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The Evaluations and Researches in Administrative and Economic Sciences

THE EVALUATIONS RESEARCHES IN ADMINISTRATIVE ECONOMIC SCIENCES

Editor

Prof. Dr. Ilyas KARABIYIK

Social Sciences



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Lyon 2021

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FOREWORD

In the field of Social Sciences, the Economic and Administrative Sciences cover a broad range, consisting of interconnected disciplines. The common ground of these disciplines can be worded as developing new approaches and perspectives, as well as solutions, to various social problems. Academic reviews, assessments, discussions, research and findings on this broad scientific spectrum contribute significantly to the formation of the Economic and Administrative Sciences literature.

This editorial book, which is created by gathering the works of various academicians under the umbrella of Economic and Administrative Sciences, consists of original studies on management, economics and political sciences. Each study will benefit both the academia and the readers who are interested in the field with its unique identity. The studies are sorted alphabetically based on the names of their respective authors.

As this book is a product of common efforts, I would like to thank everyone who contributed for their efforts, the writers of different chapters, and the publishing house and its employees, and hope that this book benefits greatly the academia and the readers interested in its subjects.

Prof. Dr. İlyas KARABIYIK
Editor

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CHAPTER I

THE COVID-19 PANDEMIC, DETERIORATION OF ECONOMIC STRUCTURE AND FISCAL MEASURES: AN EVALUATION FOR ADVANCED G20 ECONOMIES

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1. Introduction

The Covid-19 pandemic has adversely affected all the world. The number of confirmed cases and deaths has reached high levels. The confirmed cases has reached to 170 million person and the deaths has reached to 3,5 million person globally¹ (World Health Organization [WHO], 2021b). Even the advanced economies have been adversely affected by the pandemic. The Advanced G20 Economies cover %34 of the confirmed cases and %33,3 of the deaths in related to Covid-19 pandemic in the world (WHO, 2021b). Moreover the deaths and confirmed cases remain to be seen in related to Covid-19 pandemic in the world. The increase of the confirmed cases and deaths due to Covid-19 pandemic has lead to the deterioration of economic structure in the world. And also Advanced G20 Economies have faced with the deterioration of the economic structure during Covid-19 pandemic. This is because the pandemic has stopped life. The economic structure has been affected by the Covid-19 pandemic at different levels in the Advanced G20 Economies.

¹ For 24 May 2021

The deterioration of the economic structure means that decrease of the government revenue, GDP and the increase of the government expenditure, government gross debt, government primary deficit, unemployment rate. These indicators show the situation of the economic structure. The implement of the fiscal measures and the vaccination practices in response to Covid-19 pandemic will lead to the improvement of the economic structure. The announced fiscal measures will slow down and gradually eliminate the economic deterioration. As a result of the fully vaccinated population, it will be possible to increase of level of the immunity to Covid-19 pandemic that could slow or stop transmission of the virus. In this way, the economic structure will become operational.

The purpose of this study is evaluate the effect of the Covid-19 pandemic on the deterioration of the economic structure and examine the composition and size of the fiscal measures in response to the Covid-19 pandemic for the Advanced G20 Economies. In this context, the situation of the Covid 19 pandemic has been evaluated. Then the conceptual framework on which channels and determinants the Covid-19 pandemic affects the economic structure is presented. In addition, the indicators of the deterioration in the economic structure are discussed. Later it was examined the fiscal measures announced by the Advanced G20 Economies during the Covid-19 pandemic. In the last section, it has been evaluated whether the pandemic has adversely affected the economic structure.

2. The Stuation of Covid-19 Pandemic

A pandemic is defined as “an epidemic occurring worldwide, or over a very wide area, crossing international boundaries and usually affecting a large number of people” (Barnett, 2011:540). The COVID-19 pandemic, also known as the coronavirus pandemic, is an ongoing global pandemic of coronavirus disease 2019 (COVID-19) caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). The virus was first identified in December 2019 in Wuhan, China (WHO, 2020). Globally have been 166.346.635 confirmed cases of COVID-19 and included 3.449.117 deaths, reported to WHO on 23 May 2021 (WHO, 2021b).

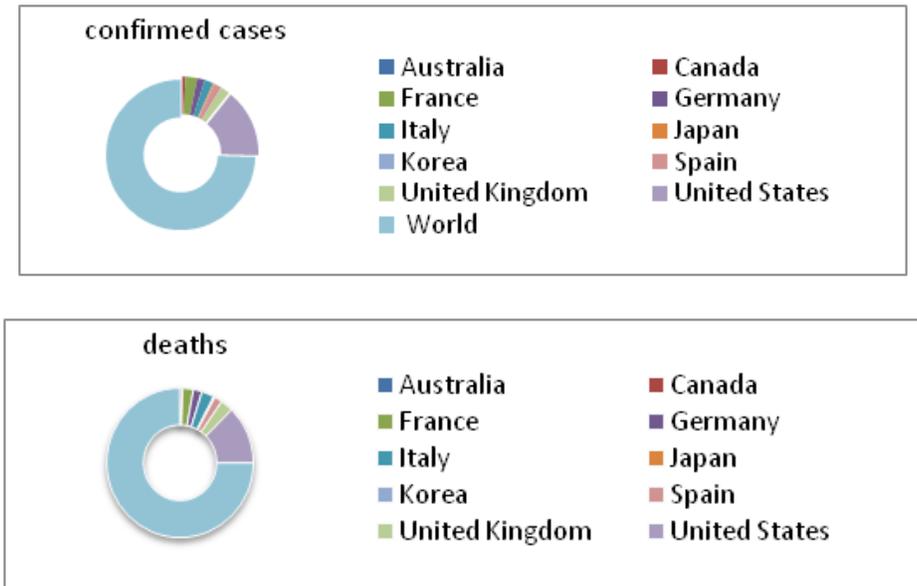


Figure 1: The Share of Confirmed Cases and the Deaths due to Covid-19 Pandemic for Advanced G20 Economies

Source: WHO (2021b)

Advanced G20 Economies are among the economies affected widely by the Covid-19 pandemic. Advanced G20 Economies cover %34 of the confirmed cases and % 33,3 of deaths due to Covid-19 pandemic of the World. The share of confirmed cases and the share of deaths due to Covid-19 pandemic for Advanced G20 Economies are shown in Figure 1. The largest share belongs to United States for the confirmed cases and deaths due to Covid-19 pandemic.

The shares of the United Kingdom, Spain, France, Germany and Italy are also relatively large in terms of the confirmed cases and the deaths due to Covid-19 pandemic.

Vaccination practices are carried out to control the Covid-19 pandemic. In this way, the immunity level is expected to increase against Covid-19. The impact of Covid-19 vaccines on the pandemic will depend on several factors. This factors include the effectiveness of the vaccines; how quickly the approved, manufactured, and delivered; the possible development of other variants and how many people get vaccinated (WHO, 2021a).

The percentage of the population fully vaccinated helps us understand how close a particular country is to achieving a level of immunity that could slow or stop transmission of the virus. The percentage of the population fully vaccinated is shown in Figure 2.

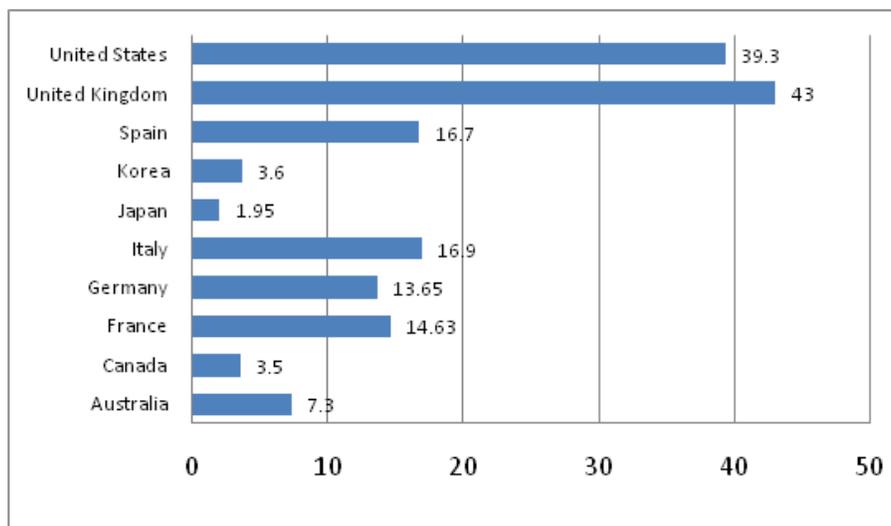


Figure 2: The Percentage of the Population Fully Vaccinated

Source: John Hopkins University & Medicine Coronavirus Research Center Covid-19 Statistics (for United States, Spain, Japan, Germany and France), coronavirus.data.gov.uk (for United Kingdom), Our world in data (for Italy), Korea Disease Control and Prevention Agency, (for Korea), Reuters Covid 19 Tracker (for Australia).

United Kingdom and United States are located at first row in the population fully vaccinated in Advanced G20 Economies. So United Kingdom and United States close are close to achieving a level of immunity that could slow or stop transmission of the virus if this sort does not change.

3. Conceptual Framework for Advanced Economies

It is shown the conceptual framework for Advanced Economies in Figure 3. The deterioration of economic structure in related to the decrease of government revenue, output, government gross debt, government primary balance and unemployment rate increased when the increase of the

confirmed cases and deaths due to Covid-19 pandemic. Some factors such as the proportion of “remote workable” jobs, share of employment in small and medium-sized enterprises (SMEs), depth of capital markets, size of the informal sector and quality and access of the digital infrastructure, size of the sunk costs (irreversible expenses and sources) were effective on the deterioration of economic structure. The governments are implemented the fiscal measures such as above the line measures and liquidity supports for economic improvement. The size and scope of fiscal measures differs between countries due to the impact of the Covid-19 pandemic and the ability to access low-cost borrowing.

The vaccination practices are increasing in related to Covid-19 pandemic. The efficiency of vaccination practices depend on some factors such as the possible development of other variants, how quickly the approved, manufacturing and delivered, effectiveness of the vaccines, how many people get vaccinated or fully vaccinated. The increase of vaccination practices in response to Covid-19 pandemic will cause the increase in level of the immunity to Covid-19 **that could slow or stop transmission of the virus**. The increase of vaccination practices and implemented by governments the fiscal measures will ensure improvement the deterioration of economic structure. This improvements state the increase of the government expenditure, government revenue, output and the decrease of the government gross debt, government primary deficit, unemployment rate. The size of improvement of economic structure depends on some factors such as the country-specific factors, the cross-border spreads, the size and composition of political support. Moreover international coordination on exit policies and accelerating the production, distribution of vaccines through intensive cooperation on vaccination will increase the improvement of economic structure. The fiscal measures will decrease gradually when the negative effect of the pandemic decreases and the economic structure improves. Then adapting political will should ensure responses to different stages of the Covid-19 pandemic. As well as structural transformations such as supporting vocational training, providing recruitment incentives instead of support policies will should implement.

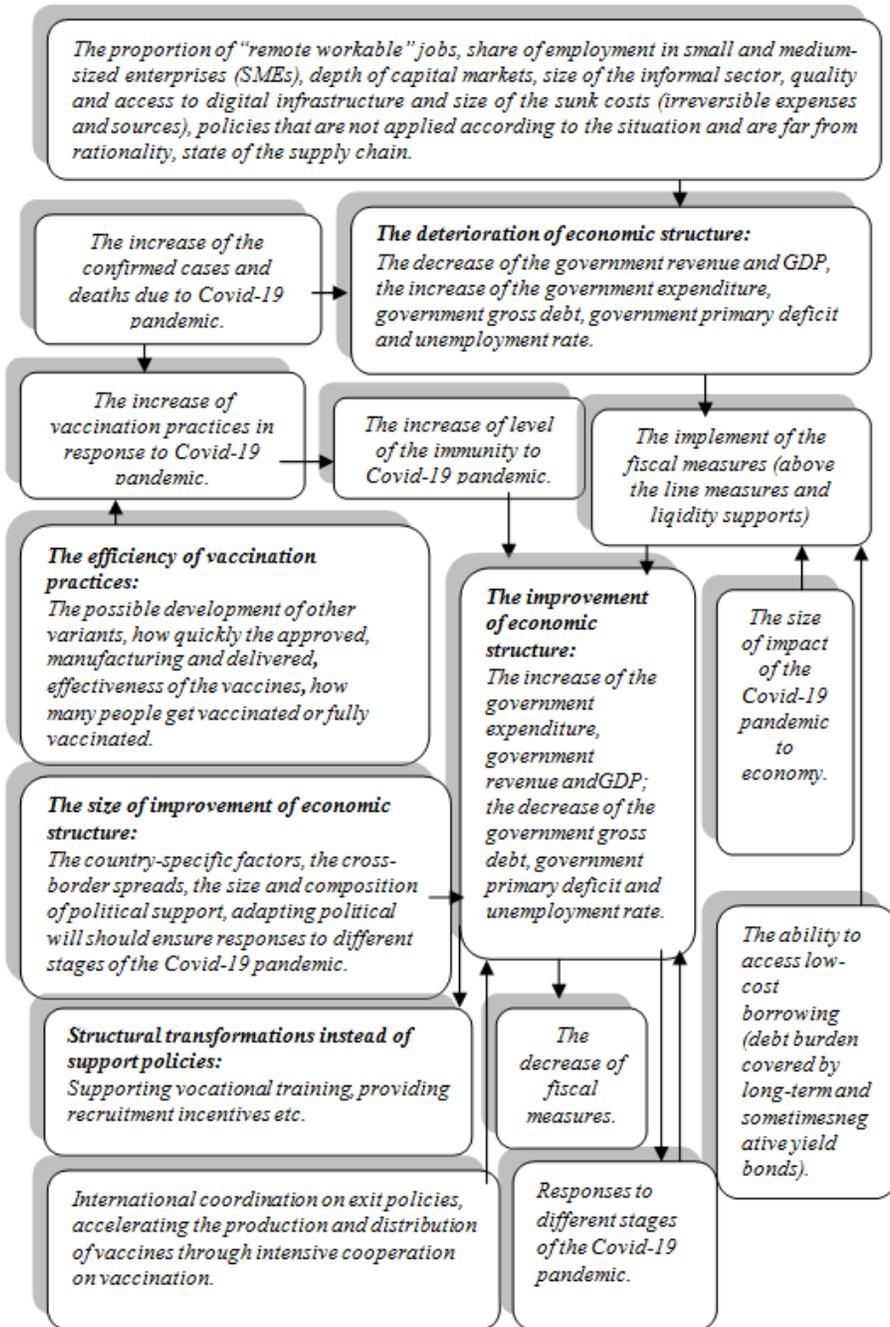


Figure 3: The Conceptual Framework for Advanced Economies

Firstly the general government gross debt (GDP%), which the indicator of economic deterioration, is shown from 2019 to 2021 in Figure 4. In all Advanced

G20 Economies, there has been an increase in the share of general government gross debt in GDP. In Advanced G20

Economies, the share of general government gross debt in GDP increased around average 21%. The increase in Australia (25%), Canada (30%), United States (24,6%), Spain (23%), Italy (22,5%) and Japan (21,4%) are higher than the average while the increase in Korea (11%) and France (17%) is lower than the average from 2019 to 2020. But the increase in other countries are around the average from 2019 to 2020.

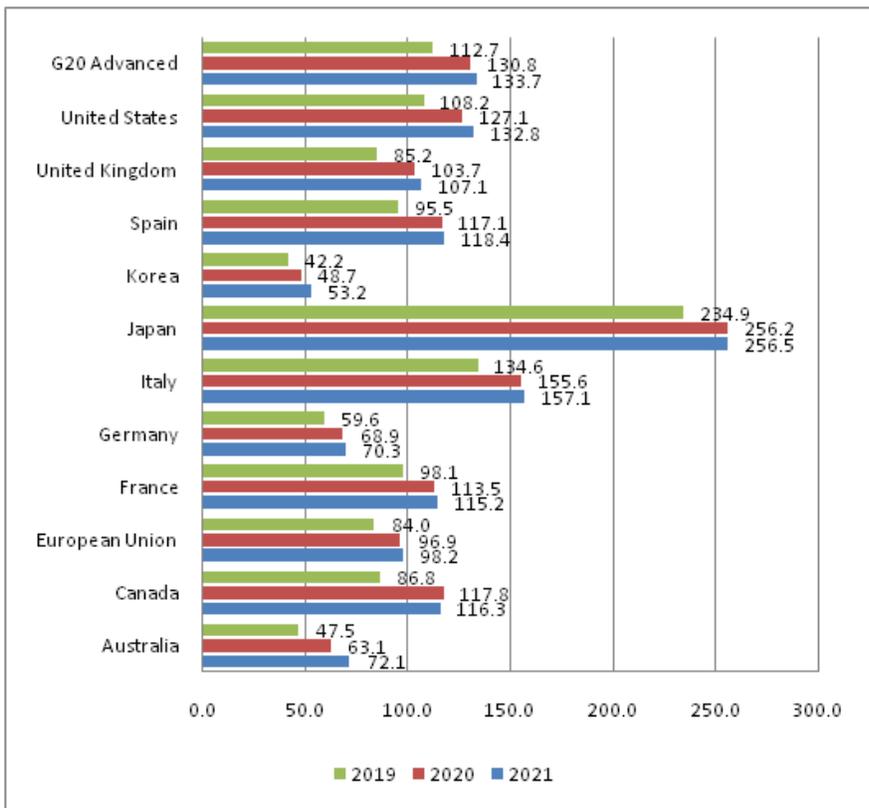


Figure 4: The General Government Gross Debt (GDP%) by Period

Source: Fiscal Monitor Database April 2021, IMF staff estimates

*For cross-economy comparison, gross debt levels reported by national statistical agencies for economies that have adopted the 2008 System of National Accounts (Australia, Canada, United States) are adjusted to exclude unfunded pension liabilities of government employees' defined-benefit pension plans.

Secondly the general government primary balance (GDP%), which the indicator of economic deterioration, is shown from 2019 to 2021 in Figure 5. The primary

balance is defined as the difference between government’s revenue (earning) and its non-interest expenditure (spending, not including debt payments).

This difference can be measured as a percentage of GDP. The primary balance (deficit/surplus)² is the government fiscal balance, excluding interest payments. According to Figure 5, the general government primary deficit (GDP%) increased the average around 8% in Advanced G20 Economies excluding Korea from 2019 to 2021. The increase in Korea is lower than the average relatively from 2019 to 2021. The increase in United States (9,9%) and United Kingdom (9,7%) are higher than the average.

Thirdly the general government revenue (GDP%), which the indicator of economic deterioration, is shown from 2019 to 2021 for Advaced G20 Economies in Figure 6.

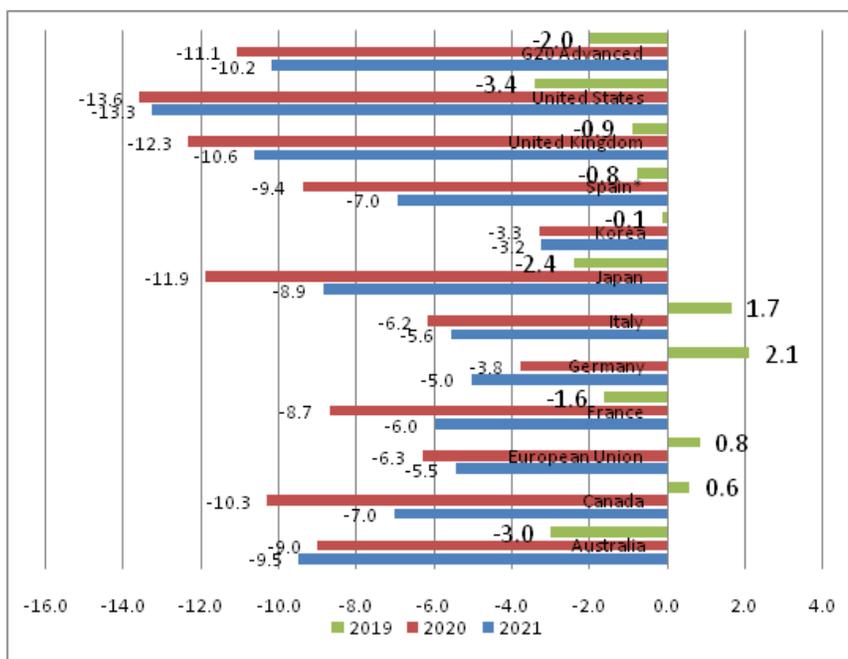


Figure 5: The General Government Primary Balance (GDP%) by Period

Source: Fiscal Monitor Database April 2021, IMF staff estimates

*Data include financial-sector support.

The general government revenue (GDP%) decreased in United Kingdom, Korea, Japan, Germany, Canada, Australia as well as decreased as average in Advaced G20 Economies but increased in Spain and Italy.

² Primary Balance = Overall Fiscal Balance – Government Interest Payments.

The general government expenditure, which the other indicator of economic deterioration, is shown from 2019 to 2021 for Advanced G20 Economies in Figure 7. General government expenditure (GDP%) increased in the all Advanced G20 Economies. This increase is around %9 as average. The largest increase occurred in United Kingdom (8,6%) and United States (9,3%).

The unemployment rate (percent of labour force), which the other indicator of economic deterioration, is shown from 2019Q4 to 2020Q4 for Advanced G20 Economies in Figure 8. The negative impact of the Covid-19 pandemic is clearly seen in Canada and United States in 2020Q4. Other countries have been relatively less negative affected by the Covid-19 pandemic.

GDP total percentage change to previous change, which the other indicator of economic deterioration, is shown for Advanced G20 Economies from 2019Q4 to 2021Q1 in the Figure 9.

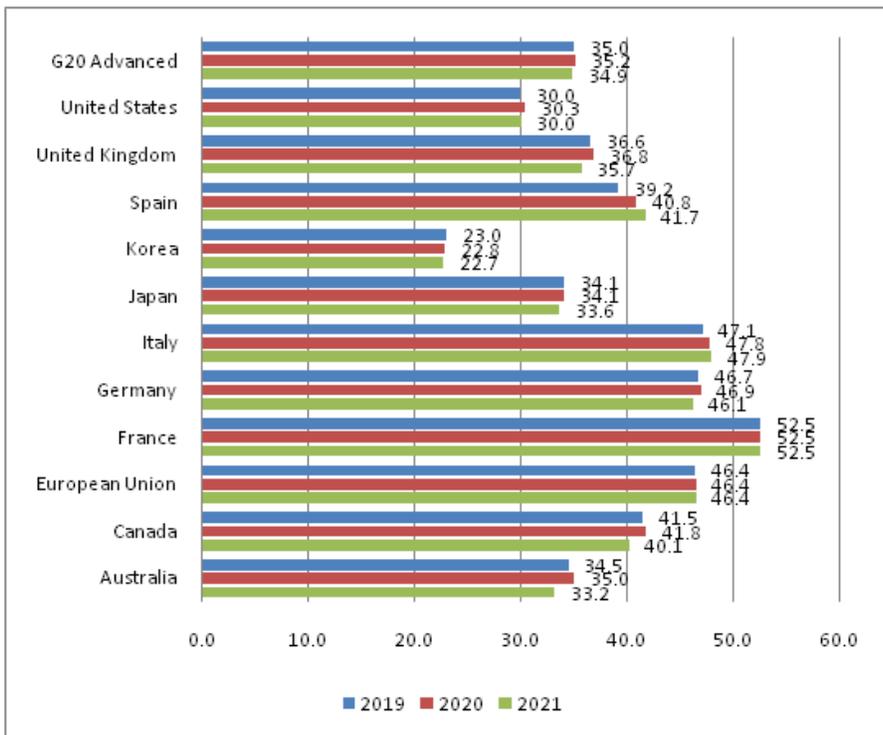


Figure 6: General Government Revenue (GDP%) by period
 Source: Fiscal Monitor Database April 2021, IMF Staff Estimates

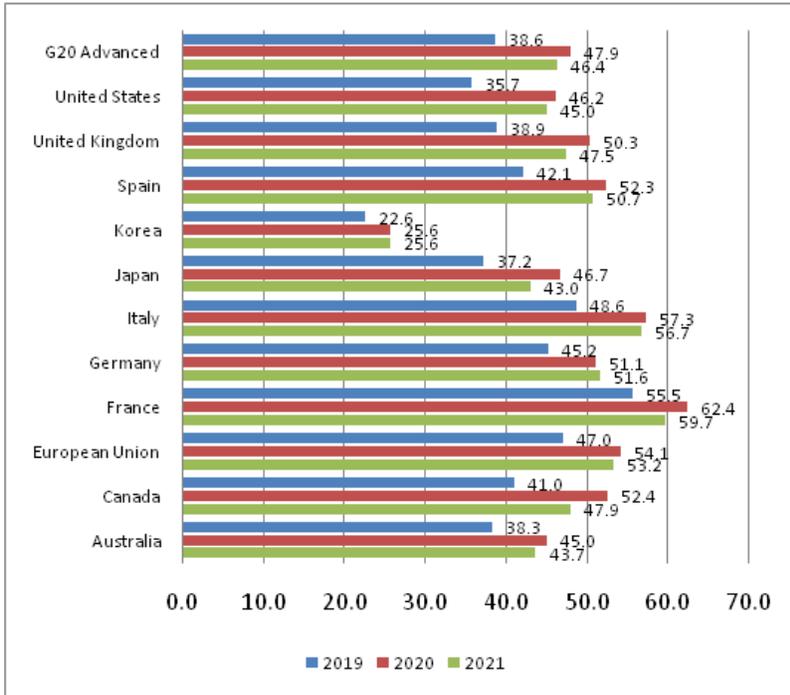


Figure 7: General Government Expenditure (GDP%) by period
 Source: Fiscal Monitor Database April 2021, IMF Staff Estimates

The negative impact of the COVID-19 pandemic is clearly seen in all countries in 2020Q4. There was a recovery in GDP in all countries in 2020Q3, but a decrease is seen again in 2020Q4 and 2021 Q1.

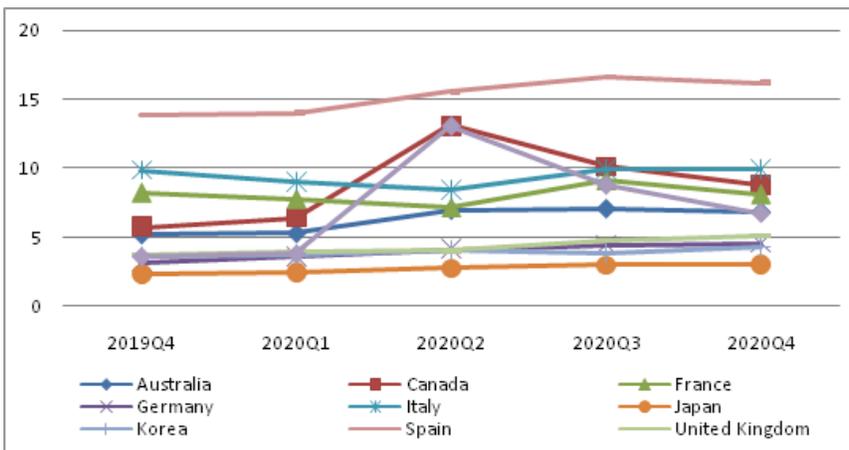


Figure 8: The Unemployment Rate Total (Labor Force %)
 Source: OECD (2021b)

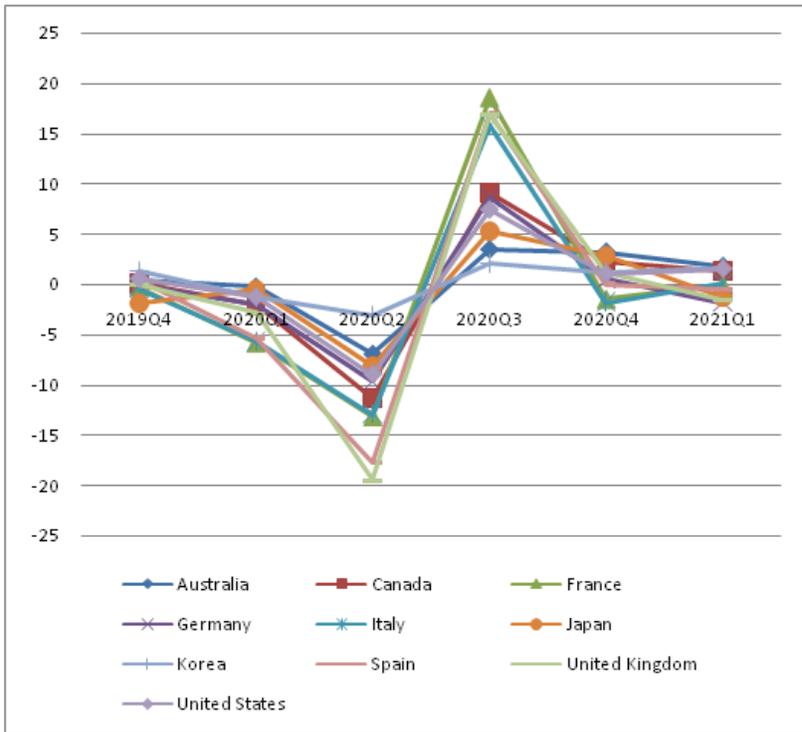


Figure 9: GDP Total Percentage Change, Previous Period
 Source: OECD (2021a)

4. The Fiscal Measures related to Covid-19

Different types of fiscal measures have announced or taken by governments in response to the Covid-19 pandemic. These fiscal measures have been in two categories as above-the-line measures and liquidity supports in the near term and beyond. Above the line measures are consist of the additional spending or forgone revenues and accelerated spending /deferred revenue. Liquidity supports are consist of the below the line measures (equity injections, loans, asset purchase or debt assumptions) and contingent liabilities (guarantees, quasi-fiscal operations) (Unternational Monetary Fund [IMF], 2021a). In Figure 10, above the line measures (2020 GDP%) taken in Advanced G20 Economies is shown.

United Kingdom has taken measures much greater than other countries related to additional spending and forgone revenue (health sector) (2020 GDP%). United Kingdom expanded the number of hospital beds, medical staff and equipment related to additional spending while waived of VAT and customs duties on critical medical import

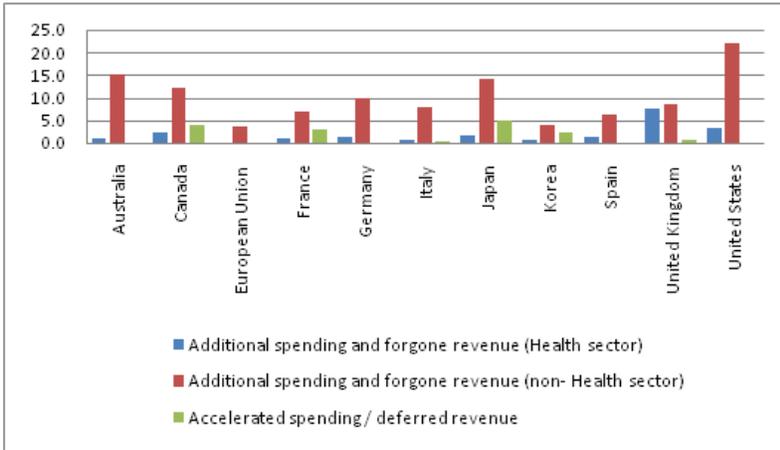


Figure 10: Above the Line Measures (2020 GDP%)

Source: IMF (2021a)

related to forgone revenue. United States approved various acts related to additional spending. These acts include treatments, drug, public health measures, vaccine development, expanding Medicare payments, providing tax advantage for certain medical expense, vaccine distribution, testing/tracing/Covid-19 mitigation programs. Moreover American Rescue Plan (March 12 2021) in the United States for additional spending include vaccine distributions/testing/treating responding to Covid-19, preserving private health coverage of workers during the pandemic, subsidizing health insurance through the government exchange/marketplaces, expanding and supporting Medicaid, CHIPs and Medicare. Besides United States approved related to forgone revenue CARES Act. CARES Act include expansion of qualified medical expenses. Canada announced supports related to personal protective equipment and supplies, reducing import costs to facilitate access to critical medical goods, Covid-19 medical research and vaccine development. Japan announced supports related to epidemic prevention and treatment, expanding diagnostic, expanding treatment facilities, expanding smart medical centers promoting treatment and vaccine development, promoting test-trace-treatment to be a global standard, increasing official development aid of Covid-19 response kits and tools. Spain announced supports related to healthcare including research for Covid-19, health services. Germany announced supports on hospital capacity, medical equipment, research and information campaigns. France announced supports related to streamlining and boosting health insurance for the sick or their caregiver, higher spending

on health supplies, bonuses for health workers, additional investment and equipment in the health sector. Australia announced supports related to primary care, aged care, hospitals, research with Covid-19 (IMF, 2021a).

United States has taken measures much greater than other countries related to additional spending and forgone revenue (non-health sector) (2020 GDP%). United States approved various acts related to additional spending. These acts include two weeks paid sick leave, up to three months emergency leave for those infected, food assistance, free virus testing, federal transfer to states for Medicaid, expanded unemployment insurance, emergency appropriations, forgivable small business loans, Small Business Administration's loans programs, Paycheck Protection Program and small business assistance, households, businesses, education and childcare. The United States Federal Government reallocated from the Department of Homeland Security's Disaster Relief Fund to provide extra unemployment benefits. Moreover American Rescue Plan (Mar 12 2021) included supports for households, business, state-local and triable governments, education. United States approved various acts related to forgone revenue on tax rebate (for Adjusted Gross Income, for employee retention credit for affected employer), expands the usage of the earned income tax credit and child tax credit. Australia spends related to tax-free cash flow assistance, wage subsidies, payments to lower income Australians, Home Builder Program, job hiring credit, infrastructure projects, others for job creation at the Commonwealth government level. Besides Australia spends related to measures include discount utility bills, cash payment to vulnerable household, construction and infrastructure projects at state and local government levels. Japan announced measures related to cash handout per person, lump-sum transfer to affected firms, subsidies for financial institutions' lending, expansion of work subsidies, incentives to accelerate improvement (including for consumption in service sectors and infrastructure investments), transfers to local governments for Covid-19 pandemic, subsidies to affected firms for rent payment, incentives for firms to invest in green technologies, subsidies to accelerate business restructuring of SMEs, extension of the Employment Adjustment Subsidy, transfers to the local governments, enhancing national resilience. Moreover Japan announced measures related to expansion of the loss carry-back and carry-forward schemes, tax incentives for firms' decarbonization and digitalization and reduction of property tax and aviation fuel tax. Canada spends for households related to emergency response benefit, recovery benefits and enhanced employment insurance, wage subsidies and protecting jobs, support to students, seniors and vulnerable groups.

Further Canada spends for businesses related to emergency business account loan forgiveness, emergency commercial rent assistance. Germany spends related to grants to hard hit small businesses and self employed, access to childcare, social security benefits, temporary relief to effected tenants, income support for families, incentivizing green and digital investment. Further Germany announced related to a temporary VAT reduction, corporate tax reliefs, personel income reliefs and social security contribution reduction. Italy spends related to income support to laid-off-workers and the self employed, vouchers for the payment of babysitters, grants for SMEs and education. France announced supports related to wages of workers under the subsidized short-time work scheme, direct financial support for affected small and very small enterprises, liberal professions, independent workers, direct transfers for low income families, extension of expiring unemployment, transfers for self employed, social programs, incentives to purchase greener vehicles, subsidies for green investment to sectors, subsidies for energy renovation of buildings, ecological transformation of the transport sector and the development of clean enegy, social transfer for low-income household. Further France announced measures related to exoneration of social security contributions for affected firms in selected sectors, carry back for corporate income taxes, permanent cuts in production taxes. Spain announced supports related to benefit for workers temporary laid off, reduction of accumulated entitlement, exemptions of social contributions for companies, allowance for self-employed workers, exemption of social contributions for self employed, corporate solvency support, rental assistance programs. Further Spain announced measures related to reduction in VAT for surgical disposable masks, temporary waiver of VAT on purchases of certain medical material as well as Covid-19 tests and vaccines, flexibility in filling income tax and VAT installment payment for SMEs and self-employed, tax incentives for landlords, redution in the contribution for employed agricultural workers. Korea announced measures related to consumption coupons forthe poor, emergency family care support, support for business re-opening, grants to local governments, cash transfers to whole households, supports for companies and employment, supports for unemployed and low income household, rent subsidy for small business owners, income supports for freelancers, supports for SME and vulnerable workers. Further Korea announced measures related to temporary corporate/income tax cuts for landlords who reduce commercial rents, rental fees reduction, reduction in airport facility fees, reduction in port and terminal charges, VAT reduction for the self employed, corporation tax cut for SMEs located in

disaster areas, consumption tax cut for auto purchase, social security contribution cut for households (IMF, 2021a).

Japan has taken measures much greater than other countries related to accelerated spending/deferred revenue (2020 GDP%). Japan announced measures related to deferral of payment of taxes and social security premiums by affected firms and households for one year. Canada announced measures related to deferrals for businesses and self employed, deferred income taxes, deferred GST/HST and custom duties for imports. France announced measures related to accelerated refund of tax credits and postponement of social security contributions and tax payment for companies. Korea announced measures related to tax payment deferral including corporate income tax and VAT, social security contribution payment deferral for households&electricity charge deferral (IMF, 2021a). In Figure 11. liquidity supports (2020 GDP%) announced in Advanced G20 Economies is shown.

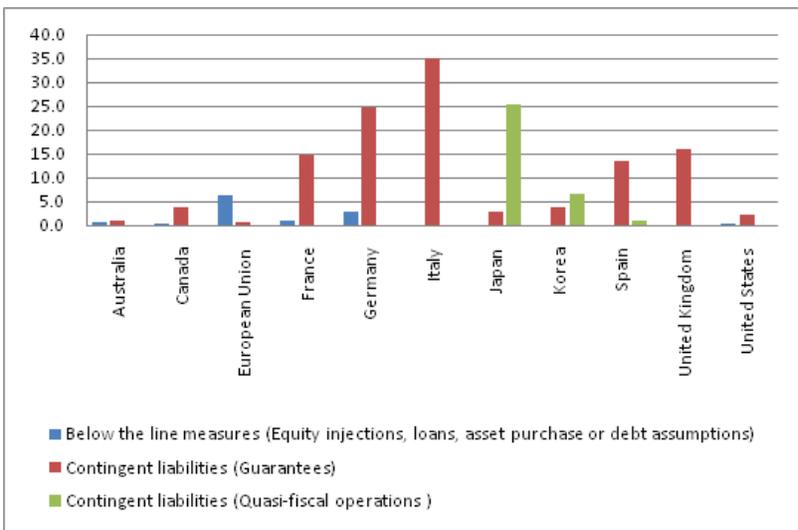


Figure 11: Liquidity Supports (2020 GDP%)
Source: IMF (2021a)

Germany has announced supports much greater than other countries related to below the line measures (equity injections, loans, asset purchase or debt assumptions) (2020 GDP%). Germany announced below the line measures related to support government equity investments affected companies, loan to state development bank for financing affected firms. France announced direct support to firms through direct lending or equity support mostly strategic companies. Australia announced to support continued Access to structured

finance markets used by smaller lenders, providing both consumer credit and business credit. United States announced loans for distress businesses (passenger and cargo air carriers, postal service).

Italy has announced supports much greater than other countries related to contingent liabilities (guarantees) (2020 GDP%). Italy announced contingent liabilities for businesses and households. Germany announced guarantees related to non-financial corporations, alleviate liquidity bottlenecks, support refinancing. United Kingdom announced

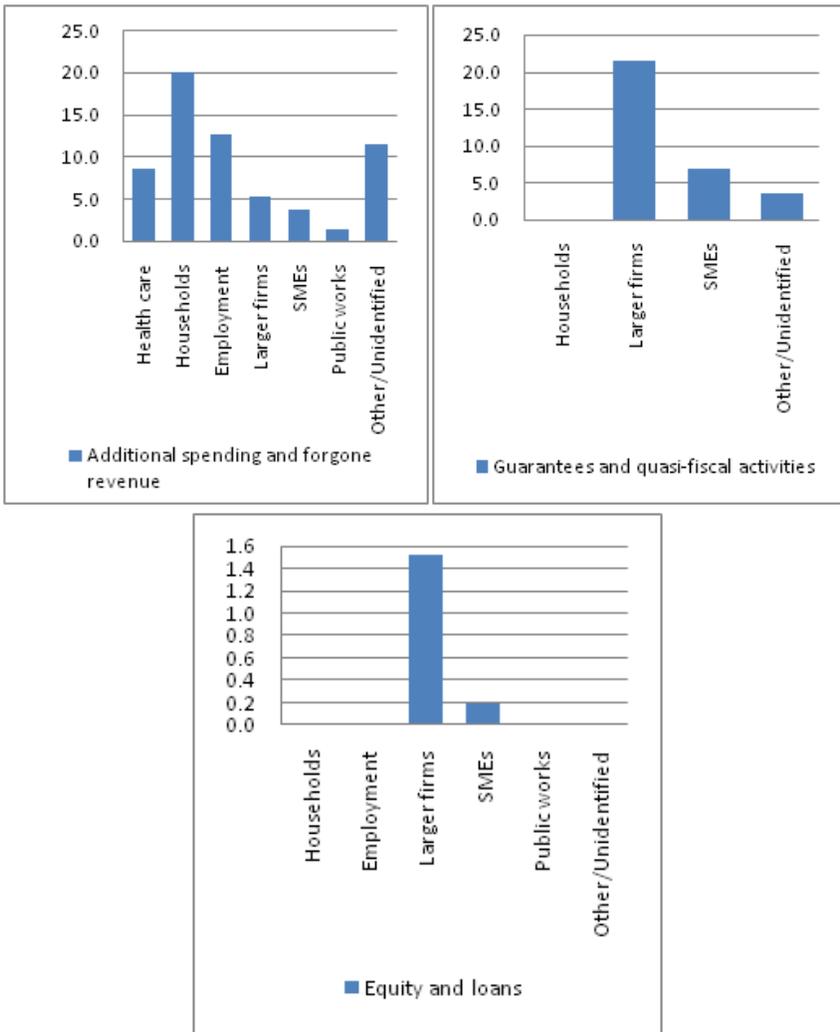


Figure 12: Government Fiscal Support in Response to Covid-19 for 2020-2021 and Advantage G20 Economies (Total%)

Source: IMF(2021b)

guarantees related to loans for SMEs and large firms including the Coronavirus Business Interruption Loan Scheme, the Coronavirus Large Business Interruption Loan Scheme, new Covid-19 Corporate Financing Facility, the Bounce Loan Scheme and Trade Credit Reinsurance Scheme. France announced guarantees related to bank loans to companies, credit reinsurance schemes, quasi-equity support or equity loans to firms. Canada announced guarantees related to coordinate on credit solutions for individual businesses including combination of loan guarantees and shared financing arrangements. Korea announced guarantees related to support program for small merchants, full&special guarantees for SMEs and small merchants, preferential guarantees for SMEs and export companies, P-CBO for companies, trade financing and overseas projects for venture capital and start-up. Japan announced guarantees on bonds/borrowings and external bonds, expanding the guarantee cap. Australia announced guarantee related to cash flows needs of SMEs.

