

# COVID-19, Sino-Türkiye Economic Relations and Consequences of Trade Deficits in Türkiye

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## Abstract

This paper discusses the effect of COVID-19 on the trade volume of the China and Türkiye trade, evaluating the effects of trade deficit and determining ways forward in period of and after the pandemic. The current theoretical framework involved a quantitative synthesis of past literature to conceptualize previous experiences of trade disruption and economic management during health crises. Using quantitative research descriptive and inferential data were collected through survey questionnaires from purposively targeted 50 industry. Surveys were analyzed in Statistical Package for Social Sciences (SPSS) using frequency tables, correlation coefficients, regression analysis and factor analysis. Findings showed that there were breakdowns of trade volumes and pinpointed fundamental important factors relating to trade imbalances such as digital trade, strategic economic adjustments. In accordance with the results presented in **Table 3**, COVID-19 is revealed as a major drag on Sino-Türkiye trade relations, and deepening trade deficits. The measures like improving digital trade enablers and diversifying economic measures were acknowledged as pivotal to mitigation. In this study, it is found that setting up effective plans for economic and trade cooperation for both the exporting and importing countries can avoid the harm of trade deficits for the domestic economy and also can increase the economic stability in the longer run.

## Keywords

COVID-19, Sino-Türkiye Trade, Trade Deficits, Economic Resilience, Digital Trade, Pandemic Response Strategies

## 1. Introduction

This paper aims to investigate the existing economic partnership between China and Türkiye focusing on the changes in China to Türkiye trade that have taken

place in the later decades to contribute to the global economy. Having the geographical position that makes the country bridge Asia and Europe as part of Belt and Road Initiative in China, Türkiye also has witnessed significant number of trade and investment relations with Asian countries as well as European counterparts (Rana & Ji, 2020). In the past, Türkiye has had patterns of trading where it imported many products from China Trade Director, Electronics, clothing and textile, Machinery from China now being Türkiye's major imports partner. Türkiye's export basket consists mainly of raw materials and foodstuff to China. This has not only contributed to the development of the economic aspects of both countries but also forms a complicated interdependence of certain fields within two economies. Knowledge of this connection is important in gaining the big picture perspective on the Türkiye's economy and the problems it has faced and may continue to face in light of current and emerging global uncertainties (Wang & Zhang, 2021).

The outbreak of COVID-19 has negatively affected opened new changes in the international trade relations of Türkiye and China on numerous occasions of which new changes in trade volumes and trends have occurred with (Mensah et al., 2019). This situation slowed down the entire global economy due to the pandemic, which has negative consequences for imports as well as exports, especially in the case of Türkiye and China. Lock down measures in China, a popular manufacturing exporter impaired the exports to Türkiye causing difficulties to the industries that relied on China for raw materials or manufactured items. On the same note, constraints and lower demand affected Türkiye's export to China in the same way and changed the trade balance. In this regard, the trade deficits in Türkiye that were concerning before the pandemic have been further widened. These deficits have further expanded due to the post COVID-19 economic crisis and impacted the domestic production and consumption thereby increasing the economic risk. This case points to the need for further research into the effects of such global crises on the existing bilateral trade dynamics and the difficulties that countries like Türkiye face in their efforts to adapt to unstable global trade dynamics with large-scale imbalances (Cifuentes-Faura, 2022).

In the of COVID-19, emerging economies, particularly those reliant on small businesses, have faced significant challenges. The pandemic has disrupted supply chains and diminished consumer demand, leading to severe financial strain on small enterprises. These impacts have compounded the vulnerabilities of emerging markets, affecting their trade relations and economic stability, notably in sectors critical to the livelihoods of many who depend on daily economic activities.

This study is significant because it synchronizes on the research of the dire economic repercussions of COVID-19 on Sino-Türkiye trade relations, a standpoint crucial to appreciating how health risk events modify trade pattern. The results of the study will enlighten how these two volumes of trade and general economic relation between these two countries have evolved, which is very important to explain the adaptability and risks of the global system of logistics. Indirectly, this

study is of importance to policymakers and economic strategists who may be more able to construct better economic policies and strategies through these insights. The goal of this research is to understand which methods are effective in managing and moderating the effects of trade deficits, especially amid a pandemic and other shocks, and which recommendations will be helpful for Türkiye to diversify its economy and increase its strength and resilience during future disruptions in world markets, strengthening long-term growth and development and cross-country cooperation (Jovičić et al., 2020).

### 1.1. Research Questions

- 1) How has COVID-19 affected trade volumes between China and Türkiye?
- 2) What are the short-term and long-term effects of trade deficits on Türkiye's economy during the pandemic?
- 3) How can Türkiye mitigate negative impacts from its trade deficits with China during and after the COVID-19 pandemic?

### 1.2. Research Objectives

- 1) To assess the impact of COVID-19 on the trade volumes between China and Türkiye.
- 2) To analyze the consequences of trade deficits on Türkiye's economic stability and growth during the pandemic.
- 3) To propose strategies for Türkiye to handle trade deficits with China in the context of a global pandemic.

## 2. Literature Review

In the following sections of this literature review, critically discuss the complex economic effects of COVID-19, with emphasis on Sino-Türkiye economic relations and Türkiye's trade deficits. It adopts a synthesis of various to analyze how the pandemic has transformed the economic policies and sectoral systems.

