Coronavirus Lockdowns and Trade Integration

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Abstract:

International trade, while being a vital asset in the growth and development of nations around the world, has been under increasing strain due to the Coronavirus Pandemic. Using a fixed effect gravity model to describe trade flows between American states and foreign partners, we study the effect of state-wide lockdowns on trade integration. In the time during and after a state-wide lockdown was implemented, state-wide trade integration fell by 20% among the states which did so. Exports and imports each also dropped in level magnitudes, but export integration fell at a greater magnitude than imports, with effects of -25% and -8% respectively.

Introduction

Trade is a vital building block to economically strong nations. The rapid implementation of communication and transportation focused technologies has allowed for the fragmentation of supply chains and outsourcing of production activities to more cost-effective partners. These innovations have lowered production costs around the world and have provided incredible boons to countries who commit to being a part of the international community.

However, the previous two decades have seen two successive catastrophic global events that were amplified due to globalization. The Great Recession of 2008 rippled throughout the world due to the interconnected nature of modern commerce, with the collapse of the American Housing market causing instability all over the globe. The vulnerability produced by being subject to the financial crises of a separate nation, let alone potential liability for any single disruption throughout the world has sparked serious debate on the merits of globalization and international trade.

The effects of the Coronavirus Pandemic have similarly been amplified by the context of our modern world. Before the pandemic, people, goods, and services traveled around the world daily. Not only did the outbreak constitute an international medical crisis, but it also forced local decision-makers to take drastic actions to halt the spread with little certainty. Personal face masks were not recommended officially by the CDC until late March of 2020, by which time the United States as a nation was reporting as many as 20,000 new cases per day.[1] As such, the main tool for policy-makers in the fight against COVID-19 was full-scale lockdowns implemented by different levels of government.

In the United States, the first options for government officials looking to protect local communities from the virus were stay-at-home and shelter-in-place orders, aimed at preventing transmission between asymptomatic individuals. In total, 43 of the 50 State governments enacted some

[1] https://covid.cdc.gov/covid-data-tracker/#trends_dailytrendscases

form of lockdown throughout April and March of 2020, with most ending before the end of May.[2] However, it came at the cost of essentially shutting down all public and non-digital events indefinitely. This was a difficult choice to make, as doing so destroyed entire sectors of the American economy. According to the Yelp Local Economic Impact report of September 2020, almost 100,000 of the 180,000 total businesses open in late April were permanently closed by September of the same year.[3] The economic fallout from lockdowns and various restrictions has also led a tense political climate that is growing wearier of international involvement.

However, international trade has been vital in fighting COVID-19, providing access to low-cost medical supplies. Early on during the pandemic, there were shortages of masks in the United States, forcing medical professionals to engage with the unknown virus under-equipped and potentially personally exposed. The cause was the fall in Chinese production earlier in the year, which was also caused by COVID-19 complications.[4] Throughout the Coronavirus pandemic, countries continually traded and donated supplies and vaccines for a variety of strategic and diplomatic objectives.[5]

In 2021, the United States began vaccinating its citizens on a large scale, with over half of the country having received at least one of the two required doses as of this writing on March 30th, 2021.[6] While the end of social distancing measures are on the near horizon, questions still linger about the effects that the pandemic had on the American economy. In this report, we will study the impact that state-imposed lockdowns had on state-level trade integration with the international economy, asking whether these events had significant impact on how much these communities rely on international

[2] https://ballotpedia.org/States_that_issued_lockdown_and_stay-at-home_orders_in_response_to_the_coronavirus_(COVID-19)_pandemic,_2020
[3] https://www.yelpeconomicaverage.com/business-closures-update-sep-2020
[4] https://www.usatoday.com/story/news/investigations/2020/04/08/coronavirus-how-face-mask-supply-u-s-dropped/5119824002/
[5] https://www.msn.com/en-us/news/world/which-countries-are-sharing-their-covid-vaccines/ar-BB1erD9y
[6] https://covid.cdc.gov/covid-data-tracker/#vaccinations

trade for economic opportunity. To do so, we construct a gravity model of trade for American states, using data on initiated state-wide lockdowns to test for the direct effect both in the immediate term and into the later stages of the pandemic on trade integration.

Literature Review

Trade integration is a subject has been thoroughly investigated in the modern era. The most common measurement of trade involves using a gravity model to deconstruct bilateral trade flows by regional and other effects. These models use the economic size and distance between entities to estimate imports and exports, considering regional GDP's, trade barriers, and other explanatory variables.