Japan has announced supports much greater than other countries related to contingent liabilities (quasi-fiscal operations) (2020 GDP%). Japan announced quasi-fiscal operations related to concessional loans and guarantees to affected firms, public financial institutions' loans to hospital and clinics, the university fund. Korea announced quasi-fiscal operations related to loan expansion to SMEs, support package to stabilize corporate bond and short-term funding market, low-rated corporate bond and CP purchase program, Key Industry Stabilization Fund, Stock Market Stabilization Fund, Bond Market Stabilization Fund.

Government fiscal support in response to Covid-19 (total%) for advanced G20 Economies are shown in Figure 12. The largest share of fiscal supports was announced for households related to additional spending and forgone revenue. The largest share of fiscal support was announced for larger firms related to guarantees and quasi-fiscal activities. The largest share of fiscal support was announced for larger firms related to equity and loans.

Above the line measure (GDP%) related to fiscal measures in response to the Covid-19 pandemic from June 2020 to April 2021 are shown in Figure 13. In June 2020, United States and Japan announced more than other countries fiscal measures in response to the Covid-19 pandemic related to above the line measure. Above the line measure (GDP%) increased from June 2020 to April 2021 almost all Advances G20 Economies. United States revised on April 2021 related to fiscal measures in response to the Covid-19 pandemic. So United States increased the share of measures in GDP. The share of measures climbed to 25,5%.

Liquidity support (GDP%) related to fiscal measures in response to the Covid-19 pandemic from June 2020 to April 2021 are shown in Figure 14. In June 2020, Italy, Germany and Japan was taken fiscal measures more than other countries in response to the Covid-19 pandemic related to liquidity support. Liquidity support (GDP%) increased from June 2020 to April 2021 in Spain, Korea, Japan, Italy and Canada while decreased in United Kingdom and France. United States and Australia remained stabil liquidity support (GDP%) from June 2020 to April 2021.

Because of fiscal measures in response to the covid-19 pandemic increased the deterioration of fiscal structure such as general government primary deficit and general government gross debt. The deterioration of

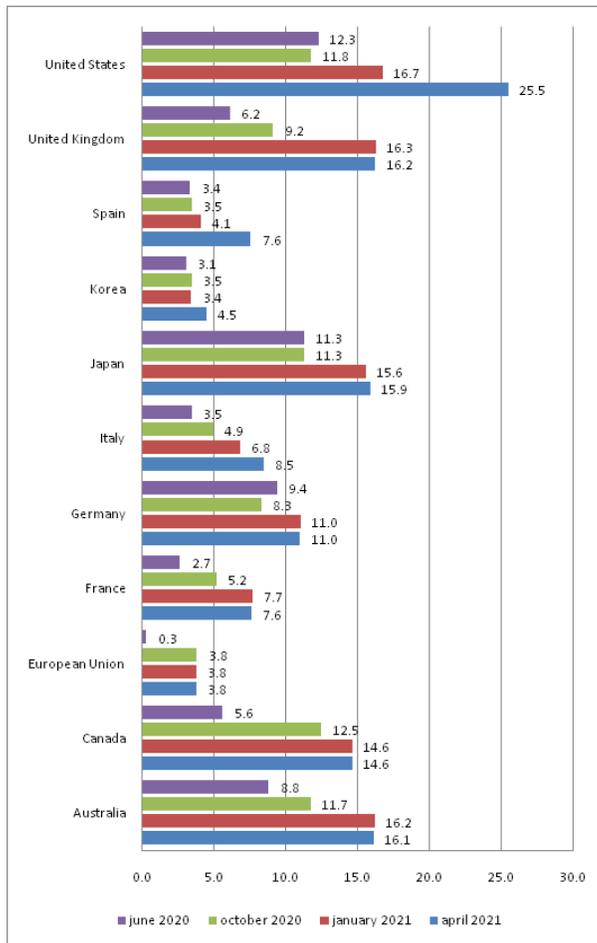


Figure 13: Fiscal Measures in Response to the Covid-19 Pandemic: Above the Line Measure (GDP%) by Period
 Source: IMF (2021a)

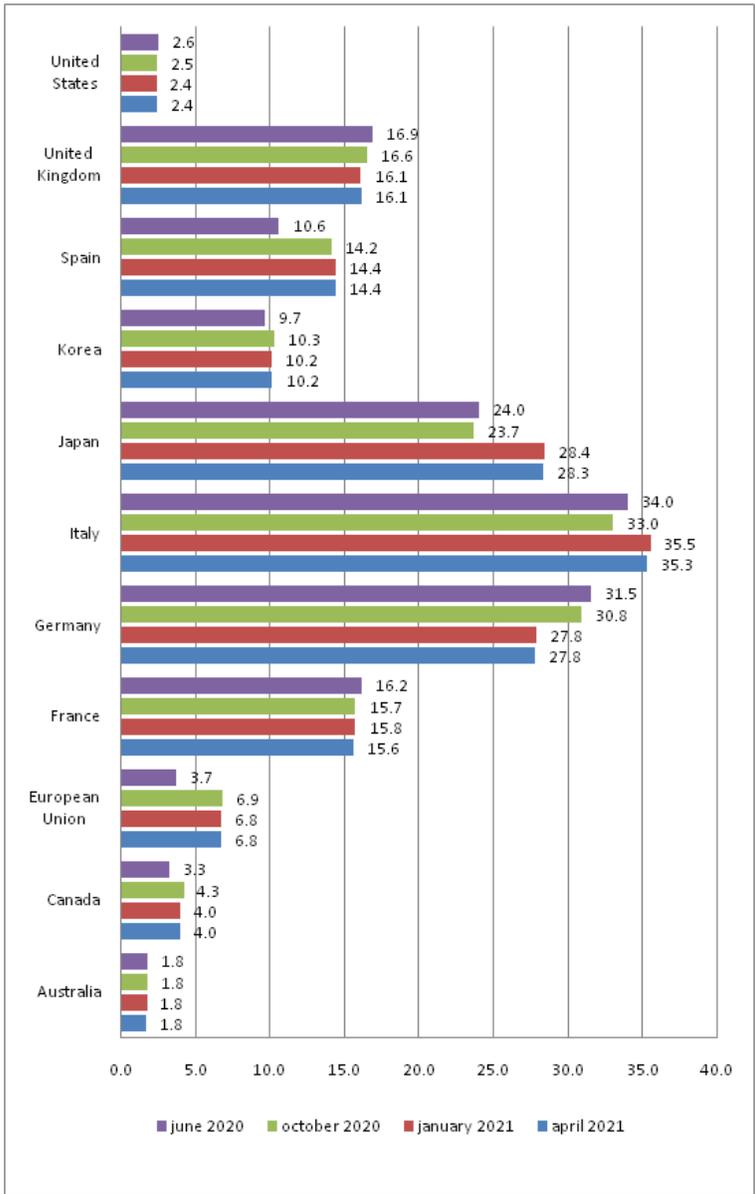


Figure 14: Fiscal Measures in Response to the Covid-19 Pandemic-Liquidity Support (GDP%) by Period

Source: IMF (2021a)

fiscal structure will gradually decrease and economic improvement will begin if countries reach a level of immunity that can slow or stop transmission of the virus.

5. Discussion and Conclusion

The purpose of this study is evaluate the effect of the Covid-19 pandemic on the deterioration of the economic structure and examine the composition and size of the fiscal measures in response to the Covid-19 pandemic for the Advanced G20 Economies. Advanced G20 Economies cover %34 of the confirmed cases and %33,3 of the deaths in related to Covid-19 pandemic in the world (WHO, 2021b). The share of the confirmed cases are listed as United States (19,70%), France (3,50%), United Kingdom (2,68%), Italy (2,52%), Germany (2,19%), Spain (2,18%), Canada (0,81%), Japan (0,43%), Korea (0,08%), Australia (0.02%), respectively in the world. Besides the share of the deaths are listed as United States (16,92%), United Kingdom (3,70%), Italy (3,63%), France (3,11%), Germany (2,53%), Spain (2,30%), Canada (0,73%), Japan (0,35%), Korea (0,05%), Australia (0.03%), respectively in the world. In both cases the United States has the largest share of the world in Advanced G20 Economies.

The number of death and confirmed cases remain to be seen in related to Covid-19 pandemic in the world. Meanwhile vaccination practices in response to Covid-19 pandemic has increased while increase confirmed cases and deaths. This increase of the vacciantion leads to increase of level of the immunity to Covid-19 pandemic that could slow or stop transmission of the virus. The percentage of the population fully vaccinated are listed as United Kingdom(43%), United States (39,3%), Italy (16,9%), Spain (16,7%), France (14,63%), Germany (13,65%), Australia (7,3%), Korea (3,6%), Canada (3,5%), Japan (1,95%).Countries with higher share of confirmed cases and deaths have greater increases in the population fully vaccinated in response to Covid-19 pandemic. The possible development of other varriants, how quickly the approved, manufacturing and delivered, effectiveness of the vaccines determine the effectiveness of vaccination practices as well as fully vaccinated.

The increase of the confirmed cases and deaths due to Covid-19 pandemic has lead to the deterioration of economic structure in the world. And also Advanced G20 Economies have faced with the deterioration of the economic structure during Covid-19 pandemic. This is because the pandemic has stopped life. The economic structure has been affected by the Covid-19 pandemic at different levels in the Advanced G20 Economies. These levels has changed according to some factors such as the proportion of “remote workable” jobs, share of employment in Small and Medium-Sized Enterprises (SMEs), depth of capital

markets, size of the informal sector, quality and access to digital infrastructure, size of the sunk costs (irreversible expenses and sources), policies that are not applied according to the situation and are far from rationality, the structure of the supply chain. The deterioration of the economic structure means that decrease of the government revenue, GDP and the increase of the government expenditure, government gross debt, government primary deficit, unemployment rate.

The Advanced G20 Economies announced various fiscal measures to mitigate deterioration of the economic structure. The fiscal measures include above the line measures, which additional spending and forgone revenue for health sector/non-health sector/accelerated spending/deferred revenue and liquidity supports, which below the line measures (equity injections, loans, asset purchase, debt assumptions)/contingent liabilities (guarantees, quasi fiscal operations). The Advanced G20 Economies announced additional spending and forgone revenue for health sector such as expanded the number of hospital beds/ medical staff/equipment, waived of VAT/customs duties on critical medical import, promoting treatment/vaccine development, providing tax advantage for certain medical expense, spending vaccine distribution/testing/tracing, preserving private health coverage of workers, subsidizing health insurance, facilitating access to critical medical goods, expanding smart medical centers. And also the Advanced G20 Economies announced additional spending and forgone revenue for non-health sector such as food assistance, expanded unemployment insurance, emergency appropriations, forgivable small business loans, employee retention credit for effected employer, expanding the usage of the earned income tax credit and child tax credit, tax-free cash flow assistance, wage subsidies, payments to lower income, job hiring credit, cash payment to vulnerable household, cash handout per person, lump-sum transfer to affected firms, subsidies for financial institutions' lending, transfers to local governments, subsidies to affected firms for rent payment, accelerate business restructuring of SMEs, reduction of property tax/aviation fuel tax, support to students/seniors/vulnerable groups, grants to hard hit small businesses and self employed, access to childcare/social security benefits, temporary relief to effected tenants, income support for families, incentivizing the green/digital investment, temporary VAT reduction/corporate tax reliefs/personel income reliefs/social security contribution reduction, direct transfers for low income families, development of clean energy, social transfer for low-income household, permanent cuts in production taxes, temporary corporate/income tax cuts for landlords who reduce

commercial rents, rental fees reduction. Moreover the Advanced G20 Economies announced accelerated spending/deferred revenue such as deferral of payment of taxes and social security premiums by effected firms and households, deferred income taxes/GST/HST/custom duties for imports, accelerated refund of tax credits and postponement of social security contributions, tax payments deferral including corporate/income tax/VAT, social security contribution payment deferral for household & electricity charge deferral. The Advanced G20 Economies announced below the line measures such as support government equity investments affected companies, direct lending/equity support mostly strategic companies, providing both consumer/business credit. The Advanced G20 Economies announced contingent liabilities such as loans for SMEs, bank loans to companies, credit reinsurance shemes, quasi-equity support, support program for small merchants, preferential guarantees for SMEs/export companies, trade financing, overseas projects for venture capital and start-up, guarantees on bonds/borrowings, public financial institutions' loans to hospital and clinics.

The general government gross debt has increased from 2019 to 2021 in Advanced G20 Economies. The countries with the highest general government gross debt (GDP%) are Canada, United States, Australia, Spain, Italy, United Kingdom, Japan, France, Korea, Germany, respectively. This rank may not be explained by shares of confirmed cases and deaths for Australia, Canada and Japan, but explain by countries' ability to access low-cost borrowing (debt burden covered by long term and sometimes negative yield bonds). Debt burden in developed economies is expected to be sustainable due to negative interest rate bonds (IMF, 2021c:7). The general government revenue (GDP%) has decreased in United Kingdom (1,1%), Australia (1,3%), Canada (0,4%), Japan (0,5%), Korea (0,3%) from 2019 to 2021. United Kingdom waived of VAT and customs duties on critical medical import related to forgone revenue. Australia spends related to tax-free cash flow assistance. Canada reduced import costs to facilitate access to critical medical goods and deferred income taxes, GST/HST, custom duties for imports. Japan announced tax incentives for firms' decarbonization and digitalization and reduction of property tax and aviation fuel tax. Further Japan announced measures related to deferral of payment of taxes and social security premiums by affected firms and households for one year. Korea announced measures related to temporary corporate/income tax cuts for land lords who reduce commercial rents, rental fees reduction, reduction

in airport facility fees, reduction in port and terminal charges, VAT reduction for the self employed, corporation tax cut for SMEs located in disaster areas, consumption tax cut for auto purchase, social security contribution cut for households. Moreover Korea announced measures related to tax payment deferral including corporate income tax and VAT, social security contribution payment deferral for households&electricity charge deferral (IMF, 2021a). The general government expenditure (GDP%) generally has increased in Advanced G20 Economies. The countries with the highest general government expenditure (GDP%) are United States, United Kingdom, Spain, Italy, Canada, Germany, Japan, Australia, France, Korea, respectively from 2019 to 2021. In the United States and United Kingdom, which countries with highest the confirmed cases and deaths due to Covid-19 pandemic, have seen the highest increase the general government expenditure (GDP%). United States and United Kingdom spend for health sector and non-health sectors in related to Covid-19 pandemic (IMF, 2021a). In relation to this, United States and United Kingdom have greater increases in the population fully vaccinated in response to Covid-19 pandemic. In parallel with the changes in general government expenditure and revenue, the rank of countries in general government primary deficit are almost similar. The countries with the highest the general government primary deficit (GDP%) are United States, United Kingdom, Canada, Italy, Germany, Australia, Japan, France, Korea, respectively from 2019 to 2021. In the United States and United Kingdom, which countries with highest the confirmed cases and deaths due to Covid-19 pandemic, have seen the highest increase the general government primary deficit (GDP%). Moreover they announced additional spending and forgone revenue and accelerated spending/deferred revenue within the scope. The increase of the primary deficits may be explained only additional spending and forgone revenue and accelerated spending/deferred revenue within the scope in Canada, Italy, Germany, Australia and Japan (IMF,2021a). But the increase of the primary deficits may not be explained with confirmed cases and deaths due to Covid-19 pandemic in Canada, Italy, Germany, Australia and Japan. The unemployment rate has increased in Advanced G20 Economies since 2019Q4. The countries with the highest unemployment rate United States, Canada, Spain, Australia, Germany, United Kingdom, Japan, Korea, Italy, respectively from 2019Q4 to 2020Q4. United States, which country with highest the confirmed cases and deaths due to Covid-19 pandemic in Advanced G20 Economies, have seen the highest increase the unemployment rate (3.17%) from 2019Q4 to 2020Q4. Also

the unemployment rates incredible increased in the United States (9,27%) and Canada (6,7%) from 2020Q1 to 2020Q2. Although a downward trend occurred from 2020Q2 to 2020Q4, it still remained above the pre-pandemic level. This result depends on such as policies that are not applied according to the situation, the proportion of “remote workable” jobs, share of employment in small and medium sized enterprises (SMEs), the size and composition of political support, continuing to increase confirmed cases and deaths. The GDP (change%) has decreased in Advanced G20 Economies from 2019Q4 to 2020Q2 except Japan. In Japan has decreased from 2020Q1 to 2020Q2. In 2020Q2, the highest decrease in GDP (change%) in United Kingdom and Spain. United Kingdom has high confirmed cases and deaths. Spain is the highest unemployment rate in Advanced G20 Economies. Even so Spain announced insufficient above the line measures (GDP%) in 2020Q1 and 2020Q2. Then above the line measures increased in Spain in 2020Q3 and 2020Q4. The highest increase in GDP (%change) in 2020Q3 was in France. High liquidity supports applied on time are effective in France. The advanced G20 Economies are generally in the direction of decrease in GDP(change%) from 2019Q4 to 2021Q1. The countries with the highest decrease are Spain, United Kingdom, Italy, Germany, France, Japan, Canada, United States, respectively from 2019Q4 to 2021Q1. But in Australia has seen increase in GDP (change%) from 2019Q4 to 2021Q1. This rank shows that parallel with the confirmed cases and deaths exclude United States. So the decrease in GDP (%change) is high if the confirmed cases and deaths are high in Advanced G20 Economies. The decrease in GDP (change%) shows that the political supports are effective but not sufficient in Advanced G20 Economies. United States has implemented inclusive fiscal support in response to Covid-19 pandemic. United States has taken measures much greater than other countries related to additional spending and forgone revenue for non-health sector such as forgivable small business loans, Small Business Administration’s loans programs as percentage of GDP³. The Biden administration’s new \$1,9 trillion fiscal package is expected to provide a strong boost to growth in the United States in 2021 and provide significant positive spillovers to trade partners (IMF, 2021c:6). Taken above the line measures has reached level of 25,5 as percentage of GDP with Biden administration’s new \$1,9 trillion fiscal package.

On the one hand, vaccination practices increase, on the other hand, above the line measure and liquidity supports has implemented within the scope of fiscal

³ Calculated for 2020 fiscal year.

measures cause economic improvement, slowly in Advanced G20 Economies. The decrease in primary budget deficit (GDP%), stabilization or decrease in unemployment rates exclude UK, Korea and Japan, also small increases in GDP (change%) is observed in Advanced G20 Economies. The strength of economic improvement depends on when the pandemic is contained and how policy support continues (IMF, 2021b:13). Moreover the size of improvement of economic structure depends on the increase of level immunity to Covid-19 pandemic that **could slow or stop transmission of the virus**. This improvements of economic structure are different levels in Advanced G20 Economies. Because these differents depend on factors such as the country-specific factors, the cross-border spreads, the size and composition of political supports. Then the implemented fiscal measures will decrease gradually when the negative effect of the pandemic and the deterioration of the economic structure decreases. Then adapting political will should ensure responses to different stages of the Covid-19 pandemic. As well as structural transformations such as supporting vocational training, providing recruitment incentives, instead of support policies will should implement. Moreover international coordination on exit policies, accelerating the production and distribution of vaccines through intensive cooperation on vaccination are important factors for the improvement of economic structure.

References

- IMF (2021c), *World Economic Outlook Managing Divergent Recoveries*, April, Washington, DC: IMF Publishing.
- IMF (2021b), *Fiscal Monitor: A Fair Shot*. April, Washington: IMF Publishing.
- IMF (2021a), *Fiscal Monitor Database of Country Fiscal Measures in Responseto the COVID-19 Pandemic*, April, IMF Fiscal Affairs Department.
- OECD (2021a), *Quarterly GDP (indicator)*, doi: 10.1787/b86d1fc8-en (Accessed on 03 June 2021)
- OECD (2021b), *Unemployment rate (indicator)*, doi: 10.1787/52570002-en (Accessed on 03 June 2021).
- Kelly, H. (2011), The classical definition of a pandemic is not elusive, *Bulletin of the World Health Organization*, 2011;89:539-540, doi: 10.2471/BLT.11.089086.
- WHO (2020), *Coronavirus Disease (Covid-19), What is Covid-19?* <https://www.who.int/news-room/q-a-detail/coronavirus-disease-covid-19> (Accessed on 25 May 2021).

WHO (2021a), *Coronavirus Disease (COVID-19): Vaccines*, [https://www.who.int/news-room/q-a-detail/coronavirus-disease-\(covid-19\)-vaccines](https://www.who.int/news-room/q-a-detail/coronavirus-disease-(covid-19)-vaccines) (Accessed on 25 May 2021).

WHO (2021b), *Coronavirus (Covid-19) Dashboard*, <https://covid19.who.int/> (Accessed on 25 May 2021).

CHAPTER II

THE EFFECT OF CORONAVIRUS ANXIETY ON NURSES' JOB SATISFACTION AND WORK-FAMILY LIFE BALANCE

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1. Introduction

The COVID-19 pandemic has been affecting the world and threatening people's lives for over one year. The World Health Organization (WHO) announced the number of detected COVID-19 cases around the world had reached 111,101,016 and the number of deaths reached 2,462,911 from December 12, 2019, when the first COVID-19 case was first seen, to February 23, 2021 (WHO, 2021).

In addition to physical health problems and negative social effects the COVID-19 pandemic may also cause psychological problems such as anxiety and panic (Askin, Bozkurt and Zeybek, 2020; Bana, 2020). Anxiety is individuals' reactions against various destructive situations concerning themselves or their surroundings. Although this reaction may be constructive, it may also cause destructive circumstances to occur (Canbaz, Tefvik Sunter, Aker and Peksen, 2007). In other words, uncontrollable excessive anxiety may have negative effects on individuals. Individuals' fear of getting infected or infecting their families, thoughts of living in an unsafe place, and similar other thoughts

may cause intense worries (Kaya, 2020). This, in turn, may cause stress, anxiety, depression, insomnia, denial, anger, and fear. These psychological problems not only affect healthcare personnel's attention, understanding, and ability to make decisions, they may also prevent them from fighting against COVID-19 and have a permanent effect on an individual's health in general (Kang, Li, Hu, Chen, Yang, et al., 2020).

Job satisfaction means individuals' overall satisfaction with their job and workplace, as well as the sum of their feelings and thoughts about their job. Job satisfaction increases motivation (Breugh, Ritz, Alfes, 2018), work engagement (Garg, Dar, Mishra, 2018), performance (Roberts and David, 2020), organizational commitment (Ozdem and, Sezer, 2019), and life satisfaction (Unanue, Gómez, Cortez, et al., 2017), as well as reducing leave of employment (Kang, et al., 2020), burnout (Mullen, Blount, Lambie, Chae, 2017; Wang, Jin, Wang, et al., 2020), and organizational cynicism (Kokalan, 2019; Ozdem and Sezer, 2019). For these reasons, job satisfaction is important for both employees and organizations.

Work-family life balance is based on Clark's (2000) Work-Family Border Theory, which indicates that individuals have a world of family and a world of work and there is a border between these worlds; and that individuals pass back and forth through this border throughout the day and try to balance these worlds. In addition to creating interpersonal relationships and meaning, structural factors such as work-related organizational policies affect this balance (Clark, 2020). Work-family life balance is defined as fulfilling the duties in a good and satisfactory way with minimum conflict at home and work (Clark, 2001).

Ensuring work-family life balance positively affects individuals' job satisfaction, organizational citizenship (Clark, 2001; Ugwu, Amazue and Onyedire, 2017) organizational justice perception (Ozeren, Arslan and Demirtas, 2019), employees' performance (Soomro, Breitenecker and Shah, 2018), and organizational commitment (Gudep, 2019). Studies have suggested that ensuring work-family life balance is an important factor for both employees and organizations.

The present study sought to answer the question: "Does nurses' coronavirus anxiety affect their work-family life balance and job satisfaction?". No studies were found in the literature that analyzed the effect of nurses' coronavirus anxiety levels on their work-family life balance and job satisfaction. The present study considered to be important as it fills the gap in the literature.

2. The Relationship Between Coronavirus Anxiety and Job Satisfaction

According to Maslow's hierarchy of needs, one of humans' needs is the need for safety (Maslow, 1943). Coronavirus anxiety is a situation threatening healthcare personnel's safety. As a complementary perspective for the literature, it is assumed that coronavirus anxiety may have a negative relationship with id. Studies analyzing the relationship between healthcare personnel's anxiety levels and job satisfaction show a negative relationship between anxiety levels and job satisfaction (Ercan, Unal, Yasar, Ciftci and Delibas, 2021; Kılıc, Guduk, Guduk and Gokuz, 2021). Other studies conducted in different sectors have also shown a negative relationship between anxiety and job satisfaction (Ak and Diken, 2020). Based on these results, the following hypothesis was suggested:

Hypothesis 1 (H1): Coronavirus anxiety negatively affects job satisfaction.

3. The Relationship Between Coronavirus Anxiety And Work-Family Life Balance

As a complementary perspective for the literature, it is assumed that coronavirus anxiety may have a negative relationship with work-family life balance. Studies have shown a negative relationship between anxiety levels and work-family life balance (Sprung and Rogers, 2020; Vanderpool and Way, 2013). However, no studies were found in the literature to that analyzed the relationship between coronavirus and work-family life balance. It is considered that coronavirus anxiety may have a negative effect on healthcare personnel's work-family life balance as they need to keep a physical distance from their family members due to the fear of getting infected with the COVID-19 virus and infecting their family members. Based on these results, the following hypothesis was suggested:

Hypothesis 2 (H2): Coronavirus anxiety negatively affects work-family life balance.

4. Methods

4.1. Study Design

This cross-sectional study was conducted with the nurses working in a private hospital. The inclusion criteria were having worked in this hospital for at least six months.

4.2. Setting and Sample

The study was conducted in a private hospital in Turkey where 118 nurses were working. The researchers wanted to use the full count method without any sampling. All nurses working in the hospital were reached and informed about the study. The participation rate was 88.13% (n=104). According to the study population size, 104 participant nurses would meet the accuracy requirements using the appropriate sampling method with a reliability of 95% and an error margin of .05. This number was determined to be sufficient for the representation of the population.

4.3. Ethical Consideration

This study was approved by the Ethics Committee of Afyon Kocatepe University (IBRN: 2021/25 Afyon Kocatepe University Ethics Committee). The participants were informed about the study and their consent was obtained. The study was conducted in accordance with the principles of the Declaration of Helsinki.

4.4. Measures

The data were collected using four questionnaires: Socio-Demographic Information, Healthcare Employee Coronavirus Anxiety Scale, Work-Family Life Balance Scale, and Minnesota Satisfaction Questionnaire.

4.4.1. Sociodemographic Variables

The Socio-Demographic Scale included questions on age, gender, marital status, education level, profession, shift, and sector.

4.4.2. Healthcare Employee Coronavirus Anxiety Scale (HECAS)

The nurses' coronavirus anxiety levels were assessed using the Healthcare Employee Coronavirus Anxiety Scale developed by Nal and Nal (2021). This 5-point Likert type scale has 7 items scored from 1=Never to 5=Always. The scale has two subscales: Self Anxiety and Anxiety towards Patients. Nal and Nal (2021) found the scale's Cronbach Alpha coefficient to be 0.8628. In the present study, the Cronbach Alpha value was found to be 0.85.

4.4.3. Work-Family Life Balance Scale

The participants' work-family life balance was assessed using the Work-Family Life Balance Scale developed by Apaydın (2011). This 5-point Likert type scale

has 11 items scored from totally disagree=1 to totally agree=5. Apaydın (2011) found the scale's Cronbach Alpha coefficient to be 0.84. In the present study, the Cronbach Alpha value was found to be 0.64.

4.4.4. Minnesota Satisfaction Questionnaire

The participants' job satisfaction was assessed using the Minnesota Satisfaction Questionnaire developed by Weiss, Davis England and Lofquist (1967) and adapted to Turkish by Baycan (1985). This 5-point Likert type scale has 20 items scored from 1=not satisfied to 5=extremely satisfied. A mean score lower than 3 indicates a low job satisfaction while a mean score close to 5 shows a higher job satisfaction. Baycan (1985) found the scale's Cronbach Alpha coefficient to be 0.77. In the present study, the Cronbach Alpha coefficient of the scale was found to be 0.88.

4.4.5. Data Collection

The study was conducted in Istanbul, Turkey between January 15 and 31, 2021. The forms prepared for the study were sent to the nurses electronically and the nurses were asked to complete the forms when they were available.

4.4.6. Data Analysis

Statistical analysis was performed using the SPSS version 25.0 software (IBM Corp., Armonk, NY, USA). The relationship between the variables was analyzed using the Pearson Correlation Analysis and the Simple Linear Regression Analysis. The significance level of the analysis results was determined to be $p < .001$ and $p < .05$.

5. Results

5.1. Sociodemographic Characteristics

The participants' mean age was 25.78 (standard deviation [SD]=7.10), and of them, 82.7% (n=86) were female and 75% (n=78) were single, 53.8% (n=56) were high school graduates, 26% (n=27) had an associate degree, and 20.2% (n=21) had a bachelor's degree. Of the participants, 75% (n=78) worked both the day and night shift, 20.2% (n=21) only worked the day shift, and 4.8% (n=5) only worked the night shift. Of them, 15.4% (n=16) worked in healthcare services for 6 months to 1 year, 49% (n=51) for 2 to 5 years, 16.3% (n=17) for 6 to 9

years, and 19.2% (n=20) for 10 or more years. Their mean coronavirus anxiety, job satisfaction, and work-family life balance scores were 2.09 (SD=.79), 3.24 (SD=.62), 3.12 (SD=.51), respectively.

5.2. Correlation Analysis Results

The relationship between the variables was determined using the Pearson Correlation Analysis. Table 1 shows the analysis results. The analysis showed no significant relationship between coronavirus anxiety and job satisfaction ($p>0.05$). Based on this finding, hypothesis H1 was rejected.

Table 1. The Correlation Analysis Results (N = 104)

Variables	M	SD	1	2	3	4	5	6	7	8	9
1. Coronavirus Anxiety	2.09	.79									
2. Self-Anxiety	1.77	.81	.866**								
3. Anxiety towards Patients	2.32	.91	.942**	.648**							
4. Job Satisfaction	3.24	.62	-.146	-.132	-.134						
5. Intrinsic Satisfaction	3.54	.61	-.098	-.073	-.101	.924**					
6. Extrinsic Satisfaction	2.80	.80	-.173	-.174	-.146	.900**	.665**				
7. Work-Family Life Balance	3.12	.51	-.580**	-.534	-.525**	.320**	.302**	.281**			
8. Work to family influence	2.78	.73	-.550**	-.514	-.492**	.314**	.270**	.307**	.898**		
9. Family impact on work	2.54	.69	-.272**	-.284**	-.224*	.239*	.162	.281**	.635**	.375**	
10. Work-family harmony	4.25	.59	-.378**	-.292**	-.380**	.083	.207*	-.075	.560**	.334**	.063

*: $p<0.05$, **: $p<0.01$, SD.: Standard Deviation

5.3. Regression Analysis Results

Table 2 shows the regression analysis results. Coronavirus anxiety was found to have a significant negative effect on work-family life balance ($\beta=-.58$, $t=-7.19$, $p<0.01$). Accordingly, a one-point increase in the nurses' coronavirus anxiety causes a decrease by 33.6% on the work-family life balance ($R^2=0.361$). These findings support the hypothesis H2 (Table 2).

Table 2. Regression Analysis Results

Independent Variable: Coronavirus Anxiety						
Dependent Variables	R²	B	Beta (β)	t	F	p
Work-Family Life Balance	.336	-.375	-.58	-7.19	51.714	.000

6. Discussion

This study aimed to determine the effect of nurses' coronavirus anxiety levels on their job satisfaction and work-family life balance during the COVID-19 pandemic.

The first studies showed that anxiety had a significant negative effect on job satisfaction^{23,31}. In the present study, the coronavirus anxiety levels of the nurses were found to be low and negative (2.09 ± 0.79). The findings of the first studies conducted in Turkey (Kılıc, et al., 2021) also supported the findings of the present study. This may be because the pandemic had continued for about 1 year, the uncertainties regarding the disease were eliminated, vaccinations had begun, and the healthcare personnel were informed about the protection methods against COVID-19. However, studies show that the healthcare personnel had high anxiety levels in other countries (Liu, et al., 2020; Zhang, et al., 2020). This may be because these studies were conducted at the beginning of the pandemic.

The present study found that the healthcare personnel's work-family life balance was low and positive (3.12 ± 0.51). This showed that the healthcare personnel in this study were able to ensure work-family life balance at the threshold level. The present study indicated that coronavirus anxiety negatively affects work-family life balance. No studies were found to analyze this subject in the literature. These findings are believed to serve as resources for future studies.

In this study, the healthcare personnel's job satisfaction was found to be moderately positive ($3.24 \pm .62$). Studies conducted in Turkey showed that the healthcare personnel's job satisfaction was moderately positive (Güven, 2019; Hassoy and Özvuran, 2019; Yalcinoz Baysal, Bigin and Oner, 2019).

Some studies reported a negative relationship between anxiety and job satisfaction (Kılıç, et al., 2021; Yılmaz, 2018). However, the present study found no significant relationship between the healthcare personnel's coronavirus anxiety and job satisfaction. This result may be attributed to different factors that affected nurses' job satisfaction, e.g., the intrinsic satisfaction of doing useful things for others.

7. Conclusion

The results of the present study provide useful theoretical assumptions for the limited literature about the effect of nurses' coronavirus anxiety on their job satisfaction and work-family life balance. This study showed that nurses' coronavirus anxiety negatively affects work-family life balance. It also indicated no relationship between coronavirus anxiety and job satisfaction. As far as it is known, this is the first study which analyzed the effect of nurses' coronavirus anxiety on work-family life balance and job satisfaction. This study showed that a situation that threatens the healthcare personnel's safety (COVID-19) had a significant negative effect on their work-family life balance.

The results of this study also indicated that nurses' work-family life balance reduced as their coronavirus anxiety increased. In other words, healthcare personnel's work-family life balance will increase as their coronavirus anxiety reduces.

Nurse managers may help nurses ensure work-family life balance by taking measures to reduce nurses' coronavirus anxiety levels.

This study can be repeated with nurses working in different health institutions. In addition, future studies can analyze the effect of coronavirus anxiety on different organizational attitudes and behaviors (organizational citizenship, motivation, employees' performance, organizational cynicism, etc.)

References

Ak, O. K., Diken, A. (2020). The effect of job satisfaction and anxiety level on the intention to leave: An empirical study on bank employees. *BRSA Banking and Financial Markets Journal*,14(2),175-204.

- Aktas, H., Simşek, E. (2015). The role of perceptions of job satisfaction and emotional burnout in individuals' attitudes of silence while organizational. *International Journal of Management, Economics and Business*, 11(24), 205–230.
- Apaydın, C. (2011). The relationship between work dependence level of faculty members and work-life balance and work-family life balance [PhD Thesis]. Ankara: Ankara University, pp. 125-130.
- Askin, R., Bozkurt, Y., Zeybek, Z. (2020). Covid-19 pandemic: Psychological effects and therapeutic interventions. *Istanbul Commerce University Journal of Social Sciences*, 19(37), 304-318.
- Bana, P. E. (2020). Evaluation of the negative situations and social stigma perception of healthcare employees in the Covid-19 outbreak process, *Research Journal of Business and Management*, 7(4), 288-298.
- Baycan, F. A. (1985). An analysis of the several aspects of job satisfaction between different occupational groups [PhD Thesis]. Istanbul: Bogazici University, pp. 33-44.
- Breaugh, J., Ritz, A., Alfes, K. (2018). Work motivation and public service motivation: disentangling varieties of motivation and job satisfaction. *Public Management Review*, 20(10), 1423–1443. <https://doi.org/10.1080/14719037.2017.1400580>
- Canbaz, S., Tevfik Sunter, A., Aker, S., Peksen, Y. (2017). Anxiety level of medical faculty final year students and affecting factors. *General Medical Journal*, 17(1), 15–19.
- Clark, S. C. (2020). Work/family border theory: A new theory of work/family balance. *Human Relations*, 53(6), 747-770. <https://doi.org/10.1177/0018726700536001>
- Clark, S. C. (2021). Work cultures and work/family balance. *Journal of Vocational Behavior*. 58(3), 348-365. <https://doi.org/10.1006/jvbe.2000.1759>
- Ercan, S. K., Unal, B., Yasar, S. A., Ciftci, E., Delibas, D. H. (2021). Workplace violence frequency and relationship of violence with life quality, life satisfaction and job satisfaction in healthcare professionals in psychiatry clinics in Konya province. *Medicine*, 10(2), 427-433. <https://doi.org/10.5455/medscience.2021.02.053>
- Garg, K., Dar, I. A., Mishra, M. (2018). Job satisfaction and work engagement: A study using private sector bank managers. *Advances in Developing Human Resources*. 20(1), 58–71. <https://doi.org/10.1177/1523422317742987>

- Gudep, V. K. (2019). An Empirical Study of the Relationships between the flexible work systems (FWS), organizational commitment (OC), work life balance (WLB) and job satisfaction (JS) for the teaching staff in the United Arab Emirates (UAE). *International Journal of Management*, 10(5), 11-27.
- Güven, S. D. (2019). Determination of job satisfaction levels of healthcare professionals working in family health center. *Ahi Evran University Journal of Health Sciences*, 3(1), 6-12.
- Hassoy, D., Özvuran, S. (2019). Job satisfaction of healthcare professionals in a state hospital and affecting factors. *Journal of Nursing Science*, 2(3), 27-32.
- Kang, L., Li, Y., Hu, S., Chen, M., Yang, C., Yang, B. X., et al. (2020). Correspondence the mental health of Wuhan, China dealing with the 2019 novel coronavirus. *The Lancet Psychiatry*, 7(3), 14. [https://doi.org/10.1016/S2215-0366\(20\)30047-X](https://doi.org/10.1016/S2215-0366(20)30047-X)
- Kaya, B. (2020). Effects of pandemic on mental health. *Journal of Clinical Psychiatry*, 23(2), 123–124. <https://doi.org/10.5505/kpd.2020.64325>
- Kılıç, U., Guduk, O., Guduk, O., Göküz, S. (2021). Examination of job satisfaction and anxiety levels of workers working at COVID-19 diagnostic centers during the pandemic. *Journal of Health Systems and Policies*, 3(1), 1-19.
- Kokalan, O. (2019). The effect of organizational cynicism on job satisfaction. *Management Research Review*, 42(5), 625-640. <https://doi.org/10.1108/MRR-02-2018-0090>
- Labrague, L. J., Santos, J. A. A. (2020). Fear of COVID-19, psychological distress, work satisfaction and turnover intention among frontline nurses. *Journal of Nursing Management*. 27 September, 1–9. <https://doi.org/10.1111/jonm.13168>
- Liu, C., Yang, Y., Zhang, X., Xu, X., Dou, Q., Zhang, W., Cheng, A. (2020). The prevalence and influencing factors in anxiety in medical workers fighting COVID-19 in China: A cross-sectional survey. *Epidemiology and Infection*, 148:E98. <https://doi.org/10.1017/S0950268820001107>
- Maslow, A. H. (1943). A theory of human motivation. *Psychological Review*, 50(4), 370–396.
- Mullen, P. R., Blount, A. J., Lambie, G. W., Chae, N. (2017). School counselors' perceived stress, burnout, and job satisfaction. *Professional School Counseling*, 21(1), 1-10. <https://doi.org/10.1177/2156759X18782468>

- Nal, M., Nal, B. (2021). Coronavirus anxiety scale development for healthcare employees No Title. *International Journal of Research -Granthaalayah*, 9(2), 149-156. <https://doi.org/httpsdoi.org10.29121/granthaalayah.v9.i2.2021.3508>
- Ozdem, G., Sezer, S. (2019). The relationship between solution-focused school leadership and organizational cynicism, organizational commitment and teachers' job satisfaction. *International Journal of Progressive Education*, 15(1), 167–183. <https://doi.org/10.29329/ijpe.2019.184.11>
- Ozeren. E., Arslan, A., Demirtas, Ö. (2019). The effect of HRM practices on work engagement and work-life balance: The mediator of organizational justice perception, the regulatory role of favoritism. *International Journal of Economic and Administrative Studies, (Special Issue)*, 211-228. <https://doi.org/10.18092/ulikidince.526411>
- Park, E. J., Seo, M. (2019). The influence of death anxiety and terminal care stress on job satisfaction of new nurses. *Korean Journal of Occupational Health Nursing*, 28(4), 230-241. <https://doi.org/10.5807/KJOHN.2019.28.4.230>
- Roberts, J. A., David, M. E. (2020). Boss phubbing, trust, job satisfaction and employee performance. *Personality and Individual Differences*. 1 March, 1-8. <https://doi.org/10.1016/j.paid.2019.109702>
- Soomro, A. A., Breitenecker, R. J., Shah, S. A. M. (2018). Relation of work-life balance, work-family conflict, and family-work conflict with the employee performance-moderating role of job satisfaction. *South Asian Journal of Business Studies*, 7(1),129-146. <https://doi.org/10.1108/SAJBS-02-2017-0018>
- Sprung, J. M., Rogers, A. (2020). Work-life balance as a predictor of college student anxiety and depression. *Journal of American College Health*. 23 January, 1-8. <https://doi.org/10.1080/07448481.2019.1706540>
- Ugwu, F. O., Amazue, L. O., Onyedire, N. G. (2017). Work-family life balance in a Nigerian banking sector setting. *Cogent Psychology*, 4(1), 1-9. <https://doi.org/10.1080/23311908.2017.1290402>
- Unanue, W., Gómez, M. E., Cortez, D., Oyanedel, J. C., Mendiburo-Seguel, A. (2017). Revisiting the link between job satisfaction and life satisfaction: The role of basic psychological needs. *Frontiers in Psychology*, 8:1-17. <https://doi.org/10.3389/fpsyg.2017.00680>
- Vanderpool, C., Way, S. A. (2013). Investigating work–family balance, job anxiety, and turnover intentions as predictors of health care and senior

- services customer-contact employee voluntary turnover. *Cornell Hospitality Quarterly*, 54(2), 149-160. <https://doi.org/10.1177/1938965513478682>
- Wang, H., Jin, Y., Wang, D., Zhao, S., Sang, X., Yuan, B. (2020). Job satisfaction, burnout, and turnover intention among primary care providers in rural China: results from structural equation modeling. *BMC Family Practice*, 21(1), 1-10. <https://doi.org/10.1186/s12875-020-1083-8>
- WHO. (2021). World Health Organization coronavirus disease (COVID-19) pandemic. [cited February 2021]. Available from: <https://www.who.int/emergencies/diseases/novel-coronavirus-2019>
- Yalcinoz Baysal, H., Bilgin, S., Oner, M. (2019). Opinions of primary care staff on occupational health and safety and their job satisfaction. *The Journal of Health Sciences and Professions*, 6(2), 200-208. <https://doi.org/10.17681/hsp.398963>
- Yilmaz, A. (2018). Burnout, job satisfaction, and anxiety-depression among family physicians: A cross-sectional study. *Journal of Family Medicine and Primary Care*, 7(5), 952-956. https://doi.org/10.4103/jfmpe.jfmpe_59_18.
- Zhang, S. X., Liu, J., Afshar Jahanshahi A., Nawaser, K., Yousefi, A., Li, J., Sun, S. (2020). At the height of the storm: Healthcare staff's health conditions and job satisfaction and their associated predictors during the epidemic peak of COVID-19. *Brain Behav Immun*, 87, 144-146. <https://doi.org/10.1016/j.bbi.2020.05.010>

CHAPTER III

POST-CRISIS PROTECTIONISM OR VOLUNTARY PRACTICE? TRADE PROTECTIVE MEASURES IN THE EUROPEAN UNION AND G20 COUNTRIES

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1. Introduction

The question of trade protectionism or free trade is in the centre of discussions among economists, politicians, or scholars. Since the Second World War, many countries and international organisations such as the World Trade Organisation put the virtues of liberal economy and free trade in front and encouraged non-protectionist liberal policies. The virtues of free trade in countries' economic welfare are undeniable and commonly accepted in the current state of global trade. As a result, many countries, policy makers and relevant international trade institutions are actively declaring and promoting free trade measures and tend to look for more liberalisation in trade and economy in general. Many regional free trade agreements are being signed and put into implementation between states either bilaterally or multilaterally¹.