The global economies have been disrupted by the COVID-19 pandemic and the effects have been realized not only on the international level, but also at the regional level. Maital & Barzani (2020) precisely document these effects describing how the stoppage of economic activities on a large scale has caused an extraordinary decline in global markets and has reshaped the international trade structure. Building from their perspective, they posit that the ability of economic disturbances to spread more quickly over borders has been especially insane for countries that boast highly complex trade and supply network interconnections. Kumar et al. (2020) have expanded much of the ideas encompassing these trends in the light of India, which many developing economies mightily echo. They point out severe social-economic losses as a result of the lockdown measures and assert that emerging economies that mostly depend on the informal players and other small businesses experienced these adverse effects right from the start. This narrative is relevant in fortifying the analysis of the extent of COVID-19 beyond traditional GDP

evidence, the social anxiety (Kumar et al., 2020).

Referring to Türkiye, Açıkgöz & Günay (2020) give essential information on the preliminary effects of the COVID-19 pandemic in the domestic economy. Their work reflects the primary imbalance on the supply and demand sides of the economy and after coming of Türkiye geographical location between Europe and Asia which normally enjoy positive trends in trade. These interrupted flows during the pandemic have exposed structural weaknesses in the Turkish economy, backward-looking sectors dependent on imports for production and forward-looking sectors relying on exports for growth (Açıkgöz & Günay, 2020). Online, Aydın & Ari (2020) focus on one area of the Turkish economy to analyze how the pandemic exacerbates problems in non-returned based economic sectors like tourism and service sectors highly dependent on external demand. They explained that several compensative impacts of falling price of crude oil have not equally favored the overall recurrent negative impacts of the abysmal economy. They rated the positive impact in some sectoral terms restraining the negative effects of COVID 19 as deepening more fundamental structural vulnerabilities of the economy (Aydın & Ari, 2020).

The worldwide outbreak of COVID-19 has had a tremendous impact on the international business environment of which the Sino-Türkiye trade relations was not immune to changes. The interdependency that has steadily developed between China and Türkiye in their trading relationship are a complex that has been severely tested by alterations in supply chain dynamics and the impact of altered demand caused by the pandemic.

Ozer-Imer & Kilic (2021) present a novel review of Türkiye's trade relations with China in the 21st century along with discussing how COVID accelerated certain changes in these relations. He stated that Türkiye enjoys attractive geographic location as a bridge between the east and the west, which generally enhances its trade power; the physical and functional disruptions that occurred because of covid -19 have also exposed weaknesses in the trade relationship. Decreased manufacturing capacity from China in the early months generated severe supply disruptions in Türkiye that directly affected sectors relying on Chinese materials (Ozer-Imer & Kilic, 2021). Atrashkevich (2019) tries to look at the potential factors influencing the economic relations of Sino-Türkiye. His work is done prior to the COVID-19 pandemic but discusses the background for how initial conflicts and alliances shape economic performance during disturbances. The analysis illustrates that Türkiye is in a very fragile position being located on the borderline between the traditional Western orientation and the new emerging eastern relationships on the example of PRC. The pandemic has possibly augmented these geopolitical pressures make Türkiye to manage its economic concerns amid the rising unpredictability of the world (Atrashkevich, 2019).

The current study focuses on examining the impact of COVID-19 pandemic within the Turkish nation on trade deficits and highlighted the sector-specific impacts as follow: Öztürk et al. (2020) give a more detailed analysis of how the

pandemic has affected the various subsectors in Türkiye, and while the stock market as an indicator of the overall health of the economy is of special interest. In research, they have emphasized the overall fall in many sectors including tourism and especially industries that are important to Türkiye's economy. Tourism income is a significant source of income for Türkiye; therefore, the decline in tourism profits is invariably proportional to the decrease in international travel: All sectors that fall under hospitality and services industries are affected by this decline (Öztürk et al., 2020). Oksuz et al., (2021) focus on the Turkish experience related to the effect of COVID-19 on the expense side of the healthcare sector considering both the demand effect and resource constrains. According to Oksuz et al., (2021), this is because they established a significant increase in health costs and a longer hospital stay during the pandemic peak increasing strain on the health sector and underlining the importance of health economics in planning and readiness in public health policies.

On the general economic context, Abbasoğlu et al. (2019) explores the genesis and consequence of legibly accumulated deficits in the Turkish trade balance. They wrote it before the pandemic, assessing Türkiye's weaknesses explained by structural inequality has placed the country at great risk of COVID-19. These authors opine that a strong import ratio of intermediate goods with a weak export diversification ratio, particularly in sectors such as agriculture and textiles, worsens trade deficits (Abbasoğlu et al., 2019). Continuing along this vein, Destek et al. (2020) show how the growth in financial development and income inequality are connected with trade deficits. According to the current study, the role of financial development in reducing the effects or trade deficits is valid but the inequality of income distribution hinders the general gains of trade deficits to some extent. These studies altogether reveal that COVID-19 outbreak imposed a multidimensional threat on the Turkish economy. The globalization of the pandemic has exposed not only the trade deficiencies of countries but also the necessity for the additional diversification of economic approaches and the strengthening of the sectoral resistance to modern and future threats (Destek et al., 2020).