The gravity model has been in use for decades, beginning with Tinbergen (1962) and Linneman (1966). The framework has been used in a variety of contexts, including measuring the trade effect of national borders (McCallum, 1995), integration of regions into the world economy (Bussiere et al., 2005, Bussiere et al., 2006), and implications of free trade agreements (Urata et al., 2007), among other roles. While implementation varies from paper to paper, the gravity model framework is heralded as being empirically successful at describing the trade relationship between different countries and regions.

The literature studying the Coronavirus and its related lockdown responses is deep and diverse within economics. Ozili et. al (2020) defines two separate mechanisms by which the lockdowns affected economic activity. Social distancing and preventative measures were implemented, which often came at the cost of traditional in-person errands which often provided opportunities to shop or otherwise add to the local economy. Second, the uncertainty surrounding how long shutdowns were going to last and the conditions following them resulted in risk averse behavior which came at the cost of consumption and investment. This report will attempt to contribute an aggregate measure of the difference in trade related trends and effects due to COVID-19 lockdowns.

Econometric Estimation

The United States can be separated into 4 regions based on geography as shown in figure 1. This analysis will treat these categories as trading blocs with regional effects on trade flows. While we will not be covering the integration between these different regions, the information regarding their individual differences in integration with the international market is valuable for general trends based

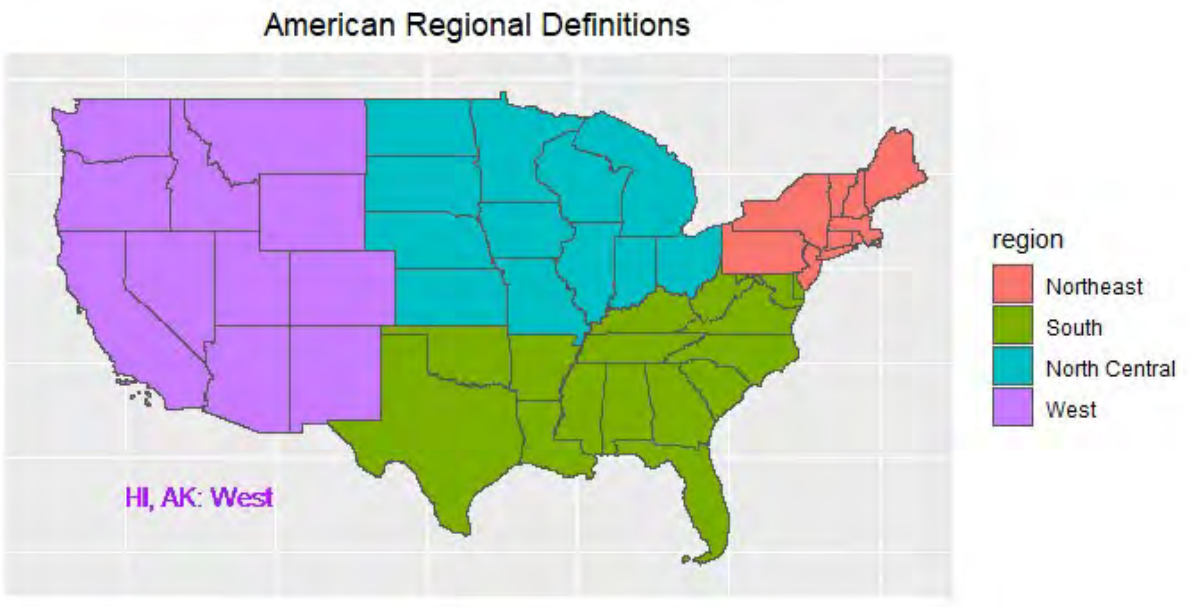

Figure 1: United States domestic regions as defined by the U.S. Census Bureau

on these distinct regions. On the foreign side, trade is aggregated by continent, allowing for general trading partner fixed effects.

A fixed effect gravity model takes the form of:

$$\ln(X_{ni}) = \beta_1 \ln(GDP_D) + \beta_2 \ln(GDP_F) + \beta_3 ln(E_i) + \beta_4 \ln(M_n) + \beta_5 \ln(\phi_{ni}) \quad (1)$$

as specified in Head and Mayer (2014). Where X_{ni} represents the measure of trade from export country i to import country n, GDP_D is the consumption total for the domestic region, GDP_F is for the foreign one, E_i represents the export country fixed effect, M_n the import country fixed effect, and ϕ_{ni} as the bilateral effect between the two.