Group 20 which is commonly known as G20 was established in 1999 with the aim of providing stability and growth among the world's biggest 19 economies. G20 Summits comprise the heads of states of these 19 countries and

¹ This chapter is an extended paper presented by the author at "The 3rd Economics, Business & Organization Research Conference" organized in collaboration with University of Rome Tor Vergata, Rome, Italy on November 20-22, 2020.

of the European Union (EU), where the G20 Ministerial Meetings gather the ministers of finance and heads of central banks. Liberalising trade and economy have been the main target of the World Trade Organisation (WTO) and of many international institutions such as the EU or the G20.

This chapter aims to explore trade and economic policies of both the EU and G20 countries, especially after G20 Summits, where G20 state heads declared they would promote free trade and stood against protective measures in trade. However, despite this declaration, 17 out of G20 countries have put some protective measures in force, which causes trade diversion. The chapter analyses first the notion of trade and its issues within Mercantilism and Keynesian economy theories. Then G20 protective measures are analysed and assessed in terms of countries which applied protective trade measures, despite WTO and G20 free trade policies and strategies.

2. International Trade: Theoretical Framework

2.1. Trade Protectionism in Mercantilist and Keynesian Policies

Protectionism point of origin can be traced back to mercantilism which was the dominant economic practice in Europe for centuries. Mercantilists supported an industrialization led by the state and defended a protective foreign trade policy for it. Looking at the results of the 1929 Economic Crisis, we can say that incomes had decreased, unemployment had increased and left an instable international currency with devastating financial crises in many countries and especially in Britain. Within these times, the theory of trade protectionism was established by John Maynard Keynes with the aim of protecting British interests. The theory particularly seeks to increase national income and employment. According to Keynes, the price of imported goods would increase because of the import tariffs which will bring additional costs on foreign products and thus change the price levels between domestic and foreign products. The price increase in the imported products would thus decrease the demand for these goods. Therefore, as the consumption of domestic goods will increase, national income and employment will increase too, depending on the size of the multiplier (Seymen, 2002). With this policy, exports of other countries will decrease because of the imports restrictions of the countries under protection, foreign trade will develop in favor of the country applying protection. According to Keynes, the increase in national income and full employment can only be the result of the state's intervention in the economy.

2.2. Liberalisation of International Trade

If we look at liberal and protective trade periods from a historical perspective, we can say that the first protective era started with the First World War and lasted until the end of the second World War. Thus, the period between 1914 and 1944 refer to a waring time accentuated by the 1929 Great Depression, recession and depression were the major aspects of this period. However, after the Second World War, a time of institutional capitalism was accompanied with liberalization and expansion in trade, with the establishment of many international institutions such as the United Nations and the European Economic Community. Then the 1970s and 80s were marked with a new protectionism and neo-mercantilism due to the OPEC crisis and a general stagflation and recession at global level. However, s neo-liberal trade and economic policies came on the agenda again between 1980s and 2000s, with the establishment of many multinational companies, free trade, competitiveness, and financial globalization. Lastly, the world has returned to neo-protectionism from the beginning of the last millennium especially from 2008 as the world was deeply affected by the global financial crisis and marked with currency and trade wars referring to neo-mercantilist and neo-protectionist policies (Ünay and Dilek, 2018).

2.3. Instruments Used in Trade Protectionism

As explained above, protectionism in economics can be defined as a set of activities and policies that restrict imports to protect local businesses and employment from foreign competition. The most common instruments used in trade protectionism are tariffs, quota restrictions, standards and export subsidies.

Import tariffs are the first tools that governments tend to use. The aim of tariffs is to reduce imports via custom tariffs and thus increase the demand for national products and protect national businesses. Additionally, countries can also apply tariffs for retaliatory purposes, if country ‘A’ unilaterally imposes import tax, country ‘B’ may also impose taxes.

Quotas are also applied to limit imports, to ensure the development of the domestic industry and increase its competitiveness. A certain amount is determined for these products and quotas are distributed to importers. Since imports cannot be made above the allowed quota, naturally, the demand for domestic goods will increase.

Another tool that countries use are documents and requirements which are referred to as 'Standards'. Countries mostly introduce quality and health standard documents for safety concerns, but they may also use these standards to protect their own manufacturer and prevent excessive imports.

The last form of protectionism is the 'incentives' and 'subsidies' that countries provide to their producers. Governments can subsidize producers in a variety of ways to increase their export capacity and become globally more competitive. Governments can provide direct financial assistance or support with low interest rates and tax exemptions to local businesses. The main goal of protectionism is to make local industries and businesses more competitive by increasing import prices and restricting import quantities.

3. The 'Virtues of Free Trade' Versus 'Beggars-Thy-Neighbour' Policy

Advocates of protectionism in foreign trade, claim that protectionist policies protect the businesses and employees of a country by introducing restrictive regulations on their trade with foreign nations. However, OECD Secretary General praised free and liberal economy, in his report titled "Policy Priorities for International Trade and Employment" that he presented at the OECD Annual Forum in 2012. He pledged that international trade plays a strong role in economic growth and job creation and that protective tendencies can cause the opposite (OECD, 2012). In the report, it was emphasized that countries that strengthen open and free market policy and resist protectionism have more opportunities to create economic growth and high-value employment, protectionist and discriminatory measures do not protect or create employment, closing markets will put additional pressure on the labor market and suppress growth. Consequently, the doctrine of protectionism runs contrary to the principle of free trade, where governments reduce barriers to trade as much as possible. There is broad consensus among economists that protectionism has a negative impact on economic growth and economic well-being (Krugman, 1993).

However, in the era of Great Depression, many countries followed the 'beggars-thy-neighbour' policies, and protectionist measures had been used in many European countries (Eichengreen and Irwin, 2010). Since the end of the Second World War, it has been the state policy of many countries to remove protectionism through free trade policies, international agreements,

and international organizations such as the WTO. However, some policies such as agricultural incentives have continued for years within the scope of the EU's Common Agricultural Policy and the economic recovery package of the USA such as "Buy American Provisions" have been criticized for being protective.

3.1. Protectionist Policies After Economic Crises

The American mortgage crisis that started at the end of 2007 spread rapidly to the European countries and affected European economy heavily and led to bankrupt of companies, increased unemployment and decreased the European GDP. In reaction, EU countries have implemented protective measures to support their economies and strategic sectors (Durusoy *et al*, 2015). With the global economic crisis in 2008, the EU flinched away from Free Trade Agreement (FTA) negotiations with United States, Canada and Japan. The European Commission can initiate protective measures, mostly in form of 'anti-dumping measures' to protect European products (De Ville and Orbie, 2016). Thus, we can say that after the outbreak of an economic crisis, countries tended to follow more protectionist policies. This is also the case when countries go through a loss of competitiveness. According to Georgiadis and Grab (2016), global economy is under the risk of a return to protectionism (Georgiadis and Grab). Li Qin-Chang (2010) observed the political action and their impact on the EU agricultural interest groups and EU trade policy making. The observation suggested that the protectionism in the EU agricultural policy would preserve its protectionist nature even though it would soften at some degree.

Baldwin describes the European trade politics as "hell" when the European trade and business are struggling and that the EU becomes more protectionist, trying to save jobs in the EU, rather than trying to reduce its obstacles overseas. In 'trade politics hell', the Council is more effective than the European Commission which becomes weaker (Baldwin, 2006).

Another important aspect regarding protectionism is that both emerging economies and industrialized countries put barriers and obstacles in their foreign trade but not only by traditional measures, also by 'behind-the-border barriers'. Moreover, many of protectionist measures that rose after crisis era were in indecipherable form and were applied to all members of the EU or NAFTA too (Wajda-Lichy, 2014).

3.2. The Paradigm of ‘Creeping Protectionism’ Despite the Benefits of Free Trade

Erixon and Sally (2010) described the world’s return to protective measures in 2009 as ‘creeping to the surface in subtle ways’ and reversing thus the almost thirty years of free trade. They assessed that “Creeping protectionism” is increasing due to many nationalistic interventions, especially in capital and product markets - which confirms us the patterns of neo-mercantilism as we assessed earlier - and the return of states applying more defensive trade policies.

The paradigm lies in the fact that countries that apply more liberal and freer trade policies benefit more compared to countries that apply protective policies. Yet, protectionism is still being applied and seen as an adequate step to protect national industries, even though trade restrictions are harmful to the economies of the trading partners (Abboushi, 2010).

Grundke and Moser analysed the US enforcement on product standards which they describe as hidden protectionism. They covered the US imports on 93 product-groups from 2002 to 2014, for 167 trading partners. They found that many imports were refused due to increased product standards which led to a decrease in the US imports. Indeed, technical regulations or product standards are being used as non-tariff barriers to trade (NTBs) and they have gained importance in recent years, especially by the USA in the post-crisis era (Grungke and Moser, 2019) . Their empirical results show that higher product standards reduce exports by 2.8 to 5 billion US Dollars, which an important value for developing economies countries.

Numerical simulation of Li and Whalley shows that protective measures applied by the United States of America (USA) reduce manufacturing employment in the USA and that this unemployment would increase even more if there were any retaliation measures (Li and Whalley, 2020).

3.3. The World Trade Organization as a Governing Body in International Trade

The World Trade Organization Agreement came into effect on 1 January 1995, by replacing the General Agreement on Tariffs and Trade (GATT) which was created in 1948. The WTO comprises today 164 member states. The WTO Agreement also created the WTO Dispute Settlement mechanism to ensure trade liberalisation rules (Corr, 1997).

There is a broad range of policy tools which protect the revenues and sales of domestic firms against foreign companies. However, Sykes (1999) stresses that fact that regulatory measures may increase foreign firms' costs compared to domestic firms but are in conclusion wasteful instruments as their costs may be superior to more common protective tools which are tariffs and quotas.

One of the well-known and much disputed barriers in international trade is the ban imposed by the EU to the sale of beef treated with growth hormones. The United States use these hormones widely and sees the European prohibition as a disguised protectionism while the EU declares that it is health measure. The dispute started in 1985 and it still continues, to comply with WTO law.

According to Cass (2001), international trade is going through a process of 'constitutionalization' which can shape states' national policies in trade and industrial policies as well as in labour market policies and reforms, which she explains especially through the operations and decisions of the Appellate Body within the World Trade Organization WTO. In principle states can easily argue that almost all regulatory measures of other states can form an obstacle to export and thus become a discriminatory trade barrier.

Times of crises generally lead to an increase in trade protectionism, which is allowed by protectionist provisions in international commercial rules. The aim is to support industries that are weakened and thus putting barriers to trade. However, the permissive and common use of these provisions can deteriorate global trade (Davis and Pelc, 2017).

4. Trade Protectionism in the European Union and G20 Countries

In our analysis, we refer to the G20 countries and to the European countries via their representation at the G20 by the EU. Therefore, our analysis includes the following countries: Argentina, Australia, Brazil, Canada, China, the European Union, France, Germany, India, Indonesia, Italy, Japan, Mexico, Russia, Saudi Arabia, South Africa, South Korea, Turkey, the United Kingdom, and the United States. Our analysis focus on figures, data, statistics and tables reflecting the status of trade protection at these countries.

Our study exposes numerical data which are combining all protective trade measures such as tariffs, quotas, standards, or subsidies implemented by the G20 countries. All figures and data have been extracted from the official reports of the WTO, World Bank, OECD and Global Trade Alert. Our analysis starts from

the global economic crisis of 2008 and comprises the years between 2008 and 2019, which include the latest available data.

4.1. Methodology of the Research

The structure of the analysis is as follows: firstly, we investigate general trends in international trade of G20 countries in the analysed timeframe and then we also analyse the sectors and countries which are mostly affected by trade protectionist measures, including extra-G20 countries. This is of particular importance for accomplishing the chapter's objective, as we expose the fact that protectionist countries do not harm only third parties but also harm themselves. This is mainly due to the nature of protectionism and its negative effects that follow, considering the multidimensionality and multilateralism in trade and retaliative measures which usually accompany protective measures.

In our analysis we have also assessed shorter sub-periods to better understand and study the short-term effects of the global economic crises; indeed, (2008-2009 and 2014-2015) and also wider periods to expose the fact that countries do not only implement protective measures only in times of crises. They tend to use protectionism overall for their national interests indeed and these long periodical analyses reflect the growing tendency in preserving trade superiority in fact. These analyses allow us to investigate the status of trade wars between countries and the potential return to protectionism in the world.

These figures which expose the growing number of trade protectionist measures globally are in contradiction with the official discourses of both the G20 and EU leaders and also of the biggest trade and economic institutions such as the WTO and the OECD. In our opinion, these figures reflect the most important elements and moments in the establishment of trade wars over the latest two decades.

5. Results of the Empirical Analysis of Trade Protectionism Since 2008

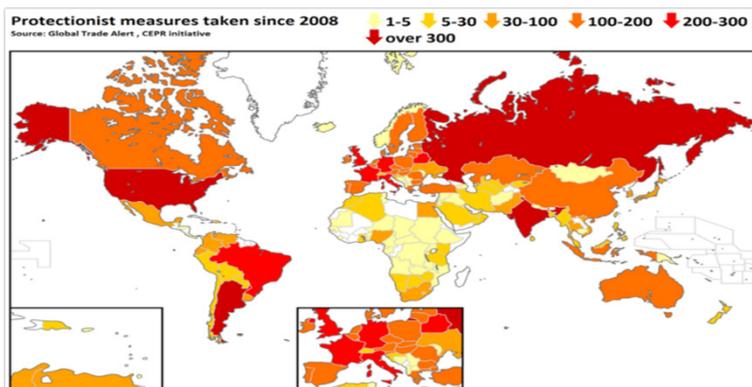
At the summit held in London on April 2, 2009, G20 Presidents made the following commitment "*We will not repeat the historical mistakes in the field of protectionism in transition periods*". However, the extent to which they adhere to this commitment is rather questionable. The World Bank reported in November 2009 that after these commitments of the G20 countries, 17 countries out of 20 took measures to restrict trade. These measures diverted world commodity

trade by 0.25% to 0.5% (approximately \$ 50 billion per year), according to their bilateral and monthly trade statistics (Henn *et al*, 2010).

After the first G20 Summit held in November 2008, 192 protective measures were taken to harm neighbouring countries and 48 “suspicious” measures were identified, making a total of 240 protective measures. Between November 2008 and September 2009, the G20 broke its promises about “not taking protective measures” every 3 days on average. The damage inflicted by the G20 countries is significant: of all product categories, all economic sectors, and a total of 206 countries (including the G20 countries) faced protective trade action at least once (Evenett, 2009).

After November 2008, the number of measures affecting China’s commercial interests was 158% higher than the number reported before St Petersburg. When considered as a percentage, the rate of measures that touched the commercial interests of the EU was even higher. Protective actions for 2010 and 2011 were 45% higher than those documented two years ago. The number of protective measures documented in 2012 and 2013 was 95% higher than the number known during the 2013 St. Petersburg Summit. The number of applications of protective trade measures recorded worldwide in 2013 was higher than in 2009. Looking at the G20 countries, there was a significant increase in protectionist measures in 2009 and approximately 500 measures were taken in 2012. After the St. Petersburg Summit, in 2013, G20 countries implemented 457 protective measures, and on average, a damaging law was passed every 23 hours (Evenett, 2014).

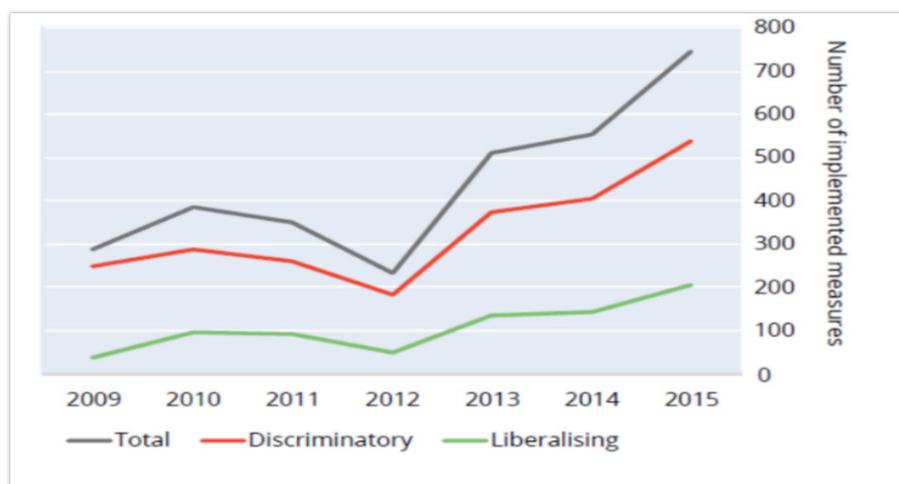
Figure 1 - Protective Measures Taken Globally Between 2008 – 2013



Source : <http://www.globaltradealert.org/sites/default/files/GTA16.pdf>, p.64.

Figure 1 represents the protective trade measures that were taken in the world between the years of 2008 and 2013. According to the Global Trade Disorder report, G20 countries took a total of 3581 measures, damaging foreign business interests. The countries are represented by different colors on this map, reflecting the number of the measures that have taken. Yellow indicates measures between 1 and 5, dark yellow indicates measures between 5 and 30, orange indicates the measures between 30 and 100, dark orange indicates measures between 100 and 200, red indicates the measures between 200 and 300 and finally dark red indicates the measures over 300. We can see from the map that the USA, Canada, Brazil, Argentina, Russia, China, India, Kazakhstan, Sweden, Finland, Poland, Belarus, Ukraine, Turkey and Australia are among the most protective countries.

Figure 2 - Worldwide Trade Measures 2009-2015



Source: 18th Global Trade Alert Report, p.18.

The chart above shows the protectionist and liberal measures implemented around the world between 2009 and 2015 October. The grey line shows the measures implemented in total, the red line shows the discriminatory (protective) measures, and the green line shows the measures taken and implemented in the direction of trade liberalization. As it is easily seen, discriminatory measures have been implemented far more than liberalizing measures between 2009 up until 2015. Discriminatory measures are approximately 2,5 times higher than liberalizing measures.

Table 1. Countries That Applied the Most Protective Measures in 2015

Rank	Country	Protective Measures in 2015	Share of the Country's Import in the 2014 Total World imports
1	Russian Federation	65	%1.6
2	India	55	% 2.6
3	USA	51	%13.4
4	Indonesia	39	%1.0
5	Brazil	38	%1.3
6	Japan	36	%4.7
7	UK	26	%4.0
8	Canada	24	%2.6
9	Turkey	24	%1.4
10	France	23	%3.8
	All other countries	631	%53.1

Source: The 18th Global Trade Alert Report

Table 1 shows us the first 10 countries that implemented protective measures in 2015. As we can see, all of top 10 countries that applied the most protective measures in 2015 are G20 countries. Russia is in the lead with 65 protective measures in 2015, India is second, USA comes third, Indonesia, Brazil and Japan applied similar number of measures, where the UK, Canada, Turkey and France followed them with approximately 20 measures in 2015.

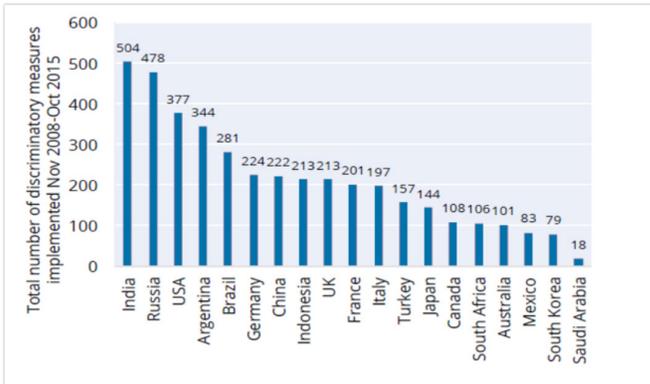
Table 2. Sectors Most Affected by Trade Protectionism in 2015

Rank	Sector	Number of Times Hit in 2015	Percentage of World Trade
1	Basic metals	84	5.36%
2	Agricultural produce	76	2.20%
3	Transport equipment	76	7.53%
4	Special purpose machinery	68	5.32%
5	Basic chemicals	66	5.31%
6	Grain mill products and starches	56	1.51%
7	Electrical machinery and apparatus	52	6.29%
8	Other chemical products	50	4.97%
9	Fabricated metal products	49	1.42%
10	General purpose machinery	48	4.87%
	All other sectors	679	55.22%

Source: The 18th Global Trade Alert Report, p.19.

The 10 sectors most affected by protectionist measures in trade were hit in total 625 times in 2015 (until October). Among 539 damaging measures that have been implemented in 2015, 443 of them are the measures implemented by the G20 countries. These ten sectors represented 45% of world imports. The most hit sector in 2015 was basic metals (84 times) which consists mainly of steel. Agriculture and transportation equipment are also among the most affected sectors by trade protective measures as they were hit 76 times in 2015.

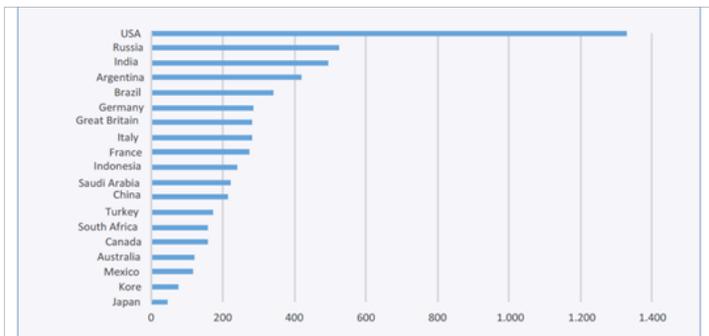
Figure 3. Trade Protectionism Ranking in G20 Countries 2008-2015



Source: 18th Global Trade Alert Report, p.22

Figure 3 ranks the G20 nations according to the total number of discriminatory measures implemented between November 2008 and the end of October 2015. The top five G20 countries are respectively, India, Russia, the United States, Argentina, and Brazil. These countries used between approximately three hundred and five hundred measures. Between October 2015 and May October, G20 countries took 145 more restrictive measures within a time of 8 months. From the total of 1583 protective measures entered into force after the crisis, only 387 of them were removed later (WTO, 2016).

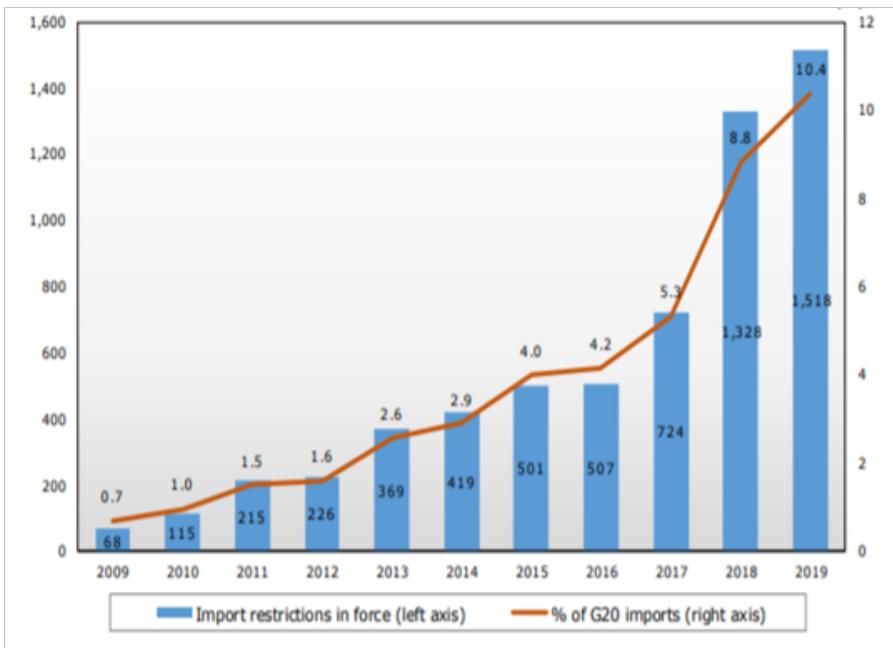
Figure 4. Trade Protective Measures in G20 Countries 2008-2017



Source: Setav 2018 Trade Wars report

When we compare the figure 3 and figure 4, we can see that in figure 3 the top three countries that applied the most protective measures between 2008 and 2015 were respectively India, Russia and the USA, whereas the figure 4 adds the years of 2016 and 2017 and the top three protective countries become the USA, Russia and India. We can see the shift from India to the USA, which can be explained by the election of Donald Trump as the President of the USA and his campaigns about protecting American companies and interest and “Making America Great Again”.

Figure 5. Cumulative Trade Coverage of G20 Import-restrictive Measures on Goods in Force Since 2009
(USD Billion and % of world merchandise imports)



Source: WTO Report on G20 Trade Measures

Table 3. Other Trade and Trade-Related Measures 2012 – 2020

Type of Measure	12	13	14	15	16	17	18	19	Mid- Oct 19 to mid- May 20	Mid May 20 to mid Oct 20
Import	58	59	45	62	42	36	60	45	26	13
- Tariffs	25	34	29	37	25	20	46	27	12	5
-Customs procedures	25	15	12	19	13	12	2	4	2	3
-Taxes	3	3	2	3	2	1	3	3	2	0
-Quota Restrictions	4	7	2	3	2	2	8	9	8	3
-Other	1	0	0	0	0	1	1	2	2	2
Export	10	20	14	23	6	11	10	8	5	5
-Duties	1	1	4	5	1	3	6	1	2	1
-Quotas Restrictions	5	4	5	4	1	4	2	2	0	2
-Other	4	15	5	14	4	4	2	5	3	2
Other	8	4	9	9	9	12	0	1	0	0
-Other than Local content issues	4	0	0	0	3	2	0	1	0	0
-Local Content	4	4	9	9	6	10	0	0	0	0
Total	76	83	68	94	57	59	70	54	31	18
<i>Average per month</i>	<i>6,6</i>	<i>6,9</i>	<i>5,7</i>	<i>7,8</i>	<i>4,8</i>	<i>4,9</i>	<i>5,8</i>	<i>4,5</i>	<i>4,4</i>	<i>3,6</i>

Source: https://www.wto.org/english/news_e/news20_e/report_trdev_nov20_e.pdf

Table 4. Cumulative Trade Coverage of G20 Import-restrictive Non-Covid-19 Related Measures 2009-2019 (US Billion Dollars)

	Total Imports (world)	Total imports (G20)	Total G20 import restrictions in force	Share in G20 imports (%)	Share in world imports (%)	Total G20 import restrictions terminated	Share in G20 imports (%)	Share in world imports (%)
2009	12,486	9,823	68.12	0.69	0.55			
2010	15,163	11,933	114.82	0.96	0.76	2.39	0.02	0.02
2011	18,109	14,263	214.60	1.50	1.19	13.73	0.10	0.08
2012	18,193	14,143	226.26	1.60	1.24	58.67	0.41	0.32
2013	18,483	14,340	369.04	2.57	2.00	36.53	0.25	0.20
2014	18,654	14,451	418.51	2.90	2.24	32.69	0.23	0.18
2015	16,360	12,561	500.95	3.99	3.06	0.19	0.001	0.001
2016	15,812	12,228	506.92	4.15	3.21	0.02	0.0001	0.0001
2017	17,587	13,615	724.23	5.32	4.12	3.88	0.03	0.02
2018	19,402	15,064	1,327.78	8.81	6.84	5.44	0.04	0.03
2019	18,869	14,629	1,517.86	10.38	8.04	13.12	0.09	0.07

Source: WTO calculations, based on UNSD Comtrade database.

Table 4 indicates the amount of import limitations that G20 countries took since 2009, we can see that these limitations in force have increased heavily both in value and in percentage of global imports.

There has been particularly a sharp increase in 2017 and 2018, which is mainly due to the import restrictions implemented by the USA on metals such as steel and also due to tariff increases resulting from trade wars between especially USA and China and some other countries.

6. Conclusion

In this chapter we explored how countries react in terms of trade policies in the post-economic crisis era, both in the short-term and in the long-term, and assess the situation of trade measures between the political and formal discourses of G20 and the EU.

We hypothesized that even the strongest advocates of liberal economy and free trade like the USA, UK, EU and G20 countries who make official

statements to stop protectionism have taken various measures to protect their national commercial interests and harm foreign commercial interests, especially in the post-crisis periods.

We have used data set from various international institutions such as the WTO, OECD and Global Trade Alert and analysed the years between 2008 up to 2020, in the G20 countries. We exposed the countries the number of protective measures implemented and the countries that used them. We also analysed the sectors that were the most targeted and hit by trade protective measures.

We have seen that countries tend to implement more protective measures especially in the following year of an economic crisis, but that protectionism is not limited to post-crises era. From the global economic and financial crisis of 2008 up until today, most countries and leaders apply neo-mercantilist and protective measures to protect their strategic sectors and national interest despite the WTO policies and G20 official discourses. Both countries who apply these protective measures and countries exposed to these measures; they are all affected by each other and as a result, many countries face commercial losses.

By the end of 2019, almost 10.5% of G20 imports were affected by protective measures introduced by G20 economies in 2009 and which are still in force. This amount equals to 1.5 trillion USD out of 14.6 trillion USD of G20 total imports (WTO, 2020). Protectionism is estimated to reduce global GDP by 10 trillion USD each year by 2025 (Boston Consulting Group and HSBC, 2020). In conclusion, restrictive policies and measures are clearly not the best way to fight effectively with crises. Contemporary economists defend liberal economy and free trade policies, and they emphasize on the harmful effects of protectionism especially in the fact that the costs of protective measures exceed the expected benefits and thus reduce economic growth (Fouda, 2012).

According to Baccini and Kim (2012), international institutions that are available in the international order serve as ‘conveyors of information and mechanisms of commitment and socialization’ especially during crises. Therefore, we can conclude by stating that the role and task of the international institutions such as the WTO should be enforced, they shall be empowered in controlling and regulating protective measures, so that the world and particularly poorer countries could benefit more from liberal economy and free trade.

References

- Baccini, L. and Kim, S. Y. (2012) Preventing Protectionism: International Institutions and Trade Policy. *The Review of International Organizations*. 7 (4): 369-398 doi:10.1007/S11558-011-9140-7
- Baldwin, M. (2006) EU Trade Politics - Heaven or Hell? *Journal of European Public Policy*. 13(6): 926-942 DOI: 10.1080/13501760600838698
- Bollen, Y., De Ville, F. and Orbie, J. (2016) EU Trade Policy: Persistent Liberalisation, Contentious Protectionism, *Journal of European Integration*, 38(3): 279-294 DOI: 10.1080/07036337.2016.1140758
- Boston Consulting Group, (2020). Protectionism Could Cost the Worldwide Economy \$10 Trillion by 2025. Available at: <https://www.bcg.com/press/17september2020-protectionism-could-cost-the-worldwide-economy-10-trillion-by-2025> (Accessed 10 May 2021)
- Cass, D. Z. (2001), The Constitutionalization of International Trade Law: Judicial Norm-Generation as the Engine of Constitutional Development in International Trade, *European Journal of International Law*, Vol. 12 No. 1, pp. 39-75.
- Corr, F. C. (1997), Trade Protection in the New Millennium: The Ascendancy of Antidumping Measures, *Northwestern Journal of International Law & Business*, Vol. 18 No. 1, pp.1-63.
- Davis, C.L and Pelc, K. (2017), Self-restraint of Trade Protection, *The Journal of Conflict Resolution*, Vol. 61 No. 2. pp. 398-429, Sage Publications, Inc., <https://www.jstor.org/stable/26363888>
- Durusoy, S., Sica, E. and Beyhan, Z. (2015), Economic Crisis and Protectionism Policies: The Case of the EU Countries. *International Journal of Humanities and Social Science*. Vol. 5 No. 6-1, pp.57-68.
- Eichengreen, B., and A. Irwin. (2010), The Slide to Protectionism in the Great Depression: Who Succumbed and Why? *The Journal of Economic History*. Vol. 70 No. 04, pp. 871–97.
- Erixon, F. and Sally, R. Trade, (2010), Globalisation and Emerging Protectionism Since the Crisis, *European Centre for International Political Economy (ECIPE) Working paper*, No. 02/2010, pp.1-21.
- Evenett, S. and Fritz, J. (2015), The Tide Turns? Trade, Protectionism, and Slowing Global Growth: The 18th Global Trade Alert Report, *Center for Economic Policy Research*, pp. 1-114.

- Evenett, S. J. (2009), Broken Promises: A G-20 Summit Report, Global Trade Alert, *Center for Economic Policy Research*, pp.1-206.
- Evenett, S. J. (2014), The Global Trade Disorder: The 16th GTA Report, pp.1-149.
- Fouda, R. (2012), Protectionism and Free Trade: A Country's Glory or Doom?. *International Journal of Trade, Economics and Finance*, Vol. 3 No. 5, pp.351-355. Available at: <http://www.ijtef.org/papers/226-CF312.pdf> (Accessed 15 June 2021)
- Georgiadis, G. and Grab, J. (2016), Growth, Real Exchange Rates and Trade Protectionism since the Financial Crisis
- Gregory, R., Henn, C., McDonald, B. and Saito, M. (2010), Trade and the Crisis: Protect or Recover. *IMF Staff Position Note*. 16.04.2010, Available at: <http://www.imf.org/external/pubs/ft/spn/2010/spn1007.pdf> (Accessed 20 July 2020)
- Grundkei R. And Moser, C. (2019), Hidden protectionism? Evidence from non-tariff barriers to trade in the United States, *Journal of International Economics*, No. 117, pp. 143–157.
- Krugman, Paul R., (1993), The Narrow and Broad Arguments for Free Trade, *American Economic Review*, Vol. 83 No. 2, pp. 362-366.
- Li, C. and Whalley, J., Trade Protectionism and US Manufacturing Employment, *Economic Modelling*, DOI: <https://doi.org/10.1016/j.econmod.2020.03.017>
- OECD, (2012), Policy Priorities for International Trade and Jobs, Available at: <https://www.oecd.org/site/tadicite/50286917.pdf> (Accessed 20 January 2020).
- Review of International Economics, 24(5), 1050–1080, DOI:10.1111/roie.12247
- Seymen, D. (2002), Dış Ticarete Yeni Korumacı Eğilimler ve Türk Dış Ticareti Açısından Değerlendirmesi, *Dokuz Eylül Üniversitesi SBE Dergisi*, Vol. 4, No.4, pp.1-22.
- Siles-Brügge, G. (2011), Resisting Protectionism after the Crisis: Strategic Economic Discourse and the EU–Korea Free Trade Agreement, *New Political Economy*, Vol. 16 No. 5, pp. 627-653, DOI: 10.1080/13563467.2011.602187
- Suhail Abboushi, S. (2010), Trade Protectionism: Reasons and Outcomes, *Competitiveness Review*, Vol 20 No. 5, pp. 384-394, DOI: 10.1108/10595421011080760
- Sykes, O.A. (1999), Regulatory Protectionism and the Law of International Trade, *The University of Chicago Law Review*, Vol. 66, No 1, pp.1-47.

- Ünay, S. and Dilek, Ş. (2018), *Yeni Korumacılık ve Ticaret Savaşları*, SETAV, No. 228, pp. 1-28
- Wajda-Lichy, M. (2014), Traditional Protectionism Versus Behind-the-Border Barriers in the Post-crisis Era: Experience of Three Groups of Countries: the EU, NAFTA and BRICS, *Journal of International Studies*, Vol. 7 No. 2, pp. 141-151. DOI: 10.14254/2071-8330.2014/7-2/12
- WTO, (2016), Report on G20 Trade Measures. Available at: https://www.wto.org/english/news_e/news16_e/g20_wto_report_june16_e.pdf (Accessed 04 June 2020)
- WTO, (2020), Report on G20 Trade Measures. Available at: https://www.wto.org/english/news_e/news20_e/report_trdev_nov20_e.pdf (Accessed 04 June 2020)

CHAPTER IV

THE EFFECTS OF TOTAL ENERGY CONSUMPTION ON FOREIGN TRADE BALANCE: PANEL DATA ANALYSIS FOR COMPARISON BETWEEN SELECTED OECD COUNTRIES AND TURKEY*

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1. Introduction

With the last century, increasing globalization activities in both economic and socio-cultural fields have led to many technological revolutions. This progress in the field of technology has brought to the agenda intense energy consumption along with human needs, causing countries to turn to more foreign trade. While increased foreign trade has contributed positively to the living standards and well-being of countries, this trade has also had some negative consequences. One of these negative consequences is the foreign trade deficits facing countries. The foreign trade deficit is a concept that expresses the negative difference that arises when a country's import costs exceed export revenues. In today's economic conjuncture, where intense capital flows are experienced, foreign trade deficits, which are an important indicator in the decisions of foreign capital regarding the choice of countries, are one of the economic instabilities highlighted by economic administrations.

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The energy, which is necessary for the continuity of economies and daily life is generally grouped into two groups in terms of resources. These resources are divided into renewable energy sources and consumable energy sources. The energy source, which can be changed in a short time when consumed, is defined as a renewable energy source. These resources are classified as hydraulic energy, geothermal energy, biomass energy, solar energy and wind energy. The energy source, which is consumed when used and cannot be changed in a short time, is defined as a consumable energy source. Such energy sources consist of fossil fuels containing hydrocarbons such as oil, natural gas and coal (Arslan and Solak, 2019:1382). It is thought that countries importing consumable energy in particular can compensate for the increased foreign trade deficit due to intensive energy use with increased investments and export revenues as a result of turning to renewable alternative energy sources. Therefore, technological moves towards the production of renewable energy sources are of great importance for these countries.

When the relevant literature on the factors affecting a country's foreign trade balance is examined, it is seen that income and price mechanisms are the most prominent macroeconomic variables that come to the fore (Khan,1974; Arize, 1994, Oskooee and Niroomand, 1998; Brooks, 1999; Oskooee and Brooks, 1999). In this context, it is thought that energyconsumption is one of the key factors that has an impact on the income and price mechanism. Therefore, the theoretical infrastructure for modeling the study is based on examples of studies that take into account the impact of income and price on the balance of foreign trade. The first of these studies was carried out by Khan (1974). Khan (1974) estimates the import and export demand functions of 15 developing countries using the Least Squares Method and annual data for the period 1951-1969. These functions are determined in logarithmic forms as follows.

$$\text{Log } M_{it}^d = \alpha_0 + \alpha_1 \text{Log}(PM_i / PD_i)_t + \alpha_2 \text{Log}Y_{it} + U_t$$

$$\text{Log } X_{it}^d = b_0 + b_1 \text{Log} (PX_i / PW)_t + b_2 \text{Log}W_t + V_t$$

Here, (M_i) and (PM) show the import and import price index of the country (i) respectively, while (PD) and (Y) symbolize the domestic price index and Real Gross Domestic Product of the country (i) respectively. While (X_i) shows the export quantity of country (i), (PX) symbolizes the export price index, (PW) the world price level and (W) the world real income. The results show that

prices play an important role in determining exports and imports of developing countries.

In another study, Brooks (1999) examines bilateral trade between the United States (US) and 6 other industrialized countries (G7) using quarterly data between 1973-1996 and the Johansen method together with several other cointegration techniques. In the study, which estimated import and export demand elasticities and income elasticities, import and export demand equations are modeled as a linear logarithmic function as follows.

$$LM_{i,t} = \alpha + \beta LY_{us,t} + \gamma LREX_{i,t} + \varepsilon_{i,t}$$

$$LX_{i,t} = \alpha' + \beta' LY_{i,t} + \gamma' LREX_{i,t} + \varepsilon_{i,t}$$

While ($M_{i,t}$), in the import demand equation indicates the import of US from other countries, ($LY_{us,t}$), represents the income (GDP) of the US and ($LREX_{i,t}$), represents the real exchange rate. The results show that the devaluation of the dollar against other currencies, along with other countries, will lead to an improvement in the US foreign trade balance. In addition, another result is that, U.S. import income elasticity is greater than export income elasticity.