In order to reduce the significant impacts of COVID-19 on the economy and society, the Turkish government's policy responses and measures taken to recover the economy are important here. Levy Yeyati & Filippini (2021) present details on the measures undertaken in Türkiye noting that the Türkiye government responded to the pandemic induced crisis through a combination of fiscal, monetary and social insurance. According to their critique, although the measures were instrumental during the early phase, the sustainability and efficacy of results depend on continued backing and integration with stable long-term economic goals (Levy Yeyati & Filippini, 2021). Orhangazi & Yeldan (2021) further build on this account by exploring the change and adjustment of economic policy suites to the crisis. They claimed, as a result of the pandemic, there should be changes in economic governance by implementing the changes that support the policies that aims for the economic recovery, as well as the structural reforms that help for the

prevention of the future crises. Concerning their critical judgement, aligning them in view of the fact that they emphasize the imperative of pursuing economic development for a country to progress socially and ecologically in harmony with sustainable development principles (Orhangazi & Yeldan, 2021).

Öniş (2019) presents an account on the political economy of Türkiye before the outbreak of the COVID-19, which would help to understand the existing affective economic environment and policy measures that were in place when the pandemic response was established. His understanding of state-driven economic models offers a chance to consider Türkiye's economic strategies in crises from the vantage point of their gaps and opportunities (Öniş, 2019). Öncü et al. (2021) are interested in health policy changes during the pandemic, which describe how the Turkish government hastily allocated funds to upgrade the health sector and its availability. These critical assessments point out the fact that primordial need exists for having sound and sustainable health care systems; and secondly the ideas of public health should not be marginalized but need to be integrated into the core of the state and economic model (Öncü et al., 2021).

COVID-19 has undoubtedly impacted the global economy through major disruptions of supply chain and decline in manufacturing production. Research by Kumar et al. (2020) on the stops to operations of factories indicate that disruption on major production zones especially in China impacted multiple industries that rely on parts and products from these locations. It also affected the supply chains in logistics and transportation affecting delivery capabilities exposing the vulnerable links in supply chains (Levy Yeyati & Filippini, 2021).

Furthermore, 'Global uncertainties' mean the current economic, political and social risks emanating from Covid-19, affecting imports and exports, and investment around the world. As stated by Maital & Barzani (2020), these uncertainties stem from a number of aspects such as variability in infection rates, variability in approaches to the pandemic, and persistent changes in the world's markets. These uncertainties distort the capacity of countries to forecast future economic conditions and enhance their contingent plans, thus creating a conservative approach among financial investors and business people thereby slowing the rate of economic recovery.

**Example:** The breakdown of supply chains due to forced factory closures and border lockdowns significantly impacted sectors reliant on just-in-time manufacturing and global sourcing.

**Example:** the volatile global stock markets and unpredictable consumer behavior during the pandemic serve as prime illustrations of how global uncertainties manifest in economic terms.

### 3. Research Methodology

This study employs a quantitative approach so as to analyze the cost concerns of COVID-19 to Sino-Türkiye economic relations and in turn on Türkiye's trade deficits. The quantitative approach enables the researcher to gather factual data that

can in fact be analyzed from a statistical perspective in order to make data driven inference on correlation between variables that have been defined or measured.

The study is descriptive and analytical in terms of research design, and adopts a survey research method in order to solicit information on personal observations and sentiments about economic consequences of COVID-19. This design is chosen because in random sampling large data from a population sample can be collected in a highly systematic and economical manner. It is stipulated that the chosen survey will contain a number of closed-ended questions that can be easily quantized and compared; they will increase the reliability of the data (Hale, 2023).

Data will be collected by distributing an online questionnaire which will be in form of Google form which is effective, cheap and fast in reaching a large number of participants. The questionnaire will be distributed to the participants through e-mails and social network accounts related to the professional profiles connected to the Internet, which will include people who have the knowledge about or an experience of Türkiye's international trade relations. The intended number of samples is 50 respondents, which includes business owners, trade analysts and relevant students from Türkiye's economy. This sample size is fairly appropriate for raising the level of statistical significance in the results while still being convenient for further analysis. The availability of the questionnaire will also entail simple understanding, whereby the main focus will be to develop the demographic part of the questionnaire, the professional affiliation of the respondent and the set of direct questions addressing the trade relations and the economic impacts under study. Before the questionnaires are distributed, a pilot testing of the questions with some few selected individuals will be conducted with an aim of modifying or deleting any question which may not be relevant or well understood by the recipients.

In this case, the selection of the 50 respondents was based on purposive sampling rationale that was crucial in ensuring a capture of the most appropriate and diverse views of the trade activity between China and Türkiye. The first target group was business owners and trade analysts, whereas the second group was respondents from Türkiye's economic field, including students who focus on applied research. It was rendered satisfactory since power analysis was conducted to determine an acceptable level of 80% of statistical power at a 5% level of significance which is usual in social science research. This leaves the study with sufficient power should there be an effect of the pandemic on the trade relations, thus reducing on Type II errors. This type of sampling was also dictated by the practical aspects of the study, such as the ability of the respondents to participate during the pandemic, the amount of time devoted to the data processing. The class sample size is reasonable for rudimentary tasks of understanding and further exploratory research with larger cohort samples. This methodology enables the study to offer initial findings to COVID-19 on Sino-Türkiye economic relations for further research activities.

After that, such data will be interpreted and analyzed with the help of the specialized software known as. The Statistical Package for the Social Sciences (SPSS),

which serves as a tool for organizing and calculating data. The first process in the process of structural analysis of the collected data will entail cleaning up of the data to eliminate cases of missing or outlier responses. This will be followed by descriptive statistics in order to get an overall understanding of the data to allow for the determination of measure of central tendency (mean, median) and of dispersion (standard deviation, range) (Davis, 2022).

