\$)
Manufacturing	Manufacturing	154	1,416,239.9	10.92	1,745,092.8	416	1,453,301.8	5.72	3,190,646
Manufacturing	Rest	93	348,159.0	4.10	553,191.2	211	1,303,716.6	3.16	17,020,451
Manufacturing	Wholesale/Retail	117	1,493,248.3	6.00	2,245,850.7	268	2,960,154.6	3.66	4,625,628
Rest	Manufacturing	65	1,243,372.0	12.89	2,029,379.4	164	525,118.1	6.34	2,327,824
Rest	Rest	48	1,696,145.1	4.87	4,155,450.9	91	999,616.7	4.69	10,920,072
Rest	Wholesale/Retail	35	1,972,590.1	10.47	10,000,015.9	102	2,296,227.2	4.52	1,837,842
Wholesale/Retail	Manufacturing	159	491,453.0	5.22	961,227.3	242	660,361.4	2.46	5,424,363
Wholesale/Retail	Rest	78	472,394.0	2.28	1,492,401.5	96	342,609.1	1.87	565,887
Wholesale/Retail	Wholesale/Retail	92	770,803.3	2.10	17,736,459.8	134	454,561.9	3.03	1,223,196