In another study, Bahmani-Oskooee and J. Brooks (1999) use Johansen and Juselius Joint Integration Method. The study tests whether there is a long-term relationship between the variables of import and export demand functions in bilateral trade between the United States and its 6 major trading partners. In addition, quarterly data between 1973 and 1996 are used in the study containing the price effect. Import and export demand functions between the United States and its trading partners are determined as below;

$$Ln M_{it}^{U.S} = \alpha + \beta Ln Y_{U.S,t} + \gamma Ln REX_{i,t} + \varepsilon_t$$

$$Ln X_{it}^{U.S} = \alpha' + \beta' Ln Y_{it} + \gamma' Ln REX_{i,t} + \varepsilon_t'$$

Where, $Ln M_{it}^{U.S}$ represents the logarithm of the US imports from its trading partners. $Ln Y_{U.S,t}$ represents the logarithm of U.S. Real Gross National Product. $Ln REX_{i,t}$, symbolizes the mutual real exchange rate between the U.S. and its trading partners, $Ln X_{it}^{U.S}$, the logarithm of U.S. exports to trading partners, and $Ln Y_{it}$, symbolizes the logarithm of the Real Gross National Product of U.S. trading partners. The results show that, income elasticities in import and export

demand equations are in line with previous literature and tend to be relatively large. It also shows that export income elasticities are significantly lower than import income elasticities.

When the literature on this subject is examined, it is seen that the majority of studies examine the relationship between energy consumption and trade openness, economic growth or exports, and a very limited study was conducted on the effects of energy consumption on the balance of foreign trade. From this point of view, it is thought that this study will contribute to the existing literature by shedding light on this issue to employees.

In this context, the study consists of a total of three parts after the introduction section. In the first part, a summary of the literature with similar study examples is given. In the second part, information about the methodology and analysis findings of the study under the heading of econometric application is given. The study is concluded with the results and recommendations section.

2. Related literature

2.1. Energy consumption and economic growth relationship

The most important indicator of a country's economic growth is considered to be the increase in the real income of that country between certain periods. Energy consumption, which has become an important production factor in the last 10 years, is considered an immersive force of this economic growth and development. For this reason, it is accepted that energy and services play important roles both in the living standards of countries and in improving socio-economic and human development (Magazzino et al., 2021). On the other hand, when the study results in the relevant literature are examined, it can be said that another important determinant of economic growth and development is foreign trade. In particular, the positive impact of export increases on economic growth causes some developing countries to adopt an export-based economic growth model due to lack of resources.

When the literature on the subject is examined, it shows that a significant part of the studies carried out are studies on the relationship of energy consumption with economic growth. The weighted results obtained from these studies using different countries and methods show that energy consumption increases economic growth or there is a causality relationship between these variables (Faisal et al., 2017; Mukhtarov et al., 2017; Ha et al., 2020; Aimer and

Dilek, 2021; Magazzino et al., 2021). In one of these studies, Saatçi and Dumrul (2013) investigate the relationship between energy consumption and economic growth in Turkey. The results of the study, which used annual data and Structural Break Model Approach between 1960 and 2008, show that there is a varying amount of a positive relationship between energy consumption and economic growth in Turkey. Another case study by Kasperowicz and Streimikiene (2016) examines the relationship between energy consumption and economic growth in V4 countries and 14 former European Union member states. The results of the study using the Panel Data Analysis Approach with the data between 1995 and 2012 show that energy consumption is positively related to economic growth.

However, some study results show that there is a negative relationship between energy consumption and economic growth. In one of these studies, Güvenoğlu and Erçakar (2018) investigate the effect of energy consumption on economic growth in Turkey. The results of the study using the annual data between 1971 and 2015 and the Johansen Cointegration Method show that energy consumption has a negative effect on Turkey's economic growth in the long run. In another study, Sikic (2018) examined the effects of renewable and non-renewable energy consumption on economic growth in 16 developed and 11 post-transition EU countries. The results obtained from the study, which used data between 1990-2018 for developed EU countries and between 1995-2018 for transition countries, show that non-renewable energy consumption in developed EU countries has a positive effect on economic growth, while renewable energy consumption has a negative effect. The opposite results are obtained in post-transition EU countries.

2.2. Energy consumption, international trade and economic growth relationship

When the literature on the subject is examined, it is seen that the causality relationship between energy consumption, foreign trade and economic growth has been investigated in some studies. While some results from these studies show that there is a unidirectional causality relationship from economic growth, export and import to energy consumption (Aslan et al., 2017), some other study results show a bidirectional relationship between international trade and energy consumption. In one of these studies, Brini et al. (2017) examine the relationship between renewable energy consumption, international trade, oil prices and economic growth in Tunisia. In the study in which the ARDL Boundary Test Approach is preferred, the analyzes are carried out using annual data from 1980 to

2011. The results show a bi-directional feedback relationship between renewable energy consumption and international trade. Some research results show that there is a bidirectional causality relationship between these three variables (Katirci et al., 2014; Katirci et al., 2016; Parajuli et al., 2021). In one of the sample studies, Katirci et al. (2014) investigate the relationship between energy consumption, international trade and real income in the United States. In the study in which the Auto-Regressive Distributed Lag (ARDL) Econometric Method is preferred, annual data between 1960 and 2010 are used for analysis. The results show a long run relationship between energy consumption, international trade and real income. They also come to the conclusion that energy consumption is the determinant of exports, imports and real income.

In one of the similar studies in the literature, Sarıtaş and Okşak (2020) examine the impact of oil consumption on exports, imports and growth in OECD countries. Panel data analysis method is preferred in the study using 1996-2018 annual data. Results from the study using three different models show that oil consumption has a positive and statistically significant impact on both exports and imports. In another study conducted by Dogan (2016), granger causality test results show a short- and long run relationship between economic growth and energy consumption, economic growth and trade and energy consumption and trade in Belgium. Therefore, it has been stated that the adoption of incentive measures related to energy consumption and trade in the long run in Belgium can have a positive effect on economic growth. In a similar study, Shakeel et al. (2014) examine five South Asian countries and examine the short and long run relationships between energy consumption, exports and GDP in these countries. Cointegration and Granger causality tests are applied in the study, in which annual panel data between 1980-2009 is used. The short run results show that there is a bidirectional causality relationship between energy consumption and GDP, between exports and GDP, and between energy consumption and exports. In the long run, there is only a bidirectional causality relationship between energy consumption and GDP.

2.3. Energy consumption, export, import and foreign trade deficit relationship

When the results of the research on the subject are examined, it is seen that some studies examine the relationship between energy consumption and foreign trade (import and export), while some studies examine the relationship between

energy consumption and exports only, and a small number of studies are focused on energy consumption and foreign trade balance which this study also focuses on.

In one of the case studies examining the relationship between energy consumption and foreign trade (import and export), Jebli and Youssef (2014) examine the relationship between manufacturing, renewable and non-renewable energy consumption and international trade for 69 countries using panel co-integration techniques. The results of the short run Granger Causality Test reveal a bi-directional feedback relationship between non-renewable energy and trade. In addition, a unidirectional causality relationship is detected from renewable energy to trade. In the long run, a bi-directional feedback causality relationship between renewable energy and imports and a unidirectional causality relationship from renewable energy to exports are identified. In another study, Sadorsky (2011) investigates the relationship between trade and energy consumption in Eight Middle Eastern countries. Panel Data Analysis method is preferred in the study using data between 1980-2007. Short run results show a unidirectional Granger causality relationship from export to energy consumption and a bi-directional feedback relationship between import and energy consumption. Zeren and Akkuş (2020) examine the long-term relationship between renewable and non-renewable energy consumption and trade openness for developing countries. Panel data analysis is used in the study using data between 1980 and 2015. Empirical results show that non-renewable energy consumption is the cause of trade openness, and renewable energy consumption is the cause of the decrease in trade openness.

In one of the case studies examining the relationship between energy consumption and exports, Erkan et al. (2009) examine the impact of energy consumption on Turkish exports in their empirical analysis. Granger Causality analysis and Impulse Response Functions are used in the study with data between 1970 and 2006. The results show a long run relationship between energy consumption and exports. In addition, granger causality analysis shows a unidirectional causality relationship from energy consumption to export. In another study, Li (2010) examines the relationship between Shandong's exports and energy consumption. Granger Causality analysis was preferred as the method in the study using data between 1980 and 2006. The results show a positive relationship between exports and energy consumption. In a similar case study, Chibueze et al. (2013) investigate the impact of Nigeria's domestic energy

consumption on exports. The estimates made in the study using annual data between 1970 and 2009 are carried out through causality analysis and impulse response functions methods. The results show a statistically significant long run relationship between domestic energy consumption and exports. In addition, the results of the Granger Causality Analysis show a unidirectional causality from energy consumption to exports.

In one of the few studies on the relationship between energy consumption and foreign trade balance, Çütçü (2019) investigates the relationship between the use of electrical energy and the balance of foreign trade in the industrial sector in Turkey. In the study using structural fracture tests, analyses are carried out using annual data between 1970 and 2015. According to the test results of the study, which preferred the Hatemi-J Co-operation Test and Hacker-Hatemi-J Bootstrap Causality Analysis Method, there is a long-term relationship between electricity consumption and foreign trade balance, but there is no bilateral causality relationship between variables.

In summary, it seems that it is not possible to talk about a consensus on the subject in studies where different methodological analyzes are carried out for different countries. In other words, while different results were obtained regarding the relationship between energy consumption, foreign trade and economic growth, weighted results showed that energy consumption increased foreign trade.

3. Materials and methods

Panel data method is used in all analyses made in the study. Panel data represents data sets consisting of a large number of observations in each sample unit. This can be created by combining time series observations with various cross-sectional units, including countries, states, regions, firms, or randomly sampled individuals or households (Fitrianto and Musakkal, 2016:242).

In order to achieve the purpose of the study, it is first, investigated by applying three different tests to see if there is a cross-section dependence in the series. In order to test the stationarity of the series and to avoid spurious regression problems when working with data containing unit root, the CADF (Cross-Sectionally Augmented Dickey Fuller) unit root test is applied which takes into account the cross-section dependency and was developed by Pesaran (2007). After it is seen that the series become stationary at the first differences, the cointegration test is performed and it is seen that there is a long run cointegration

relationship between the variables. After determining the cointegration relationship between the series, in the last stage of the study, the cointegration coefficient of the units is estimated with the help of the AMG (Augmented Mean Group Estimator) Estimation Method developed by Eberhardt and Bond (2009). The variables used in the study are defined in Appendix 1.

3.1. Data

The analyzes in the study are carried out using annual data from 2001-2018, covering a total of ten countries. Nine of the countries included in the study consist of developed OECD countries (Germany, England, France, Italy, Netherlands, Denmark, Spain, Belgium, Ireland) and one is composed of both OECD and emerging market countries (Turkey). The energy consumption data used in the study were obtained from the International Energy Agency (IEA) database, and the total export and import data were obtained from the World Bank Database. Data are included in the analysis using logarithmic forms.

3.2. Econometric model

The econometric analyzes applied in the study are carried out through two different models: export and import. Energy consumption is thought to be one of the main factors that have an impact on income and price mechanism. Therefore, the theoretical background for modeling the study is based on examples of studies that take into account the effect of income and price on the foreign trade balance (Khan, 1974; Arize, 1994; Oskooee and Niroomand, 1998; Brooks, 1999; Oskooee and Brooks, 1999). The findings are estimated using the following models adapted to the study.

$$\text{LnIMP}_{it} = \theta_0 + \theta_1 \text{LnENY}_{it} + \varepsilon_{it} \quad (1)$$

$$\text{LnEXP}_{it} = \delta_0 + \delta_1 \text{LnENY}_{it} + \mu_{it} \quad (2)$$

Where (i), given in both equations symbolizes the cross-section units, that is the selected OECD countries, and (t), symbolizes the time dimension of the study, namely the years. LnENY shows the total energy consumption of the countries, while LnIMP and LnEXP show the total import and export series of selected OECD countries respectively. In addition ε and μ symbolize the error series of the model.

3.3. Cross-sectional dependence test for series

In the first stage of the study, three tests are performed to test cross-sectional dependence between series. The first is the Larange Multiplier (LM) test put forward by Breusch and Pagan (1980). This is a test of the mean of the bidirectional correlation coefficients of the square residues. A constant N and $T \rightarrow \infty$ (a small N with respect to T) using seemingly unrelated regression. This test is based on LM statistics given in equation (3).

$$LM_{BP} = T \sum_{i=1}^{N-1} \sum_{j=i+1}^N \hat{\rho}_{ij}^2 \quad (3)$$

where $\hat{\rho}$ symbolizes the sample estimate of the binary correlation of the residues (Koçbulut and Barış, 2016:152). The second test performed is the CD test developed by Pesseran (2004) and estimated with the help of equation (4).

$$CD_{LM} = \sqrt{\frac{1}{N(N-1)}} \sum_{i=1}^{N-1} \sum_{j=i+1}^N T(\hat{\rho}_{ij}^2 - 1) \quad (4)$$

Pesaran (2004) stated that, the LM test exhibits serious deviations in cases where N is greater than T . To overcome such deviations, Pesaran (2004) developed another test called CD for $N > T$, which includes the mean of binary correlations of residues. In the test in question, under the null hypothesis, for a sufficiently large T , CD statistics are close to $N(0.1)$ in the distribution when N is $\rightarrow \infty$ (Peseran, 2004:5; Baltagi and Kao, 2012:4).

The next test is the Biased Cross-Sectional Dependency Lagrange Multiplier test developed by Pesaran, Ullah and Yamagata (2008) and estimated with the help of equation (5).

$$LM_{adj} = \sqrt{\frac{2}{N(N-1)}} \sum_{i=1}^{N-1} \sum_{j=i+1}^N \frac{(T-k)\hat{\rho}_{ij}^2 - \mu_{Tij}}{v_{Tij}} \quad (5)$$

Pesaran, Ullah, and Yamagata (2008) developed a new LM test, based on the LM test put forward by Breusch-Pagan, that corrects the deviation of previous tests in panels with purely external regressors and normal errors. The authors in question have agreed that the Biased LM Test successfully controls the size of the test and has acceptable power (Burdisso and Sangiacomo, 2016:434).

In all tests, the null hypothesis “There is no cross-sectional dependency” is tested against the alternative hypothesis “There is a cross-sectional dependency”. The presence or absence of cross sectional dependency between series causes

the stationarity tests performed for series to differ. When the relevant literature is examined, it is seen that the first generation unit root tests are used when there is no cross-sectional dependency between the series, and the second generation unit root tests are used when the cross-section dependency is determined (Baltagi, 2008:284; Bilginoğlu and Bolat, 2013:35).

3.4. Unit root analysis

After determining the presence of cross-sectional dependency in the series, CADF (Cross-Sectionally Augmented Dickey Fuller) test, which is among the second generation unit root tests is preferred to test the stationarity of the series. The CADF test, which can be used in the case of $T > N$ or $N > T$, was developed by Pesaran (2007). In this test, CADF statistics are first calculated for all panel units. Then, CIPS (Cross Sectionally Augmented IPS) test statistics are obtained by calculating the arithmetic mean of the CADF statistics values (Gençoğlu et al., 2020:7). CADF/ CIPS test statistics values are estimated with the help of the following equations (6) and (7), respectively (Peseran, 2007).

$$\Delta y_{it} = a_i + b_i y_{i,t-1} + c_i \bar{y}_{t-1} + d_i \Delta \bar{y}_t + e_{it} \quad (6)$$

$$CIPS(N, T) = t - bar = N^{-1} \sum_{i=1}^N t_i(N, T) \quad (7)$$

The stationarity of the series is determined by comparing the obtained CADF statistics values with the critical table values developed by Pesaran (2007). In the CADF test; “Series are not stationary” H_0 hypothesis is tested against “Series are stationary” alternative hypothesis.

3.5. Cross-section dependency tests for models

In the next step, pre-tests are carried out on the models. The first of these is cross-section dependency tests for models. The test results show that the probability values are significant at the 1% level, so the null hypothesis is rejected and there is a cross-sectional dependency in both models. Therefore, in the later stages of the study, tests that take into account cross-sectional dependence are continued.

3.6. Homogeneity test

The second pre-test for the model is the test that tests the homogeneity of the slope coefficient included in the cointegration equation. With this test, the null

hypothesis “slope coefficients are homogeneous” is tested against the alternative hypothesis “slope coefficients are not homogeneous”. This test proposed by Swamy (1970) and developed by Peseran and Yamagata (2008) is estimated with the help of the equation given below;

$$Y_{it} = a + \beta_i + X_{it} + \varepsilon_{it} \quad (8)$$

Where (β_i) symbolizes the slope coefficient and with the help of this equation, the difference between the horizontal parts of the slope coefficient is tested in a general cointegration equation (Altıntaş and Mercan, 2015:364).

3.7. Cointegration analysis

In the study, the long-term cointegration relationship is tested with the Westerlund-Edgerton Cointegration test developed by McCoskey and Kao (1998). With the study of Westerlund and Edgerton (2007), the test in question can also be preferred in models with heterogeneous structure and cross-section dependence. The test developed based on the Lagrange multiplier test is estimated with the help of the equation shown in equation (9).

$$LM_N^+ = \frac{1}{NT^2} \sum_{i=1}^N \sum_{t=1}^T W_i^{-2} S_{it}^2 \quad (9)$$

Where (S_{it}^2) is the partial error terms, and (W_i^{-2}) is the long-term variance values. The sum of partial error terms (S_{it}^2) and long-term variance (W_i^{-2}) values are obtained with the help of the model estimated using Fully Modified Least Squares Method (FMOLS). The null hypothesis “There is co-integration between series” is tested against the alternative hypothesis of “There is no co-integration between series”, through the test statistical value (LM_N^+) . Monte Carlo simulation examples show that the test can also be preferred in cases where small samples are involved (Westerlund and Edgerton, 2007:186-187; Aytun, Akin and Uçan, 2015:211).

3.8. Estimation of cointegration coefficients

After determining the cointegration relationship between the series, the cointegration coefficients of the units are estimated in this part of the study. AMG (Augmented Mean Group Estimator) Estimation Method developed by Eberhardt and Bond (2009) is preferred as a method. This method can make coefficient estimates for both the entire panel and all units that make up the panel. Also, this method estimates the long run cointegration coefficient for the entire

panel using the weighted form of the arithmetic mean of the cross coefficients. With this feature, it is stated that it gives more reliable results than the CCE (Common Correlated Effects) Prediction Method introduced by Peseran (2006). In addition, it is emphasized that this method causes effective results in unbalanced panel models by taking into account the common factor and dynamic effects in the series (Eberhardt and Bond, 2009; Göçer, 2013:233). Decomposition of variables in method estimation is shown with equations (10), (11) and (12).

$$y_{it} = \beta'_i x_{it} + \mu_{it} \mu_{it} = a_i + \lambda'_i f_t + \varepsilon_{it} \quad (10)$$

$$x_{mit} = \pi_{mi} + \delta'_{mi} g_{mt} + p_{1mi} f_{1mt} + \dots + p_{nmi} f_{nmt} + v_{mit} \quad (11)$$

$$f_t = \varphi' f_{t-1} + \varepsilon_t \quad \text{ve} \quad g_t = \mathcal{N}' g_{t-1} + \omega_t \quad (12)$$

Where (x_{it}) represents a vector of observable common variables, while symbols (f_t) and (g_t) represent country-specific factor loads and unobserved common factors, respectively.

4. Findings of the Research

4.1. Cross-sectional dependence test for series

Analyses performed without investigating the cross-sectional dependency based on the assumption that all cross-sectional units are affected by a shock at the same rate may yield deviating and inconsistent results. Therefore, it is of great importance to test the cross-sectional dependency between series before proceeding with unit root analysis. When the obtained test results are examined, it is seen that the probability values for all series and three tests are less than 0.05 and statistically significant at the level of 1%. Therefore, the null hypothesis is rejected and the alternative hypothesis is accepted. In other words, the existence of a cross-sectional dependency in all series is accepted. The results of the cross-sectional dependency test, as shown in Table 1.

Table 1: Results of Cross Section Dependency Test for Series

Variables	Breusch-Pagan LM Test	Pesaran-Scaled LM Test	Bias-corrected scaled LM Test	Pesaran CD Test
IMP	1255.344***	127.5815***	127.4029***	35.42744***
EXP	1271.892***	129.3258***	129.1472***	35.66084***
ENR	471.5026***	44.95732***	44.77875***	15.04484***

Note: (***) symbol represents 1% significance level.

4.2. Test for unit root

After determining the presence of cross-sectional dependence in the series, CADF (Cross-Sectionally Augmented Dickey Fuller) test, which is among the second generation unit root tests is preferred to test the stationarity of the series. When the CADF unit root test CIPS statistics values for the entire panel are compared with the critical values of Peseran (2007), the H_0 hypothesis, which accepts that the series is not stationary in both the fixed and trended models with constant trend cannot be rejected. When the first differences of the series are taken, it is seen that all series become statistically stationary at 1% significance level, therefore the prerequisite for cointegration analysis to be $I(1)$ is fulfilled. Statistics of the test results obtained are given in Table 2.

Table 2: Results of unit root tests

Variables	At Level		At first differences	
	Constant	Constant and Trend	Constant	Constant and Trend
IMP	-1.686 (1)	-1.664 (1)	-3.348*** (1)	-3.566*** (1)
EXP	-1.964 (1)	-2.133 (1)	-3.623*** (1)	-3.842*** (1)
ENR	-1.793 (1)	-2.554 (2)	-3.814*** (1)	-2.924** (2)
Critical Values				
%1	-2.570	-3.310	-2.570	-3.310
%5	-2.330	-2.860	-2.330	-2.860
%10	-2.210	-2.730	-2.210	-2.730

Note: The symbols (***) and (**) show the values obtained are significant at 1% and 5% level, respectively. Values in parentheses indicate optimal lag lengths. CADF / CIPS Critical values are obtained from the tables numbered II (b) and II (c) in Peseran (2007) study, based on the T/N size (29/10) included in the study.

4.3. Cross-section dependency tests for models

In the next stage, pre-tests are made for the model. The first of these is the cross section dependency test conducted for the model. The test results show that the probability values are significant at t 1% level, so the null hypothesis is rejected and there is a cross-sectional dependency in both models. Additionally, this result means that a shock to one of the countries included in the study may affect other countries as well. Based on this, in the next stages of the study, tests taking into account cross-sectional dependency are used. The test results obtained are given in Table 3.

Table 3: Results of Cross-section dependency tests for models

Models	LM _{BP} Test	CD _{LM} Test	LM _{adj.} Test
Export Model	566.6***	164***	20.77***
Import Model	559.5***	161.7***	19.99***

Note: (***) symbol represents 1% significance level.

4.4. Homogeneity test

The second preliminary test for the models tests the homogeneity of the slope coefficients in the cointegration equation. With this test, the null hypothesis that the slope coefficients are homogeneous is tested against the alternative hypothesis that the slope coefficients are not homogeneous. Both tests give statistically significant results at 1% level. These results show that the null hypothesis is rejected and the alternative hypothesis is accepted, so that coefficients of both models have a heterogeneous structure. In other words, it can be stated that the effects of energy consumption on both exports and imports of the countries included in the study are not same and it differs from country to country. The results of the homogeneity delta test are given in Table 4.

Table 4: Results of Homogeneity test

Models	Delta_tilde test	Delta_tilde_adj test
Export Model	7.804***	8.242***
Import Model	8.155***	8.613***

Note: (***) symbol represents 1% significance level.

4.5. Panel cointegration test

In the test for the cointegration relationship, the Asymptotic probability values in the absence of cross-section dependence and Bootstrap critical values in the presence of cross-section dependence are taken into account (Westerlund ve Edgerton, 2007:186-187). When the Asymptotic probability values are examined, the null hypothesis is rejected in the absence of cross-section dependence and it is seen that there is no long run cointegration relationship between the series. However, since cross-sectional dependence between series is detected in the study, bootstrap probability values are taken into account and the probability values obtained show that the null hypothesis cannot be rejected. In other words, the existence of a cointegration relationship between series is accepted. The results of the Panel cointegration test are given in Table 5.

Table 5: Results of cointegration coefficients

Import Model			
Models	LMStatistics	Bootstrap Probability Values	Asymptotic Probability Values
Constant	2.180	0.813	0.015
Constant/ trend	8.693	0.852	0.000
Export Model			
Models	LMStatistics	Bootstrap Probability Values	Asymptotic Probability Values
Constant	3.040	0.736	0.001
Constant/ trend	8.879	0.818	0.000

4.6. Estimation of cointegration coefficients

After determining the cointegration relationship between the series, in the next step of the study, the cointegration coefficient of the units is estimated with the help of the AMG (Augmented Mean Group Estimator) Estimation Method developed by Eberhardt and Bond (2009). When the results are examined, it is seen that the statistical values obtained for the overall panel in the import and export models are significant at the rate of 1% and 10%, respectively. When the results by country are analyzed, it is seen that the increase in Belgium's total energy consumption is positive and statistically significant at the 1% level on the export of this country. However, when the effect of the increase in the total energy consumption of the same country on the total import is examined, it is seen that a statistically significant value is not obtained. When the results for Germany are examined, statistically significant values are not obtained in either the export or import model, in other words, the change in the energy consumption values of this country does not have a significant effect on the import or export values of the countries. When the results of the Netherlands, Turkey and Denmark are analyzed, it is seen that the increase in the total energy consumption values of the three countries does not have a statistically significant effect on the exports of these countries. However, when the effects of total energy consumption in the same countries on the total imports of the said countries are examined, it is seen that there are positive and statistically significant effects at the level of 1% in all three countries. In other words, this result shows that total energy consumption causes a significant foreign trade deficit in the Netherlands, Turkey and Denmark. When the findings of France and Italy are examined, it is seen that

the total energy consumption in these countries has a positive and significant effect at the level of 1% on their total imports, while it has a positive and significant effect at the level of 5% on their exports. When the results of all other countries are examined, it is seen that the increase in total energy consumption values has a positive and statistically significant effect at the level of 1% on both imports and exports of these countries.

When the results obtained are analyzed in terms of the effects on the foreign trade balance of the countries included in the analysis, it is seen that there is no statistically significant result regarding the relationship between Germany's total energy consumption and foreign trade balance. In Belgium, where total energy consumption does not have a significant effect on total imports, it can be said that a 1% increase in total energy consumption causes a 0.49% increase in the total export of this country, positively affecting its foreign trade and causing a foreign trade surplus. It is seen that a 1% increase in total energy consumption in Denmark, the Netherlands and Turkey, where total energy consumption does not have a significant effect on total exports, causes a deficit of 71%, 59% and 58%, respectively, on the foreign trade balance of these countries. A similar analysis is also made for countries where total energy consumption has a positive and statistically significant effect at the level of 1% on both imports and exports. When the results are examined, it shows that a 1% increase in total energy consumption caused a foreign trade deficit of 0.24% in France, 0.90% in Italy, 0.67% in Spain, 0.51% in the United Kingdom and finally 0.51% in Ireland.

Table 6: Results of AMG Long Run Coefficient Estimation

Panel AMG/ Countries	Import Model		Export Model	
	ENR	Constant Coefficient	ENR	Constant Coefficient
Panel AMG	0.83***	7.19***	0.23*	10.02***
Belgium	-0.03	11.24***	-0.49***	13.32***
France	0.46***	9.07***	0.22**	10.30***
Germany	0,24	10.33***	-0.19	12.63***
Italy	1,20***	5.24***	0.30**	9.77***
Spain	1.00***	6.25***	0.33***	9.37***
Turkey	0.58**	7.81***	0.28	9.05***
United Kingdom	1.72***	2.59***	0.76***	7.47***

Panel AMG/ Countries	Import Model		Export Model	
	ENR	Constant Coefficient	ENR	Constant Coefficient
Ireland	1,51***	4.63***	1.00***	6.58***
Netherlands	0.59***	8.42***	0.009	11.20***
Denmark	1.04***	6.35***	0.33	10.54***

Note(s): The symbols (***), (**) and (*) represent 1%, 5% and 10% significance levels, respectively.

5. Conclusions

When the panel results are examined in general, it is seen that the increase in total energy consumption in selected OECD countries has a positive effect on the foreign trade of these countries in the long run. This result is consistent with the results of some studies given in the literature summary (Katirci et al., 2014; Brini et al., 2017; Çütçü, 2019; Sarıtaş & Okşak, 2020). However, considering the main purpose of the study, the effect of total energy consumption on the foreign trade balance becomes more important than the effect on the foreign trade values of these countries. In this context, the empirical findings obtained from the research show that total energy consumption causes foreign trade deficit in Turkey as well as in all developed countries included in the study except Belgium and Germany.

Of course, energy consumption alone is not the determinant of foreign trade deficits. Apart from this, many reasons can increase foreign trade deficits. However, in terms of emerging markets that need intense energy on the way to economic development, it is of great importance to determine how much energy consumption increases these deficits in terms of combating these deficits. Because these deficits, due to the decrease in foreign exchange reserves, may cause the national currency to lose value against foreign currencies in emerging markets such as Turkey, leading to exchange rate pressure and an increase in prices, leading to inflation. This situation, which causes serious income loss and employment problems, especially in countries whose exports are dependent on imports, is considered as the cause of many foreign exchange and banking crises in different periods. In addition, this situation may reduce the credibility of these countries in international markets and increase their borrowing costs significantly. Therefore, with this result obtained regarding Turkey, it is believed

that energy consumption puts serious pressure on turkey's total imports and has a decisive role on the chronic foreign trade deficits in this country.

The empirical findings provide important evidence that energy consumption is an important variable that causes foreign trade deficit in other developed OECD countries included in the study, except for Germany and Belgium. However, it is thought that the effects of these deficits on these countries will not be as damaging as the effects on developing countries due to both strong reserves and external surpluses in capital and current account. However, it should be noted that if necessary measures are not taken for these deficits, it also contains many macroeconomic risks for the future. In this sense, economic administrations have important responsibilities in the control of foreign trade deficits. For this reason, monitoring income and price movements arising from energy consumption and implementing appropriate economic policies are of great importance in terms of economic stability. In addition, it is thought that turning to renewable energy sources instead of non-renewable energy sources can help economic administrations in this struggle. In addition, it is thought that increasing production activities for the domestic supply of input goods such as raw materials, natural resources and technological products required for energy consumption will provide important advantages to countries in combating foreign trade deficits.

References

- Aimer, N. and Dilek, S. (2021), Toda-Yamamoto Causality Test Between Energy Consumption And Economic Growth: Evidence From A Panel Of Middle Eastern Countries, *Journal of Empirical Economics and Social Sciences*, 3(1), p.56-78.
- Altıntaş, H. and Mercan, M. (2015), AR-GE HarcamalariveEkonomik Büyümeİlişkisi: OECD ÜlkeleriÜzerineYatayKesitBağımlılığıAltında Panel EşbütünleşmeAnalizi, *SBF Dergisi*, 70(2), p.345-376.
- Arize, A. C. (1994), Cointegration Test Of A Long-Run Relation Between The Real Effective Exchange Rate And The Trade Balance", *International Economic Journal*, 8(3), p.1-9.
- Arslan, E. and Solak, A. (2019), Türkiye'deYenilenebilirEnerjiTüketiminin İthalatÜzerindekiEtkisi, *International Journal of Society Researches*, 10(17), p.1382.

- Aslan, A., Öcal, O. and Shahbaz, M. (2017), Energy Consumption–Trade Openness – Economic Growth Nexus İn G-8 Countries, *Cappadocia Academic Review*, 1(1), p.71-97.
- Aytun, C., Akın, C. S. and Uçan, O. (2015), GelişmişveGelişmekte Olan Ülkelerde TelekomünikasyonYatırımlarive DoğrudanYabancıSermaye Yatiriml arılışkisi, *EgeAkademikBakış*, 15(2), p.207-216.
- Baltagi, B.H. (2008), *Econometric Analysis of Panel Data (Fourth Edition)*. West Sussex: John Wiley & Sons.
- Baltagi, B. H., Feng, Q. and Kao, C. (2012), A Lagrange Multiplier Test For Cross-Sectional Dependence İn A Fixed Effects Panel Data Model, *Center for Policy Research*, Paper No. 137, p.1-37.
- Bilginoğlu, M. A. and Bolat, S. (2013), AvrupaBirliği’ndeMaliyePolitikalarının Sürdürülebilirliği:Durağan Olmayan Panel Veri’ Den Kanıt, *MaliyeDergisi*, 164, p.27-46.
- Brini, R., Amara, M. and Jemmali, H. (2017), Renewable Energy Consumption, International Trade, Oil Price And Economic Growth Inter-Linkages: The Case Of Tunisia, *Renewable and Sustainable Energy Reviews*, 76, p.620-627.
- Brooks, T. J. (1999), Currency Depreciation And The Trade Balance: An Elasticity Approach And Test Of The Marshall-Lerner Condition For Bilateral Trade Between The Us And The G-7, (Thesis Ph. D. in Economics). Milwaukee: The University of Wisconsin.
- Burdisso, T. and Sangiacomo, M. (2016), Panel time series: review of the methodological evolution, *The Stata Journal*, 16(2), p.424-442.
- Çütçü, İ. (2019), SanayideKullanılanElektrikTüketimiileDışTicaretDengesiArasındakiİlişki:YapısalKırılmalıTestlerleEkonometrik Bir Analiz, *Hacettepe Üniversitesi İktisadiVeDariBilimlerFakültesiDergisi*, 37(1), p.17-39.
- Dogan, E. (2016), The Relationship Between Economic Growth, Energy Consumption And Trade, *Bulletin of Energy Economics (BEE)*, 4(1), p.70-80.
- Eberhardt, M. and Bond, S. (2009), Cross-Section Dependence in Nonstationary Panel Models: A Novel Estimator, *MPRA Paper*, Paper No. 17870.
- Erkan, C., Mucuk, M. and Uysal, D. (2010), The Impact Of Energy Consumption On Exports: The Turkish Case, *Asian Journal of Business Management*, 2(1), p.17-23.

- Faisal, F., Tursoy, T. and Ercantan, O. (2017), The Relationship Between Energy Consumption And Economic Growth: Evidence From Non-Granger Causality Test, *Procedia Computer Science*, 120, p.671-675.
- Fitriantoa, A. and Musakkala, N.F.K. (2016), Panel Data Analysis For Sabah Construction Industries: Choosing The Best Model, *Procedia Economics and Finance*, 35, p.241-248.
- Gençoğlu, P., Kuşkaya, S. and Büyüknalbant, T. (2020), Seçilmiş OECD Ülkelerinde Sağlık Harcamalarının Sürdürülebilirliğinin Panel Birim Kök Testleriyle Değerlendirilmesi”, *Ankara Üniversitesi SBF Dergisi*, Early View, p.1-15.
- Göçer, İ. (2013), Ar-Ge Harcamalarının Yüksek Teknolojili Ürün İhracatı, Dış Ticaret Dengesi Ve Ekonomik Büyüme Üzerindeki Etkileri, *Maliye Dergisi*, 165, p.215-240.
- Güvenoğlu, H. and Erçakar, M. (2018), Enerji Tüketiminin Ekonomik Büyüme Üzerine Etkisi: Türkiye Uygulaması (1971-2015), *Journal of Management and Economics Research*, 16(4), p.272-288.
- Ha, N.M. and Ngoc, B. H. (2020), Revisiting The Relationship Between Energy Consumption And Economic Growth Nexus In Vietnam: New Evidence By Asymmetric ARDL Cointegration, *Applied Economics Letters*, 27(15), p.75-80.
- Jebli, M. B. and Youssef, S. B. (2014), Output, Renewable And Non-Renewable Energy Consumption And International Trade: Evidence From A Panel Of 69 Countries, *Munich Personal RePEc Archive (MPRA)*, Paper No. 56494, p.1-29.
- Kasperowicz, R and Streimikienė, D. (2016), Economic Growth And Energy Consumption: Comparative Analysis Of V4 And The “Old” Eu Countries”, *Journal of International Studies*, 9(2), p.181-194.
- Katircioğlu, S., Fethi, S., Beton K. D., Çağlar, D. and Taşpınar, N. (2014), Energy Consumption, International Trade, And Real Income In The USA: An Empirical Investigation Using Conditional Error Correction Models, *Journal of Renewable and Sustainable Energy*, 6(6), 063116.
- Katircioğlu, S., Fethi, S., Beton K. D. and Çağlar, D. (2016), Interactions Between Energy Consumption, International Trade, And Real Income In Canada: An Empirical Investigation From A New Version Of The Solow Growth Model, *International Journal of Green Energy*, 13(10), p.1059-1074.

- Khan, M. S. (1974), Import And Export Demand In Developing Countries, *IMF Staff Papers*, 21, p.678-693.
- Koçbulut, Ö. and Barış, S. (2016), AvrupaBirliğiÜlkelerindeİhracatVe DoğrudanYabancıYatırımlarınKadınİstihdamıÜzerindekiEtkisi: Panel Veri Analizi”, *AydınİktisatFakültesiDergisi*, 1(2), p.22-39.
- Li, L. (2010), An Empirical Analysis Of Relationship Between Export And Energy Consumption In Shandong Province, *International Journal of Business and Management*, 5(3), p.214-216.
- Lillis, T. and Turner, J. (2001), Student Writing In Higher Education: Contemporary Confusion, Traditional Concerns, *Teaching in Higher Education*, 6(1), p.57-68.
- Magazzino,C., Mutascu, M., Mele, M. and Sarkodie, S.A. (2021), Energy Consumption And Economic Growth İn Italy: A Wavelet Analysis, *Energy Reports*, 7, p.1520–1528.
- Mukhtarov, S., Mikayilov, J. I. and Vüqar İsmayılov, V. (2017), The Relationship Between Energy Consumption And Economic Growth: Evidence From Azerbaijan, *International Journal of Energy Economics and Policy*, 7(6), p.32-38.
- Nnaji, C. E., Chukwu, O. J. and Moses, N. (2013), Does Domestic Energy Consumption Contribute to Exports? Empirical Evidence from Nigeria, *International Journal of Energy Economics and Policy*, 3(3), p.297-306.
- Oskooee, M. B., Brooks, T. J. (1999), Cointegration Approach to Estimating Bilateral Trade Elasticities Between U.S. And Her Trading Partners, *International Economic Journal*, 13(4), p.119-128.
- Oskooee, M. B., Niroomand, F. (1998), Long-Run Price Elasticities And The Marshall-Lerner Condition Revised, *Economics Letters*, 61(1), p.101-109.
- Parajuli, R.T., Aryal, S., Majed Alharthi, M. and Paudel, R.C. (2021), Energy Consumption, Export Performance And Economic Growth In A Landlocked Developing Country: The Case Of Nepal, *AIMS Energy*, 9(3), p.516-533.
- Pesaran, M. H. (2004), General Diagnostic Tests For Cross Section Dependence In Panels, *The Institute for the Study of Labor (IZA)*, Paper No. 1240, p.1-40.
- Pesaran, M. H. (2007), A Simple Panel Unit Root Test In The Presence Of Cross-Section Dependence, *Journal Of Applied Econometrics*, 22, p.265-312.
- Sadorsky, P. (2011), Trade And Energy Consumption In The Middle East, *Energy Economics*, 33(5), p.739-749.

- Sarıtaş, T. and Okşak, Y. (2020), OECD ülkelerinde petrol tüketiminin ihracat ithalat ve büyüme etkisi, *Gaziantep University Journal Of Social Sciences*, 19(3), p.805-822.
- Shakeel, M., İqbal, M. M. and Majeed, M. T. (2014), Energy Consumption, Trade and GDP: A Case Study of South Asian Countries, *Pakistan Development Review*, 53(4), p.461-476.
- Westerlund, J. and Edgerton, D.L. (2007), A Panel Bootstrap Cointegration Test, *Economic letters*, 97, p.185-190.
- Zeren, F. and Akkuş, H. T. (2020), The Relationship Between Renewable Energy Consumption And Trade Openness: New Evidence From Emerging Economies, *Renewable Energy*, 147(1), p.322-329.

CHAPTER V

EFFECT OF POLITICAL STABILIZATION AND CORRUPTION IN RISING ECONOMIES ON FOREIGN DIRECT INVESTMENT: PROVES BY PANEL DATA ANALYSIS

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1. Introduction

Foreign direct investment (FDI) has a remarkable position as the dynamic of growth for underdeveloped and developing countries. Foreign direct investment is defined as being invested across borders by an organization operating in any economy to establish a business or obtain the right to participate in the management of the business for a permanent interest in another economy (Bin ArisFadzallah: 2018 p.16). Developing economies do have not sufficient financing opportunities to realize large investment projects and also create new employment opportunities. FDI is essential under these circumstances. Moreover, the company that deals with FDI contributes to labor productivity by transferring its own technology and knowledge at the same time (Jan, Ali and Ali, 2019 p.479). Since the countries with foreign investment carry weight in the host country, they may use this situation as a foreign policy tool for their own interests. Besides these positive effects, FDI has some negative impacts as well.

According to Lipsey (2004), there may be a short-term possible foreign exchange deficit due to money transfer in the country that invests in a foreign country; the country with foreign direct investment might be affected by the

political and economic instability of the host country; finally, since large-scale FDI means high money inflows, there may occur a negative impact on the effectiveness of monetary and fiscal policies of the host country.

There are several definitions regarding corruption in the literature. This study utilized the data of "corruption control". Corruption control is characterized as the use of public power in favor of elites and for personal gain. This definition covers the concept of bribery as well without an exception regarding the size of amounts. Since this situation minimizes the feeling of trust in the system in which corruption control is poor, it is based on the assumption that the ratio of foreign direct investment will decrease because of low trust. However, there also are studies in the literature about the positive effects of corruption on attracting FDI. For Cuervo-Cazurra (2006), corruption varies by differences in bribe cost of FDI. Since the countries with a high level of corruption experience corruption in their own countries, they do not refrain from investing in countries with a high level of corruption. For example, corruption negatively affects foreign direct investment inflows in countries with a high level of corruption such as China and Nigeria (Cuervo-Cazurra 2006 p.807). The behavior of companies is essential at this point; some of them decide to invest in a country with a high level of corruption thinking that bureaucratizing is easy there.

In addition to all these, it is known that multinational corporations (MC) decide to make a foreign direct investment to provide property, location, and internalization advantages. Property advantage means licensee ownership; location advantage means the decisions to move activities that will add value to companies beyond their borders; finally, internalization advantage can be defined as the company determines the production of the products in its field of activity in a way that is in its own interests (Woo and Heo, 2009 p.226). The relevant advantages above, indeed, are the 'Electric Paradigme' approach in Dunning's (1993) study. Political stability includes the corporate policies of the governments that MC uses to gain location advantage. Besides its economic conditions, the host country should also politically have a stable structure to attract foreign direct investment. However, political stability and economic stability are integrated. For the sake of example, political instability may negatively affect investors' decisions based on deteriorations in macroeconomic indicators.

