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FINANCING FOREING TRADE IN TURKEY UNDER 2020 CORONA VIRUS COVID-19 PANDEMICS

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ABSTRACT
Purpose- The study aims to estimate the export income of Turkey under the effects Corona Virus Covid 19 Pandemics of 2020.
Methodology- The study employs descriptive statistics analyses for macroeconomic indicators of leading export markets of Turkish economy.
Findings- **T**he analysis shows that Turkish Economy export income would decline 30 percent relative to 2019 due to sudden shock and lockdowns and losses, deaths and illnesses during the first quarter of 2020.
Conclusion- The World Economy has been expected to shrink 3 percent at 2020. This is larger than 1.68 percent decline in growth rate at 2009. In 2009 financial crises, Turkish export volume decreased %30 in 2009. At 2020, the export of Turkey would decrease 30 per cent due to decline of import demand of major export markets of EU, OECD and member countries of Islamic Cooperation Countries. However, the World Bank and IMF's expectations suggest rapid growth in the World economy at 2021.

Keywords: International trade, export volume, current account, Turkish economy, corona virus covi-19, pandemics
JEL Codes: F10, F11, F14

1. INTRODUCTION

This study aims to estimate the change in export of Turkish economy after the changes on the World economy due the declaration pandemics of Coronavirus Covidien 19 2020. The number of patients and deaths due CoronaVirus Covid 19 related illnesses increased all over the world since January 15, 2020. The physical distance was only recommended measures to stop the contagiousness of the disease necessitated a break in production in many economies, especially in many service sectors. In this paper, after analysing previous economic crises and their effects in the World economy, the pandemics of Coronavirus Covid 19 on Turkish export will be examined by analysing

2. LITERATURE REVIEW

In literature, firstly, the definition of depression has been reviewed. Later, the relationship between gross domestic product, and international trade since gross domestic products is one of the main indicators in assessment of effects of crises in the national and the World economy. No single definition of the depression is available, depression can be described as an economic collapse in production due to high and unavoidable high unemployment rates. The most important difference between the recession and the crisis is that the economy can easily recover with the automatic correction response of the government policies and markets, and recovery from the crisis is not so easy under depression (Samuelson, 2012).

The one of the first determinant of depression concerns with the gross domestic product. The economic effects of economic depression may be measured a change in gross domestic product. Gross Domestic Product (GDP) was firstly proposed by Kuznet (1934) as a macroeconomic indicator. In economy books, GDP is expressed as the sum of the final products produced in a country using all the country's production factors over a period of time In the expenditures approach, the export expenditures, which are the expenditures made by the residents in the economies of other countries, especially the expenditures made by the consumers in one country, become important. Imports, which means spending on the products produced by other countries without the calculation by the expenditure method, are also subjects of a country's economy and similarly closely related to the world economy. It is precisely at this point that Kuznet, which Fioramonti () interprets as the strongest number in the world, gains importance to the GDP and its change on other components of the economy. GDP continued to be an important indicator in the second world war after the 1929 great depression (Fiaramonti, 2014). This proposal presented by Kuznet (1934) to Congress was important enough to be awarded with Nobel later. Economic crisis that started in 1929 eliminated almost every manufacturing country and all food and raw material producers.

GDP is a recent indicator for measuring the size of economic output. Early definitions of "national income" does not include government spending since governments had limited function in the economy earlier than the 1929 economic depression (Coyle,2014). Although government expenditure for the World War II made need for the modern definition of GDP. The collection of statistics for GDP and the national accounts made the development of macroeconomics policy tools to influence growth. GDP became one of the good measure for national income. Change on it became good indicators to predict the length of economic crises and deepness by comparing GDP over time and across countries.

GDP = consumption + government expenditures + investments + (exports – imports)

While consumption, investment, imports are directly affected by domestic policies, exports depend entirely on the fiscal and monetary policies of the countries that are exported. Therefore, how much of the export will depend on the supply depends on the demand of the products exported in the target country.