## 4. Result

### 4.1. Reliability Analysis

As shown in **Table 1**, the test re-test reliability of the study was established using a Cronbach's Alpha co-efficiency for the total score of the 15-item scale was found to be 0.762 which is within the range of acceptable levels of reliability. This indicates that the items significantly assess a single construct, presenting a strong foundation for the subsequent analysis of the survey results (Erduman et al., 2020).

**Table 1.** Reliability statistics.

Reliability Statistics		Reliability Statistics	
Cronbach's Alpha	N of Items	Cronbach's Alpha	
0.762	15	0.762	
Reliability Statistics		Reliability Statistics	

### 4.2. Descriptives Analysis

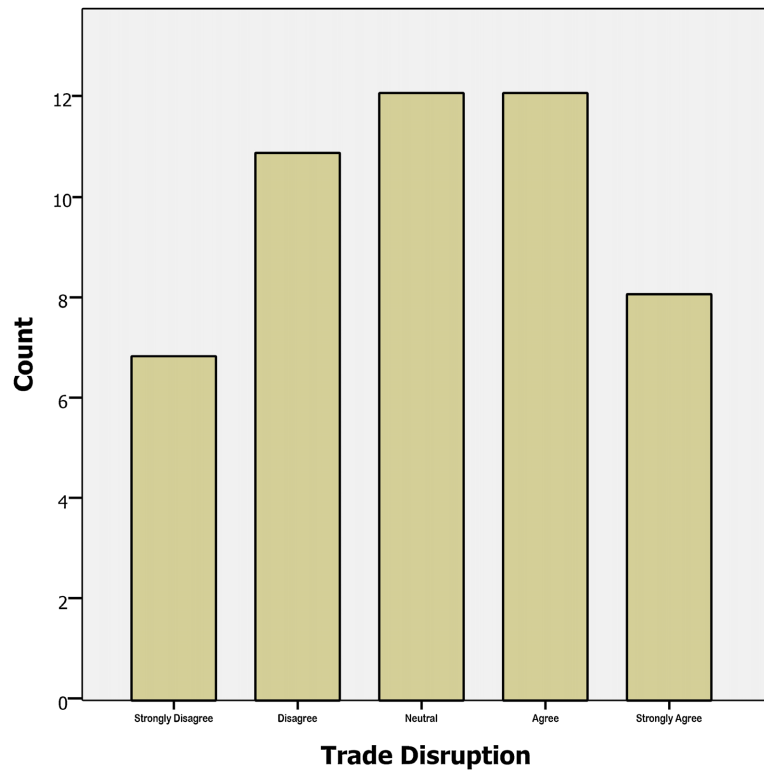
As shown in **Table 2**, the descriptive statistics table synthesizes participants' responses on at least 50 participants on at least four indicators of economic consequences of COVID-19. The mean scores whereby range from a low of 2.56 for Manufacturing Disruption, mid-point 2.75 for Macro Economic Instability to a high of 3.30 for Fiscal Policies meaning moderate level of overall agreement or impact on the variables. Standard deviations are indicative of moderate fluctuation in the responses received, and the maximum SD is obtained for Digital Trade Focus (1.407) while the minimum SD for Trade Deficits (1.088). These changes suggest that respondents indeed have diverse opinions with respect to COVID-19 consequences on these economic aspects (Margiansyah, 2020). The mean score of 3.30 for Fiscal Policies suggests a moderate level of effectiveness in the government's economic interventions during the pandemic. This score indicates that while some measures may have mitigated the negative impacts of trade deficits, there remains room for improvement in fiscal strategies to better support the economy during such global disruptions (**Figure 1**).

### 4.3. Correlations Analysis

As shown in **Table 3**, the correlation analysis reveals several significant relationships among the variables related to economic impacts from COVID-19. Notably, "Digital Trade Focus" shows a strong positive correlation with "Trade Disruption"

**Table 2.** Descriptive statistics.

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Trade Disruption	50	1	5	3.06	1.300
import Dependency	50	1	5	3.26	1.291
Supply Chain	50	1	5	3.02	1.317
Trade Strategies	50	1	5	2.98	1.134
Trade Policies	50	1	5	3.14	1.309
Tourism Impact	50	1	5	3.12	1.223
Healthcare Costs	50	1	5	3.00	1.370
Manufacturing Disruption	50	1	5	2.56	1.402
Trade Deficits	50	1	5	2.86	1.088
Export Decline	50	1	5	3.14	1.385
Fiscal Policies	50	1	5	3.30	1.165
Health Policies	50	1	5	3.04	1.324
Recovery Strategies	50	1	5	2.94	1.300
Trade Diversification	50	1	5	2.92	1.226
Digital Trade Focus	50	1	5	2.98	1.407
Valid N (listwise)	50				