This study empirically analyzed the effects of institutional factors such as corruption and political stability on FDI inflows in rising economies. Cross

section dependence was considered in analyses; long-termed relations were reviewed at the same time. This paper is an influential study in this respect. Literature has many studies regarding this issue. Method and using rising economies as the country group are the originalities of this study. Moreover, the direct effect of corruption and political stability was endeavored to be revealed minimizing the number of variables that affect or may affect FDI.

2. Literature Review

Literature has many studies reviewing the effects of corruption and political stability on FDI. However, there is no consensus on their effects. Studies that scrutinized the effects of corruption on FDI generally used the variables of corruption control. Habib and Zurawicki (2002) who emphasized the negative effects of corruption on FDI analyzed the relationship between corruption and foreign direct investment for 89 countries for the period between 1996 and 1998. According to their results, corruption puts blocks on foreign direct investment. Castro and Nunes (2013) researched the effect of corruption on foreign direct investment inflows for 73 countries for the 1998-2008 period. They highlighted that corruption control can be an important strategy for foreign direct investment inflows. Woo and Heo (2009) reviewed the relationship between FDI inflows and corruption for eight of non-OECD Asian countries for the period between 1984 and 2004. For their findings, corruption interrupted FDI inflows for relevant countries and periods. Nur and Dilber (2017) analyzed the factors that affect FDI for 18 developing countries for the 1996-2014 period. It is observed based on the results that corruption control creates positive impacts on FDI. Tosun, Yurdakul and İyidoğan, (2014) scrutinized the relationship between FDI and corruption considering the short and long-term effects through monthly series for Turkey in the 1992:01-2010:12 period. They revealed that corruption affects FDI negatively in the short and long run. Hossain (2016) endeavored to determine the relationship between FDI and corruption for 48 counties from 3 different regions. For the findings, the decline in corruption for countries from three regions increases the FDI inflows. Canare (2017) analyzed the relationship between FDI and corruption for 46 countries in the Asia Pacific region for the period between 2006 and 2013. They emphasized that there are more FDI inflows to the countries with a low level of corruption. Karim, Karim and Nasharuddin. (2019) conducted a study to review the relationship between

corruption, economic growth, inflation, and FDI for ASEAN-5 countries for the 1995-2014 period. For the findings, the countries with low corruption and market size attract more FDI. Gök, Yamak and Saygın (2018) scrutinized the effects of FDI inflows on corruption for 17 MENA countries for the 1996-2016 period. They also found that FDI inflows reduce corruption. Zhao, Kim and Du (2003) analyzed the effects of corruption and transparency on FDI for forty countries. It was emphasized at the end of the study that corruption and transparency have a remarkable impact on FDI.

There also are studies that review the effects of corruption and political stability on FDI inflows. Asiedu's (2006) study is one of them revealing that corruption and political instability affect FDI inflows negatively. The relevant author conducted a study for 22 African countries for the 1984-2000 period and revealed the positive effects of positive macroeconomic indicators on FDI. However, he also mentioned that corruption and political instability obstruct FDI inflows. Artan and Hayaloğlu (2015) performed a survey to determine the effect of institutional indicators on FDI for 29 OECD countries for the 1990-2012 period. They analyzed corruption and political stability as a subcomponent of political risk and found that relevant variables are effective on FDI inflows. Another study was conducted by Busse and Hefeker (2007) for 83 developing countries for the period. They researched the relationship between corruption, political stability, and FDI inflows of various institutional indicators. For the results, corruption and political stability are the factors that affect FDI inflows. Gani (2007) reviewed the effect of many governance data including political stability and corruption control on FDI for 17 countries from Latin America and the Caribbean region for the specific periods from 1996 and 2002. He emphasized at the end of the study that political stability, corruption, and other governance data have a positive impact on FDI inflows. Cleeve (2012) analyzed the effect of governance indicators such as corruption and political stability on FDI inflows for 40 Sub-Saharan African countries. Results show that corruption and political stability have remarkable effects on FDI. Since political stability and corruption affected FDI inflows negatively in BRICS countries for the years between 2000 and 2010, according to Jadhav and Katti (2012), contrary to these views, stability and corruption have a low level of impact on FDI inflows. Bayar and Alakbarov (2016) conducted a survey for 23 developing economies for the 2002-2014 period. They mentioned that corruption has no positive or negative effect on FDI inflows. There also are different surveys in the literature on the

subject, which we cannot categorize among these studies. Kim (2010) analyzed the effect of political stability on foreign direct investment inflow and outflows for 28 countries for the 1990-2002 period. It can be seen when looking at the results that FDI outflows are more in countries with a high level of civil rights while FDI inflows are at a low level in countries with low democracy levels and high corruption in the public. Epaphra and Massawe (2017) made research for 5 East African countries for the 1996-2015 period. They highlighted the corruption control for FDI inflows that GDP per capita is more effective than corruption in foreign direct investment inflows. Abdella, Naghavi and Fah (2018) studied BRIC countries for the 2002-2016 period and revealed that corruption has no impact on FDI while trade openness and political stability are effective on FDI. Moreover, the effect of both variables on FDI is positive. For Jadhav (2012), economic factors are more important than institutional and political factors in attracting FDI; the first of those factors is the market size. Morrissey and Udomkerdmongkol (2012) scrutinized whether FDI creates a crowding-out effect on domestic private sector investments for 46 developing countries for 1996-2009; they also analyzed the effect of political stability and corruption on FDI. It was mentioned at the end of the study that corruption and political instability create a negative effect on FDI inflows while FDI also affects domestic private investments negatively. Touny (2016) analyzed the effect of corruption, political stability on FDI for 15 middle east countries for the 1996-2014 period. For their findings, corruption has a negative impact on FDI in countries with a high level of political instability. Lucke and Eichler (2016) analyzed the relationship between FDI and governance indicators for 29 sources and 65 host countries during the 1995-2009 period. They stated that corruption control and political stability positively affect FDI inflows in developing countries, but foreign investors with high-profit motives and who want to have certain privileges prefer to invest in countries with political instability and corruption. Hamid, Jena and Mukhopadhyay (2020) analyzed the causality relation between FDI and corruption with political stability for the Indian economy for the 1996-2017 period. They revealed that there is a one-way causality relation from corruption to FDI while there is a two-way causality relation between FDI and political stability. Ay, Kızılkaya and Akar (2016) scrutinized the effect of corruption and democracy on FDI for 10 developing countries for the years between 1995 and 2013. According to the results, corruption and a high level of democracy affect FDI inflows positively.

Barişand Bekteş (2021) analyzed the relationship between FDI and governance indicators for 28 EU countries for the 2002-2017 period. According to the analysis results, corruption has no significant impact on FDI while political instability has an increasing effect on FDI.

3. Data and Method

This study focused on the effect of political instability (PS) and corruption (COR) on foreign direct investment (FDI) for 22 rising economies for the 2002-2019 period. Explanations regarding variables can be seen in the table below.

Table 1: Definition of Variables

Variables	Source	Explanation
FDI	World Bank (WDI)	It shows the ratio of Direct investment that will enable the right to participate in the management share of any business that comes to the country to GDP.
COR	World Bank (WGI)	This data that we define as corruption is called ‘‘corruption control’’. Corruption, large and small, is the seizure of the state by the elite, and the extent to which public power is used for private gain. This index takes a value between 0 (highest level of corruption) and 100; 0 means the lowest rank and 100(lowest corruption) is the highest rank.
PS	World Bank (WGI)	This variable is defined as the absence of political or politically motivated violence and terrorist incidents. This index takes a value between 0 and 100; 0 (highest risk) is the lowest rank and 100 (lowest risk)is the highest rank.

Source: It was obtained from World Development Indicator (WDI) and WorldGovernance Indicator (WGI) database published by the World Bank.

$$FDI_{it} = a_{it} + COR_{it} + PS_{it} + \mu_{it} \quad i = 1, 2, \dots, T \text{ and } t = 1, 2, \dots, N \quad (1)$$

1 numbered equation shows the model used in this study. i and t inequation respectively mean the unit and time dimension; μ_{it} is the residues.

Table2: Descriptive Statistics Regarding Variables

	FDI	COR	PS
Mean (Average)	3.346	45.349	32.726
Maximum	54.239	91.414	86.255
Minimum	-40.414	1.463	0.473
Std. Error	5.794	19.831	21.532
Number of Observations	396	396	396

Table 2 shows the descriptive statistics regarding variables. Variables have a specific mean and variance. Moreover, since the numbers of observations are the same in all the variables, this research can be called a balanced panel data study.

3.1. Method

3.1.1. Cross Section Dependence and Slope Homogeneity Test

Estimations in panel data analyses without considering cross section dependence (CSD) may be mistakable. Because the probability of a shock observing in one economy to be seen in another economy increases due to the reasons such as globalization and liberalization of trade. Moreover, the slope homogeneity needs to be tested at the same time. Because the econometric analysis differs based on the probability of the model to be heterogeneous or homogeneous. Therefore, Breusch Pagan (1980) and Pesaran, Ullah and Yamagata (2008) tests were utilized to test CSD. The test that was suggested by Pesaran and Yamagata (2008) was used to test the presence of the slope homogeneity. Breusch and Pagan's (1980) test statistics are as shown in Equation 2.

$$LM = T \sum_{i=1}^{N-1} \sum_{j=i+1}^N T_{ij} \hat{\rho}_{ij}^2 \sim \chi_{N(N-1)/2}^2 \quad (2)$$

$\hat{\rho}_{ij}$ is the estimation of correlation coefficients obtained by the residues of 1 numbered equation. The main hypothesis which assumes that there is no cross section dependence in cross sections in Breusch and Pagan's (1980) LM test is tested against the alternative hypothesis assuming that there is dependence in two cross sections at least. Simulation results of this test showed that it is more consistent if N is smaller than T ($N < T$). Paseran (2004), for this reason, accepted the properness of CD_{LM} test to be used in case of $N > T$ (Yılancı and Özgür, 2019 p.24799).

$$CD_{LM} = \left(\frac{1}{N(N-1)} \right)^{1/2} \sum_{i=1}^{N-1} \sum_{j=i+1}^N (T_{ij} \rho_{ij}^2 - 1) \sim N(0,1) \quad (3)$$

Pesaran (2004) suggested the below equation for the cases such as $T \rightarrow \infty$ and $N \rightarrow \infty$.

$$CD = \sqrt{\frac{2}{N(N-1)}} \sum_{i=1}^{N-1} \sum_{j=i+1}^N (T_{ij} \rho_{ij}^2) \sim N(0,1) \quad (4)$$

Since the test is weak when the bilateral correlations of residues are not 0 in CD, Pesaran et al. (2008) suggested to be used the form of LM test in 5 numbered equation.

$$LM_{adj} = \sqrt{\left(\frac{2}{N(N-1)} \right)} \sum_{i=1}^{N-1} \sum_{j=i+1}^N \hat{p}_{ij} \frac{(T-k) \hat{p}_{ij}^2 - \mu_{Tij}}{\sqrt{V_{Tij}^2}} \sim N(0,1) \quad (5)$$

In equation 5, k is the number of explanatory variables; μ is the expected value and variance of \hat{p}_{ij} .

Pesaran and Yamagata (2008) suggested the below version of Swamy test to determine the slope homogeneity in model. This test is used in cases if there are $T \rightarrow \infty$ and $N \rightarrow \infty$. For this reason, it is a test that can be used for all N and T sizes. The main hypothesis ($H_0 : \beta_i = \beta$) that accepts homogeneity is tested against the alternative hypothesis ($\beta_i \neq \beta_j$) assuming that the model is heterogeneous.

$$\tilde{S} = \sum_{i=1}^N (\hat{\beta}_i - \beta_{WFE})' \frac{x_i' M_\tau x_i}{\tilde{\sigma}_i^2} (\hat{\beta}_i - \beta_{WFE}) \quad (6)$$

$\hat{\beta}_i$ and β_{WFE} respectively show pooled OLS and weighted fixed effect estimators. M_τ is the descriptive matrix that is arranged based on T and $\tilde{\sigma}_i^2$. Test that is called $\tilde{\Delta}$ is shown below

$$\tilde{\Delta} = \sqrt{N} = \left(\frac{N^{-1} \tilde{S} - k}{\sqrt{2k(T-k-1)/T+1}} \right) N(0,1) \quad (7)$$

3.1.2. PANICCA Unit Root Test

This test that was developed by Reese and Westerlund (2016) and Pesaran (2007) and Pesaran, Smith and Yamagata (2013) is a combination of the unit root test, which takes into account the number of factors and subtracts the cross-sectional

means (CA) from the values of the series, and the PANIC tests developed by Bai and Ng (2010) which test the stationarity of the residues and factors separately. This is because the relevant test is called PANICCA. Pesaran (2007) included CA of dependent variable, Y_{it} ; in other words, \bar{Y}_t was used as instrumental variable. Thus, if Y_{it} has a unit root, \bar{Y}_t has a unit root at the same time; there may occur spurious regression problem. Independent values in all time and unit dimensions of the series should be obtained under these circumstances. Since there is utilized Y_{it-1} (difference of Y_{it}) in Bai and Ng' (2010) test process, the probability of encountering a spurious regression is very low. Some of weaknesses of PANIC test were revealed while the simulations measuring the power of test were $N < T$ (Reese and Westerlund, 2016 p.962; YerdelenTatoğlu, 2017 p.101). Common factor equation of Y_{it} can be seen below.

$$Y_{it} = a'_i D_p + \lambda'_i F_t + \varepsilon_{it} \quad (8)$$

In 8 numbered equation, F_t is the common factor vector of common load coefficients with $(rx1)$ dimension and associated with λ_i at $(rx1)$ dimension; $D_p = (1, \dots, t^p)$, $(p+1) \times 1$ shows constant vectors if there is $p=0$ while it shows vectors with constant and trend if there is $p=1$. Hereby, there is allowed for adding one or more than one factors with $(mx1)$ size to Y_{it} variable.

$$X_{it} = \beta'_i D_p + \Lambda'_i F_t + \mu_{it} \quad (9)$$

Below equation can be expressed as follows if 8 and 9 equations are written as $Z_{it} = (Y_{it}, X'_{it})'$

$$Z_{it} = \beta'_i D_p + C'_i F_t + V_{it} \quad (10)$$

There are $B_i = (a_i, \beta_i)$, $C_i = (\lambda_i, \Lambda_i)$ and $V_{it} = (\varepsilon_{it}, \mu'_{it})'$ in 10 numbered equation. C_i is a matrix at $rx(m+1)$. Residues of the common factor model of Z_{it} can be estimated if the difference of Z_{it} is computed in PANIC test. The matrix representation of this model is as follows.

$$z_i^p = f^p C_i + v_i^p \quad (11)$$

Equation above is the CA estimators of f^p and v_i^p in 6 and 7 numbered equations

$$\hat{f}^p = M_p \bar{z} = \bar{z}^p = N^{-1} \sum_{i=1}^N M_p z_i \quad (12)$$

$$\hat{v}_i^p = z_i^p - \hat{f}^p \hat{C}_i \quad (13)$$

\hat{f}^p in 12 and 13 numbered equations are the estimator of f^p . Reese and Westerlund (2016) suggested ADF test that was used for unit root test by Bai and Ng (2004). P_a and P_b test statistics are respectively as shown in equations 14 and 15 to perform a unit root test for residues.

$$P_a = \frac{\sqrt{NT}(\hat{p}^+ - 1)}{\sqrt{2\hat{\phi}_e^4/w_e^4}} \quad (14)$$

$$P_b = \sqrt{NT}(\hat{p}^+ - 1) \sqrt{\frac{1}{NT^2} \text{tr}(\hat{\varepsilon}'_{-1} \hat{\varepsilon}_{-1})} \frac{w_e^2}{\hat{\phi}_e^4} \quad (15)$$

In 14 and 15 numbered equations, there are used $\hat{p}^+ = \frac{\text{tr}(\hat{\varepsilon}'_{-1} \hat{\varepsilon})}{\text{tr}(\hat{\varepsilon}'_{-1} \hat{\varepsilon}_{-1})} + \frac{3}{T} \frac{\hat{\sigma}_e^2}{\hat{w}_e^2}$

equations if there are $p = -1$ and $p = 0$ and also if there are $\hat{p}^+ = \frac{\text{tr}(\hat{\varepsilon}'_{-1} \hat{\varepsilon}) - NT \hat{\lambda}_e}{\text{tr}(\hat{\varepsilon}'_{-1} \hat{\varepsilon}_{-1})}$

and $p = 1$.

$\hat{\sigma}_e^2$, \hat{w}_e^2 and $\hat{\lambda}_e$ respectively show the variance, long-term variance and one-way long-term variance of \hat{e}_{it} . $\hat{\phi}_e^4$ is shown that CA of w_e^4 (YerdelenTatoğlu, 2017 p.100-103).

3.1.3. Durbin Hausman (Durbin-H) Panel Cointegration Test

We need to review the presence of the cointegration relation between variables to make a comment specifying the long-run coefficients among variables. It is to the point to make a comment by determining long-run coefficients if there is cointegration in the model. This study used Durbin-H cointegration analysis. Because this test that was developed by Westerlund (2008) is used in models with CSD; there is no precondition for variables to be stationary at the same level. This test was preferred in this study because FDI series from variables are stationary at a level while other variables are difference stationary. The first difference in the Durbin-H test is calculated; common factors of the model are estimated by the principal components method. 16 numbered equation shows difference equation.

$$\Delta y_{it} = \lambda'_i \Delta A_t + \Delta e_{it} \quad (16)$$

Since y_{it} in 16 numbered equation is now known, EKK estimation cannot be performed; thus, principal components method is used.

$$\Delta \hat{y}_{it} = \Delta a_{it} - \hat{\beta}_i \Delta b_{it} \quad (17)$$

$\hat{\beta}_i$ in 17 numbered equation is regressed to Δb_{it} of Δa_{it} . \hat{A}_i is found by repeating Eigen vector corresponding to the largest Eigen value of the matrix $\Delta \hat{y} \Delta \hat{y}'$ at $(T-1) \times (T-1)$ dimension by $\sqrt{(T-1)}$ times. Estimated factor loads are computed as $\hat{y} = \frac{\Delta \hat{A}' \Delta \hat{y}}{T-1}$ (Altıntaş and Mercan, 2015: 367). Residues whose difference is computed and which are defactored as follows.

$$\Delta \hat{e}_{it} = \Delta \hat{y}_{it} - \hat{\lambda}_i' \Delta \hat{A}_i \quad (18)$$

Sum of residues in 18 numbered equation are obtained as follows:

$$\hat{e}_{it} = \sum_{j=2}^l \Delta \hat{e}_{ij} \quad (19)$$

$$\hat{e}_{it} = \hat{e}_{it-1} + hata \quad (20)$$

Durbin-H group and panel test statistics as follows:

$$w_i^2 = \frac{1}{T-1} \sum_{j=-M_i}^{M_i} \left(1 - \frac{j}{M_i+1} \right) \sum_{t=j+1}^T \hat{v}_{it} \hat{v}_{it-j} \quad (21)$$

\hat{v}_{it} in 21 numbered equation are the residues in 19 numbered equation. M_i is the band width defined by the autocovariance number. w_{it} is the long term variance of v_{it} . Thus, there can be obtained two variances estimations. $\hat{S}_i = \frac{\hat{w}_i^2}{\hat{\sigma}_i^4}$ and $\hat{S}_n = \frac{\hat{w}_n^2}{(\hat{\sigma}_n^2)^2}$ are \hat{w}_n^2 and $\hat{\sigma}_n^2$ and they are computed as follows:

$$\hat{w}_n^2 = n^{-1} \sum_{i=1}^n \hat{w}_i^2 \quad \text{and} \quad \hat{\sigma}_n^2 = n^{-1} \sum_{i=1}^n \hat{\sigma}_i^2 \quad (22)$$

Durbin-H test group and panel test statistics as follows:

$$DH_g = \sum_{i=1}^n \hat{S}_i (\tilde{\phi}_i - \tilde{\phi}_i)^2 \sum_{t=2}^T \hat{e}_{it-1}^2 \quad (23)$$

$$DH_p = \hat{S}_n (\tilde{\phi} - \tilde{\phi})^2 \sum_{i=1}^n \sum_{t=2}^T \hat{e}_{it-1}^2 \quad (24)$$

In 23 numbered equation, the main hypothesis as $H_0 : \phi_i = 1, \forall i = 1, \dots, n$ is tested against the alternative hypothesis as $H_1^p : \phi_i = \phi$ ve $\phi_i < 0$. There is a cointegration relation for each units (n) if the main hypothesis is denied. In 24 numbered equation for group estimation, the null hypothesis, $H_0 : \phi_i = 1$ is tested against alternative hypothesis, $H_1^s : \phi < 1$; there is cointegration relation at least in one unit if the null hypothesis is denied (Westerlund, 2008 pp.200-203; Altıntaş and Mercan, 2015 pp.367-368).

4. Findings

Table3: Cross Section Dependence and Slope Homogeneity Test Results

	Test statistics	P-value
LM, Breusch and Pagan (1980)	351.00 ^I	0.000
LM _{adj} , Pesaran et al., (2008)	11.9 ^I	0.000
Slope Homogeneity Test Results		
$\tilde{\Delta}$, Pesaran and Yamagata (2008)	5.08 ^I	0.000

Note: I means significance at 1% level.

As is seen in Table 3, the main hypothesis assuming that there is no crosssectiondependence in the model and also the model is homogeneous at the slope is denied. In other words, there is cross section dependence and the model is heterogeneous.

Table4: PANICCA Unit Root Test

	Tests	Test Statistics	P-value
COR	P _a	-1.54	0.938
	P _b	29.50	0.953
ΔCOR	P _a	6.88 ^I	0.000
	P _b	108.58 ^I	0.000
PS	P _a	-0.05	0.522
	P _b	43.46	0.494
ΔPS	P _a	5.08 ^I	0.000
	P _b	91.71 ^I	0.000
FDI	P _a	3.57 ^I	0.000
	P _b	77.50 ^I	0.000
ΔFDI	P _a	8.49 ^I	0.000
	P _b	123.67 ^I	0.000

Note: I shows significancy at 1% level.

Table 4 shows PANICCA unit root test results; COR and PS variables are stationary at their first difference while FDI variable is stationary at level. In other words, they are not cointegrated at the same level. Therefore, we need to use the Durbin-H cointegration test for cointegration analysis.

Table5: Durbin H Cointegration Analysis Results

	Test statistics	P-value
DH-g	-3.03 ¹	0.001
DH-p	-3.07 ¹	0.001

Note: I shows significance at 1% level.

It can be expressed based on Durbin H cointegration test results in Table 5 that there is a cointegration relation in both group and panel. So, long-term coefficients among variables can be reviewed.

Table 6: Long-Term Coefficients DOLS

	$FDI = f(COR)$		$FDI = f(PS)$	
	Coefficient	P-value	Coefficient	P-value
Panel (grup)	0.041*	0.000	0.025*	0.000
Argentina	0.119**	0.022	-0.065	0.125
Bangladesh	0.031**	0.028	-0.045	0.170
Brazil	-0.124	0.109	0.255**	0.027
Bulgaria	2.209*	0.008	-0.297	0.524
China	-0.097**	0.014	0.245*	0.000
Indonesia	-0.016	0.681	0.055	0.219
India	0.032	0.849	-0.038	0.900
Philippines	0.060	0.439	0.005	0.962
South Africa	0.011	0.751	0.144**	0.019
Colombia	0.169	0.126	0.122	0.108
Hungary	0.101	0.939	1.025	0.412
Malaysia	0.044	0.677	0.008	0.889
Mexican	-0.012	0.301	0.026	0.558
Pakistan	-0.002	0.975	0.116	0.533
Peru	-0.004	0.975	-0.033	0.752
Poland	-0.068	0.391	-0.040	0.190
Romania	-0.251	0.324	-0.395	0.143

	$FDI = f(COR)$		$FDI = f(PS)$	
	Coefficient	P-value	Coefficient	P-value
Russia	-0.021**	0.029	-0.074	0.418
Chile	0.711*	0.000	-0.184**	0.036
Thailand	0.120**	0.049	-0.070**	0.035
Turkey	0.153*	0.008	0.172*	0.009
Ukraine	0.240**	0.031	0.074*	0.002

Note: *, **, *** respectively show significances at 1%, 5% and 10%.

Table 6 shows the long-term DOLS coefficients of the model. Estimation regarding the overall panel confirms that corruption control (COR) and political stability (PS) variables are statistically significant. A 1-unit change in COR and PS increases foreign direct investment inflow as 0.04 and 0.025 units. The relevant situation varies from country to country when we evaluate it as units. A 1-unit increase in the COR variable increases FDI by 0.11 in Argentina, 0.03 in Bangladesh, 2.20 in Bulgaria, 0.12 in Thailand, 0.15 in Turkey, and 0.24 in Ukraine. However, a 1-unit increase in COR respectively decreases FDI by 0.09 in China and 0.02 in Russia. Moreover, a 1-unit change in PS increases FDI by 0.25, 0.24, 0.14, 0.17, and 0.07 respectively in Brazil, South Africa, Turkey, and Ukraine while a 1-unit increase caused decreases by 0.18 and 0.07 in Chile and Thailand. Changes in COR and PS did not affect FDI in other countries.

5. Conclusion

Especially developing and developed countries have to make investments to reach the growth ratio that they have targeted. However, as is known, the capital of those countries is limited. For this reason, they need direct or indirect investments. Indirect investments enter as securities based on the domestic interest rates. Inflow and outflow of these investments are easy. They, in general, meet the short-term financing needs of the host country. But direct investments are permanent investments. Direct investments are made by means of buying shares of a company at a level to obtain the right to participate in the management or also transferring investments abroad to the host country. Again, such investments contribute to economic growth in real terms as well as increase skilled workforce and employment; they also guarantee long-

term foreign currency inflow to the host country. In this regard, policymakers prefer but also encourage foreign direct investment inflows to indirect foreign investments.

Companies who make the foreign direct investment are called in economic literature Multinational Companies (MC). MC decides to invest in a foreign country so as to get maximum revenue with minimum risk based on their economic and corporate structure. When viewed from this aspect, besides the economic structure of the host country, institutional indicators such as political stability and corruption are crucial for foreign direct investment inflows. This study analyzed the effects of corruption control and political stability on foreign direct investment inflows. Analysis results vary in terms of the overall panel and the units. COR and PS increase FDI in rising market economies that constitute the general of the panel. The findings of the paper jibe with the results of the studies belong to Asiedu (2006), Artan and Hayaloğlu (2015), Busse and Hefeker (2007), Gani (2007), Cleeve (2012). However, the results differ when we look at the units. The increase in COR variable increased FDI in the expected direction for Argentina, Bangladesh, Bulgaria, Chile, Thailand, Turkey, and Ukraine while the increase in PS increased FDI in the expected direction in Brazil, China, South Africa, Turkey, and Ukraine. Contrary to this, an increase in COR decreases FDI in China and Russia while an increase in PS decreased FDI in Chile and Thailand; there could be many reasons for this. Cuervo-Cazurra (2006) highlighted that countries with high levels of corruption and some of some multinational companies acting for high profit have a desire to invest in countries with corruption and political instability. In addition to this view, Karim et al. (2019) and Jadhav (2012) revealed that the market size is more effective than institutional variables such as corruption and political instability in attracting FDI. Concerning the frame of these two views, China and Russia are two countries with both high corruption and big market share; their FDI rates may be increasing for these reasons. Chile and Thailand may be attracting FDI due to their higher political instability compared to other countries. Two countries whose relationship between FDI and COR with PS is in the expected direction are Turkey and Ukraine. Reformation in COR and PS in these countries has caused FDI inflows. In this regard, both countries need to develop typical policies to attract FDI.

References

- Abdella, A. B., Naghavi, N., & Fah, B. Y. (2018). The effect of corruption, trade openness and political stability on foreign direct investment: Empirical evidence from BRIC countries. *International Journal of Advanced and Applied Sciences*, 5(3), 32-38.
- Altıntaş, H., & Mercan, M. (2015). Ar-Geharcamalar ıve ekonomik büyüme ilişkisi: OECD ülkeleri üzerine yatay kesit bağımlılığ ı alt ınd a panel eş büt ünleş me analizi. *Ankara Üniversitesi SBF Dergisi*, 70(2), 345-376.
- Artan, S., & Hayaloğlu, P. (2015). Doğ rudan yabancı sermaye yatırımlarının kurumsal belirleyicileri: OECD ülkeleri örneğ i. *Ege Academic Review*, 15(4).
- Asiedu, E. (2006). Foreign direct investment in Africa: The role of natural resources, market size, government policy, institutions and political instability. *World economy*, 29(1), 63-77.
- Ay, A., Kızılkaya, O., & Akar, T. (2016). Geliş mekte olan ülkelerde yolsuzluk ve demokrasi'nin DYY üzerindeki etkisi: ampirik bir inceleme., *Business and Economics Research Journal*, 7(3), 73-87.
- Bai, J., & Ng, S. (2004). A PANIC attack on unit roots and cointegration. *Econometrica*, 72(4), 1127-1177.
- Bai, J., & Ng, S. (2010). Panel unit root tests with cross-section dependence: a further investigation. *Econometric Theory*, 1088-1114.
- Barış, S., & Bekteş, S. (2021) Yönetiş im Göstergelerinin Doğ rudan Yabancı Yatırımlar Üzerindeki Etkisi: Avrupa Birliğ i Ülkelerinden Deliller. *Sakarya İktisat Dergisi*, 10(1), 1-24.
- Bayar, Y., & Alakbarov, N. (2016). Corruption and foreign direct investment inflows in emerging market economies. *Ecoforum Journal*, 5(2).
- Bin ArisFadzallah, M. H. (2018). *Effects of corruption on FDI inflows in Malaysia* (Master's thesis, Anadolu University).
- Breusch, T. S., & Pagan, A. R. (1980). The Lagrange multiplier test and its applications to model specification in econometrics. *The review of economic studies*, 47(1), 239-253.
- Busse, M., & Hefeker, C. (2007). Political risk, institutions and foreign direct investment. *European journal of political economy*, 23(2), 397-415.
- Canare, T. (2017). The effect of corruption on foreign direct investment inflows: Evidence from a panel of Asia-Pacific countries. In *The changing face of corruption in the Asia Pacific* (pp. 35-55). Elsevier.

- Castro, C., & Nunes, P. (2013). Does corruption inhibit foreign direct investment?. *Política. Revista de Ciencia Política*, 51(1), 61-83.
- Cleeve, E. (2012). Political and institutional impediments to foreign direct investment inflows to sub-Saharan Africa. *Thunderbird International Business Review*, 54(4), 469-477.
- Cuervo-Cazurra, A. (2006). Who cares about corruption?. *Journal of international business studies*, 37(6), 807-822.
- Dunning, J.H., (1993). "Multinational enterprises and the global economy", Available at: <http://books.google.com/books?id=Hz6S4BGmGxUC>.
- Epaphra, M., & Massawe, J. (2017). The effect of corruption on foreign direct investment: A panel data study. *Turkish Economic Review*, 4(1), 19-54.
- Gani, A. (2007). Governance and foreign direct investment links: evidence from panel data estimations. *Applied economics letters*, 14(10), 753-756.
- Gök A., Yamak, T., & Saygın, E. (2018). Doğrudan yabancı sermaye yatırımlarının yolsuzluk üzerindeki belirleyicisi: MENA bölgesi için panel veri araştırması. *Uluslararası İktisadi ve İncelemeler Dergisi*, 287-302.
- Habib, M., & Zurawicki, L. (2002). Corruption and foreign direct investment. *Journal of international business studies*, 33(2), 291-307.
- Hamid, I., Jena, P. K., & Mukhopadhyay, D. (2020). Does Corruption Impede Foreign Direct Investment Inflows in India? An Empirical Investigation. *IUP Journal of Applied Economics*, 19(3), 45-66.
- Hossain, S. (2016). Foreign direct investment (FDI) and corruption: Is it a major hindrance for encouraging inward FDI?. *African Journal of Business Management*, 10(10), 256-269.
- Jadhav, P. (2012). Determinants of foreign direct investment in BRICS economies: Analysis of economic, institutional and political factor. *Procedia-Social and Behavioral Sciences*, 37, 5-14.
- Jadhav, P., & Katti, V. (2012). Institutional and political determinants of foreign direct investment: evidence from BRICS economies. *Poverty & Public Policy*, 4(3), 49-57.
- Jan, M. S., Ali, S., & Ali, A. (2019). Does corruption affect foreign direct investment: Evidence from East Asian countries. *Review of Economics and Development Studies*, 5(3), 479-486.
- Karim, B. A., Karim, Z. A., & Nasharuddin, M. N. (2019). Corruption and Foreign Direct Investment (FDI) in ASEAN-5: A panel evidence. *Economics and Finance in Indonesia*, 64(2), 145-156.

- Kim, H. (2010). Political stability and foreign direct investment. *International Journal of Economics and Finance*, 2(3), 59-71.
- Lipsey, R. E. (2004). Home-and host-country effects of foreign direct investment. In *Challenges to globalization: Analyzing the economics* (pp. 333-382). University of Chicago Press.
- Lucke, N., & Eichler, S. (2016). Foreign direct investment: the role of institutional and cultural determinants. *Applied Economics*, 48(11), 935-956.
- Morrissey, O., & Udomkerdmongkol, M. (2012). Governance, private investment and foreign direct investment in developing countries. *World development*, 40(3), 437-445.
- Nur, H. B., & Dilber, İ. (2017). Gelişmekte olan ülkelerdedoğrudanya-bancıyatırımlarınbelirleyentemelunsurlar. *DokuzEylülÜniversitesiİktisadi-İdariBilimlerFakültesiDergisi*, 32(2), 15-45.
- Pesaran MH (2004) General diagnostic tests for cross section dependence in panels. University of Cambridge, Faculty of Economics, Cambridge Working Papers in Economics No. 0435.
- Pesaran, M. H. (2007). A simple panel unit root test in the presence of cross-section dependence. *Journal of applied econometrics*, 22(2), 265-312.
- Pesaran, M. H., & Yamagata, T. (2008). Testing slope homogeneity in large panels. *Journal of econometrics*, 142(1), 50-93.
- Pesaran, M. H., Smith, L. V., & Yamagata, T. (2013). Panel unit root tests in the presence of a multifactor error structure. *Journal of Econometrics*, 175(2), 94-115.
- Pesaran, M. H., Ullah, A., & Yamagata, T. (2008). A bias-adjusted LM test of error cross-section independence. *The Econometrics Journal*, 11(1), 105-127.
- Reese, S., & Westerlund, J. (2016). Panicca: Panic on cross-section averages. *Journal of Applied Econometrics*, 31(6), 961-981.
- Tosun, M. U., Yurdakul, M. O., & İyidoğan, P. V. (2014). The relationship between corruption and foreign direct investment inflows in Turkey: an empirical examination. *Transylvanian Review of Administrative Sciences*, 10(42), 247-257.
- Touny, M. A. (2016). The interactive effects of corruption and political instability on foreign direct investment: evidence from the Middle East region. *International Journal of Trade and Global Markets*, 9(4), 370-385.

- Westerlund, J. (2008). Panel cointegration tests of the Fisher effect. *Journal of Applied Econometrics*, 23(2), 193-233.
- Woo, J. Y., & Heo, U. (2009). Corruption and foreign direct investment attractiveness in Asia. *Asian Politics & Policy*, 1(2), 223-238.
- YerdelenTatoğlu, F. (2017). Panel ZamanSerileriAnaliziStataUygulamalı (1. Baskı). Beta yayınevi, İstanbul.
- Yilanci, V., & Ozgur, O. (2019). Testing the environmental Kuznets curve for G7 countries: evidence from a bootstrap panel causality test in rolling windows. *Environmental Science and Pollution Research*, 26(24), 24795-24805.
- Zhao, J. H., Kim, S. H., & Du, J. (2003). The impact of corruption and transparency on foreign direct investment: An empirical analysis. *MIR: Management International Review*, 41-62.

CHAPTER VI

THE RELATIONSHIP BETWEEN EXCHANGE RATE, EXTERNAL DEBTS AND INFLATION: A COINTEGRATION ANALYSIS FOR TURKEY

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1. Introduction

After the 1980s, when the phenomenon of globalization accelerated, foreign borrowing became one of the important financing tools used by both developed and developing countries. However, while developed countries can usually borrow with their own national currency, developing countries can only borrow in foreign currencies such as euros and dollars. In this context, fluctuations in exchange rates do not have an impact on foreign debts of developed countries, but they affect developing countries. Therefore, foreign borrowing is a macroeconomic problem for developing countries. Due to the insufficient domestic savings, developing countries have to turn to foreign sources in order to increase their economic capacity and provide basic public services. In these countries with limited foreign currency revenues such as tourism and exports, foreign debts that are not directed to areas that increase the production capacity of the economy continue to increase by creating a vicious circle that nourishes itself as “debt-interest-debt”. Therefore, it is very important whether foreign borrowing is made for financing the budget deficit or for financing investments. In this context, it is inevitable for foreign borrowing, which is not managed well, to reach an unsustainable point in the long term.

Turkey has applied monetary targeting and exchange rate targeting strategy until the 2000s. Following the crises in 1999 and 2000, it started implementing the inflation targeting strategy in 2001, which is based on the priority of price stability and the flexible exchange rate. In the beginning of new era, Turkey has been faced with many macroeconomic problems such as high inflation, high interest rates, large budget deficits and relatively high debt stock. The inflation rate, which was 70% at the beginning of 2002, decreased to a single digit in 2004, to 7% in 2006, when explicit inflation targeting was accepted, and to 5% in 2009. The inflation rate, which started to rise with the increasing domestic demand following the global financial crisis, climbed up to over 20% with the effect of the increasing exchange rates in 2018.

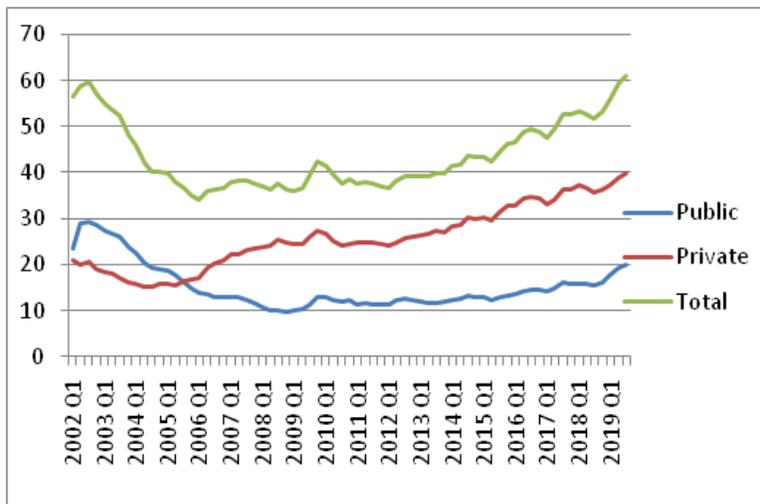


Figure 1. Turkey's Foreign Debt (2002-2019)

Source: Ministry of Treasury and Finance

At the beginning of 2002, total external debt, with a share of 60% in GDP, decreased by up to 35% in 2006. The foreign debt rate, which then began to increase, reached 60% in 2019, its previous level. However, unlike the 90s, private sector debt, not public debt, was instrumental in re-increasing total foreign debt.

The next parts of the study continue as follows. In the second part, the theoretical framework of the subject is discussed. In the third part, empirical studies in the related literature are mentioned, and the fourth part consists of data, empirical analysis and findings. The fifth chapter covers the results of the study and some policy recommendations.

2. Theoretical Framework

Foreign debts interact with basic macroeconomic variables such as exchange rate and inflation. Traditional approaches based on flexibility, such as the Marshall-Lerner Condition, point to the existence of a negative relationship between the exchange rate and foreign debt, based on the exchange rate's relationship with imports and exports. According to this approach, if the domestic demand elasticity of imports and the foreign demand elasticities of exports are equal to or greater than 1 in total, an increase in the exchange rate decreases the domestic demand of imported goods while increasing the foreign demand of export goods (Seyidoğlu, 2013). However, if the Marshall-Lerner condition is not met, the positive effect of the decline in the exchange rate on exports is uncertain. If the Marshall-Lerner condition is met, increasing export revenues due to the positive competitive effect can be used as an important source in the payment of external debts.

Recently, approaches based on the balance sheet effect suggest that the increase in the exchange rate increased foreign debts (Cespedes, 2004; Berganza, 2003, Cavallovd, 2005). According to Calvo and Reinhart (2002), this situation causes fear of floating in countries where debt dollarization is high. In developing countries with debt dollarization, economic actors' incomes are generally in local currency, while their liabilities are in foreign currency. Therefore, the increase in the exchange rate increases the debts of the firms in foreign currency while decreasing the real value of the assets in the local currency. This phenomenon, which is expressed as the balance-sheet effect, ultimately increases the debt / asset ratio and causes the net value of companies to decrease. This also means that the share of external debts in GDP has increased. The effect of exchange rate on foreign debts varies depending on the degree of dollarization and the amount of change in exchange rates. The higher the degree of dollarization, the more the total value of external debts will increase. According to Eichengreen (2002:30), excessive losses in local currencies strengthen the balance sheet effect, while small losses cause the competitive effect to be more dominant.

As an increase in the exchange rate increases foreign debt through the balance sheet effect in countries where debts are dollarized, Cavallo et al. (2005) states that the increase in exchange rate, sudden stops in capital flows and the decrease in output may be related to external debts in foreign currency. Real depreciation due to the depreciation of domestic assets against foreign debts will

force the country to sell domestic assets, thereby causing further depreciation in national currency.

In addition to its impact on foreign debts, the exchange rate can have an impact on the rate of inflation through imports and exports. While a low exchange rate pass-through effect increases the independence of monetary policy, it also facilitates the implementation of inflation targeting. Fluctuations in exchange rates affect domestic prices of traded goods directly and indirectly. An increase in the exchange rate may cause inflation directly by increasing the prices of the imported consumer goods, and indirectly by increasing the production costs through imported intermediate and capital goods. This situation is more evident especially in countries with low domestic demand elasticity of imports, that is, high import dependency. The dependence of developing countries on import restricts the exchange rate to be used as a competitive tool, at least in the short term.