Trade integration is expressed as the ratio of trade flows over domestic GDP. Note that since this equation is in log form, the ratio between trade and GDP will be as such:

$$\ln(X_{ni}) - \ln(GDP_D) = \beta_2 \ln(GDP_F) + \beta_3 ln(E_i) + \beta_4 \ln(M_n) + \beta_5 \ln(\phi_{ni}) \quad (2)$$

Other explanatory variables are often used, including distance, common languages, and exchange rates. With the low frequency of our time series data use fixed effects to account for other miscellaneous relationships between two regions.

In this case, we will not have data on quarterly GDP numbers for individual continents. Instead, we will add a year interaction for each trading partner fixed effect, culminating in the following regression:

$$\ln(T_{DF}) - \ln(GDP_D) = \beta_3 R_D + \beta_4 C_F + \gamma_1 C_F Y \quad (3)$$

Where T_{DF} represents the domestic state trade flow in state D with foreign partner continent F, R_D is the state's regional trading bloc effect based on geography, C_F represents the fixed effect for trading partner continent, and Y is treated as a categorical variable instead of a continuous one. To add an analysis of whether the Coronavirus Lockdowns influenced these measures, we will use a dummy variable indicating quarters during or after a state has initiated a lockdown. This means that our final model will be as such:

$$\ln(T_{DF}) - \ln(GDP_D) = \beta_3 R_D + \beta_4 C_F + \gamma_1 C_F Y + \delta P_D \quad (4)$$

Where P_D is an indicator for whether state D is or has been under a Coronavirus lockdown. We will also analyze another iteration including yearly trends:

$$\ln(T_{DF}) - \ln(GDP_D) = \beta_3 R_D + \beta_4 C_F + \gamma_1 C_F Y + \delta P_D + \gamma_2 y + \gamma_3 P_D y \quad (5)$$

Where y represents the year of an observation, treated as a continuous variable. The coefficients of interest will be δ, the immediate effect of the lockdowns, and γ_3, the change in overall trend due to

lockdowns. Since the Coronavirus pandemic has isolated the United States and other countries from others, we would expect each of these coefficients to be negative, implying a negative effect on trade integration.

Data

The frequency of our model is quarterly. To create the gravity model defined above, we need information on trade flows aggregated by trading partner. The Bureau of Economic Analysis provides quarterly estimates of these values for each of the 50 states from 2011 to March of 2021. Another necessary ingredient is estimates of imports and exports partitioned for each state by trading partner continent. The United States Census keeps state export and import statistics that are available in a monthly format including trading partner continents, allowing for easy aggregation to the quarter frequency we need. The final dataset we need involves dates of state-wide lockdowns, taken from an online table on Ballotpedia which is sourced with the announcements of each measure.[7]

Earlier on, we made the decision to ignore foreign continental GDP values, instead opting for regional yearly fixed effects. Part of the reason for this decision was a failure to find world GDP datasets with sufficient frequency. We were able to find one published by the world bank disaggregated by continent, but it was only kept on a yearly basis. As such, we decided to use fixed yearly effects to control for the general yearly effects by trading partner continent. For the time-frame selected, we decided to limit our data to the post-Global Financial Crisis, specifically from 2011 onward when trends in trade seem to stabilize. This decision was influenced by a visual inspection of trade flows since 2008, where it seems that 2011 is a point at which the volatility of the Great Recession has faded, and general trends begin which last until 2020.

[7] https://ballotpedia.org/States_that_issued_lockdown_and_stay-at-home_orders_in_response_to_the_coronavirus_(COVID-19)_pandemic,_2020

To specify post-lockdown quarters, we use an indicator for each state which observes 0 if the state has never implemented a lockdown up until that quarter, and 1 if the state is in lockdown or was previously. For trading partner yearly fixed effects, we interact each year as a categorical variable to allow for regional shocks. This is our replacement for trading partner GDP.

Analysis

Occurring in the first quarter of 2020, the pandemic had a clear and sustained effect on the magnitude of trade utilized by different American regions. Figure 2 shows how the Coronavirus Pandemic, beginning in quarter one of 2020, correlates with a large drop in all regional trade both for imports and exports. Compare this with the data from 2008 during the Global Financial Crisis, when we see a similar but drop in trade flows.