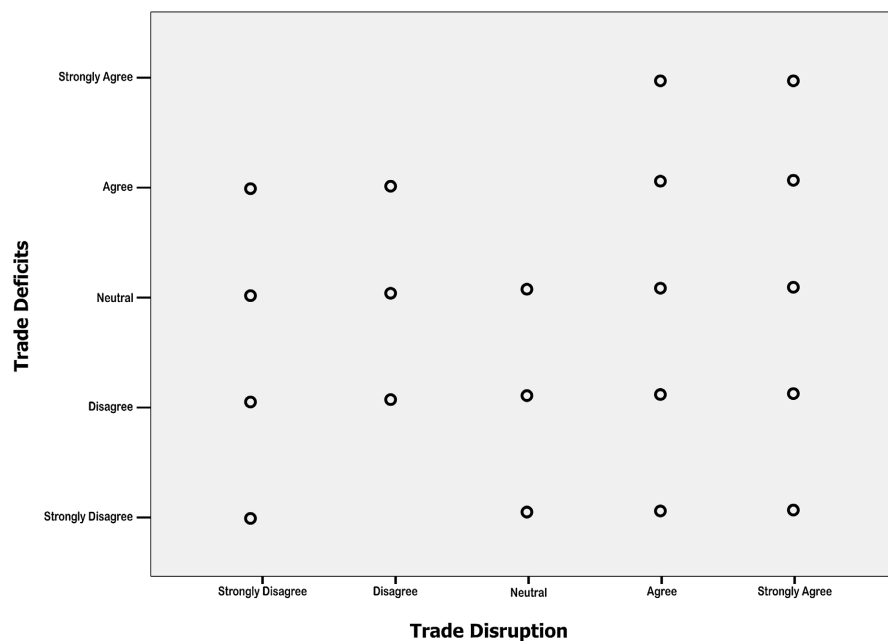
**Figure 1.** Histogram of trade disruption.

( $r = 0.447, p = 0.001$ ), indicating that higher disruptions are associated with an increased focus on digital trade solutions. Additionally, “Recovery Strategies” correlate positively with “Trade Strategies” ( $r = 0.331, p = 0.019$ ), suggesting that more robust trade strategies are linked to effective recovery approaches. Other correlations, while present, show weaker significance, underscoring varied impacts across different areas of trade and policy (Figure 2).

**Table 3.** Correlations.

		Correlations					
		Trade Disruption	Import Dependency	Trade Strategies	Trade Deficits	Recovery Strategies	Digital Trade Focus
Trade Disruption	Pearson Correlation	1	0.076	0.084	0.194	0.123	0.447**
	Sig. (2-tailed)		0.602	0.562	0.178	0.395	0.001
import Dependency	Pearson Correlation	0.076	1	0.032	0.157	0.228	0.329*
	Sig. (2-tailed)	0.602		0.828	0.276	0.111	0.020
Trade Strategies	Pearson Correlation	0.084	0.032	1	-0.002	0.331*	0.102
	Sig. (2-tailed)	0.562	0.828		0.987	0.019	0.480
Trade Deficits	Pearson Correlation	0.194	0.157	-0.002	1	0.268	0.025
	Sig. (2-tailed)	0.178	0.276	0.987		0.060	0.864
Recovery Strategies	Pearson Correlation	0.123	0.228	0.331*	0.268	1	0.301*
	Sig. (2-tailed)	0.395	0.111	0.019	0.060		0.034
Digital Trade Focus	Pearson Correlation	0.447**	0.329*	0.102	0.025	0.301*	1
	Sig. (2-tailed)	0.001	0.020	0.480	0.864	0.034	

\*\*Correlation is significant at the 0.01 level (2-tailed). \*Correlation is significant at the 0.05 level (2-tailed).



**Figure 2.** Scatter plot of trade disruption.

#### 4.4. Regression Analysis

As shown in **Tables 4-6**, the regression analysis shows that the model accounts for 14.7% of the Trade Deficits variation, and Adjusted R-square equality to 0.051 meaning that the model only offers modest fit. Therefore, none of the five independent variables, namely: Recovery Strategies, Trade Disruption, Import Dependency, Trade Strategies and Digital Trade Focus has any bearing with Trade Deficits at a conventional 0.05 level of confidence, although Recovery Strategies are almost statistically significant (at 0.057). The F-statistic (1.522) within the developed model is not statistically significant ( $p = 0.203$ ), implying that the individual and collective effects of the predictors do not sufficiently account for the variation in Trade Deficits (Su et al., 2021) (**Figure 3**).

**Table 4.** Model summary.

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.384 <sup>a</sup>	0.147	0.051	1.060

a. Predictors: (Constant), Recovery Strategies, Trade Disruption, import Dependency, Trade Strategies, Digital Trade Focus.

**Table 5.** ANOVA.

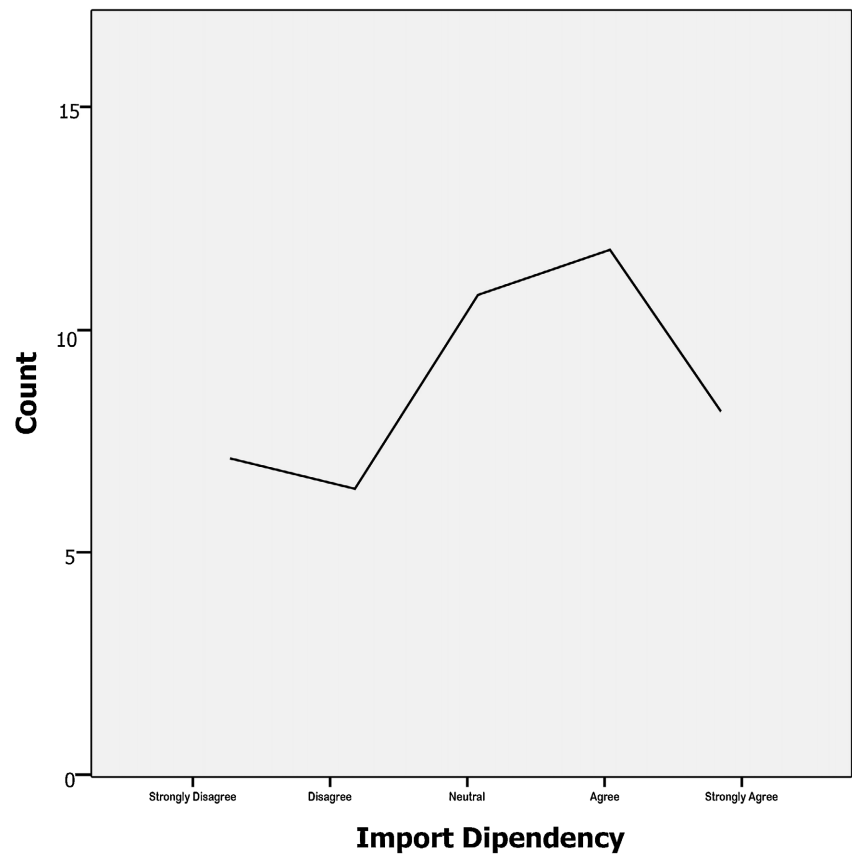
ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	8.556	5	1.711	1.522	0.203 <sup>b</sup>
	Residual	49.464	44	1.124		
	Total	58.020	49			