In Adam Smith (1776), David Ricardo (1835), Hecksher Ohlin theories (1935), new trade theories were the main theoretical explanation for liberalization of markets in all countries. The main argument for raising the welfare of the countries. One of the main cr iteria to raise welfare an increase in gross domestic product, employment, consumption. All these theories make very strong connection between gross domestic product and international trade. Following 1979 Washington Consensus (1979), neoliberalizm became the main stream of thought for the developing economies and developed economies of the World. This new trend was different approach of 1929 great depression. The effect of great depression so strong that many of the economies followed protectionary policies and they imposed high import taxes for the products imported from the other countries for increasing their own production. However, for developing countries, export led growth strategy of Balassa (1978) was the main policy choice for the developing countries. In this mutual trade activity, developing countries should export to other while the others import.Large numbers of studies measure the effects of economic crises on international trade. Lee (1969) is one of them. Lee's (1969) study explained that 1920s followed by the main effects of depression on trade, production, prices and investment, and how they affected national income, employment and consumption during the period of great depression of 1929. Therefore, the most important macroeconomic indicator for determining of export volume of the country depends on importing country macroeconomic indicators, specifically import function.Yadav(1977) did one of the first studies on Canadian import demand. Study finds that Canadian import demand is homogeneous in prices and import prices are affected from two factors two components: the foreign exchange export price and the exchange rate. Deaton and Muelbauer (1980) demand functions of import are regarded as homogeneous of degree zero in prices. Abbott and Seddighi (1996) focused on an increase negative import elasticity. Bahmani-Oskooee and Niroomand (1998) studied aggregate model of import demand functions for 30 countries during economic crises and argued that the expectation of an increase in domestic income should lead positive income elasticity (Bahmani- Oskooee and Niroomand, 1988). In their other study, Bahmanii Oskooee and Kara (2003) argued the import and export demand functions for industrialized countries such as Australia, Canada, Denmark, and the U.S and use conventional import model by decomposing GDP into its three board components- final consumption expenditure, expenditures on investment goods and net exports. Then the specified model is as follows;

$$Mt= f(FCt, It, Xt, RPt)$$

According to Samuelson (2012), the source of modern crises depends on the measures taken against institutions and events. In 2008, Government spending in Europe is routinely 40 percent or more of national income. In United States, it exceeds one third to provide welfare state conditions (Samuelson,2012).Levchenko, Logan and Tesar (2010) argued 2008 recession caused a collapse in international trade by using. U.S. imports and exports data The 40 percent decline in trade relative to overall economic activity is larger than in previous crises (Levchenko et al, 2010). Wang and Whalley (2010) measured the impact of China, India, Japan, Korea, Malaysia, Taiwan, and Thailand on their foreign trade in the first months of the 2009 crisis. shows that monthly exports decreased by 26.3%, 37.1%, 49.4%, 15.4%, 29.8%, 26.6% and 44.4% respectively. Monthly imports decreased by 43.1%, 37.3%, 42.7%, 24.3%, 30.3%, 40.3% and 56.6%, in part due to the drop in oil prices. Only, Korea had the best performance due to a smaller decline and a quick recovery. Japan's trade had serious and long-term effects in exports and imports.Wang and Whalley (2010)also compare this performance both with that of the North American and European economies in the 1930s and with that of the severely impacted Asian economies in the 1997-1998. Asian financial crisis.Allessandria, Kaboski and Midrigan (2010) examined the effects of 2008 on international trade also. The size of production,trade and inventories declined at similar quantity to those observed in the current and previous recessions. From August 2008 to April 2009, the US had 27% (non-oil) import and export decline. This collapse was significantly greater than the 15 percent drop in manufacturing industry production, and was also common on a global level. Eaton, Kortum, Neiman and Romalis (2016) used a multi-country general equilibrium model for 21 countries to measure effects of the Great Recession and find out 29 percent drop in world trade in manufactures during 2008-2009.

3. DATA AND METHODOLOGY

For this purpose, in addition to literature review, descriptive statistics analysis have been used. The World Banks Statistics for gross domestic product, import, export have been used. The data covers the period from 2000 to 2019. This period has specifically chosen since data covers effects of 2001 and 2008-2009 financial crisis in Turkey. Turkey's export statistics have been taken from Turkiye Statics Institute.