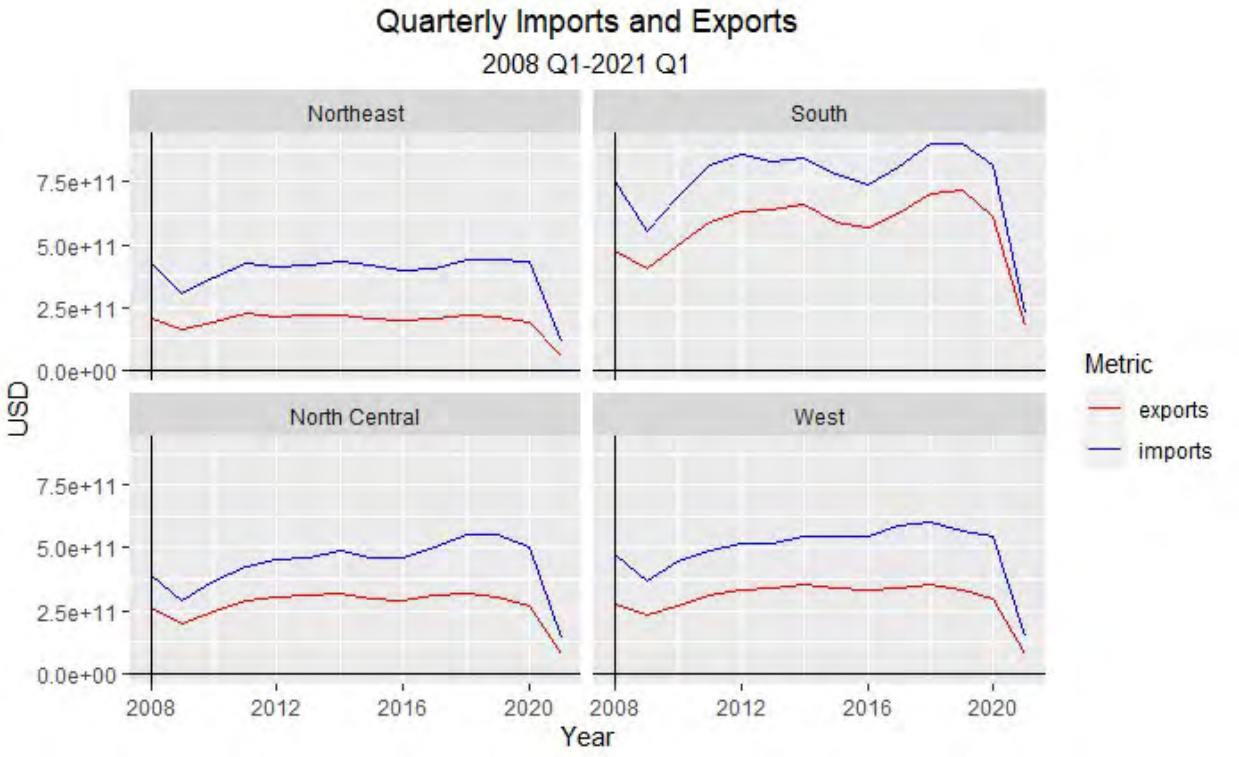

Figure 2: Import and export figures aggregated by American region. Data is sourced from the U.S. Census Bureau. https://usatrade.census.gov/

While the behavior of trade levels is similar between the two crises, there are significant differences in trade reactions to these events. Note in figure 3 how the trade deficit remains at

proportional levels throughout 2020, contrasted with the data in 2008 which shows volatility. Consider