On the other hand, as implicitly set forth in the Marshall-Lerner Condition, due to an increase in the exchange rate, domestic and foreign demand for goods produced domestically will increase inflationary pressures, at least in the short term, as production capacity cannot be increased. According to Cavallo et al. (2005:1), although traditional economic theory suggests that increasing demand and production increase competitiveness due to depreciation, many foreign exchange crises are related to sharp declines in output rather than economic expansion. Debtors who remain unprotected due to the devaluation in an environment with high dollarization may withdraw from production and thus cause a contraction.

The exchange rate pass-through effect is higher in emerging markets and especially in countries with a history of currency crisis (Edwards, 2006; Calvo and Reinhart, 2000). Besides traditional approaches that connect the strength of the exchange rate pass-through effect to microeconomic factors that are not influenced by monetary policy, such as price elasticities and market structure, alternative approaches that establish a relationship between inflation and pass-through effect emphasize the importance of monetary policy regimes. Accordingly, while high inflation increases the exchange rate pass-through effect, low inflation decreases this effect (Choudri and Hakura, 2001:3). According to this alternative approach, the gradual weakening of the exchange rate pass-through effect since the early 1990s is the strong commitment of central banks to price stability and the increasing reliability of monetary policy as a prerequisite

of the inflation targeting regime implemented in many countries in this period. This approach, which connects the exchange rate pass-through effect to the monetary policy regime, suggests that due to targeting low inflation, the inflation targeting strategy will automatically achieve the low pass-through effect (Taylor, 2000: 1390; Hunt & Isard, 2003: 9; Edwards, 2006: 28).

3. Literature

Empirical studies examining the relationship between exchange rate, foreign debts and inflation focus on the impact of the exchange rate on foreign trade and its impact on the balance sheet. In this context, the level of development of countries, the structure of foreign trade and the type of foreign debts can determine the effect of the exchange rate on external debts, inflation and other macroeconomic variables. Therefore, it is possible to see that different results appear in the literature. According to Cespedes et al. (2004), which examines the relationship between the exchange rate, balance sheet and output, an increase in the exchange rate decreases the net values of the company's balance sheets and restricts investments due to the dollarization of debts. On the other hand, as a compensatory effect, the expanding effect of the increase in the exchange rate can lead to an increase in domestic investments. According to Cavallo et al. (2005), the fluctuation in exchange rates reveals two important costs. First, the heavier a country's debt load in foreign currencies the larger the expected increase in the exchange rate. Because the increase in asset sales in countries with high foreign debt sparked a further increase in the value of national currency. According to the authors, if the value decreases in national currency can be limited, the debt/asset ratio may remain at low levels.

According to the findings obtained by Köhler (2016), the decrease in the value of local currency in the case that foreign debt denominated in foreign currencies indicates that, due to the balance sheet effect it creates, it is likely to cause economic contractions. In addition, increased foreign interest rates, low liquidity and increased risk premiums due to debt dollarization can jeopardize the sustainability of debts. According to the author, a devaluation in local currency balances the external debt/asset ratio to the extent that it can increase domestic capital accumulation.

Reza and Pontines (2005) examined the impact of external debt on the exchange rate. The study, which used data from Indonesia, Pilipins, Thailand and Korea, the countries most affected by the East Asian Crisis in 1997, found

that the increase in foreign debt was partly responsible for the depreciation of the local currency.

Taylor (2000) investigated the causes of the declining exchange rate pass-through effect in the 1990s. According to the results of Taylor (2000), the fact that there is a positive relationship between inflation and persistence of inflation indicates a positive relationship between the inflation rate and the exchange rate pass-through effect. Accordingly, the low pass-through effect is due to the low inflation rate. In order to test the Taylor hypothesis, Choudri and Hakura (2001) examined the relationship between inflation and the exchange rate pass-through effect. The results of the study, which used data from 71 developed and developing countries in 1979-2000 period, showed that there is a positive and significant relationship between the average inflation rate and the pass-through effect. Devereux and Yetman (2010) found that there is a positive relationship up to a certain point between inflation and exchange rate pass-through effect. Accordingly, as the rate of inflation increases, exchange rate pass-through increasing at a decreasing rate. According to these results, nominal rigidities play an important role in understanding the low exchange rate pass-through in countries where inflation rates are low and stable.

Campa and Goldberg (2001) is another study testing the hypothesis proposed by Taylor (2000). According to the study based on data from OECD countries, the relationship between high inflation and exchange rate volatility with exchange rate pass-through is weak. The main factor that determines the exchange rate pass-through is the composition of imported goods.

Few studies have been conducted in the literature on the relationship between external debt and inflation. One of these is Reinhart and Rogoff's (2010) work for emerging markets. In the study, when the external debt / GDP ratio is between 60% and 90%, the inflation rate is around 13%. When the external debt / GDP ratio rises above 90%, the inflation rate approaches 17%.

Koluri (1987) investigated the direct and indirect effect -through monetary growth- of external debt on inflation rate in Mexico and Brasil. According to the results, external debts directly and indirectly affect the inflation rate in Brazil, while in Mexico only indirectly. These results show that the expansionary fiscal policy may be inflationary by affecting the central bank's monetary policy. Assibey-Yeboah and Mohsin (2014) examined the effect of inflation on external debt in their study for six developing countries. According to the findings of the study, the inflation rate decreases the amount of investment, labor, consumption

and accordingly production. Decreasing credibility of the economy due to falling production causes an increase in the foreign debt interest rate. This has reduced the demand for external borrowing. Using data from the period 1974-2008, Awan et al (2011) concluded that there is a positive relationship between foreign debt and exchange rate in Pakistan. Accordingly, a 1% increase in the exchange rate increases foreign debts by 0.79% in the long run. Similar results were obtained in the study of Fida et al (2012) for Pakistan. Similarly, Palic et al (2017) found that the increase in the exchange rate increased Croatia's external debt in the long run.

There have been many studies in Turkey investigating the impact of the exchange rate pass-through, but there are few studies examining the relationship between external debts, exchange rate and inflation. Ulusoy and Küçükkale (1996) examined the impact of foreign debt on inflation and growth in Turkey. In the study using annual data from 1965-1994, it was observed that foreign debts had a positive effect on inflation, but this effect weakened over time. Aypek and Erener (2018), which analyzed the effect of the exchange rate on Turkey's foreign debt stock with quarterly data for the period 2005-2017, found that the exchange rate had an impact on net foreign debt stock/GDP. Ekinci (2015) investigated the relationship between foreign debts and inflation in Turkey. According to the study's findings, foreign debts increased the inflation rate in the period 2003-2015. According to the author, the main reason for increasing inflation of external debts is the use of debts in the financing of inefficient investments and budget deficits. In panel data analysis involving Turkey and the six Turks Republic, Kamaç (2016) found that there is a causality towards growth from external debts, but there is no relationship between external debts and inflation. Fendoğlu et al (2019) examined the relationship between external debts and exchange rate pass-through. According to the results of the study, which included 20 manufacturing sub-sectors in Turkey, sectors with high debts in foreign currencies were found to have increased their prices more than other sectors after a devaluation in local currency.

4. Empirical Analysis and Findings

4.1. Data

In 2001, Turkey adopted inflation targeting strategy based on flexible exchange rate and fiscal discipline, thus setting a new framework for monetary policy. The effects of the strategy began to emerge in early 2002. Therefore, 2002Q1

is considered the beginning of the analysis period. In the study, quarterly data covering the period 2002Q1-2019Q4 were used to demonstrate the short and long-term relations between foreign debts, exchange rate and inflation in Turkey. External debts (ED) are made up of the private sector, public sector and central bank's total external debts and are included in the analysis as external debts/GDP. The exchange rate (ER) is considered as a nominal exchange rate showing the value of 1 US dollars against 1 TL, and the inflation rate (INF) is considered as a % increase in CPI. Foreign debt data were obtained from the Treasury and Finance Ministry, while the exchange rate and inflation data were obtained from the FRED database.

4.2. Unit Root Test

In analyzes made with non-stationary time series, spurious regression problems may occur. Therefore, firstly, it should be determined whether the series are stationary or not. The presence of non-stationary series is investigated by unit root tests. The unit root tests developed by Dickey and Fuller (1981) and Phillips and Perron (1988) are mostly used in the literature. In this study, ADF (Augmented Dickey-Dickey Fuller) test developed by Dickey and Fuller was used.

Unit root test results are very important in order to reveal the cointegration relationship between the variables and to follow the method in this context. Because, in order to decide which co-integration tests that can investigate the long-term relationship between the variables, it is necessary to know the degree of integration of the series. ARDL Boundary test can be applied in a mixed structure regardless of whether all series are stationary at level or not. However, in order for Engle-Granger and Johansen co-integration tests to be applied, all variables included in the analysis must contain a unit root at the level and be stationary at their first difference. ADF unit root test results are shown in Table 1.

Table 1: ADF Unit Root Test Results

ADF Test						
Variables	I(0)			I(1)		
	intercept	Trend/int.	None	intercept	trend/int.	None
LED	-1,487	-2,762	-0,087	-5,242*	-5,457*	-5,284*
LINF	-1,918	-2,168	0,075	-3,906*	-4,167*	-3,916*
LER	3,066	0,460	3,729	-7,506*	-5,019*	-7,020*

Note: *shows significance at 1 percent level

According to ADF unit root test results, it is seen that all variables are not stationary at level, but all of them are stationary in their first differences.

4.3. Johansen Cointegration Test

ADF unit root test results show that there may be a long-term co-integration relationship between variables or variables can act together in the long term. The Johansen Cointegration test can be used to demonstrate the existence of this relationship. The Johansen Co-integration approach, based on a Vector Autoregressive (VAR) basis, is expressed as follows:

$$y_t = \mu + A_1 y_{t-1} + \dots + A_p y_{t-p} + \varepsilon_t \quad (1)$$

Where, y_t is an $n \times 1$ vector of non-stationary variables that are integrated of order one and ε_t is an $n \times 1$ vector of innovations. Equation (1) can be re-written as:

$$\Delta y_t = \mu + \Pi y_{t-1} + \sum_{i=1}^{p-1} \Gamma_i \Delta y_{t-i} + \varepsilon_t \quad (2)$$

Where

$$\Pi = \sum_{i=1}^p A_i - I \quad \Gamma_i = - \sum_{j=i+1}^p A_j \quad (3)$$

If the coefficient matrix Π has reduced rank $r < k$, then there exist $k \times r$ matrices α and β each with rank r such that $\Pi = \alpha \beta'$ and $\beta' y_t$ is $I(0)$. r is the number of cointegrating relations (the cointegrating rank), the elements of α are known as the adjustment parameters in the VEC model and each column of β is a cointegrating vector (Hjalmarson and Österholm, 2007)

To determine the number of cointegrating relations (r) Johansen (1991) proposed two different likelihood ratio tests: the trace test and maximum eigenvalue test. The trace statistic for the null hypothesis of r cointegrating relations against an alternative of k cointegrating relations is estimated as:

$$LR_r = -T \sum_{i=r+1}^k \ln(1 - \lambda_i) \quad (4)$$

Where r is the number of cointegration relations, k is the number of endogenous variables, for $r = 0; 1, \dots, k-1$, T equals the sample size and λ_i is the i -th largest eigenvalue of the P matrix in equation (3)

As a second test, maximum eigenvalue statistic which tests the null hypothesis of cointegrating relations against the alternative of $r+1$ cointegrating relations for $r=0; 1, \dots, k-1$. This test statistic is computed as:

$$LR_{max} = -T \ln(1 - \lambda_{r+1}) \quad (5)$$

Unlike the Engle –Granger cointegration test, which includes an explanatory variable, the Johansen Co-integration test, based on a Vector Autoregressive (VAR) basis, contains more than one explanatory variable, and therefore multiple cointegration relationships can occur between variables.

The lag length of the VAR model must be calculated before proceeding to the Johansen cointegration analysis. The test showing the lag length is shown in Table 2.

Table 2: VAR Model Lag Length Results

Lag	LogL	LR	FPE	AIC	SC	HQ
0	196.1563	-	5.76e-07	-5.85322	-5.75369	-5.81389
1	428.0942	435.7621	6.71e-10	-12.6089	-12.2108*	-12.4516
2	441.4432	23.8664	5.89e-10	-12.7407	-12.0439	-12.4654*
3	446.8998	9.25970	6.59e-10	-12.6333	-11.6380	-12.2400
4	4527787	9.44193	7.31e-10	-12.5387	-11.2448	-12.0274
5	479.0523	39.8083*	4.39e-10	-13.0621	-11.4697	-12.4329
6	489.2139	14.4726	4.33e-1*	-13.097*	-11.2063	-12.3501

When Table 2 is examined, SIC information criterion suggests the appropriate lag length as 1, HQ information criterion 2 and LR information criterion 5. FPE and AIC information criteria suggest the appropriate lag length as 6. Accordingly, the appropriate lag length of the VAR model is accepted as 6. After determining the appropriate lag length, the Johansen Cointegration test results applied to determine the existence of a long-term relationship between the variables are shown in Table 3.

Table 3: Johansen Cointegration Test

Hypothesis		TraceStatistics		Maximum EigenvalueStatistics	
H ₀	H ₁	Statistics	0,05 Critical value	Statistics	0,05 Critical value
r=0	r=1	43.04648*	35.01090	31.58555*	24.25202
r ≤ 1	r=2	11.46093	18.39771	10.81110	17.14769
r ≤ 2	r=3	0.649827	3.841446	0.649827	3.841466

Note: *denotessignificance at 1%level

When Table 3 is examined, H₀ hypothesis, which suggests that there is no cointegration vector among the variables, was rejected by both trace statistics and maximum eigenvalue statistics, H₁ hypothesis was accepted. Also, since the calculated test statistics are smaller than the relevant critical values, the H₀ hypothesis which suggests that it is $r \leq 1$ and $r \leq 2$, is rejected. These results, which reveal that there is at least one co-integration vector, show that Turkey's external debts, the rate of inflation and the exchange rate are moving together in the long term. However, trace and maximum eigenvalue test results do not provide any information about the direction of the relationship between variables in the long term.

In order to establish a relationship in this context, the co-integration equation must be created using normalized co-integration coefficients. This study mainly aims at how foreign debt reacts to the change in inflation and exchange rate, and therefore co-integration vectors are normalized by external debts. Normalized coefficients are shown in Table 4.

Table 4: NormalizedCointegratingEquation

CointegratingEquation	LnED	LnINF	LnER
Equation 1	1.00	0.118215 (0.05738) [2.0614]*	-0,587702 (0.09614) [-6.1155]**

Note: Standarderrors in () & t-statistics in [], * denotessignificance at 5%, ** denotessignificance at1% level

Table 4 shows the normalized co-integration equation. In the equation, the coefficients of variables refer to long-term balance values. According to these results, there is a statistically significant and negative relationship between

external debts and inflation in the long run. Accordingly, a 1% reduction in the inflation rate increases the share of external debts in GDP by 0.11% in the long term. Otherwise, external debts will increase. As stated in Assibey-Yaboah and Muhsin (2014), rising interest rates due to inflation reduces investment demand and as a result the demand for foreign borrowing decreases. However, according to the normalized co-integration equation, there is a significant and positive relationship between external debts and the nominal exchange rate in the long run. In this context, a 1% increase in the nominal exchange rate increases the share of external debts in GDP by 0.58%. Given that foreign debts are being dollarized in Turkey, the balance sheet effect caused by exchange rates leads to an increase in the external debt burden. These results coincide with the results of many studies put forward in literature such as Cespedes et al (2005); Calvo and Reinhart (2000); Cavoli (2009).

4.4. Vector Error Correction Model

After a co-integration relationship is detected between variables, the short-run causality relationship is investigated by the Vector Error Correction Model (VECM) recommended by Engle & Granger (1987). This model can be used to determine short-term relationships as well as the long-term balance between variables. The following VECM equations are used to determine the short-term relationships between external debts, inflation and the exchange rate, and adjustment speed in the long-run.

$$\begin{aligned} \Delta \ln ED_t = & \alpha_1 + \sum_{i=1}^n \beta_1 \Delta \ln ED_{t-i} + \sum_{i=1}^n \gamma_1 \Delta \ln INF_{t-i} \\ & + \sum_{i=1}^n \phi_1 \Delta \ln ER_{t-1} + \phi ECT_{t-1} + \varepsilon_{1t} \end{aligned} \quad (6)$$

$$\begin{aligned} \Delta \ln INF_t = & \alpha_2 + \sum_{i=1}^n \beta_2 \Delta \ln ED_{t-i} + \sum_{i=1}^n \gamma_2 \Delta \ln INF_{t-i} \\ & + \sum_{i=1}^n \phi_2 \Delta \ln ER_{t-1} + \phi ECT_{t-1} + \varepsilon_{2t} \end{aligned} \quad (7)$$

$$\begin{aligned} \Delta \ln ER_t = & \alpha_3 + \sum_{i=1}^n \beta_3 \Delta \ln ED_{t-i} + \sum_{i=1}^n \gamma_3 \Delta \ln INF_{t-i} \\ & + \sum_{i=1}^n \phi_3 \Delta \ln ER_{t-1} + \phi ECT_{t-1} + \varepsilon_{3t} \end{aligned} \quad (8)$$

Where; n is lag numbers, β, γ, δ are short run dynamic coefficients of the model's adjustment long-run equilibrium, and ECT is the error correction term. ECM contains long-run information derived from the long-run cointegrating relationship. Coefficient of ECM , φ is the speed of adjustment parameter which expected to be negative sign. It measures the speed at which ED returns to equilibrium after changes in INF and ER .

VECM produces results that include both long-term and short-term causal relationships. The fact that the coefficient of the ECM parameter is negative and statistically significant means that there is a causality relationship from explanatory variables to dependent variables in the long run and the deviations in the short run will stabilise in the long run. The statistical significance of F statistics based on the Wald test which applied to the coefficients of the explanatory variables shows that there is short-term causality.

Table 5: VECM Estimation Results

Granger Causality			Error Correction Model
Dependent Variables	Independent Variables		ECM_{t-1}
$\Delta \ln ED$	$\Delta \ln INF$ [0.819] (0.542)	$\Delta \ln ER$ [4.257] (0.0030)	-0.193 (0.0032)
$\Delta \ln INF$	$\Delta \ln ED$ [1.067] (0.391)	$\Delta \ln ER$ [5.953] (0.000)	-1.267 (0.005)
$\Delta \ln ER$	$\Delta \ln INF$ [0.959] (0.452)	$\Delta \ln ED$ [1.770] (0.138)	0.379 (0.028)
Diagnostic Tests Results			
	Coefficient	P-value	
R^2	0.74		
Serial correlation (LM-stat)	8.51	0.51	
Normality (Jarque-Bera)	1.81	0.93	
Heteroskedasticity (Chi-sq)	214.85	0.87	

Note: coefficient in () & F-statistics in []

Table 5 shows the Granger causality test based on VECM, which shows the short-term causality relationship between the variables, and the coefficients for the ECM_{t-1} term which showing the long-run causality. In the model, where external debts are independent variables, the coefficient of the term ECM is negative and statistically significant at 1% level as expected. These results indicate that there is a causality from the exchange rate and inflation to foreign debts in the long term, and the change in these variables will bring the external debts closer to the long-term equilibrium after approximately five quarters ($1/0.193=5.18$ quarters=fifteen months). Similarly, in the model where inflation is an independent variable, the coefficient of the term ECM is negative and statistically significant. Accordingly, the exchange rate and foreign debts together affect the inflation rate in the long run. However, since the term ECM is larger in this model, the long-run speed of adjustment will be faster and inflation will approach equilibrium in a shorter period of time (0.8 quarter = 2.5 months). In the model where the exchange rate is an independent variable, although the term of ECM is statistically significant, inflation and foreign debts cannot balance the exchange rate in the long run because its coefficient is positive.

Table 5 also shows the results of VECM-based Granger causality, which shows short-term causality relationships. If the F statistic is statistically significant at 5% level in the Wald test results, the null hypothesis which suggesting that there is no causality is rejected. When the test results are examined, the causality relationship between the variables is as follows:

- There is a one-way causality from the exchange rate to foreign debts and inflation.
- There is no causal relationship between inflation and external debts.
- Foreign debts and inflation have no effect on the exchange rate.

5. Conclusion

In this study, using quarterly data for the period 2002-2019, long and short-run relations between foreign debts and exchange rate and inflation were examined in Turkey. For this purpose, johansen co-integration tests and Granger causality tests were applied to the series. Johansen co-integration test shows a long-run relationship between variables. According to vecm forecast results, inflation and exchange rates together affect foreign debts in the long term. Similarly, external

debts and exchange rate together affect the inflation rate. In this context, VECM long-run forecast results support Johansen co-integration test results. According to the Granger causality test based on VECM, which gives short-term relations, the exchange rate is the cause of both inflation and external debt. In this context, the exchange rate increases foreign debts by creating a balance sheet effect, while increasing inflation by the exchange rate transition effect.

The lack of domestic savings in Turkey requires foreign borrowing. However, as in other developing countries, Turkey can be borrowed in foreign currencies such as dollars and euros, not with its own national currency. This phenomenon, which is expressed by Eichengreen and Hausmann (1999) as the “original sin”, causes liability dollarization. Since a significant portion of the revenues in Turkey are in local currency, an increase in exchange rates increases the share of foreign debts in GDP when calculated in dollars. On the other hand, the domestic prices of intermediate goods and consumer goods imported by Turkey, which is relatively high in dependence on imports, are affected by fluctuations in the exchange rate. As understood from the empirical results of this study, the exchange rate has an effect on foreign debts and inflation. However, in a globalized world, foreign borrowing and international trade are a fact of Turkey. But Turkey can reduce the impact of the exchange rate on macroeconomic variables. In this context, import dependence should be reduced in the long term by directing external debts to productive areas that increase production capacity. Thus, external debts do not turn into a self-feeding vicious cycles. On the other hand, supporting income-generating activities in foreign currencies can weaken the negative effects of debt dollarization. With all this, the Central Bank, which implements an independent monetary policy, should minimize fluctuations in the exchange rate without severing it from the economic context.

References

- Assibey-Yeboah & M. Mohsin, M. (2014). The Real Effects of Inflation in a Developing Economy with External Debt and Sovereign Risk, *North American Journal of Economics and Finance* 30 (2014) 40–55
- Awan, A., Asghar, N. & Rehman, H. (2011). The Impact Of Exchange Rate, Fiscal Deficit And Terms of Trade on External Debt of Pakistan a Cointegration and Causality Analysis, *Australian Journal of Business and Management Research*, 1 (3)

- Ayppek, N.&Erener, C. (2018). Döviz Kuru Hareketlerinin Türkiye'nin Dış Borç Stoku Üzerindeki Etkisinin Analizi, *Bankacılık Ve Finansal Araştırmalar Dergisi*, 5 (2)
- Berganza, J.C., Chang, R.&Herrero, A.G. (2003). Balance sheet effects and the country risk premium: an empirical investigation, Working Papers 0316, Banco de España; Working Papers Homepage.
- Calvo, G. A.,&Reinhart, C:M., (2000). Fixing Your Life, NBER Working Paper, No.8006
- Calvo, Guillermo A.&Reinhart, C.M. (2002), "Fear of Floating," *Quarterly Journal of Economics*, 117(2): 379-408.
- Campa, J. &Goldberg, L., (2001). Exchange Rate Pass-Through Into Import Prices: A Makro or Micro Phenomenon, NBER Working Paper No. 8934
- Cavallo, M., Kisselev, K., Perri, F. & Roubini, N., (2005). Exchange Rate Overshooting and the Costs of Floating, FRB of San Francisco Working Paper No. 2005-07.
- Céspedes, L. F., Chang, R. & Velasco, A. (2004). Balance Sheets and Exchange Rate Policy, *American Economic Review*, 94, 1183–1193.
- Choudhri, E.U. & Hakura, D.S. (2001). Exchange Rate Pass-Through to Domestic Prices: Does the Inflationary Environment Matter?, IMF Working Paper No. 194
- Devereux, M.B. & Yetman, J.,(2010).Price Adjustment and Exchange Rate Pass-through, *Journal of International Money and Finance, Elsevier*, 29(1), 181-200
- Edwards, S. (2006). The Relationship Between Exchange Rates and Inflation Targeting Revisited, NBER Working Paper, No.121163
- Eichengreen, B. (2002). Can Emerging Markets Float? Should They Inflation Target? Banco Central Do Brasil Working Paper, No.36,
- Eichengreen, B. & Housman, R. (1999). Exchange Rates and Financial Fragility, NBER Working Paper No. 7418
- Ekinci, M.B. (2016). External Borrowing and Inflation in Turkey Between 2003 and 2015: A Simple Linear Regression Analysis, *International Journal of Economics and Financial Issues*, 6(1), 45-54.
- Fendoğlu, S. &Çolak, M.S., Hacıhasanoğlu, Y.S. (2019). Foreign Currency Debt and the Exchange Rate Pass-Through, CBRT Working Paper No. 19/24
- Fida, B.A., Khan,M.M. & Sohail, M.K. (2012). Analysis of Exchange rate Fluctuations and External Debt: Empirical Evidence From Pakistan, *African Journal of Business Management*, 6(4), pp. 1760-1768

- Hjalmarsson, E. & Österholm, P. (2007). Testing for Cointegration Using the Johansen Methodology when Variables are Near Integrated, IMF Working Paper No.141
- Hunt, B. & Isard, P. (2003). Some Implication for Monetary policy of Uncertain Exchange Rate Pass-Through, IMF Working Paper, No.25
- Johansen, S. (1991). Estimation and Hypothesis Testing of Cointegration Vectors in Gaussian Vector Autoregressive Models, *Econometrica*, 59 (6), 1551-1580
- Kamacı, A. (2016). Dış Borçların Ekonomik Büyüme ve Enflasyon Üzerine Etkileri: Panel Eşbütünleşme ve Panel Nedensellik Analizi, *International Journal of Cultural and Social Studies*, 2 (1), 165-175
- Kolori, B. R. & Giannaros, D.S. (1987). Deficit and External Debt Effects on Money and Inflation in Brazil and Mexico: Some Evidence, *Eastern Economic Journal*, 13 (3) 243-248
- Köhler, K. (2016). Currency Devaluations, Aggregate Demand, and Debt Dynamics in an Economy with Foreign Currency Liabilities, IPE Working Paper, No. 78/2016
- Palic, I., Banic, F. & Matic, L. (2018). The Analysis of The Impact Of Depreciation on External Debt In Long-Run: Evidence From Croatia, *Interdisciplinary Description of Complex Systems* 16(1), 186-193
- Reinhart, C. & Rogof, K., (2010). Growth in a Time of Debt *American Economic Review: Papers & Proceedings* 100: 573–578
- Seyyidoğlu, H. (2013). Uluslararası İktisat, Güzem Yayınları, İstanbul
- Siregar, R.Y. & Pontines, V. (2005). External Debt and Exchange Rate Overshooting: The Case of Selected East Asian Countries, University of Adelaide Australia, School of Economics Working Paper No.14
- Taylor, J.B. (2000). Low Inflation, Pass-Through and The Pricing Power of Firms, *European Economic Review*, 44, 1389-1408
- Ulusoy, A. & Küçükale, Y. (1996), Türkiye’de Dış Borçların İktisadi Büyüme ve Enflasyon Üzerine Etkisi, *Ekonomik Yaklaşım*, 7 (21), 13-25

CHAPTER VII

DIGITAL LEADER AND INFORMATION TECHNOLOGY APPLICATIONS

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1. Introduction

When an organization wants to move from a traditional process to a comprehensive digital platform, it requires a thriving leadership strategy that might be effective in the long run for this type of change. Many leaders lack from the technical knowledge or ability to oversee this transformation. However, the decisions that the leader must make in this transformation are critical and require the ability to be flexible. Organizations that employ leaders with different qualifications may encounter different and unexpected results in this regard. Therefore, leadership styles should be examined to determine the effectiveness of the decision that made in the digital transformation process (Sow & Aborbie, 2018). The leadership model to be applied should be suitable for the organizational atmosphere and the sector in which the organization operates, as well as to ensure the integration of digitalization and information technologies into the organization. When the leadership style applied is not compatible with digital transformation and information technology applications, the transformation strategy becomes ineffective and problems may arise. These problems cause a negative influence over the organization which lasts many years (Allio, 2015). For this reason, the digital leader who can make the decisions that can realize the transformation and ensure the integration of information technologies should be at a level to

comprehend and manage information technologies. The need for a redefinition of the leader emerges here. Leaders who can keep themselves up-to-date and open to change will be at the forefront of the implementation of digital transformation and information technologies. The rapid evolution in leadership studies is revealing the changing realities of the world and especially the advances in technology (Kremer, 1993). Leaders who cannot adopt with these advances and respond to changing digital and technological needs will suffer problems in the management of organizations in the twenty-first century. Especially the Z generation (those born after 1995; Okan & Yalman, 2013) starting their full-time working life as of 2020 will increase the dimensions of the problems experienced. Generation Z, who want to express themselves more freely, will affect both the employee and customer profile and organizational dynamics. Changing organizational dynamics also means changing the behaviour of the leader of the organization. For the digitalized world, organizations will require digital leaders.

This study aims to determine the effect of digital leadership and information technology applications on organizational performance. The digital leader and information technology applications will be examined individually in the conceptual framework, and the relationship between them will be revealed in the conclusion section.

2. Digital Leader

In today's world, digitalization manifests itself in every aspect and moment of life. It does not seem possible to shun digitalization on a personal or organizational level (Phelps, 2014). Organizations need to be digitized in an agile manner in order to meet the requirements of the modern world and to survive in the competitive market environment. This awareness organizations make the necessary investments in digital technologies and information technologies. In the report of the Ministry of Development (2019-2023), it is pointed out that "in the next five years, digital transformation investments and the income to be obtained as a result of these investments will increase greatly. For example, the US market, valued at US\$66.67 billion in 2016, is expected to reach US\$152.31 billion in 2022, with a CAGR of 14.72% between 2017 and 2022. Similarly, it is stated that the German industry will invest a total of 40 billion Euros in the field of Industry 4.0 each year until

2020, and the annual investments will increase up to 140 billion Euros by applying the same investment level to the European industrial sector. Although increasing digital technology is ubiquitous in modern work environments, its potential is often underutilized (Colbert et al., 2016). At this point, the call for the digitalization of the leader emerges. Digital leaders are leaders who have an internet connection regardless of time and place, can use open-source technology, and have skills such as customizing mobile devices and information technologies (Sheninger, 2019). In addition, digital leadership is a leadership model that can give its followers the necessary support to use digital platforms and integrate with information technologies. (Yücebalkan, 2018). The importance of digital leadership is increasing and studies reveal its importance. Westerman et al. (2014) emphasized that failures in digital transformation are usually the result of either a lack of coordination or a lack of participation of leaders (Asiltürk, 2020). The digital leader has to follow all the digital transactions carried out by the organization where he is charged with management. The organization leader who is unaware of its employees and the digital and information technologies they use, cannot be expected to make the right decisions in its activities. In addition, leaders who lack these skills need to be constantly persuaded by their employees. This persuasion process will cause loss for the organization as a waste of time and additional cost. Since the leader cannot make up for this deficiency by himself, it will also spoil the internal atmosphere of the organization. Although he defines himself as taking traditional and more concrete steps, he will not be willing] to accept whether he can use the information technologies required by the modern age. In particular, he will not be accepted by the Z generation employees and will suffer serious communication problems. Dahlstrom et al. (2017) stated the following elements to ensure digital transformation.

- determining the future direction of the business,
- identifying the leaders who will guide the transformation,
- convincing key stakeholders that transformation is a good idea,
- determining how the organization can be competitive in the digital age,
- determining how decisions should be made during transformation,
- obtaining financing to achieve the transformation's goals
- identifying areas where the organization can be successful and achieve its goals effectively through this effort.

The Importance of to determine the leader who will direct the transformation in order to ensure digital transformation and enable the organization to use information technologies effectively has been seen in studies. Digital leader name; It derives from the leadership style that provides digital transformation, increases the use of information technologies within the organization and offers these opportunities to its employees.

3. Information Technology Applications

3.1. Knowledge Concept

In this section, concepts related to information and information technologies will be given. Today, the importance of knowledge and knowledgeable people is increasing in the information society. Knowledge is seen as the strategic power of businesses. The best use of this strategic power exists in the missions of the enterprises. Along with the increasing importance of information, developing information technologies in parallel also increase the usability of information. For this reason, it is useful to define the concept of knowledge, which is the basis on which information technologies are based. According to the definition that information engineers have been working on for a long time; It is the product of knowledge or mind, the situation and reality that is told and said. Knowledge is basically a flexible combination that provides a framework for the co-assessment of organized and coherent experiences, values, relevant information, and expert opinion; it is defined as the ability to take information into action (Liebowitz & Megbolugbe, 2003). When knowledge is acquired, it is revealed and processed in the minds of individuals; It comes to life not only in documents and documents, but also in all routine studies (Davenport & Prusak, 2001). According to Belkin, knowledge is the interpretation of the event. According to McCreadie and Rice, information is the representative of knowledge. Traditionally, information is stored through books, but now electronic media has gained more importance. Knowledge is the inference of environmental stimuli and phenomena, and not all of them experience message transmission concern. It is part of the information communication process. Rather than words or inputs, meanings, timing and social factors play a very important role in the interpretation of information. Again, according to McCreadie and Rice, it is important that knowledge appears as a resource or commodity. Information is similar to a message transmitted from receiver to transmitter. The receiver interprets the message as intended by

the sender. Sometimes, information can be distorted or changed in addition to the messages sent as expected to be interpreted (Madden, 2000).

Information also appears as the ability to read data and signs from the environment. According to many information experts, information is a property of all living organisms. According to long time researches of zoologists, the extremely bright colours of animals indicate that they are poisonous. Predators started stay away from such animals due to their experiences. That is, a predator may learn that an overly bright male butterfly is poisonous and thus avoid approaching it. However, compared to a female butterfly, the colour of the male butterfly indicate that it is a male, so those markings have a different meaning for the female butterfly. Obviously, the overly bright colors on the male butterfly convey different messages to the female butterfly and the predator. Although what is conveyed is “bright colours”, for the predator this means poison, while for the female butterfly it evokes the gender of the male butterfly. There is a difference in the interpretation of information here. Messages about information sharing do not have to be the same for the receiver and the transmitter. According to Shannon and Weaver, “The fundamental problem of communication is the change in the different perception of the transmission from one side to the other in the reconstitution of the message”. If the given signal is a message, it should be a writer for the sender and a reader or both for the receiver and empathy should be established (Madden, 2000). Depending on the developments in information and communication technologies, production, consumption, distribution relations and the economic system, which are described as the triple pillar of the economy in the information economy, which has replaced the industrial economy, are all restructured on the basis of knowledge and information becomes the main factor of competition (Sarihan, 1998). Knowledge is individualized information that enables the individual to fully and accurately understand his/her experiences (Barutçugil, 2002). The differences experienced in the world economy in recent years in the economic, social and technological fields are explained by the concept of knowledge economy. These complex processes, which are closely related to each other, have revealed the necessity for societies to think big and live. As a result of the developments in communication and information technologies, the obvious and permanent effects experienced in the economy call for a redefinition of many micro and macro concepts (Kevük, 2006). In the socio-economic development process, societies have experienced and are going to experience the transition

processes from primitive society to agricultural society, from agricultural society to industrial society, from industrial society to information society. The first of the stages thought to be important in the history of humanity is the transition from the primitive life to the agricultural society that connects people to the land and the settled order, the second is the transition from the agricultural society to the industrial society where mass production, consumption and education are important, and the third is the information society process in which mass welfare, knowledge and qualified human capital gain importance (Aktan and Tunc, 1998). Knowledge is the most effective factor that changes, develops and transforms organizations from bottom to top. In this context, managing the flow of information, collecting and using information are among the issues that modern companies deal with the most. It is the feature of benefiting from knowledge that reveals the difference of organizations. Accessing information, managing and using it determines the success (Yeniçeri and İnce, 2005). In terms of companies and countries, the importance of information has become increasingly important in recent years. Economic activities, the importance and development of information technologies have taken on a global structure. This situation provided a competitive advantage, companies spread their activities through information technologies and used information and information technologies as a strategic power in their competitive efforts. In fact, different examples and signs of the knowledge economy have appeared in all times of humanity (Kevük, 2006). The knowledge economy shows that the transformation of investment in knowledge is higher in physical capital investments. The value of the knowledge people has in the market is becoming more and more important. In addition, the most important difference that distinguishes the knowledge economy from other economic structures and the industrial economy is that knowledge has a primary priority among economic factors. This means that knowledge forms the basis of the knowledge economy (Dura and Atik, 2002).

3.2. The Concept of Information Technologies

In businesses, information is used in decision-making processes, with the ability to plan, maintain and control the effectiveness of the institution. Information; It is much more important than the traditional production factors consisting of raw materials, capital and labour and has been accepted as a very important resource. In this respect, business managers have started to move towards modern techniques

that allow the acceleration of business activities, reduction of transactions, and access to the desired information in the desired time. (Naralan, 1998).

In general, information technologies provide advantages for businesses in terms of increasing efficiency, minimizing costs, offering higher quality products and services to customers, developing new information-oriented products and increasing competitiveness (Adıgüzel vd., 2006). It is a fact that the use of information technologies will have a positive impact on the administrative activities of institutions. As a matter of fact, the information processed and presented with computers, which is one of the information technology products, has made the behaviour and decisions of the managers easier, and has also been able to improve the planning, decision-making and production methods. Today's management practices have been developed. However, the cooperation between the main departments of the enterprises increased, the problems between the departments and branches could be analysed much better, leading to the adoption of a more obvious and organized management philosophy (Ülgen, 1980).

Information systems are systems that collect, process and store the necessary information from different sources in order for the manager to make decisions, and turns the information into a report (Güleş, 2000). This system provides managers and lower-level employees with various opportunities to examine problems, revive complex issues, and design new products (Kenneth and Laudon, 2001). While information technologies have undertaken the task of facilitating the daily work of lower and middle management in general until a short time ago, today, especially with fast processors, developing database software and internet technology, it makes an important contribution to the important decisions of the senior management. In a constantly competitive environment, the need for information systems that fully support the business activities of the enterprise is increasing in order to be successful in competition, to be able to predetermine the constantly changing business conditions and to respond quickly to them (Atlaş, 2014).

3.3. Information Technology Systems

In general, information technologies can provide advantages for businesses such as increasing efficiency, minimizing costs, offering much higher quality products and services to customers, developing new products with information resources and increasing competition. The use of information technologies is likely to have some positive contributions to the managerial actions of businesses. Because the

information processed and presented by computers, which are the products of information technologies, made the behaviour and decisions of the managers easier, and improved the planning, decision-making and production methods. It has enabled the development of modern management techniques. Along with this, the cooperation between the basic departments of the enterprises has increased. There have been developments in computer technology in the last 20 years. Data processing has become faster, more affordable and reliable. With their increasing technical capacities, decreasing costs and ease of use, businesses benefit greatly from information technologies.

Managerial information system; It is a computer-aided system that provides the necessary information flow in an organization, combines data from the internal and external environment, provides information and processing support, and provides information that will facilitate decision-making to the management in a timely and meaningful way (Barutçugil, 2002). Many definitions have been made about management information systems. Some of them are mentioned below (Gökçen, 2007):

- All of the activities and systems in the organization necessary for the processing, use and management of information as a resource.
- A business system that provides information about the past, present and future (projection) of an organization and its environment.
- It is a method that enables the planning, control and operational functions of the organization to be carried out effectively, providing the necessary, timely and accurate information to the management in order to facilitate the decision-making process. It is a computer information system that can integrate data from different sources in order to provide the necessary information for management decision making.
- It is a subsystem of the organization's information system in relation to managerial decisions for control and strategic planning.
- It is a system that brings and monitors the data from the environment, captures the data from the operations in the business and records the transactions, filters, organizes and presents the data to the manager as information by selecting it, giving the managers the opportunity to produce the information they desire.
- It is the total amount of the computer-based integrated information processing methods that can be developed to equip managers with timely and effective information in an organization.

Decision support systems are computerized information systems. It supports business and organizational decision-making activities. A properly designed decision support system is an interactive internet-oriented system that solves and identifies problems, and can use documents, personal information, and business models. They are the systems that include models, simulations and applications designed to make decision making easier and more effective. Decision support emerged as a result of managers' efforts to solve managerial problems with models and was first introduced by the study of J. D. Little (Özsever vd., 2009).

Office automation systems are the use of computer technology to automate routine operations and functions performed in an office. Office automation systems are computer-based information systems that enable the collection, processing, recording and transfer of electronic messages, documents and other forms of communication between individuals, groups and organizations (Elibol, 2005). With the use of office automation systems, information flow between organizations is accelerated and costs are reduced. Reducing costs is the primary goal of enterprises. The increased efficiency with the falling costs is reflected in the field work of the enterprise and increases the performance.

As a result of expert systems solving problems depending on the subject; A new type of software has emerged, with its unique principles, tools, and techniques, which forms the basis of information engineering. The definition for expert systems is as follows: "It is the arrangement of knowledge-based elements within the computer, thanks to the abilities of experts, such as the arrangement of systems that can make intelligent decisions or offer intelligent suggestions about an event or situation" (Baykoç and Öz, 2004). With the increase in the role of expert systems in the business, mechanisms that can instantly evaluate the needs of the market and the market are emerging. These mechanisms not only face instant problems, but also evaluate the problems that the business may encounter in the future, and seek ways to stop these problems before they become apparent. However, in order to create expert systems, companies require a decent amount of knowledge and trained personnel.

Electronic Data Processing Systems is the sharing of information between different organizations in computer and machine format. It's a paperless electronic exchange of information with suppliers. Electronic data processing systems are not only useful but also fast. Although the electronic data processing system, which saves time, has a limited capacity, it is still efficient and responsive to the needs of some companies. The inadequacy of electronic data processing

systems means loss of time, effort and speed for companies. In addition, this inadequacy will result in the employment of extra personnel. If it is considered that the error rate in manual work will be high, these errors will cause additional costs for businesses.

The Development of the Use of Information Technologies in Businesses

The development of the use of information technologies in enterprises has taken place in the form of periods. These are data processing period, micro period and network period.

Data Processing Period: This period, which lasted from 1960-1980, was shaped by industrial products supporting mainframe computers. The purpose of using mainframe computers in companies has been to automate lower-level administrative and factory work in order to increase organizational efficiency. From the mid-1970s, the demand for mainframe computers began to decline. As companies began to increase their demands for computer systems that could benefit middle managers, the computer industry turned to this field (Bradley, Hausman, & Nolan, 1993). The decrease in demand for mainframe systems and the need for mid-level managers to benefit from computer-based applications have led to new searches in the computer industry. The need for computer applications of middle-level managers was different from the need for computer applications of lower-level employees. In this period, middle-level managers' attempts to automate failed due to factors such as hardware and software (Akin, 2005).