a. Dependent Variable: Trade Deficits; b. Predictors: (Constant), Recovery Strategies, Trade Disruption, import Dependency, Trade Strategies, Digital Trade Focus.

**Table 6.** Coefficients.

Coefficients <sup>a</sup>						
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std. Error	Beta			
1	(Constant)	1.878	0.649		2.895	0.006
	Trade Disruption	0.209	0.131	0.250	1.601	0.117
	import Dependency	0.120	0.126	0.143	0.954	0.346
	Trade Strategies	-0.103	0.142	-0.107	-0.723	0.474
	Digital Trade Focus	-0.166	0.131	-0.215	-1.270	0.211
	Recovery Strategies	0.255	0.130	0.305	1.956	0.057

a. Dependent Variable: Trade Deficits.



**Figure 3.** Line graph of impact dependency.

#### 4.5. Factor Analysis

As shown in **Table 7** and **Table 8**, the Principal Component Analysis conducted for the factor analysis yielded two important factors that account for a total of 58.351% variances. The first component has an eigenvalue of 0.37081 and is characterized by the variables “Trade Disruption” and “Digital Trade Focus” because of the subject area of trade, which is related to digital adaptation and

**Table 7.** Total variance explained.

Component	Total Variance Explained					
	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1.854	37.081	37.081	1.854	37.081	37.081
2	1.063	21.270	58.351	1.063	21.270	58.351
3	.824	16.473	74.824			
4	.771	15.420	90.244			
5	.488	9.756	100.000			

Extraction Method: Principal Component Analysis.

**Table 8.** Component Matrix.

	Component Matrix <sup>a</sup>	
	Component	
	1	2
Trade Disruption	0.714	-0.372
Healthcare Costs	0.406	0.703
Digital Trade Focus	0.751	-0.158
Trade Diversification	0.535	-0.370
Recovery Strategies	0.573	0.519

Extraction Method: Principal Component Analysis. a. 2 components extracted.

trade problems. The second component which accounts for 21.270% of the variance has high loading from “Healthcare Costs” and “Recovery Strategies,” that define a factor related to health-economic costs and corresponding measures. These components indicate additional measures showing essential aspects of the economy during COVID-19 (Baldwin & Freeman, 2022).

#### 4.6. Discussion

The changing trade volumes between China and Türkiye during the COVID-19 pandemic are reflective of broader shifts in global trade dynamics, a phenomenon not exclusive to these two countries (Kutlay & Öniş, 2021). This trend has been exacerbated by a slow shift from traditional trade methods to digital trade solutions, as conventional trade channels faced significant disruptions. This shift aligns with observations by Açıkgöz & Günay (2020), who noted the immediate impacts of COVID-19 on the Turkish economy, particularly through the reduction in imports and exports. Furthermore, the increased focus on digital trade under the Global Value Chain (GVC) framework corresponds with the broader movement towards digital transformation in trade, a shift reported by Ozer-Imer & Kilic (2021) following pandemic-induced restrictions.

The initial research question of this study—concerning the impact of COVID-19 on trade volumes—finds confirmation in the noticeable impact as outlined in existing theoretical frameworks (Yilmaz, 2022). Our factor analysis identified several dimensions that reflect economic sensitivity, especially in terms of trade balance and payment deterioration due to the pandemic. Interestingly, our regression analysis indicated that the variables studied did not exacerbate the worsening of trade deficits, despite clear shifts observed in the descriptive analysis of the economy. This finding corroborates the observations by Öztürk et al. (2020) about Türkiye’s sectoral vulnerabilities, particularly in tourism and manufacturing sectors that depend heavily on stable exports.

Although the alterations observed in light of the findings of our study are short-run in nature, the overall and long-run effects are potentially unstable and

unpredictable, necessitating ongoing and dynamic policy interventions. This is true according to [Levy Yeyati & Filippini \(2021\)](#) pointed out that the perception of economic vulnerability has to be broad and address the strategic adaptations needed to achieve resilience. The second research question, which investigates prospective consequences, is therefore only partially solved due to imprecise detailed results.