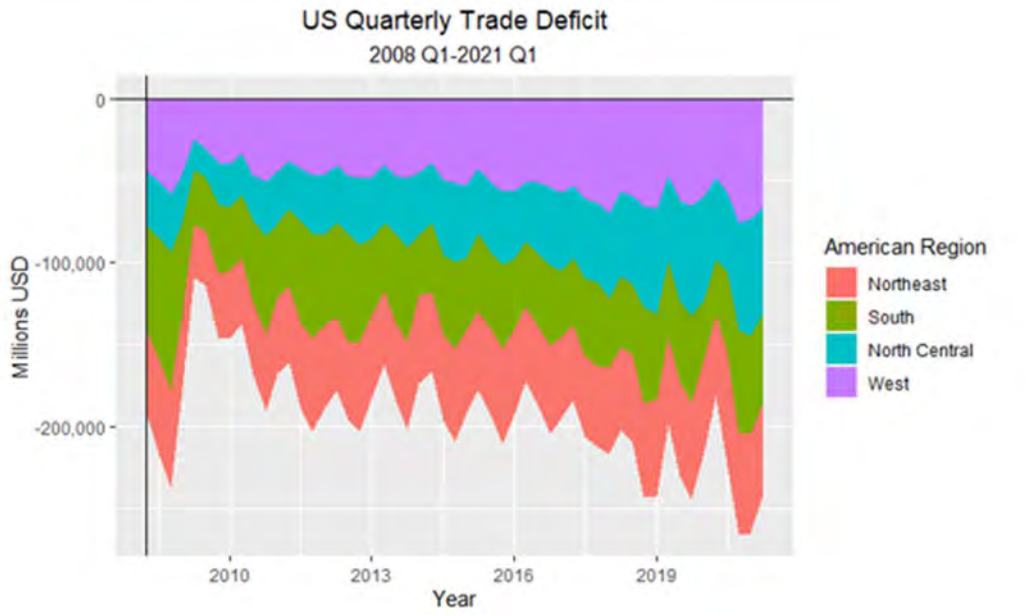

Figure 3: Domestic regional trade deficits stacked on top of each other. Data is sourced from the U.S. Census Bureau. https://usatrade.census.gov/

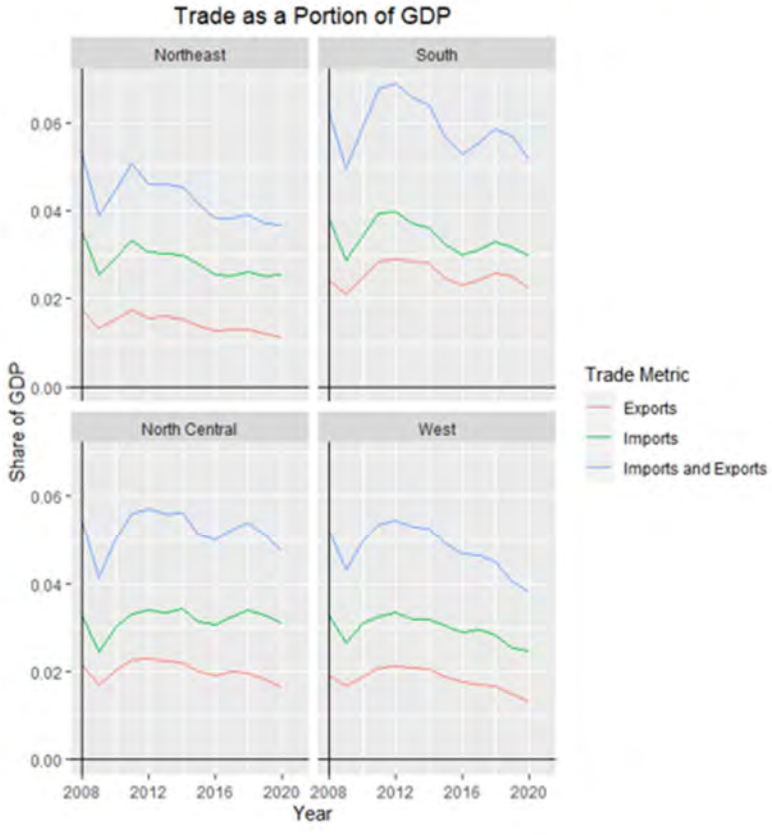

Figure 4: U.S. trade flows divided by nominal GDP for each region. Trade flows are sourced from the U.S. Census Bureau. https://usatrade.census.gov/

Nominal GDP is sourced from the Bureau of Economic Analysis https://www.bea.gov/data/gdp/gdp-state

figure 4, which shows a similar story with respect to trade flow share of nominal region GDP. One

possible explanation for the consistent differences in behavior may stem from the source of each crisis. In 2008, the United States was the first country to feel the effects of the Great Recession, as it was the domestic housing market which collapsed and began contagion. In 2020, however, the Coronavirus had to be transmitted from overseas before lockdowns and other measures were implemented. However, note that the United States did feel pressure early in the pandemic partly due to China's crucial role in global supply chains, but this effect should be less influential than the collapse of domestic mortgage bonds.