4. FINDINGS

While the epidemic threatened health and lives, it also caused an economic crisis. Leading international organizations such as the World Bank and IMF anticipate that the world economy will shrink by 3% in 2020. This contraction is called the biggest economic crisis in the world, after the great crisis of the world economy in 1929(IMF,2020)

The COVID-19 crisis caused dramatic supply and demand shocks in the world economy and that these shocks inevitably cause major disruptions in trade. World Trade Organization economists predict that trade will fall sharply in every r egion of the world and in all sectors of the economy. In an optimistic scenario, global trade volume in commodity volumes may drop by 13% in 2020. If the pandemic is not brought under control and governments cannot coordinate policy responses, the decline may be 32% or more. Two factors will determine the healing power of the World Economy. The first is how quickly the epidemic disease is controlled. And second, policy choices by governments (Azevedo, 2020) https://www.wto.org/english/news_e/pres20_e/pr855_e.htm)

In this paper, using the data obtained from the World Bank for the total World GDP growth rate and the Turkey export statistics from TUIK, the change in export volume for the 2020 has been estimated. Since this is sudden and simultaneous shock in World demand and supply due to coronavirus pandemics 2020, in the model, only the growth rate of World GDP has been taken into consideration. The other changes, like, price elasticity of products exported, foreign exchange rate volatility have not been studied. In simple model, it is considered that, GDP growth rate change with the import demand function of export destination country. Literature review showed that countries import demand depends on their GDP and change in GDP (GDP growth rate) is one of the important determinant of import demand. Turkey' export volume depends on the import demand function of countries exported.

Table 1: Comparable Analysis of Turkey With 2009 Financial Crises in Terms of GDP, Export Statistics

	GDP Growth Rate %				Turkey Export	Change %	European	Share of EU	Change in Total	Export to Countries	Change in Export
Years	World	Turkey	OECD	EU	Million USD $	Change	Million USD$	%	%	Billion USD$	%
2003	2,96	5,61	2,04	0,93	36059		27474	76,2		8585	
2004	4,40	9,64	3,20	2,60	47253	23,7	36699	77,7	25,1	10554	18,7
2005	3,91	9,01	2,81	1,93	63167	25,2	41527	65,7	11,6	21640	51,2
2006	4,38	7,11	3,08	3,49	85534	26,1	48136	56,3	13,7	49924	56,7
2007	4,32	5,03	2,70	3,16	107272	20,3	60745	56,6	20,8	55153	9,5
2008	1,85	0,85	0,25	0,65	132027	18,7	63708	48,3	4,7	76478	27,9
2009	-1,68	-4,70	-3,47	-4,33	102143	-29,3	47227	46,2	-34,9	60854	-25,7
2010	4,30	8,49	2,92	2,21	113883	10,3	52933	46,5	10,8	68186	10,8
2011	3,13	11,11	1,82	1,83	134906	15,6	62587	46,4	15,4	80470	15,3
2012	2,51	4,79	1,26	-0,75	152461	11,5	59394	39,0	-5,4	101761	20,9
2013	2,66	8,49	1,48	-0,06	161481	5,6	67365	41,7	11,8	94116	-8,1
2014	2,84	5,17	2,04	1,58	166505	3,0	72357	43,5	6,9	94148	0,0
2015	2,86	6,09	2,42	2,35	150982	-10,3	67301	44,6	-7,5	83681	-12,5
2016	2,59	3,18	1,74	2,06	149247	-1,2	71943	48,2	6,5	77304	-8,2
2017	3,20	7,47	2,47	2,72	164495	9,3	77920	47,4	7,7	86575	10,7
2018	3,1	2,8	2,3	2,1	177169	7,2	88903	50,2	12,4	88266	1,9
2019	2,9	0,9			180836	2,0	76728	42,4	-15,9	104108	15,2
2020	-3,0	-4,0		-12,0	131081	-28	53000	42,4	-30	78081	-25

As a result of descriptive statistics analysis, it may be argued that Turkish economy would decline 30 percent in 2020 due to decline in World economy GDP.

5. CONCLUSION

Turkish economy export volume have been estimated depending on the literature review of 1929 great depression and 2008 financial crises of the World. The World Economy would shrink 3 percent in the World Gross Domestic Product in 2020. This shrinkage is larger than 1.68 percent decline of 2008 financial crisis in 2009. At 2020, the export of Turkey would decrease 30 percent due to decline of import demand of major export markets of EU, OECD and member countries of Islamic Cooperation Countries. However, the World Bank and IMF's expectations suggest rapid growth in the World economy at 2021.

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