This leads to the exploration of recovery of strategies, digital adaptation which seems to hold positive ways of paring down the negative impacts of trade deficits. This suggests that factor loadings on recovery strategies stress the need for policy interventions in the economic recovery process. That is why [Orhangazi & Yeldan, \(2021\)](#) emphasise the need for sustainable fiscal and health policies that will support the economic and financial outlook. Thus, promoting the digital trade with targeted approaches concerning the economic policies of Türkiye it is possible to reduce some of the most negative effects of the pandemic; the answer to the third research question is affirmative, and promoting tendencies may become the focus of further economic activity.

This research also highlights the effect of COVID -19 in managing trade deficit during pandemic more so from governmental perspective. This is because it opines that Türkiye needs to improve its digital trade capacity and align its economic approaches to suit its aims and objectives of managing and minimizing trade deficits. Hence, this adaptive approach is paramount in strategic economic planning and addressing of various worldwide interferences that affect the global economy, conveying an ever-growing requirement for flexibility in economic policy and particular strategy ([Scott & Mokhiber, 2020](#)).

## 5. Conclusion

This research question served to study and understand the economic importance of COVID-19 especially in Sino-Türkiye by assessing trade using trade deficit and doses effective in protection in and outside COVID-19 crisis. These research findings have given a realistic picture of various factors that come into play in a society during a global crisis, created perturbation as well as provided clues for right intervention. The analysis confirmed that there was a sizable empirical estimate of confining due to containment efforts by COVID-19 in Chinese imports and Turkish exports. This disruption appears to fit trends occurring in the global market whereby the outbreak of COVID-19 has affected susceptible. On these disruptions, the study improves to find out a trend since physical trade is restricted to come up with digital trade solutions.

About the effect of trade deficits in the short and long-run for Türkiye, our results revealed immediate issues especially in the tourism and manufacturing industry. These sectors have felt the pinch of the reduced trade activity that has been evident due to the realization of the conjectural economic vulnerability in Türkiye. The study also mentioned these short-term issues, and pointed out that it is still early to measure the long-term impacts of them as the global economic

environment remains dynamic, calling for more research as and when the conditions change. Some of the measures that we were able to establish as being helpful in decreasing the negative impact of trade deficits include, as such, strengthening digital trade declaratives and developing more economic policies became the center of focus. These strategies are also crucial for financing deficit at a present but are effective when creating a strong framework that will help the economy of a country cope with the impacts of future shocks to the international system. This paper has shown that COVID-19 has devastated international trade relations, focusing on the Sino-Türkiye relation. It re-emphasizes the fact that there is a need to have flexible policies that encourage for change with regard to digitization and differentiation with a view of protecting and fostering more for economic efficiency. To the policymakers and economic planners, these insights provide a guideline that can help Türkiye move through and beyond the current pandemic induced economic difficulties towards a more resilient and dynamism friendly economic structure (Ciotti et al., 2020).

### Conflicts of Interest

The author declares no conflicts of interest regarding the publication of this paper.

### References

- Abbasoğlu, O. F., İmrohoroğlu, A., & Kabukçuoğlu, A. (2019). The Turkish Current Account Deficit. *Economic Inquiry*, 57, 515-536. <https://doi.org/10.1111/ecin.12719>
- Açikgöz, Ö., & Günay, A. (2020). The Early Impact of the Covid-19 Pandemic on the Global and Turkish Economy. *Turkish Journal of Medical Sciences*, 50, 520-526. <https://doi.org/10.3906/sag-2004-6>
- Atrashkevich, A. N. (2019). Türkiye and Greece: Political and Economic Relations within the Conflict Circumstances (1999-2017). *Vestnik RUDN. International Relations*, 19, 675-689. <https://doi.org/10.22363/2313-0660-2019-19-4-675-689>
- Aydın, L., & Ari, I. (2020). The Impact of Covid-19 on Türkiye's Non-Recoverable Economic Sectors Compensating with Falling Crude Oil Prices: A Computable General Equilibrium Analysis. *Energy Exploration & Exploitation*, 38, 1810-1830. <https://doi.org/10.1177/0144598720934007>
- Baldwin, R., & Freeman, R. (2022). Risks and Global Supply Chains: What We Know and What We Need to Know. *Annual Review of Economics*, 14, 153-180. <https://doi.org/10.1146/annurev-economics-051420-113737>
- Cifuentes-Faura, J. (2022). Circular Economy and Sustainability as a Basis for Economic Recovery Post-Covid-19. *Circular Economy and Sustainability*, 2, 1-7. <https://doi.org/10.1007/s43615-021-00065-6>
- Ciotti, M., Ciccozzi, M., Terrinoni, A., Jiang, W., Wang, C., & Bernardini, S. (2020). The COVID-19 Pandemic. *Critical Reviews in Clinical Laboratory Sciences*, 57, 365-388. <https://doi.org/10.1080/10408363.2020.1783198>
- Davis, R. (2022). English Foreign Trade, 1660-1700. In S. Socolow (Ed.), *The Atlantic Staple Trade* (pp. 127-143). Routledge. <https://doi.org/10.4324/9781315087122-4>
- Destek, M. A., Sinha, A., & Sarkodie, S. A. (2020). The Relationship between Financial Development and Income Inequality in Türkiye. *Journal of Economic Structures*, 9, Article