	All dependant variables in log form			
	Bilateral	Bilateral/State GDP	Bilateral	Bilateral/State GDP
	(1)	(2)	(3)	(4)
State GDP (log)	1.230***		1.240***	
	(0.006)		(0.006)	
American NE	-13.831***	-7.839***	35.955***	27.964***
	(0.164)	(0.027)	(3.609)	(3.770)
American S	-13.544***	-7.495***	36.241***	28.309***
	(0.165)	(0.024)	(3.609)	(3.770)
American NC	-13.909***	-7.897***	35.877***	27.908***
	(0.165)	(0.023)	(3.608)	(3.769)
American W	-14.262***	-8.335***	35.526***	27.468***
	(0.166)	(0.027)	(3.609)	(3.770)
Partner Asia	3.523***	3.523***	3.523***	3.523***
	(0.024)	(0.026)	(0.024)	(0.026)
Partner Oceania	0.119***	0.119***	0.119***	0.119***
	(0.026)	(0.027)	(0.025)	(0.027)
Partner Europe	3.066***	3.066***	3.066***	3.066***
	(0.025)	(0.026)	(0.024)	(0.026)
Partner North America	3.391***	3.391***	3.391***	3.391***
	(0.026)	(0.027)	(0.026)	(0.027)
Partner South/Central America	1.538***	1.538***	1.538***	1.538***
	(0.027)	(0.028)	(0.027)	(0.028)
Year			-0.025***	-0.018***
			(0.002)	(0.002)
Post-Lockdown	-0.272***	-0.206***	-0.121***	-0.096**
	(0.036)	(0.038)	(0.038)	(0.039)
Post-Lockdown Trend				
Trade Partner Year FE	No	No	No	No
Observations	15,600	15,600	15,600	15,600
R^2	0.998	0.982	0.998	0.982
Adjusted R^2	0.998	0.982	0.998	0.982
Residual Std. Error	0.801	0.835	0.796	0.832
F Statistic	901,126.100***	84,075.920***	836,252.000***	76,885.730***
Note:				*p<0.1; **p<0.05**; p<0.01*

Table 1:Results from our Gravity model not considering trading partner year fixed effects. Bilateral trade flows are defined as the sum of imports and exports.

When using trade partner yearly fixed effects, we find that the coefficient for being post-lockdown is small and statistically insignificant. We also included the post-COVID-19 trend variable, but collinearity prevented a point estimate. We also ran the same regressions without the continent year fixed effects, which do find significant effects for being post-lockdown. Moreover, these simplified versions have the same r-squared while having far fewer coefficients, implying that these control regressions are a more efficient model. Table 1 shows the results from this model, which reveals a decrease in bilateral trade integration by 20% for states that underwent a lockdown. Running the same regressions as a function of exports results in similar effects, with an average decrease of 25% post lockdown. Interestingly, the same model for imports reports a statistically insignificant coefficient, with a fall of 8%.

Conclusion

The model identifies a 20% decrease in the summed shares of imports and exports as a portion of GDP. This reveals some evidence that reliance on international trade decreased in magnitude and percentage of GDP during and after the Coronavirus lockdowns of 2020. These results are inline with our expectations ahead of time, as the isolating nature of COVID-19 lockdowns meant that international travel and transport costs increased. We acquire these estimates using a fixed effect gravity model with an indicator for post-state-lockdown time periods.

This framework also reveals a 25% decrease in export share of GDP, but a statistically insignificant 8% decrease in import share. These results imply that while overall reliance on trade has fallen, these effects do not apply each direction equally. Exports are far more affected than imports, perhaps implying that American exporters have fared worse during the Pandemic.

While certainly a start, the limitations of available data make controlling for various effects difficult. Finding world GDP measures on a quarterly basis may help models better account for the

gravitational pull of different continental trading blocs. Using added measures of trade barriers and contextual characteristics might allow for more accurate estimates. However, this paper does provide space to argue that domestic importers and exporters faced different influences during and after the Coronavirus lockdowns. Future research can be conducted on why importers and exporters were subject to different effects, as well as forecasting how and whether global markets will reintegrate similarly to before the lockdowns.

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Appendix: Other Regression Tables

	All dependant variables in log form			
	Exports	Exports/State GDP	Exports	Exports/State GDP
	(1)	(2)	(3)	(4)
State GDP (log)	1.183***		1.192***	
	(0.006)		(0.006)	
American NE	-13.441***	-8.692***	39.538***	33.122***
	(0.172)	(0.023)	(3.885)	(3.969)
American S	-12.965***	-8.172***	40.012***	33.644***
	(0.171)	(0.023)	(3.885)	(3.969)
American NC	-13.171***	-8.406***	39.808***	33.410***
	(0.173)	(0.023)	(3.885)	(3.969)
American W	-13.724***	-9.027***	39.256***	32.787***
	(0.176)	(0.031)	(3.884)	(3.968)
Partner Asia	3.195***	3.195***	3.195***	3.195***
	(0.026)	(0.027)	(0.026)	(0.027)
Partner Oceania	0.390***	0.390***	0.390***	0.390***
	(0.027)	(0.027)	(0.026)	(0.027)
Partner Europe	2.824***	2.824***	2.824***	2.824***
	(0.026)	(0.027)	(0.026)	(0.027)
Partner North America	3.195***	3.195***	3.195***	3.195***
	(0.027)	(0.027)	(0.027)	(0.027)
Partner South/Central America	1.558***	1.558***	1.558***	1.558***
	(0.029)	(0.030)	(0.028)	(0.029)
Year			-0.026***	-0.021***
			(0.002)	(0.002)
Post-Lockdown	-0.334***	-0.281***	-0.173***	-0.153***
	(0.043)	(0.043)	(0.044)	(0.045)
Post-Lockdown Trend				
Trade Partner Year FE	No	No	No	No
Observations	15,600	15,600	15,600	15,600
R^2	0.998	0.983	0.998	0.983
Adjusted R^2	0.998	0.983	0.998	0.983
Residual Std. Error	0.880	0.899	0.875	0.896
F Statistic	691,673.900***	89,919.860***	641,395.200***	82,315.820***
Note:				*p<0.1; **p<0.05**; p<0.01*