Micro Period: In the micro period that developed in the early 1980s, information technology was aimed to be used by knowledge workers. The new paradigm developed to meet the needs of middle-level personnel has been information instead of automation. The purpose of informing, unlike automation, was to increase the efficiency and productivity of employees rather than using computers instead of personnel. As a result of the widespread use of microcomputers, it has been observed that middle level managers have decreased over time (Bradley, 1993). Personal computers have become widespread. The development of micro technologies makes the impact of microcomputer felt in various products, and microprocessors are used in almost every product from consumer electronics to automobiles and credit cards (Akin, 2005).

Network Era: Automation of administrative and factory work in data processing and micro periods, informing knowledge workers, developing products and services are the main reasons for the increase in demand for

computer fields. If businesses want to gain competitive advantage by using information technologies, they need to make the necessary changes in their organizational structures and go to a networked organization. It is estimated that the use of information technologies will lead to a tenfold increase in productivity if employees and jobs are organized in the form of a network. In networking, projects will be carried out by cross-functional groups and the boundaries of traditional departments will disappear. A networked organization would make it possible for the firm's activities and projects to be carried out by multidisciplinary groups. The trend is spreading the use of interorganizational networks that connect more than one organization. Interorganizational networks are a system that connects a firm's wide and local area networks to the networks of its customers, suppliers, information service businesses, and other organizations (Bradley, 1993). Increasing investment in automation of lower-level jobs, supporting knowledge workers, and developing intelligent products and services has provided the basis for the establishment and expansion of networks between computers. The effects of both local and wide area networks show themselves in many areas. Fast and effective communication of the personnel working in all units within the company, access to databases, and interactive information exchange over the network with competitors, sub-industry and customers outside the company bring along many organizational and sectoral differences (Akin, 2005).

3.4. Effects of Information Technologies on Businesses

Changes in production, business profitability, and consumer surplus are the three methods used to calculate the value of information technology. The complementary relationship between IT and other firms is assumed to be an indirect and hard-to-calculate relationship between IT and business. The complementary concept often defines the production paradox in observing diversity in information technology and business value (Thouin, Hoffman, & Ford, 2008). The productivity paradox sheds light on the changes in the findings on information technology investments and production at the firm level. Production; It is the calculation of output rates, product produced, one or more outputs, raw materials and labour costs. If information technologies have a positive impact on production, more output should be created compared to the same level of input. If information technologies have a negative impact on production, less output than the same level of input is expected. Information

technology brings with it the possibility of lower cost of raw materials and increases the price of output per worker. However, production and information technology cooperation is more profitable than companies that do not use information technologies. According to the analyses, a profitable relationship is observed between information technologies and investment. However, there is not necessarily a positive relationship between diversity in production and information technology. The use of information technologies does not directly provide production gain. When production is calculated, it is very difficult to determine the effect of information technology investments on inputs and outputs. Approaches for calculating the value of information technologies are being developed to calculate the effect of information technology investments on financial performance (Thouin, Hoffman, & Ford, 2008).

3.5. Security in Information Technologies

Management of information technology risks within an organization is discussed in academic, professional and managerial fields. Managing risks in information technology is about not paying close attention to the links between organizations. Apart from the scope, many sources address the risks of information technologies, potential threats, probability of success and effects on organizations (Smith et al., 2007). Major information technology crash risks are as follows (Faisal, Banwet, & Shankar, 2006):

Shared denial of service attacks: Introduced in 1998 when the service was shut down, which caused a lot of traffic. These attacks resulted in the blocking of legitimate access to the Internet and the disruption of supply chain operations. E-commerce sites, such as Yahoo, eBay, Amazon, have been attacked by these attacks. *Terrorist attacks:* Terrorist attacks on the World Trade Center and the Pentagon have greatly damaged the information and communication infrastructure. It was discussed that knowledge planning and practice should be reconsidered in order not to fall into the same situation in the face of such big events. Terrorists can also attack federal government websites in order to find possible threats, identify and access weaknesses, and damage the information system.

Natural disasters: The tsunami that hit Indonesia, Sri Lanka and parts of India, Hurricane Katrina that hit New Orleans are defined as events that serve as a lesson for the revision of information systems. For these disasters that are out of human control, solutions have come to the fore against the possibility of information technologies being damaged.

Conclusion

The digital transformation process has started with the increase in the use of information technologies with the developing technology and also with the ease of access to these technologies. Change is essential for transformation. Change is a difficult process for employees and leaders. There will be resistance to change. Employees who do not want to lose their gains are afraid of change and tries to avoid it (Çalışkan, 2019). Leaders who can manage this process are needed in order to break the resistance to change, to realize digital transformation and to integrate information technologies into the organization. And this is possible with digital leaders. Unlike other leaders, the digital leader stands out with its compatibility with digital platforms and information technologies. It can communicate with the Z generation and evaluate them both as an employee and a customer. As a result of this evaluation, the ability to fully reveal and meet the needs brings digital leaders to the fore. For this reason, digital leaders, who will be top managers in the near future, will be able to manage their organizations through information technologies in the digital environment, regardless of time and place, although they are not largely included in the senior management layer of the organizations. In addition to performing processes such as reporting, analysis, marketing and planning with smaller boards of directors through information technologies in the digital environment, they will be closer to their employees. Digital leaders, who process the intense data they obtain in the digital environment quickly and define the needs of the market and industry they are in, will exhibit leadership behaviours that have not been seen before. Digital leaders who are tangibly distant but digitally close to the people around them are good analysts with their expertise in information technology. They can calculate the financial return of their investment in information technology systems and are characterized by being technology enthusiasts. Information technologies are rapidly aging tools and systems. For this reason, it is closely followed by digital leaders. Failure of a wrong technological investment to deliver what is desired in the digital environment means destruction for the organization. The measurement of financial performance, which is one of the important parameters in organizational performance, is made by comparing the investment made and the income obtained. In order for the organization to survive, its financial performance must be at a high level. In the digitalizing world, digital leaders will manage their businesses with the ability to make decisions in an agile manner

in the face of rapidly aging technologies and techniques. Other leadership styles are expected to be reshaped with the tendencies of the Z generation along with digitalization and are being evaluated.

Referances

- Adıgüzel, B., Özasan, B. Ö. ve Derindere, S. (2006). Lojistik Sektöründe Bilgi Teknolojilerinin Kullanımı: Türkiye’de Araç Takip Sisteminin (ATS) Kullanımına Yönelik Bir İnceleme, V. Uluslar arası Bilgi, Ekonomi ve Yönetim Kongresi, s. 927-928.
- Akın, H. B. (2005). Yeni ekonomi, Çizgi Kitabevi, İstanbul.
- Aktan, C. C. ve Tunç, M. (1998). Bilgi Toplumu ve Türkiye, Yeni Türkiye Dergisi, Ocak-Şubat, s.118.
- Allio, R. J. (2015). Good strategy makes good leaders. *Strategy & Leadership*, 43 (5), page 3-9.
- Asiltürk, A. (2020). Dijital Dönüşüm Bağlamında Dijital Liderlik ve Dijital Liderler. In Book: Sosyal Bilimlerde Güncel Konular ve Araştırmalar, Publisher: Çizgi Kitabevi
- Atlas, Y. (2009). Arz Zinciri Yönetiminde Bilişim Teknolojisi. Barutçugil, İ. (2002). Bilgi Yönetimi (2.Baskı), Kariyer Yayıncılık, İstanbul.
- Baykoç, Ö.F. ve Öz, E. (2004). Tedarikçi Seçimi Problemine Karar Teorisi Destekli Uzman Sistem Yaklaşımı, Gazi Üniversitesi Mühendislik Mimarlık Fakültesi Dergisi, 19.(3), s.276.
- Bradley, S. P., Hausman, J.A. ve Nolan, R. L. (1993). *Globalization Technology and Competition*, Harvard Business School Press, Boston.
- Colbert, A., Yee, N., & George, G. (2016). The digital workforce and the workplace of the future. *Academy of Management Journal*, 59, pp. 731-739.
- Çalışkan, A. (2019) Değişime Direnç: Bir Ölçek Uyarlama Çalışması Süleyman Demirel Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi C.24, S.2, s.237-252.
- Dahlstrom, P., Desmet, D., & Singer, M. (2017). The seven decisions that matter in a digital transformation: A CEO’s guide to reinvention. *Digital McKinsey*.
- Davenport, T.H. & Prusak, L., (2001). *Working knowledge: How organizations manage what they know*, Harvard Business School Press, Boston MA.
- Dura, C. ve Atik, H. (2002). Bilgi Toplumu, Bilgi Ekonomisi ve Türkiye (1. Baskı), Literatür Yayınları, No: 72, İstanbul.

- Elibol, H. (2005). Bilişim Teknolojileri Kullanımının İşletmelerin Organizasyon Yapıları Üzerindeki Etkileri, Selçuk Üniversitesi Sosyal Bilimler Enstitüsü Dergisi, (3), s.158.
- Faisal, M. N. ve Shankar, R. (2006). An Analysis Of The Dynamics Of Information Risk In Supply Chains of Select Sme Clusters, s. 50.
- Gökçen, H. (2007). Yönetim Bilgi Sistemleri, Palme Yayıncılık, Ankara. Güleş, H. K. (2000). Bilişim Sistemlerinin Toplam Kalite Yönetimindeki Yeri ve Önemi, İzmir: 9 Eylül Üniversitesi, İİBF Dergisi, Cilt: 5, Sayı: 1, s. 24.
- Kalkınma Bakanlığı (2018). On birinci Kalkınma Planı (2019-2023), Sanayide Dijitalleşme Çalışma Grubu Raporu, Ankara
- Kevük, S. (2006). Bilgi Ekonomisi Knowledge Economy. Journal of Yaşar University, 1(4), s. 319.
- Kremer, M. (1993). The O-Ring Theory of Economic Development, The Quarterly Journal of Economics, Volume 108, Issue 3, Pages 551–575.
- Laudon C., Kenneth, P. ve Laudon, J. (2001). Essentials Of Management Information Systems, Fourth Edition, Prentice Hall International, Inc., New Jersey, s. 7.
- Liebowitz, J., & Megbolugbe, I., (2003). A set of Frameworks to Aid Project Manager in Conceptualizing and Implementing Knowledge Management Initiatives , International Journal of Project Management 21(3), s. 189-198
- Madden, A.D., (2000). A Definition of Information, Aslib Proceedings Vol 52, No.9, s.343-344. Naralan, A. (1998). Erzurum Ticari İşletmelerinde Bilgisayar Kullanım Düzeyi, Atatürk Üniversitesi, İİBF Dergisi, Cilt. 12, Sayı. 1-2, s. 379.
- Okan, E. Y. ve N. Yalman (2013). Türkiye’de Tartışmalı Reklamlar: Kuşaklar Arası Karşılaştırma. H.Ü. İktisadi ve İdari Bilimler Fakültesi Dergisi, 31/2, 135-152.
- Özsever, Ç., Gençoğlu, T. ve Erginel, N. (2009). İşgücü Verimlilik Takibi İçin Sistem Tasarımı ve Karar Destek Modelinin Geliştirilmesi, Dumlupınar Üniversitesi Fen Bilimleri Dergisi, (18), s.52.
- Phelps, K. C. (2014). So much technology, so little talent? Skills for harnessing technology for leadership outcome. Journal of Leadership Studies, 8(2), pp. 51-56.
- Sarıhan, H. İ. (1998). Rekabette Başarının Yolu Teknoloji Yönetimi. Desnet Yayınları, İzmir.

- Sheninger, E.(2019). Pillars of digital leadership, <https://leadered.com/pillars-of-digital-leadership/> Eriřim Tarihi:11.08.2021.
- Smith, G. E., Watson, K. J., Baker, W. H. ve Pokorski, J. A. (2007). A critical balance: collaboration and security in the IT-enabled supply chain. *International Journal of Production Research*, Vol. 45, No. 11, s. 2602-2603
- Sow, M. & Aborbie, S. (2018). Impact of Leadership on Digital Transformation, *Business and Economic Research*, Macrothink Institute, vol. 8(3), pages 139-148.
- Thouin, M., Hoffman, J. J.ve Ford, E. W. (2008). The Effect of Information Technology Investment on Firm-level Performance in the Healthcare Industry. *Health Care Management Review*. 33(1), s. 65-67
- Ülgen, H. (1980). İşletme Yönetiminde Bilgisayarlar, İstanbul Üniversitesi, Yayın No. 2806, s. 130.
- Westerman, G., Bonnet, D., McAfee, A., (2014). *Leading digital: turning technology into business transformation*. Cambridge, MS: Harvard Business Press.
- Yücebalkan, B. (2018). Digital leadership in the context of digitalization and digital transformations. In B. Eryılmaz, K. Özlü, Y.B. Keskin, & C. Yüçetürk (Eds.), *Current academic studies in social science*, Gece Kitaplığı, pp 1-7.
- Yeniçeri, Ö. ve İnce, M. (2005). *Bilgi Yönetim Stratejileri ve Giriřimcilik*, İstanbul: IQ Kültür-Sanat Yayıncılık, s.26.

CHAPTER VIII

PERCEPTIONS OF INDIVIDUALS IN NGOS WITHIN THE SCOPE OF EFFECTIVE LEADERSHIP AND MENTORING BEHAVIOR INTERACTION IN VOLUNTARY ACTIVITIES: A STUDY IN IZMIR

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1. Introduction

It can be stated that the reason for the existence of today's NGOs is their fundamental and supporting mission. In other words, it can be stated that NGOs have a nature to organize, grow, and develop within their mission and provide services to society through many activities. On the other hand, the philosophy of voluntarism involves management that includes its professionalism and not dilettantism and leadership that will appear mainly in the management process (Ellis, 1997: 1-2). If managers in non-governmental organizations are equipped with leadership skills and reflect this in the processes, they will be able to mobilize the potential of all volunteers in line with the objectives framed by the mission.

Mentoring can also have a positive and integrative impact on the process as a developer in the formal and/or informal transfer of leadership experiences. Thus, if leadership is seen as a guarantee for the success of volunteering in practice, mentoring can also be expressed as a developer and complement of volunteering with the sharing of experiences.

In this context, this study has uncovered effective leadership in volunteering in the context of perceptions of individuals in NGOs and the importance of mentoring behaviors as a complement to it, their interaction, and positive context that will be reflected in the processes. The research was conducted between May 2021 and July 2021 in the context of 142 NGO members in 17 NGOs in the Izmir province.

2. Literature Overview

2.1. *Volunteering in NGOs*

As stakeholders of NGOs (associations, foundations, trade unions, cooperatives, chambers, etc., and their parent organizations), government institutions, and private sector companies, legal organizations with the philosophy of voluntarism provide many complementary and inclusive valuable services in society with very modest opportunities (Drucker, 1995: 210; Kaldor, 2003: 10).

In this context, voluntary activities in NGOs include creating a healthy and quality society, sustainability, promoting democracy and human rights, participation, addressing harm and injustice in community, helping, participating in solving problems, personal encounters, developing human relationships, developing cultures, and perform many general tasks such as protecting and promoting beliefs, defending and protecting nature and other living things, contributing to professional and technical issues, working on platforms, and applying pressure when necessary (Empowering America's Grassroots, 2005: V; Schwedler, 1997: 5; Kamat, 2003: 68). Individuals in NGOs, on the one hand, strive to perform the general tasks mentioned above. On the other hand, they contribute and benefit in many professional areas, such as interpersonal relations, socialization, transition to professionalism, coaching, a reflection of their knowledge and skills in the processes in a helpful way, a good feeling, and teamwork (Yanay and Yanay, 2008: 66; Ryfman, 2006: 15-24; Bray, 2005: 2).

As a version of the human resource management process, a typical volunteer management process in NGOs involves planning, recruitment/recruitment

of volunteers, training, leadership, and evaluation. It is seen that necessary feedback is also included in the process (NAFSA, 2002: 2-22; Empowering America's Grassroots, 1-1-5-5; American Red Cross, 2006: 4-24; 14-16). In the process of volunteer management, the effective implementation of individual and institutional communication both within and outside the organization is of great importance to the success of the process. Effective communication processes are timely, participative, reliable, clear, understandable; They contain values and have productive qualities (Fenton and Inglis, 2007: 341).

Some fundamental disadvantages can also be seen in NGOs. The first is that the philosophy of volunteering can be misunderstood. For example, failure to demonstrate professional management and leadership strategically, laziness in implementing activities, inability to adapt to extraordinary situations, lack of sustainability, and failure to participate can be noted (Özmutaf, 2019: 183). Secondly, due to this fragile structure, NGOs can be negatively affected (drop in performance, high stress, and conflicts, members leaving, etc.) because they are organizations with high volunteer commitment (Güder, 2005: 49). The third point is financial problems. Limitation and rational use of material and financial resources, problems in openness and transparency, problems in membership fees, inability to find donors, etc. are some examples (MacMillan et al., 2005: 807; Whitman, 2008: 426; Drucker, 1990: 86, 89). In this context, it can be stated that it is vital to carry out management by emphasizing the philosophy of volunteering within the framework of rational leadership and participation in overcoming such fundamental disadvantages.

2.2. Leadership, Mentoring and Relationship Studies

Leadership can exist when the manager (leader) influences the subordinates (followers) towards the goals and changes behavior in the desired direction. Leadership is one of the most important, much debated, and constantly studied management topics on which theories and approaches are presented. Leadership theories explain leadership by focusing on traits (physical, mental, personality, etc.), behaviors (emphasis on the person and/or work, etc.), and situational conditions (emphasis on the person and/or work after the return of conditions, etc.). Leadership approaches, on the other hand, deal with leadership in various forms (strategic, transformational, interactional, charismatic, visionary, etc.) within the framework of these theories in large numbers and great detail

(Bateman and Zeithaml, 1990: 490, 493; Hampton, 1986: 459), 463; Nahavandi and Malekzadeh, 1999: 321, 327, 328).

Leadership is the management function/process of “leading,” which focuses on the leadership that enables to act following goals by influencing and motivating followers. Interpersonal roles (symbolic roles, recruiting, training, motivating, assisting in performance improvement, etc.), informational roles (obtaining and presenting information to internal and external stakeholders), etc.), decision-making roles (supporting voluntary entrepreneurship, allocating resources, talking and negotiating, eliminating negativity, etc.) (Mintzberg, 1989; Mintzberg, 1973). The basic leadership qualities include development, influencing and activating potential, strategic ability, visionary, entrepreneurship, intellectuality, taking/giving initiative, leading, empathy ability, flexibility, experience, emotional intelligence, self-confidence and reliability, high motivation and energy, charisma, etc. (Özmutaf, 2019: 98).

Mentoring is when one person (mentor) with a higher level of experience guides another (mentee) on a variety of topics (professional and/or otherwise) and in a variety of ways (formal, informal, individual, organizational, leadership, team, e-mentoring, etc.) and/or role models. The leading roles of the mentor include asking developing questions, active listening, knowledge transfer, career development advice, challenge, visionary, developing different perspectives, support and encouragement, providing guidance and advice, making friends, intellectual leadership, developing areas of the person, helping to identify and break down (Freedman, 2017: 173; Philips-Jones, 2003: 2; Daniel et al., 2006: 7).

Administrative phases of mentoring are, in short, preparation, conversation, activity (application in processes), and finalization (concrete view of development). Innately, feedback is based on the phases (Wong and Premkumar, 2007: 5-6).

The primary approach of mentoring can be expressed as support for the positive development of the other (knowledge, skills, talents, career, psychosocial aspects, etc.). Therefore, a manager with leadership skills can be seen as a tool that makes critical strategic contributions in practice while influencing, benefiting from, and improving his subordinates (Özmutaf, 2019: 115).

On the other hand, there are opinions in the literature that support mentoring in developing leadership. Socialization, professional development, increased job satisfaction, development of leadership skills and leadership capacity, etc., by benefiting from mentoring in managers. In this context, it is emphasized that benefits are offered (Stead, 2005: 172).

In this regard, one study found a positive interaction between transformational leadership and mentoring. Another study conducted in librarianship found that it benefits developing leadership skills and guiding new individuals in the future (Smith, 2013: 22).

However, another study found that mentoring development in the context of leadership, and particularly transformational leadership, may not be sufficient on its own (Clair and Deluga, 2001: 23).

Another study found that behavior change in this direction is enabled by mentoring, empowerment, equipping, providing effective communication, leadership development, and rapid sharing of experiences (Wakahiu, 2011: 139).

Some studies approach the issue in the context of gender. In the context of women, mentoring of women has been found to contribute significantly to female leadership and development. (Headley, 2017: 157). However, the lack of sufficient quantity and quality of female leaders in practice can disadvantage female mentoring. Thus, it is important that female leaders also participate equally in terms of quality and quantity in business. In this regard, the literature points out that although the female population worldwide is just over 50%, even in the US, there are only 11% female executives in senior positions and 25% in supervisory positions (Prewitt et al., 2011: 18). Naturally, it is clear that the situation in developing and underdeveloped countries will be at a lower level. In overcoming this problem, both female and male executives have a great responsibility (Patel and Buiting, 2013: 22).

2.3. The Relationship between Leadership and Mentoring in Volunteering Activities in NGOs

It is debatable whether there is voluntariness like mentoring and mentor relationships. The general view is that the mentor chooses the mentee on an informal basis when it comes to mentoring. In the formal setting, tasks may also involve compatibility within the context of specializations in organizations (Thornton, 2015: 2).

However, when the issue is considered in the context of the master-apprentice relationship and mutual development, it can be stated that the most effective mentoring will occur in a way that integrates formality and informality, in other words, voluntarily. The literature states that mentoring should be essential, developmental, satisfying, and with a mutual high motivation/willingness. If it is not perceived as such, it will show failure (Philips-Jones, 2003: 1).

On the other hand, leadership is a process that, by its nature, involves the assumption of power from informality. In other words, although the leader derives power from formality, power with the informal support of power may lead to change in the desired direction towards the mission, vision, values, principles, goals, and objectives. In this case, a behavior change is expected to occur in the desired direction through the use of leadership in management (Akdemir, 2012: 348).

From these remarks, it can be concluded that the philosophy of voluntarism as an informality element intersects with leadership and mentoring behaviors. Furthermore, the reason for the existence of NGOs can be expressed in the context of their voluntary missions. NGOs can be put in a common denominator as “Voluntary Sector,” “Voluntary Associations,” “Voluntary Organizations,” “Public Voluntary Organizations,” and “Private Volunteer Organizations.” (Dinçer, 1996: 49).

A study conducted in NGOs in the context of volunteering found that sharing unique experiences, retaining volunteers, improving their motivation and morale, and creating a culture conducive to the dissemination of knowledge were uncovered in mentoring and leadership. In this context, it was found that a lack of resources (HR, time, finances, tools, equipment, technology, etc.), insufficient mentoring knowledge, and irregular activities can create a disadvantage for mentoring in NGOs (Bordnowska and Seiler, 2019: 203).

Mentoring support can come from internal and/or external circles, depending on the size and capabilities of the NGO. Mentoring can contribute to leadership in the form of supporting a leader and their training, mentoring team or advisory group, peer support groups, etc. Furthermore, in the context of volunteering, the leader cannot help teach volunteers a particular skill or competency, solve their problems in the activities, increase their knowledge of the community or activities, support them with coaching, energize them, determine their levels of development, support them with awards and celebration processes, etc. It can also be seen that the declared are integrated with the supervisor and contribute to brainstorming, all sorts of support about opportunities, stress management, etc. Within this framework, processes such as acknowledging the right to change mentors, finalizing a contract, laying out plans in a strategic framework, determining orientation time in negotiations, publishing bulletins or reports, holding modest celebrations, etc., can be suggested (Williams, 2005: 7,8).

Implementing this process in the context of volunteering in NGOs can take place in screening and identifying potential mentors and mentees among

volunteers, matching mentors and mentees, bringing mentors and mentees together in meetings within programs, monitoring ongoing support, supervision and mentoring relationships, recognizing contributions, ensuring mentors and mentees achieve results, respectively (NMP, 2005: 91).

As can be seen from the above, the interplay of leadership and mentoring in volunteer activities in NGOs is of great importance, both directly and indirectly, to the success of the activities in NGOs. Therefore, leadership and mentoring of volunteers in volunteer activities in NGOs are aligned with the strategic framework and process perceptions of these two dimensions, and a study is presented that approaches the topic holistically. This study contributed to the literature and practice with an empirical approach and the involvement of NGO members in the context of perceptions.

3. Research

3.1. The Purpose of the Research

The primary purpose of the research is to determine the perceptions of individuals in non-governmental organizations related to effective leadership and mentoring behaviors in volunteer activities. In this context, the perspectives of individuals in NGOs on the interaction between leadership and mentoring and detailed differences in socio-demographic factors were also uncovered.

3.2. Data Collection Tools

The survey form prepared for the research consists of two main parts. In the first part, there are questions related to the independent variables of the research, such as age, gender, educational status, position in the NGO and the length of experience in the NGO, effective leadership, and mentoring in volunteering. In the second part, there are 15 suggestions for leadership and 11 suggestions for mentoring to determine the perceptions of NGOs in the interaction of effective leadership and mentoring behavior. For the statistical analysis, the propositions were weighted 1 for “strongly disagree,” 2 for “strongly disagree,” 3 for “somewhat agree,” 4 for “agree,” and 5 for “strongly agree” on a 5-point Likert scale. Fifteen propositions, 2 and 11 propositions, were grouped under a single factor.

3.3. Data Collection and Analysis

The questionnaire prepared for the research was used between May 2021 and July 2021 through a face-to-face interview with 142 people in 17 NGOs

in Izmir. All of the surveys were included in the analyzes. SPSS and AMOS software was used in statistical analysis in the research. Factor analysis, one-sample t-test, two independent samples t-test, Kruskal Wallis Test, correlation analysis, and structural equation modeling were performed in the study.

3.4. Basic Hypotheses of the Research

In the research, six basic hypotheses were formed regarding the perceptions of NGOs related to effective leadership and mentoring behaviors in volunteer activities. These are listed below:

H₁: For effective leadership in volunteer activities in NGOs, the perception towards the factor is positive (Factors: Leadership behavior, strategic managerial processes).

H₂: In the context of mentoring behavioral characteristics in volunteer activities in NGOs, the perception towards the ...factor is positive (Factor: Voluntary mentoring behavior characteristics).

H₃: In the context of effective leadership behaviors in volunteer activities in NGOs, there is a difference in perception towards the ... factor concerning socio-demographic variables (Factors: Leadership behavior, strategic managerial processes).

H₄: Within the characteristics of mentoring behavior in volunteer activities in NGOs, there is a difference in socio-demographic variables (gender, educational status, position in NGO, experience) for the factor... (Factor: Voluntary mentoring behavior characteristics).

H₅: There is a positive linear correlation between effective leadership factors and mentoring behavior characteristics in volunteer activities in NGOs (Factors: Leadership behavior, strategic managerial processes, voluntary mentoring behavior characteristics).

H₆: The interaction between effective leadership factors and mentoring behavioral characteristics is important for volunteer activities in NGOs (Factors: Leadership behavior, strategic managerial processes, voluntary mentoring behavior characteristics).

4. Findings

One hundred forty-two individuals from NGOs participated in the study. Statistics were compiled within the framework of the data obtained.

4.1. Socio-Demographic Findings

Participants' mean age and standard deviation in terms of gender were 48.2 ± 12.84 for females ($n=114$, 80.3%) and 49.6 ± 14.64 for males ($n=28$, 19.7%). The distribution of education is 18.3% ($n=26$), high school 70.4% ($n=100$) and college 11.3% ($n=16$). Of the participants, 10.9 are in the manager position ($n=24$) and 83.1% are in the ordinary member position ($n=118$). Those with nine or fewer years of NGO experience are 77.5% ($n=110$), and those with ten years or more of NGO experience are distributed as 22.5% ($n=32$).

4.2. Findings Regarding the Importance of Effective Leadership and Mentoring in Volunteering

Two fundamental questions were asked regarding effective leadership and mentoring in volunteer activities in NGOs. In this regard, the exceptionally high and high rates for the importance of effective leadership were 88.7% overall. The importance of mentoring was very high, and a high rate of 85.9% overall (Table 1). Participants place a high value on effective leadership and mentoring in their volunteer work.

Table 1. Participant General Perceptions of the Importance of Effective Leadership and Mentoring in Volunteering Processes

Leadership Perception Level	Frequency	Percent
Very High	20	14,1
High	106	74,6
Middle	14	9,9
Low	2	1,4
Total	142	100,0

Mentoring Perception Level	Frequency	Percent
Very High	31	21,8
High	91	64,1
Middle	16	11,3
Low	2	1,4
Very Low	2	1,4
Total	142	100,0

4.3. Reliability and Validity of the Measurement Tool

In the second part of the questionnaire, 15 propositions for effective leadership in volunteering and 11 propositions for mentoring were created, and an explanatory factor analysis was conducted separately for these propositions. Factor analyzes were conducted using principal component analysis. Effective leadership behavior has a Kaiser-Meyer-Olkin value of 0.893 and Bartlett Test of sphericity (Chi-Square =3200.371, Sd= 105, p=0.000), and the diagonal values of the anti-image correlation matrix vary between 0.970-0.830. For the mentoring property, the Kaiser-Meyer-Olkin -value is 0.893, and the Bartlett test of sphericity (Chi-Square =1851.768, Sd= 55, p=0.000) and the diagonal values of the anti-image correlation matrix vary between 0.934-0.834. According to these results, it was concluded that both structures are suitable for factor analysis. As a result of factor analysis, the two factors explained the total variance of 83.43% (the first factor 44.645% and the second factor 38.785%) for effective leadership behavior. The single factor variance for the mentoring property was 71.595%. The total value of Cronbach Alpha is 0.977 for effective leadership behavior and 0.955 for mentoring. According to this result, it can be seen that the factors revealed by the propositions in the questionnaire explain the facts to a very great extent. The Cronbach's alpha values are also consistent based on general, factor, and item. The factors were named considering the propositions they contain: In this framework, two factors for effective leadership behaviors were named "Leadership behavior" and "Strategic managerial processes," and the factor for mentoring was named "Voluntary mentoring behavior characteristics" (Table 2 and Table 3).

Table 2 provides explanations for effective leadership behaviors in the context of validity and reliability:

Table 2. Validity and Reliability for Effective Leadership Behavior Propositions

Required for effective leadership in volunteer activities	Factor Name	Factors		Cronbach Alfa	
		1	2	Genel=0,977	
Sharing experiences	Leadership behavior	,889	,300	,968	,973
Ensuring effective use of resources		,855	,363	,968	
Carrying out effective activities in project teams		,854	,390	,967	
Rehber niteliğinde davranışların varlığı		,844	,363	,968	
Presence of supportive rewarding activities (honoring etc.)		,828	,340	,970	
Presence of developing and informative processes		,763	,512	,969	
Participatory sharing of ideas		,735	,540	,969	
Driving innovation, change and transformation		,686	,472	,971	
Strategic perspective (mission, vision, values, principles, goals, objectives, strategies, etc.)	Strategic managerial processes	,342	,865	,952	,960
Integration of organizational and individual goals		,201	,863	,958	
Existence of effective communication processes (clear, clear, understandable, etc.)		,400	,789	,956	
Keeping commitment high (to NGO, activities, etc.)		,508	,771	,951	
Ensuring high motivation		,537	,756	,950	
Ability to think both locally and globally		,482	,750	,954	
Establishing an environment of respect and trust		,597	,686	,954	

Table 3 contains explanations for the mentoring characteristics in the context of validity and reliability:

Table 3. Validity and Reliability for Mentoring Feature

In volunteer activities ... mentoring is a behavioral feature	Factor Name	Factor	Cronbach Alfa
		1	Genel=0,955
Influencing within the scope of goals and objectives	Voluntary mentoring behavior characteristics	,935	,907
Having an exemplary personality (respectable, loved, supported, knowledgeable, visionary, etc.)		,922	,911
Ability to offer different and in-depth perspectives		,912	,951
High empathy		,906	,950
To have the necessary tolerance		,900	,919
Demonstrate approaches in the context of support, guidance, advice and encouragement		,898	,922
Providing effective communication		,848	,901
Raising developer/reinforcing questions and solutions		,841	,917
Demonstrate the necessary seriousness and sensitivity in the context of mentoring		,829	,941
Having sufficient knowledge and experience regarding the activities		,820	,924
Have a voluntary willingness		,310	,938

4.4. Findings on the Factors

Hypotheses H_1 and H_2 were accepted within the research findings (Table 4). According to this result, “leadership behavior” and “strategic managerial processes” are perceived by participants as very important concerning effective leadership in volunteer activities in NGOs and “voluntary mentoring behavior

characteristics” are perceived by participants as very important concerning characteristics of mentoring in volunteer activities in NGOs (Table 4).

Table 4. One Sample T-Test

Factor	N	Mean ± Std. Deviation	Test Value = 3	
			t	p
Leadership behavior	142	4,1±,64	21,248	,000
Strategic managerial processes	142	4,2±,64	23,687	,000
Voluntary mentoring behavior characteristics	142	4,2±,88	16,239	,000

In the context of the research findings, hypotheses H_3 ve H_4 were accepted only concerning the “position variable” (Table 5). According to this result, “leadership behavior” and “strategic managerial processes” in the framework of effective leadership in volunteer activities in NGOs and “voluntary mentoring behavior characteristics” in the framework of mentoring characteristics in volunteer activities in NGOs are perceived as more critical by leaders than by regular members. There is no difference in participants’ perceptions of gender, education, and experience. (Table 5).

Table 5. Factors and Socio-Demographic Variables

Faktör	Cinsiyet	N	Mean ± Std. Deviation	t	p
Leadership behavior	Woman	114	4,1±,63	0,081	,935
	Man	28	4,1±,71		
Strategic managerial processes	Woman	114	4,3±,62	0,751	,954
	Man	28	4,2±,74		
Voluntary mentoring behavior characteristics	Woman	114	4,1±,59	-1,959	,052
	Man	28	4,5±1,5		
Factor	Education	N	Mean Rank	Chi-square	p

Faktör	Cinsiyet	N	Mean ± Std. Deviation	t	p
Leadership behavior	Woman	114	4,1±,63	0,081	,935
	Man	28	4,1±,71		
Strategic managerial processes	Woman	114	4,3±,62	0,751	,954
Leadership behavior	Primary Middle	26	68,85	,585	,746
	High School	100	73,08		
	University	16	65,97		
Strategic managerial processes	Primary, Middle	26	68,50	1,163	,559
	High School	100	70,70		
	University	16	81,38		
Voluntary mentoring behavior characteristics	Primary, Middle	26	72,33	4,233	,120
	High school	100	74,40		
	University	16	52,03		
Factor	position	N	Mean ± Std. Deviation	t	p
Leadership behavior	Executive	24	4,5±,39	3,775	,000
	Member	118	4,0±,65		
Strategic managerial processes	Executive	24	4,5±,48	2,207	,029
	Member	118	4,2±,66		
Voluntary mentoring behavior characteristics	Executive	24	4,5±,42	2,140	,034
	Member	118	4,1±,93		
Factor	experience (year)	N	Mean ± Std. Deviation	t	p
Leadership behavior	1-9	110	4,1±,61	-,565	,573
	10 and over	32	4,2±,75		
Strategic managerial processes	1-9	110	4,2±,61	,050	,960
	10 and over	32	4,2±,75		

Faktör	Cinsiyet	N	Mean ± Std. Deviation	t	p
Leadership behavior	Woman	114	4,1±,63	0,081	,935
	Man	28	4,1±,71		
Strategic managerial processes	Woman	114	4,3±,62	0,751	,954
Voluntary mentoring behavior characteristics	1-9	110	4,2±,93	,948	,345
	10 and over	32	4,0±,68		

In the research findings, the H_5 hypothesis was accepted in the framework of all correlations (Table 6). All binary correlations are positive linear. In this context, the correlation between “leadership behavior” and “strategic managerial processes” is very high, the correlation between “leadership behavior” and “voluntary mentoring behavior characteristics” is high, and the correlation between “strategic managerial processes” and “voluntary mentoring behavior characteristics” is medium (Table 6).

Table 6. Correlations

Factors		Leadership behavior	Strategic managerial processes
Strategic managerial processes	r	,850**	-
	p	.000	-
Voluntary mentoring behavior characteristics	r	,688**	,575**
	p	.000	.000
**. Correlation is significant at the 0.01 level (2-tailed) and N=142.			

The hypothesis H_6 suggested in the structural equation model was accepted (p 0.05). The fit values are CIMIN/DF=3.317, GFI=0.949, CFI=0.951, NFI=0.945, RMSEA=0.0724. Beta=0.36 for leadership behavior (LB) and strategic managerial processes (SMP), Beta=0.38 for leadership behavior (LB) and voluntary mentoring behavior characteristics (VMBC), strategic managerial processes (SMP) and voluntary mentoring behavior characteristics Beta=0.35 for VMCD. Within the findings, a significant interaction between the factor of effective leadership

(LB and SMP) and the factor of mentoring behavior characteristics (VMBC) in volunteer activities in NGOs were discovered (Figure 1).

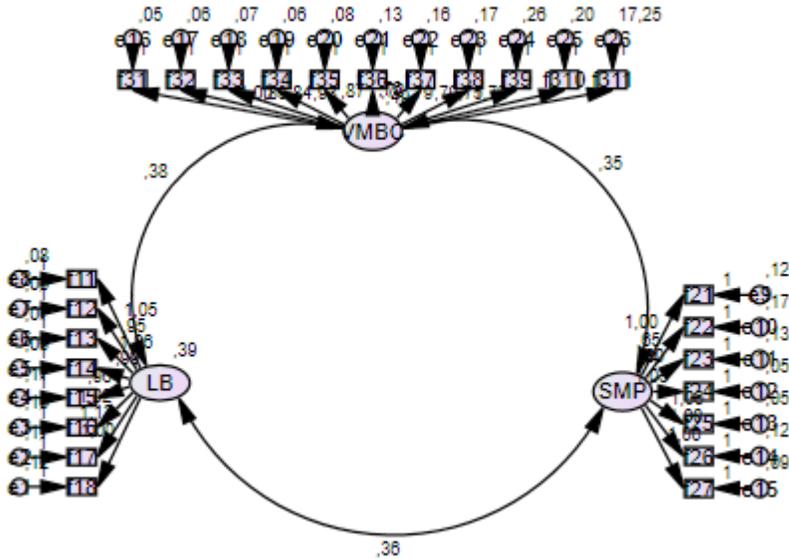


Figure 1. Interactions Between LB, SMP, and VMBC

5. Conclusion

Effective leadership is essential in today's contemporary non-governmental organizations to guide volunteer activities under goals and objectives. In this context, it can be emphasized that in approaching leadership in NGOs, a different philosophy that embraces and reflects a culture arising from the nature of volunteering should be integrated into the processes. It can be concluded that mentoring, with its formal and informal dimensions, will play a complementary role in supporting and enhancing leadership effectiveness in the context of volunteering in NGOs. In this framework, it was found that the study participants placed a high value on effective leadership and mentoring behaviors in general, and a new perspective was revealed in the context of NGOs.

On the other hand, it was found that the factors of "leadership behavior" and "strategic managerial processes" were given high importance in the context of effective leadership, and the factor of "voluntary mentoring behavior characteristics" was given high priority in the context of mentoring behavior in

NGOs Therefore, while volunteering in NGOs can be described as a strategic issue within leadership, it can also be described as a product of processes that need to be supported by mentoring as a leadership quality. The fact that those in managerial positions in NGOs care more about all three factors than others can, of course, be explained by the logic that managers in the steering phase emphasize leadership with a volunteer perspective and can support this through volunteer mentoring.

Furthermore, in connection with the results of the correlation analysis and the structural equation analysis, it can be stated that the factors “leadership behavior,” “strategic managerial processes” and “mentoring behavior characteristics” are all considered separately and contain a synergetic effect in the context of their interaction in volunteering.

Consequently, strengthening effective leadership in volunteer activities in NGOs can be achieved by engaging in mentoring behaviors. In this regard, the field research has revealed the importance of effective leadership and mentoring behaviors for both non-profit and for-profit organizations in the context of mission and goal achievement.

References

- Akdemir, Ali, İşletmeciliğin Temel Bilgileri, Ekin Yay., Bursa, 2012.
- American Red Cross, “Volunteer Handbook”, http://northwestflorida.redcross.org/index.php?pr=Volunteer_Services/media/Volunteer_Handbook.pdf, 2006, (Eylül 2008).
- Bateman, Thomas S. and Zeithaml, Carl P., Management, Richard D. Irwin, Inc., USA, 1990.
- Bray, Ilona, Effective Fundraising For Non Profits, Kumarian Press, Bloom Field, USA, 2005.
- Bortnowska, Hanna and Seiler, Bartosz, Formal Mentoring in Nonprofit Organizations. Model Proposition, Management, 23(1), 2019: 188-208.
- Clair, Lynda St., Deluga, Ronald J., Transformational Leadership And Mentoring: Theoretical Links And Practical Implications, Bryant College Faculty Working Paper Series, 2001.
- Daniel, Jessica H., Aponte, Joseph F., Chao, Georgia T., Cuevas, Haydee M., Locke, Benjamin D., Matthews, Janet A., Vosvick, Mark A., Wedding, Danny, Williamson, Tanya E., Koocher, Gerald P., Introduction to Mentoring, A Guide for Mentors and Mentees, the American Psychological Association, 2006.