- No. 11. <https://doi.org/10.1186/s40008-020-0187-6>
- Erduman, Y., Eren, O., & Gül, S. (2020). Import Content of Turkish Production and Exports: A Sectoral Analysis. *Central Bank Review*, 20, 155-168. <https://doi.org/10.1016/j.cbrev.2020.07.001>
- Hale, W. (2023). *The Political and Economic Development of Modern Türkiye*. Routledge. <https://doi.org/10.4324/9781003420538>
- Jovičić, E., Stevanović, S., & Beraha, I. (2020). Serbia-China Bilateral Trade Relations: Major Challenges and Opportunities. *Economic Analysis*, 53, 133-144. <https://doi.org/10.28934/ea.20.53.2.pp133-144>
- Kumar, S., Maheshwari, V., Prabhu, J., Prasanna, M., Jayalakshmi, P., Suganya, P., & Jothikumar, R. (2020). Social Economic Impact of COVID-19 Outbreak in India. *International Journal of Pervasive Computing and Communications*, 16, 309-319. <https://doi.org/10.1108/ijpcc-06-2020-0053>
- Kutlay, M., & Öniş, Z. (2021). Turkish Foreign Policy in a Post-Western Order: Strategic Autonomy or New Forms of Dependence? *International Affairs*, 97, 1085-1104. <https://doi.org/10.1093/ia/iab094>
- Levy Yeyati, E., & Filippini, E. L. (2021). *Social and Economic Impact of COVID-19*. Documento de Trabajo. Universidad Torcuato Di Tella. Escuela de Gobierno. <https://repositorio.utdt.edu/handle/20.500.13098/13087>
- Maital, S., & Barzani, E. (2020). *The Global Economic Impact of COVID-19: A Summary of Research*. Samuel Neaman Institute for National Policy Research. <https://www.neaman.org.il/wp-content/uploads/2024/02/Global-Economic-Impact-of-COVID19.pdf>
- Margiansyah, D. (2020). Revisiting Indonesia's Economic Diplomacy in the Age of Disruption: Towards Digital Economy and Innovation Diplomacy. *JAS (Journal of ASEAN Studies)*, 8, 15-39. <https://doi.org/10.21512/jas.v8i1.6433>
- Mensah, C. N., Long, X., Dauda, L., Boamah, K. B., Salman, M., Appiah-Twum, F. et al. (2019). Technological Innovation and Green Growth in the Organization for Economic Cooperation and Development Economies. *Journal of Cleaner Production*, 240, Article ID: 118204. <https://doi.org/10.1016/j.jclepro.2019.118204>
- Oksuz, E., Malhan, S., Gonen, M. S., Kutlubay, Z., Keskindemirci, Y., & Tabak, F. (2021). COVID-19 Healthcare Cost and Length of Hospital Stay in Türkiye: Retrospective Analysis from the First Peak of the Pandemic. *Health Economics Review*, 11, Article No. 39. <https://doi.org/10.1186/s13561-021-00338-8>
- Öncü, M. A., Yildirim, S., Bostanci, S., & Erdoğan, F. (2021). The Effect of COVID-19 Pandemic on Health Management and Health Services: A Case of Türkiye. *Düzce Tıp Fakültesi Dergisi*, 23, 61-70. <https://doi.org/10.18678/dtfd.860733>
- Öniş, Z. (2019). Türkiye under the Challenge of State Capitalism: The Political Economy of the Late AKP Era. *Southeast European and Black Sea Studies*, 19, 201-225. <https://doi.org/10.1080/14683857.2019.1594856>
- Orhangazi, Ö., & Yeldan, A. E. (2021). The Re-Making of the Turkish Crisis. *Development and Change*, 52, 460-503. <https://doi.org/10.1111/dech.12644>
- Ozer-Imer, I., & Kilic, E. C. (2021). Reciprocal Dependencies: Türkiye-Iran Trade Relations since the Turn of the 21st Century. *Middle East Policy*, 28, 217-227. <https://doi.org/10.1111/mepo.12580>
- Öztürk, Ö., Şişman, M. Y., Uslu, H., & Çitak, F. (2020). Effects of COVID-19 Outbreak on Turkish Stock Market: A Sectoral-Level Analysis. *Hitit Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 13, 56-68. <https://doi.org/10.17218/hititsosbil.728146>

- Rana, P. B., & Ji, X. (2020). *China's Belt and Road Initiative*. Springer Singapore.  
<https://doi.org/10.1007/978-981-15-5171-0>
- Scott, R. E., & Mokhiber, Z. (2020). *Growing China Trade Deficit Cost 3.7 Million American Jobs between 2001 and 2018: Jobs Lost in Every US State and Congressional District*. Economic Policy Institute.  
[https://app.overton.io/document.php?policy\\_document\\_id=economicpolicyinstitute-38e3b94ad661899b25d26f48c4596ab6](https://app.overton.io/document.php?policy_document_id=economicpolicyinstitute-38e3b94ad661899b25d26f48c4596ab6)
- Su, C., Khan, K., Umar, M., & Zhang, W. (2021). Does Renewable Energy Redefine Geopolitical Risks? *Energy Policy*, 158, Article ID: 112566.  
<https://doi.org/10.1016/j.enpol.2021.112566>
- Wang, Q., & Zhang, F. (2021). What Does the China's Economic Recovery after COVID-19 Pandemic Mean for the Economic Growth and Energy Consumption of Other Countries? *Journal of Cleaner Production*, 295, Article ID: 126265.  
<https://doi.org/10.1016/j.jclepro.2021.126265>
- Yilmaz, B. (2022). *Trade Relations between China and Türkiye: A Comparison with the European Union*. Working Paper/Research Division Asia.