	All dependant variables in log form			
	Exports	Exports/State GDP	Exports	Exports/State GDP
	(1)	(2)	(3)	(4)
State GDP (log)	1.192***		1.192***	
	(0.006)		(0.006)	
American NE	-13.493***	-8.536***	52.608***	50.324***
	(0.182)	(0.072)	(16.117)	(16.831)
American S	-13.018***	-8.014***	53.083***	50.847***
	(0.181)	(0.072)	(16.117)	(16.831)
American NC	-13.221***	-8.247***	52.880***	50.613***
	(0.183)	(0.072)	(16.117)	(16.831)
American W	-13.774***	-8.872***	52.326***	49.989***
	(0.185)	(0.073)	(16.117)	(16.831)
Partner Asia	3.033***	3.033***	3.033***	3.033***
	(0.086)	(0.088)	(0.086)	(0.088)
Partner Oceania	0.222**	0.222**	0.222**	0.222**
	(0.086)	(0.090)	(0.086)	(0.090)
Partner Europe	2.855***	2.855***	2.855***	2.855***
	(0.084)	(0.088)	(0.084)	(0.088)
Partner North America	3.065***	3.065***	3.065***	3.065***
	(0.088)	(0.090)	(0.088)	(0.090)
Partner South/Central America	1.455***	1.455***	1.455***	1.455***
	(0.091)	(0.096)	(0.091)	(0.096)
Year			-0.033***	-0.029***
			(0.008)	(0.008)
Post-Lockdown	-0.090*	-0.050	-0.090*	-0.050
	(0.054)	(0.055)	(0.054)	(0.055)
Post-Lockdown Trend				
Trade Partner Year FE	Yes	Yes	Yes	Yes
Observations	15,600	15,600	15,600	15,600
R^2	0.998	0.983	0.998	0.983
Adjusted R^2	0.998	0.983	0.998	0.983
Residual Std. Error	0.869	0.891	0.869	0.891
F Statistic	93,932.340***	11,182.520***	93,932.340***	11,182.520***
Note:				*p<0.1; **p<0.05**; p<0.01*

	All dependant variables in log form			
	Imports	Imports/State GDP	Imports	Imports/State GDP
	(1)	(2)	(3)	(4)
State GDP (log)	1.406***		1.415***	
	(0.008)		(0.008)	
American NE	-19.463***	-8.919***	33.724***	19.870***
	(0.216)	(0.039)	(4.666)	(5.029)
American S	-19.405***	-8.761***	33.780***	20.029***
	(0.221)	(0.035)	(4.666)	(5.030)
American NC	-20.006***	-9.425***	33.181***	19.365***
	(0.219)	(0.033)	(4.665)	(5.029)
American W	-20.285***	-9.855***	32.905***	18.935***
	(0.221)	(0.039)	(4.665)	(5.029)
Partner Asia	4.314***	4.314***	4.314***	4.314***
	(0.032)	(0.036)	(0.032)	(0.036)
Partner Oceania	0.003	0.003	0.003	0.003
	(0.035)	(0.039)	(0.035)	(0.039)
Partner Europe	3.777***	3.777***	3.777***	3.777***
	(0.033)	(0.036)	(0.032)	(0.036)
Partner North America	4.113***	4.113***	4.113***	4.113***
	(0.035)	(0.037)	(0.035)	(0.037)
Partner South/Central America	1.809***	1.809***	1.809***	1.809***
	(0.037)	(0.041)	(0.037)	(0.041)
Year			-0.027***	-0.014***
			(0.002)	(0.002)
Post-Lockdown	-0.196***	-0.080	-0.035	0.009
	(0.046)	(0.049)	(0.048)	(0.051)
Post-Lockdown Trend				
Trade Partner Year FE	No	No	No	No
Observations	15,600	15,600	15,600	15,600
R^2	0.997	0.976	0.997	0.976
Adjusted R^2	0.997	0.976	0.997	0.976
Residual Std. Error	1.037	1.117	1.033	1.116
F Statistic	490,094.500***	64,044.470***	453,017.100***	58,344.810***

Note: *p<0.1; **p<0.05**; p<0.01

	All dependant variables in log form			
	Imports	Imports/State GDP	Imports	Imports/State GDP
	(1)	(2)	(3)	(4)
State GDP (log)	1.415***		1.415***	
	(0.008)		(0.008)	
American NE	-19.277***	-8.558***	80.141***	75.202***
	(0.245)	(0.139)	(17.284)	(19.115)
American S	-19.221***	-8.399***	80.198***	75.362***
	(0.249)	(0.138)	(17.285)	(19.116)
American NC	-19.819***	-9.062***	79.599***	74.698***
	(0.247)	(0.138)	(17.285)	(19.115)
American W	-20.097***	-9.493***	79.322***	74.267***
	(0.249)	(0.139)	(17.285)	(19.116)
Partner Asia	3.944***	3.944***	3.944***	3.944***
	(0.134)	(0.149)	(0.134)	(0.149)
Partner Oceania	-0.271*	-0.271*	-0.271*	-0.271*
	(0.145)	(0.160)	(0.145)	(0.160)
Partner Europe	3.467***	3.467***	3.467***	3.467***
	(0.135)	(0.147)	(0.135)	(0.147)
Partner North America	3.899***	3.899***	3.899***	3.899***
	(0.145)	(0.153)	(0.145)	(0.153)
Partner South/Central America	1.736***	1.736***	1.736***	1.736***
	(0.147)	(0.162)	(0.147)	(0.162)
Year			-0.050***	-0.042***
			(0.009)	(0.010)
Post-Lockdown	-0.019	0.068	-0.019	0.068
	(0.056)	(0.060)	(0.056)	(0.060)
Post-Lockdown Trend				
Trade Partner Year FE	Yes	Yes	Yes	Yes
Observations	15,600	15,600	15,600	15,600
R^2	0.997	0.977	0.997	0.977
Adjusted R^2	0.997	0.976	0.997	0.976
Residual Std. Error	1.029	1.112	1.029	1.112
F Statistic	66,001.630***	7,879.317***	66,001.630***	7,879.317***
Note:				*p<0.1; **p<0.05**; p<0.01*

	All dependant variables in log form			
	Bilateral	Bilateral/State GDP	Bilateral	Bilateral/State GDP
	(1)	(2)	(3)	(4)
State GDP (log)	1.239***		1.239***	
	(0.006)		(0.006)	
American NE	-13.744***	-7.568***	60.894***	58.049***
	(0.181)	(0.095)	(13.589)	(14.544)
American S	-13.458***	-7.223***	61.180***	58.394***
	(0.182)	(0.094)	(13.589)	(14.544)
American NC	-13.821***	-7.624***	60.817***	57.993***
	(0.183)	(0.093)	(13.589)	(14.544)
American W	-14.173***	-8.065***	60.465***	57.553***
	(0.183)	(0.095)	(13.589)	(14.544)
Partner Asia	3.247***	3.247***	3.247***	3.247***
	(0.098)	(0.105)	(0.098)	(0.105)
Partner Oceania	-0.146	-0.146	-0.146	-0.146
	(0.103)	(0.110)	(0.103)	(0.110)
Partner Europe	2.899***	2.899***	2.899***	2.899***
	(0.098)	(0.104)	(0.098)	(0.104)
Partner North America	3.208***	3.208***	3.208***	3.208***
	(0.106)	(0.109)	(0.106)	(0.109)
Partner South/Central America	1.396***	1.396***	1.396***	1.396***
	(0.105)	(0.113)	(0.105)	(0.113)
Year			-0.037***	-0.033***
			(0.007)	(0.007)
Post-Lockdown	-0.060	-0.011	-0.060	-0.011
	(0.045)	(0.047)	(0.045)	(0.047)
Post-Lockdown Trend				
Trade Partner Year FE	Yes	Yes	Yes	Yes
Observations	15,600	15,600	15,600	15,600
R^2	0.998	0.982	0.998	0.982
Adjusted R^2	0.998	0.982	0.998	0.982
Residual Std. Error	0.789	0.826	0.789	0.826
F Statistic	123,036.900***	10,485.200***	123,036.900***	10,485.200***

Note: *p<0.1; **p<0.05;** p<0.01