- Diñçer, Meral, Çevre Gönüllü Kuruluşları, Türkiye Çevre Vakfı Yay., Ankara, 1996.
- Drucker, F. Peter, Managing The Nonprofit Organization, HarperCollins Publishers, New York, USA, 1990.
- Drucker, F. Peter, Gelecek İçin Yönetim, Cev: Fikret Üçcan, Türkiye İş Bankası Yay., İstanbul, 1995.
- Ellis, Susan .J., "Is Volunteer Management Rely a Profession?", 1997, <http://www.energizeinc.com/hot/july97.html>, (Mart 2006).
- Empowering America's Grassroots, Successful Strategies For Recruiting, Training, and Utilizing Volunteers, USA, 2005.
- Fenton, Nancy E. ve Inglis, Sue, A Critical Perspective on Organizational Values, Nonprofit Management & Leadership, 13(3), 2007: 335-347.
- Freedman, Shin, Effective Mentoring, IFLA Journal, 35(2), 2009: 171-182.
- Güder, Nafiz, Sivil Toplumcunun El Kitabı, STGP Yayınları, Ankara, 2005.
- Hampton, David R., Management, McGraw-Hill Book Company, USA, 1996.
- Headley, Jessica A. The Influence Of Mentoring On Leadership Development Among Women Counselor Educators: A Phenomenological Investigation, In Partial Fulfillment of the Requirements for the Degree Doctor of Philosophy, The Graduate Faculty of The University of Akron, 2017.
- Kaldor, Mary (2003), Civil Society and Accountability, Journal of Human Development, 4(1): 6-12, 14-17.
- Kamat, Sangeeta., NGOs and the New Democracy, Harvard International Review, USA, 2003.
- MacMillan, Keith, Money, Kevin, Money Arthur, Downing, Steve, Relationship Marketing In The Not-For-Profit Sector: An Extension and Application Of The Commitment-Trust Theory, Journal of Business Research, 2005: 807.
- Mintzberg, Henry, Mintzberg on Management: Inside Our Strange World of Organizations, The Free Press, USA, 1989.
- Mintzberg, Henry, The Nature of Managerial Work, Harper & Row, USA, 1973.
- NAFSA, Recruitment and Management of Volunteers in Edicational Advising Centers, 54th Annual Conference, Texas, 2002.
- Nahavandi, Afsaneh and Malekzadeh, Ali R., Organizational Behavior, Prentice -Hall, Inc, USA, 1999.
- NMP, How to Build A Successful Mentoring Program Using the Elements of Effective Practice, A Step-By-Step Tool Kit For Program Managers, National Mentoring Partnership, USA, 2005.

- Özmutaf, Nezi̇h M., aędař Yönetici Nitelikleri ve Yönetisel Konular, Detay Yay., Ankara, 2019.
- Patel, Gita ve Buiting, Sophie Gender Differences in Leadership Styles and The Impact Within Corporate Boards, Commonwealth Secretariat, Social Transformation Programmes Division, 2013.
- Philips-Jones, Linda, Skills For Successful Mentoring: Competencies of Outstanding Mentors and Mentee, CCC/The Mentoring Group, 2003.
- Prewitt, James, Weil, Richard, McClure, Anthony. Developing Leadership in Global and Multi-cultural Organizations, International Journal of Business and Social Science, 2(13), 2011: 13-20.
- Ryfman, Philippe, Sivil Toplum Kuruluşları, Çev: İsmail Yerguz, İletişim Yay., İstanbul, 2006.
- Schwedler, Jillian (1997), "Civil Society and the Study of Middle East Politics", Toward Civil Society in the Middle East, Lynne Rienner Publishers, Colorado, USA, 1997.
- Smith, Daniella L., The Role of Mentoring in the Leadership Development of Pre-Service School Librarians, Education Libraries, 36(1), 2013: 15-23.
- Stead, Valerie, Mentoring: A Model for Leadership Development?, International Journal of Training and Development, 9(3), 2005: 170-182.
- Thornton, Kate, "The Impact Of Mentoring On Leadership Capacity and Professional Learning", Mentoring in Early Childhood Education: A Compilation of Thinking, Pedagogy and Practice, NZCER Press, 2015.
- Whitman, John R., Evaluating Philanthropic Foundations According to Their Social Values, Nonprofit Management & Leadership, 18(4), 2008: 426.
- Wakahiu, Jane, Mentoring: A Model For Cultivating Leadership Competencies in Kenyan Women Religious, Advancing Women in Leadership, 33, 2011: 132-141.
- Williams, Ken, Mentoring: The Next Generation Of Nonprofit Leaders: A Practical Guide For Managers, Center For Leadership Development, 2005.
- Wong, A.T. and Premkumar, K., An Introduction to Mentoring Principles, Processes, and Strategies for Facilitating Mentoring Relationships at a Distance, MedEdPortal, 2007.
- Yanay, V. Galit and Yanay, Niza, The Decline of Motivation? From Commitment To Dropping Out of Volunteering, Nonprofit Management & Leadership, 9(1), 2008: 68-75

CHAPTER IX

THE EFFECTS OF ARAB SPRING ON TURKEY'S FOREIGN TRADE: A SURVEY ON 18 MENA COUNTRIES

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1. Introduction

The protests, which began in the year 2011 against the government in Tunisia, quickly spread over the other countries in the region and a new era, in which the opposing movements accelerated, and civil wars and management changes occurred, started in the Middle East. In this period called as Arab Spring, countries have made changes in their foreign policy strategies and adopted changes in their domestic policies with more oppressive or more reformist approaches. Furthermore, some of the countries in the region took direct or indirect interventionist actions in order to suppress the movements in other countries (Bayraktar, 2020).

Within the new conjuncture of the Middle East, the new conditions and behavior types that the countries in the region face inside and outside the country has brought confrontation between countries that have not encountered problems before. Due to reasons like regional leadership competition, supporting different parties in regional incidents, migration, and terrorist groups, political relations of the countries were negatively affected.

Arab Spring has affected the countries in the region at dissimilar levels. It has caused government changes in some of the countries, and remained at opposition protests level in some others. However, its effects are not limited with these. Because of the civil wars take place in the region, new refugee crises arose and terrorist groups settled in the regions having authority deficit. As the

valuable natural resources' handover take place in countries having civil war or government changes, countries outside the region are engaged in the conflicts in order to gain economic benefits.

Arab Spring has also affected the non-Arab countries in the region. Iran, Turkey, and Israel have been directly or indirectly influenced by the new conditions that the Arab Spring created. Because of the increasing security concerns of the countries in the region that are governed by monarchies, Iran continued to be more loudly addressed as a threat in the region (Uzun, 2013). The normalization of Israel's relationship with the countries in the region due to the Palestine conflict remained on the agenda for longer under the altered conditions. However, Turkey had to struggle with security problems and many terrorist organizations along Turkey's border with Syria, and hosted more than 3 million migrants (Keyman, 2016). Even Turkey's relationships with the EU have been affected by the chaotic environment that the Arab Spring created (Oğuzlu, 2012; Kirişçi, nd.).

Differing from many countries in the region, Turkey evaluated the movements, which started with Arab Spring, as a demand for democracy and exhibited an attitude different from the countries which considered these movements as a threat to their national security. It can be stated that there is an increasing opposition against Turkey in the region, because of Turkey's attitude against the Syrian civil war, Libyan civil war and the government changes in Egypt, and Turkey's closeness to Qatar (Bayraktar, 2020; Yazıcıoğlu & Asal, 2021).

Although the opposition against Turkey among GCC countries led by UAE and KSA have limitedly reflected to the economic relationships in recent years, Turkey's export to KSA has been significantly damaged by the economic sanctions imposed by KSA since October 2020 (Türko, 2021). Turkey's relations with Egypt are tense because of Turkey's support to Muslim Brothers organization and attitude towards the coup government during the process of Muslim Brotherhood's coming to power by election in Egypt and then being overthrown by a military coup. There also are evaluations that Turkey has been gradually increasingly isolated in recent years (Yazıcıoğlu & Asal, 2021).

After the Arab Spring, Turkey's foreign policy has transformed from 'preserving the status quo' to 'revisionist' (Özpek & Demirağ, 2014). Turkey's foreign policy after the year 2002 was shaped with the vision of 'zero problem approach' and had a collaborative character based on soft power, multicultural

diplomacy, liberal experience, and historical legacy. In the period after 2011 Arab Spring, Turkey adopted new roles that can be characterized as active independent, anti-terror, and regional protector. Some sources interpreted that Turkey changed its policies after the Arab Spring reached Syria, some others stated that maximum autonomy and reciprocity diplomacy styles were adopted since 2015 and Turkish foreign policy became more security-oriented since this date (Lecha, 2011; Munassar, 2021; Keyman, 2016). Well, have the changes in Turkey's foreign policy strategy in the changing conjuncture of Middle East reflected on the economic relationships?

The aim of this study is to investigate differences in Turkey's foreign trade with MENA countries in the conjuncture of Middle East changing with Arab Spring. For this purpose, Turkey's foreign policy was divided into three periods from the aspect of regional strategies as 1993-2001, 2002-2010, and 2011-2020. The differences between three periods in Turkey's export to and import from each MENA country was examined. The number of countries involved in this study is 18: Syria, Iran, Iraq, Israel, Jordan, Lebanon, Egypt, Tunisia, Libya, Algeria, Morocco, United Arab Emirates (UAE), Yemen, Kuwait, Kingdom of Saudi Arabia (KSA), Bahrain, Qatar, and Oman. Since the foreign trade data of the period before 2012 couldn't be accessed, Sudan was not involved in the analyses. Repeated Measures One-Way ANOVA analysis was used in the present study.

The present study is very comprehensive since it presents the progress between periods by analyzing all the MENA countries together, except for Sudan. Besides, the results of the present study are expected to contribute to basis of discussion for studies evaluating the foreign trade and foreign policy of Turkey.

2. Studies examining the effects of Arab Spring on Turkey's foreign trade

Arab Spring is a topic that has been widely studied in international relations and economy disciplines. Especially in the first years following the emergence of the movement, researchers investigated under which conditions the Arab Spring arose (Öztürkler, 2014; Ansarian, 2020), and what kind of social and economic effects it had (Buzkıran & Kutbay, 2013). In a study interpreting Turkey's foreign trade with selected MENA countries by using macroeconomic data, the most exported and imported products were evaluated (Metin & İspiroğlu, 2017). In

a study interpreting the effects of Arab Spring on Turkey by using foreign trade and tourism revenue data, it was concluded that Turkey's economic relationships with Egypt, Libya, Syria, and Tunisia have been negatively affected (Göçer & Çınar, 2015).

In another study investigating the foreign trade of Turkey with selected countries in the region, foreign trade data of the period 2005-2015 were used and the net values of Turkey's export to and import from these countries and the shares of these countries in Turkey's export and import were evaluated. This study reported that there was an increasing trend in Turkey's export to the selected countries before the Arab Spring, a rapid decreasing trend occurred together with the Arab Spring, and then a recovery period was observed afterwards. It was reported that a similar tendency but in a non-sharp progress was realized in import (Öncel & Malik, 2015).

In a recent study examining the effects of Arab Spring by using the Gravity model, it was reported that the increase in political connections and concentration positively contributed to the trade between Turkey and MENA countries. It was emphasized that the bilateral trade increased when foreign policy was based on the soft power tools, but the interventionist activism seen in the post-Arab Spring period and the role played as a party in a regional problem had negative effects on the bilateral foreign trade (Kahveci, 2019).

3. Method

The strategy change in Turkish foreign policy after Justice and Development Party's coming to power and the starting date of Arab Spring demonstrations were accepted as the beginning of 2nd and 3rd periods and the 28-year period between 1993 and 2020 was divided into three parts. The first period covers the years between 1993-2001, the second period covers the years between 2002-2010, and the third period covers the years between 2011-2020. The data of Turkey's foreign trade with 18 MENA countries was obtained from UN Comtrade database (UN Comtrade Database, 2021). Since the foreign trade data between Turkey and Sudan covers the period after 2012, Sudan couldn't be involved in the analyses.

In order to examine the differences in export and import data between periods, Repeated Measures One-Way ANOVA analysis was preferred to be used. The import and export between Turkey and 18 MENA countries were

separately analyzed for each of MENA countries. Thirty-six analyses were conducted in total.

The analysis of Turkey's foreign trade with these countries was illustrated using 3 figures. The first figures coded with (a) were prepared by the author by using the net values of export and import between two countries. The figures coded with (b) and (c) which compare the exports and imports between periods were generated by the analyze program.

Variance analysis (ANOVA) is used to test any statistically significant difference between two or more means (Antalyalı, 2006). Repeated Measures ANOVA is a variance analysis carried for related (dependent) groups and its objective is similar to the dependent t-test. Repeated Measures ANOVA test can be used in detecting any overall differences between related means. The dependent variable needs to be continuous (interval or ratio) and the independent variable categorical (either nominal or ordinal). Data can be analyzed by this method when studies investigate either the changes in mean scores over three or more time points or the differences in mean scores under three or more different conditions (Laerd Statistics, 2021).

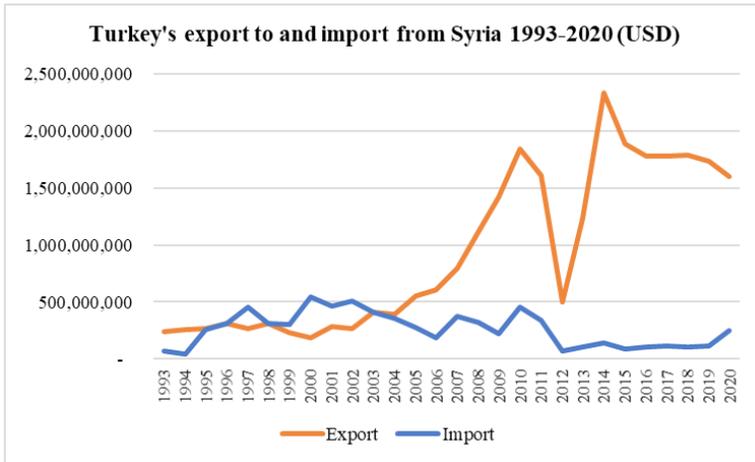
Analysis results are introduced in-text as $F(df_{\text{time}}, df_{\text{error}}) = F \text{ value}, p = p \text{ value}$. Progress of the export and import among three periods are shown respectively with figures generated by the analyze program. The analysis was carried out using SPSS Statistics 22.

4. Analysis

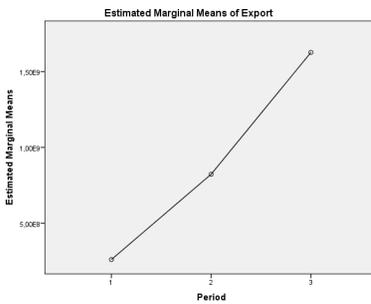
4.1. Neighbor and Close MENA Countries

4.1.1. Foreign Trade Between Turkey and Syria

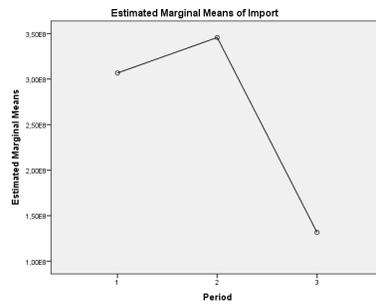
Net value of Turkey's export to and import from Syria in USD between 1993-2020 is presented in Figure 1(a). Repeated Measures One Way ANOVA test was conducted for the comparison of export in three periods. Mauchly's Test of Sphericity indicated that the assumption of sphericity had been met ($p=0.800>0.05$). There is statistically significant difference detected between three periods [$F(2, 16)=27.198, p=0.000$]. Bonferroni test, performed for multiple comparison between three periods, indicates that there is statistically significant difference between 1st and 2nd ($p=0.044$), 1st and 3rd ($p=0.000$), and 2nd and 3rd ($p=0.014$) periods at 95% confidence interval. As seen in Figure 1(b) average value of exports exhibit an increasing progress between three periods.



(a)



(b)

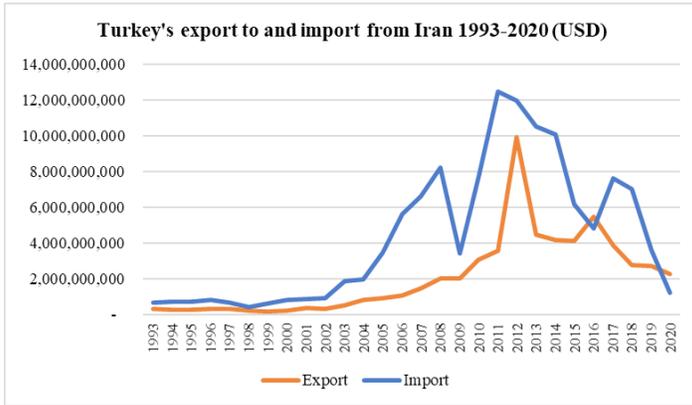


(c)

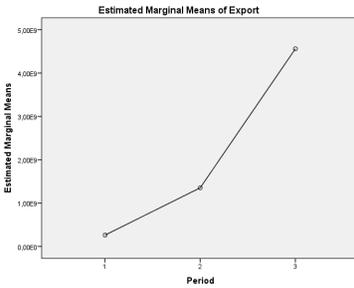
Figure 1: (a) Turkey’s Export to and Import from Syria 1993-2020 (USD), (b) Comparison of Exports, and (c) Comparison of Imports in Three Periods

The same analysis was conducted for the comparison of import in three periods. Mauchly’s Test of Sphericity indicated that the assumption of sphericity had been violated ($p=0.019<0.05$). Greenhouse-Geisser correction is used, and statistically significant difference detected between three periods [$F(1.193, 9.547)=5.902, p=0.032$]. Bonferroni test, performed for multiple comparison between three periods, indicates that there is statistically significant difference between 2nd and 3rd periods at 95% confidence interval ($p=0.000$). There is no significant difference detected between 1st and 2nd periods, and 1st and 3rd periods. As seen in Figure 1(c), the average value of imports exhibit an increasing progress between 1st and 2nd periods, and a decline between 2nd and 3rd periods.

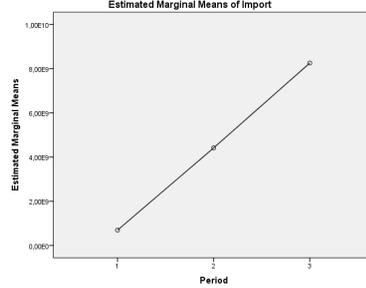
4.1.2. Foreign Trade Between Turkey and Iran



(a)



(b)



(c)

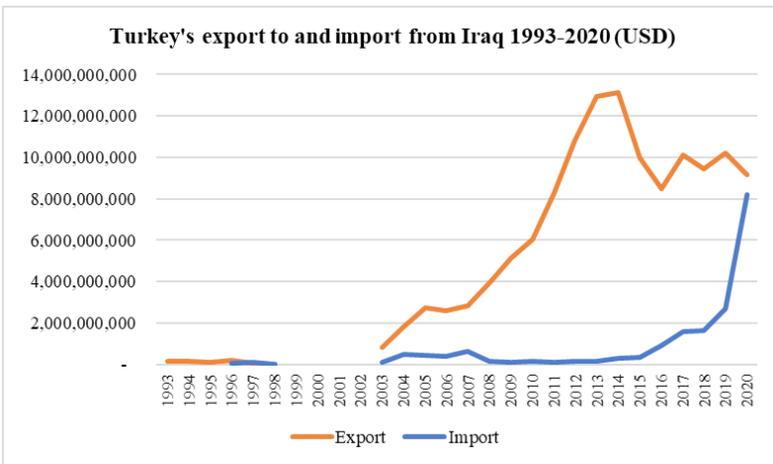
Figure 2: (a) Turkey’s Export to and Import from Iran 1993-2020 (USD), (b) Comparison of Exports, and (c) Comparison of Imports in Three Periods

Net value of Turkey’s export to and import from Iran in USD between 1993-2020 is presented in Figure 2(a). Repeated Measures One Way ANOVA test was conducted for the comparison of export in three periods. Mauchly’s Test of Sphericity indicated that the assumption of sphericity had been violated ($p=0.003<0.05$). Greenhouse-Geisser correction is used, and statistically significant difference detected between three periods [$F(1.110, 8.882)=20.762, p=0.001$]. Bonferroni test, performed for multiple comparison between three periods, indicates that there is statistically significant difference between 1st and 2nd ($p=0.017$), 1st and 3rd ($p=0.001$), and 2nd and 3rd ($p=0.023$) periods at 95% confidence interval. As seen in Figure 2(b) average value of exports exhibit an increasing progress between three periods.

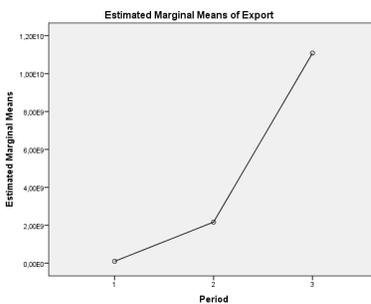
The same analysis was conducted for the comparison of import in three periods. Mauchly’s Test of Sphericity indicated that the assumption of sphericity

had been violated ($p=0.000<0.05$). Greenhouse-Geisser correction is used, and statistically significant difference detected between three periods [$F(1.056, 8.449)=15.768, p=0.003$]. Bonferroni test, performed for multiple comparison between three periods, indicates that there is statistically significant difference between 1st and 2nd periods ($p=0.010$), and 1st and 3rd periods ($p=0.000$) at 95% confidence interval. There is no significant difference detected between 2nd and 3rd period. As seen in Figure 2(c) average value of imports exhibit an increasing progress between three periods.

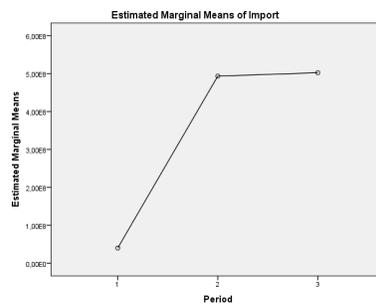
4.1.3. Foreign Trade Between Turkey and Iraq



(a)



(b)



(c)

Figure 3: (a) Turkey’s Export to and Import from Iraq 1993-2020 (USD), (b) Comparison of Exports, and (c) Comparison of Imports in Three Periods

Net value of Turkey’s export to and import from Iraq in USD between 1993-2020 is presented in Figure 3(a). Repeated Measures One Way ANOVA test

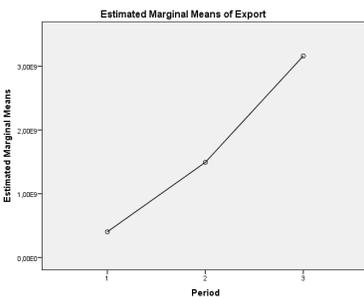
was conducted for the comparison of export in three periods. Mauchly's Test of Sphericity indicated that the assumption of sphericity had been met ($p=0.194>0.05$). There is statistically significant difference detected between three periods [$F(2, 8)=104.125, p=0.000$]. Bonferroni test, performed for multiple comparison between three periods, indicates that there is statistically significant difference between 1st and 2nd ($p=0.019$), 1st and 3rd ($p=0.001$), and 2nd and 3rd ($p=0.003$) periods at 95% confidence interval. As seen in Figure 3(b) average value of exports exhibit an increasing progress between three periods.

The same analysis was conducted for the comparison of import in three periods. Mauchly's Test of Sphericity indicated that the assumption of sphericity had been met ($p=0.386>0.05$). However, there is no statistically significant difference detected between three periods [$F(2, 4)=6.033, p=0.062$.] Progress of the average value of imports is presented in Figure 3(c).

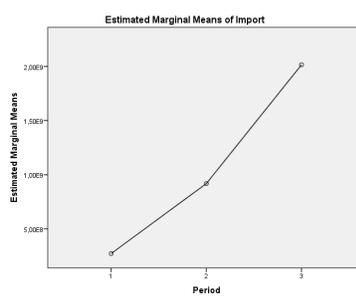
4.1.4. Foreign Trade Between Turkey and Israel



(a)



(b)



(c)

Figure 4: (a) Turkey's Export to and Import from Israel 1993-2020 (USD), (b) Comparison of Exports, and (c) Comparison of Imports in Three Periods

Net value of Turkey's export to and import from Israel in USD between 1993-2020 is presented in Figure 4(a). Repeated Measures One Way ANOVA test was conducted for the comparison of export in three periods. Mauchly's Test of Sphericity indicated that the assumption of sphericity had been violated ($p=0.033<0.05$). Greenhouse-Geisser correction is used, and statistically significant difference detected between three periods [$F(1.233, 9.867)=209.526, p=0.000$]. Bonferroni test, performed for multiple comparison between three periods, indicates that there is statistically significant difference between 1st and 2nd ($p=0.000$), 1st and 3rd ($p=0.000$), and 2nd and 3rd ($p=0.000$) periods at 95% confidence interval. As seen in Figure 4(b) average value of exports exhibit an increasing progress between three periods.

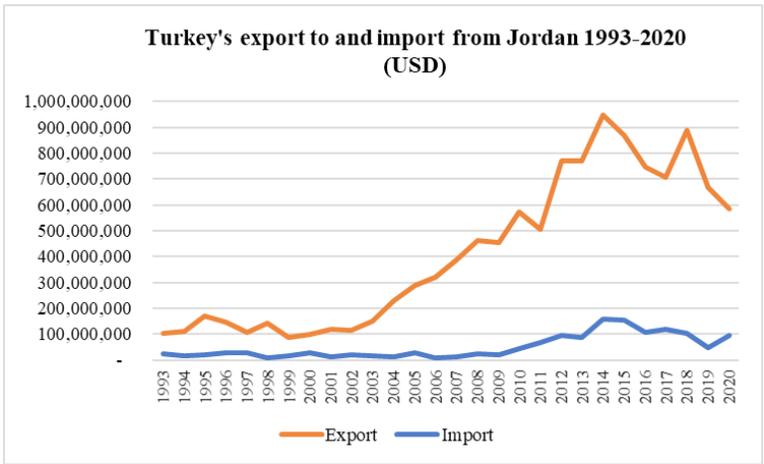
The same analysis was conducted for the comparison of import in three periods. Mauchly's Test of Sphericity indicated that the assumption of sphericity had been violated ($p=0.006<0.05$). Greenhouse-Geisser correction is used, and statistically significant difference detected between three periods [$F(1.130, 9.044)=42.298, p=0.000$]. Bonferroni test, performed for multiple comparison between three periods, indicates that there is statistically significant difference between 1st and 2nd ($p=0.000$), 1st and 3rd ($p=0.000$), and 2nd and 3rd ($p=0.007$) periods at 95% confidence interval. As seen in Figure 4(c) average value of imports exhibit an increasing progress between three periods.

4.1.5. Foreign Trade Between Turkey and Jordan

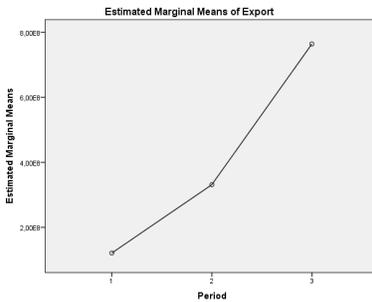
Net value of Turkey's export to and import from Jordan in USD between 1993-2020 is presented in Figure 5(a). Repeated Measures One Way ANOVA test was conducted for the comparison of export in three periods. Mauchly's Test of Sphericity indicated that the assumption of sphericity had been met ($p=0.562>0.05$). There is statistically significant difference detected between three periods [$F(2, 16)=76.983, p=0.000$]. Bonferroni test, performed for multiple comparison between three periods, indicates that there is statistically significant difference between 1st and 2nd ($p=0.013$), 1st and 3rd ($p=0.000$), and 2nd and 3rd ($p=0.000$) periods at 95% confidence interval. As seen in Figure 5(b) average value of exports exhibit an increasing progress between three periods.

The same analysis was conducted for the comparison of import in three periods. Mauchly's Test of Sphericity indicated that the assumption of sphericity had been violated ($p=0.005<0.05$). Greenhouse-Geisser correction is used, and statistically significant difference detected between three periods [$F(1.124,$

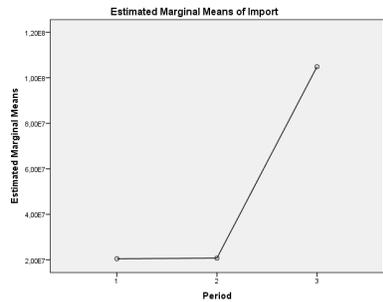
8.992)=42.530, $p=0.000$]. Bonferroni test, performed for multiple comparison between three periods, indicates that there is statistically significant difference between 1st and 3rd ($p=0.000$), and 2nd and 3rd ($p=0.001$) periods at 95% confidence interval. There is no significant difference detected between 1st and 2nd periods. As seen in Figure 5(c) average value of imports exhibit a steady course then an increasing progress between three periods.



(a)



(b)



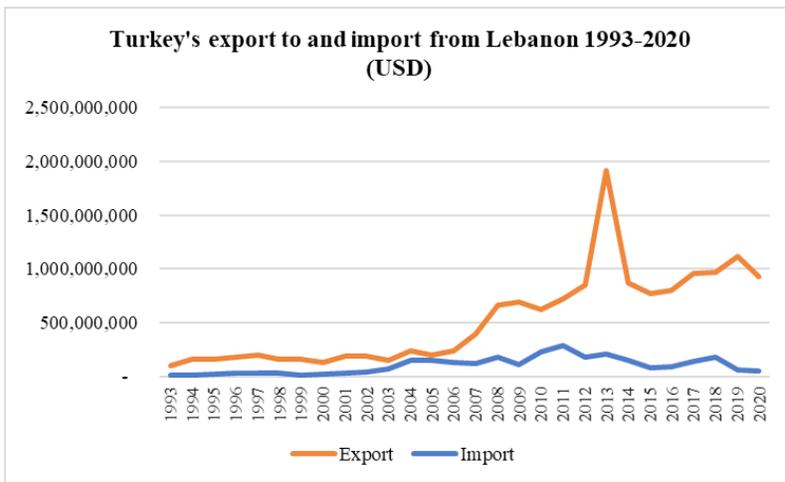
(c)

Figure 5: (a) Turkey’s Export to and Import from Jordan 1993-2020 (USD), (b) Comparison of Exports, and (c) Comparison of Imports in Three Periods

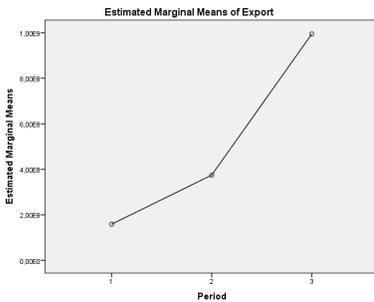
4.1.6. Foreign Trade Between Turkey and Lebanon

Net value of Turkey’s export to and import from Lebanon in USD between 1993-2020 is presented in Figure 6(a). Repeated Measures One Way ANOVA

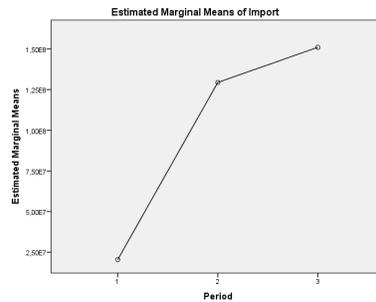
test was conducted for the comparison of export in three periods. Mauchly's Test of Sphericity indicated that the assumption of sphericity had been met ($p=0.184>0.05$). There is statistically significant difference detected between three periods [$F(2, 16)=27.936, p=0.000$]. Bonferroni test, performed for multiple comparison between three periods, indicates that there is statistically significant difference between 1st and 3rd ($p=0.000$), and 2nd and 3rd ($p=0.007$) periods at 95% confidence interval. There is no significant difference detected between 1st and 2nd periods. As seen in Figure 6(b) average value of exports exhibit an increasing progress between three periods.



(a)



(b)



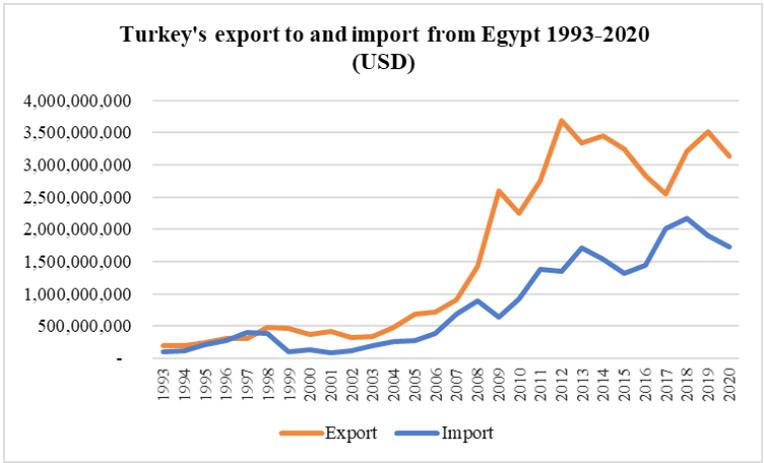
(c)

Figure 6: (a) Turkey's Export to and Import from Lebanon 1993-2020 (USD), (b) Comparison of Exports, and (c) Comparison of Imports in Three Periods

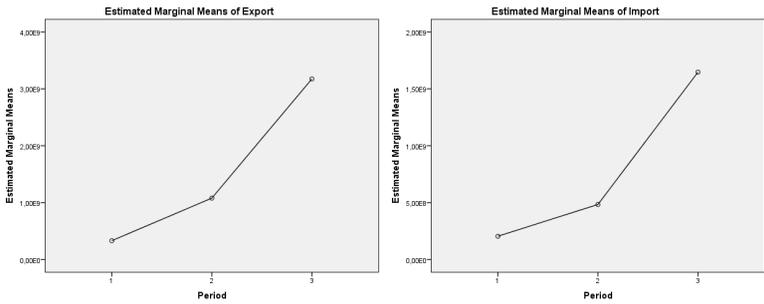
The same analysis was conducted for the comparison of import in three periods. Mauchly’s Test of Sphericity indicated that the assumption of sphericity had been violated ($p=0.011<0.05$). Greenhouse-Geisser correction is used, and statistically significant difference detected between three periods [$F(1.158, 9.267)=12.188, p=0.005$]. Bonferroni test, performed for multiple comparison between three periods, indicates that there is statistically significant difference between 1st and 2nd ($p=0.001$), and 1st and 3rd ($p=0.003$) periods at 95% confidence interval. There is no significant difference detected between 2nd and 3rd periods. As seen in Figure 6(c) average value of imports exhibit an increasing progress between three periods.

4.2. Countries in North Africa

4.2.1. Foreign Trade Between Turkey and Egypt



(a)



(b)

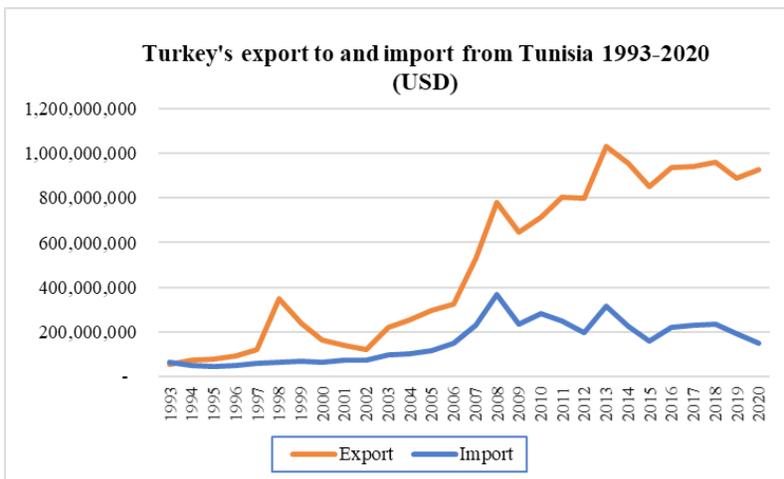
(c)

Figure 7: (a) Turkey’s Export to and Import from Egypt 1993-2020 (USD), (b) Comparison of Exports, and (c) Comparison of Imports in Three Periods

Net value of Turkey's export to and import from Egypt in USD between 1993-2020 is presented in Figure 7(a). Repeated Measures One Way ANOVA test was conducted for the comparison of export in three periods. Mauchly's Test of Sphericity indicated that the assumption of sphericity had been met ($p=0.094>0.05$). There is statistically significant difference detected between three periods [$F(2, 16)=72.050, p=0.000$]. Bonferroni test, performed for multiple comparison between three periods, indicates that there is statistically significant difference between 1st and 3rd ($p=0.000$), and 2nd and 3rd ($p=0.000$) periods at 95% confidence interval. There is no significant difference detected between 1st and 2nd periods. As seen in Figure 7(b) average value of exports exhibit an increasing progress between three periods.

The same analysis was conducted for the comparison of import in three periods. Mauchly's Test of Sphericity indicated that the assumption of sphericity had been met ($p=0.394>0.05$). There is statistically significant difference detected between three periods [$F(2, 16)=94.488, p=0.000$]. Bonferroni test, performed for multiple comparison between three periods, indicates that there is statistically significant difference between 1st and 3rd ($p=0.000$), and 2nd and 3rd ($p=0.000$) periods at 95% confidence interval. There is no significant difference detected between 1st and 2nd periods. As seen in Figure 7(c) average value of imports exhibit an increasing progress between three periods.

4.2.2. Foreign Trade Between Turkey and Tunisia



(a)

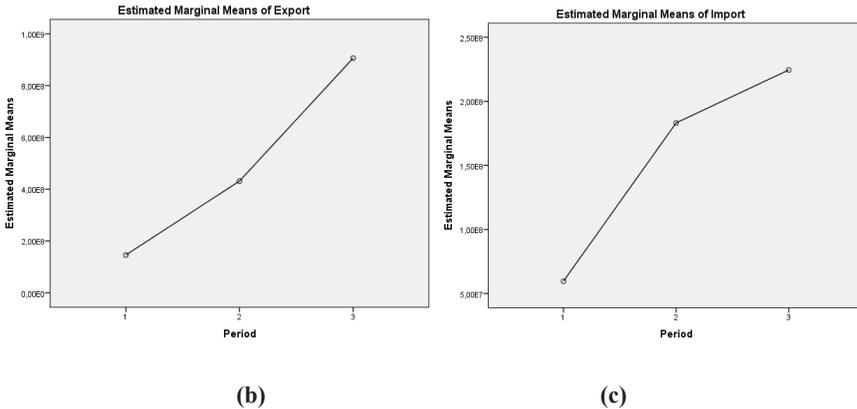


Figure 8: (a) Turkey's Export to and Import from Tunisia 1993-2020 (USD), (b) Comparison of Exports, and (c) Comparison of Imports in Three Periods

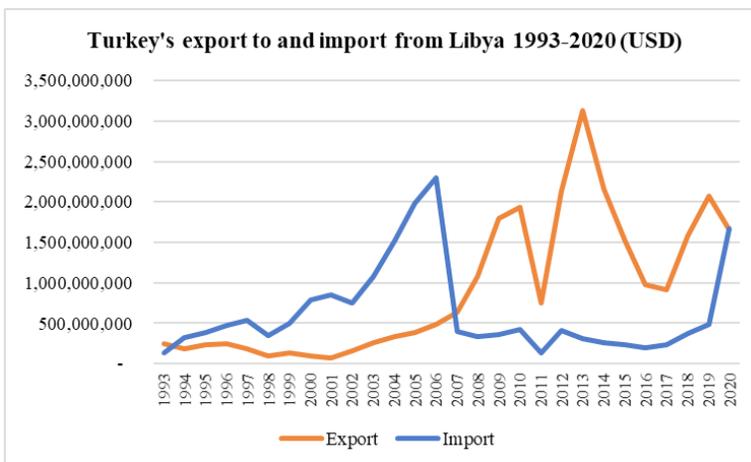
Net value of Turkey's export to and import from Tunisia in USD between 1993-2020 is presented in Figure 8(a). Repeated Measures One Way ANOVA test was conducted for the comparison of export in three periods. Mauchly's Test of Sphericity indicated that the assumption of sphericity had been met ($p=0.079>0.05$). There is statistically significant difference detected between three periods [$F(2, 16)=82.350, p=0.000$]. Bonferroni test, performed for multiple comparison between three periods, indicates that there is statistically significant difference between 1st and 2nd ($p=0.006$), 1st and 3rd ($p=0.000$), and 2nd and 3rd ($p=0.001$) periods at 95% confidence interval. As seen in Figure 8(b) average value of exports exhibit an increasing progress between three periods.

The same analysis was conducted for the comparison of import in three periods. Mauchly's Test of Sphericity indicated that the assumption of sphericity had been violated ($p=0.027<0.05$). Greenhouse-Geisser correction is used, and statistically significant difference detected between three periods [$F(1.216, 9.728)=16.014, p=0.002$]. Bonferroni test, performed for multiple comparison between three periods, indicates that there is statistically significant difference between 1st and 2nd ($p=0.012$), and 1st and 3rd ($p=0.000$) periods at 95% confidence interval. There is no significant difference detected between 2nd and 3rd periods. As seen in Figure 8(c) average value of imports exhibit an increasing progress between three periods.

4.2.3. Foreign Trade Between Turkey and Libya

Net value of Turkey's export to and import from Libya in USD between 1993-2020 is presented in Figure 9(a). Repeated Measures One Way ANOVA test was conducted for the comparison of export in three periods. Mauchly's Test of Sphericity indicated that the assumption of sphericity had been met ($p=0.366>0.05$). There is statistically significant difference detected between three periods [$F(2, 16)=14.655, p=0.000$]. Bonferroni test, performed for multiple comparison between three periods, indicates that there is statistically significant difference between 1st and 3rd ($p=0.001$) periods at 95% confidence interval. There is no significant difference detected between 1st and 2nd, and 2nd and 3rd periods. As seen in Figure 9(b) average value of exports exhibit an increasing progress between three periods.

The same analysis was conducted for the comparison of import in three periods. Mauchly's Test of Sphericity indicated that the assumption of sphericity had been violated ($p=0.001<0.05$). Greenhouse-Geisser correction is used, and statistically significant difference detected between three periods [$F(1.065, 8.517)=5.771, p=0.040$]. Bonferroni test, performed for multiple comparison between three periods, indicates that there is statistically significant difference between 1st and 3rd ($p=0.034$) periods at 95% confidence interval. There is no significant difference detected between 1st and 2nd, and 2nd and 3rd periods. As seen in Figure 9(c) average value of imports exhibit an increasing then decreasing progress between three periods.



(a)

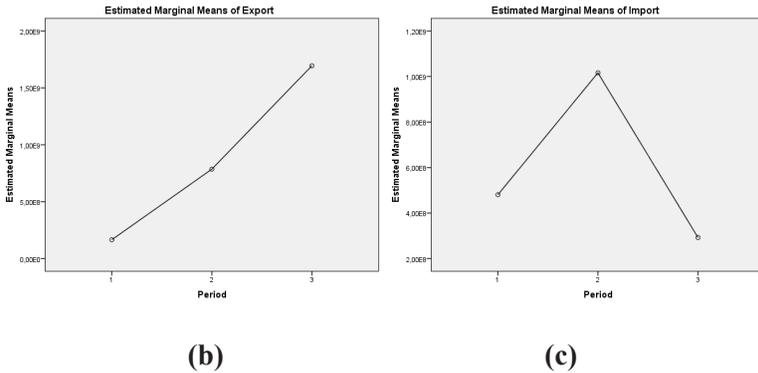
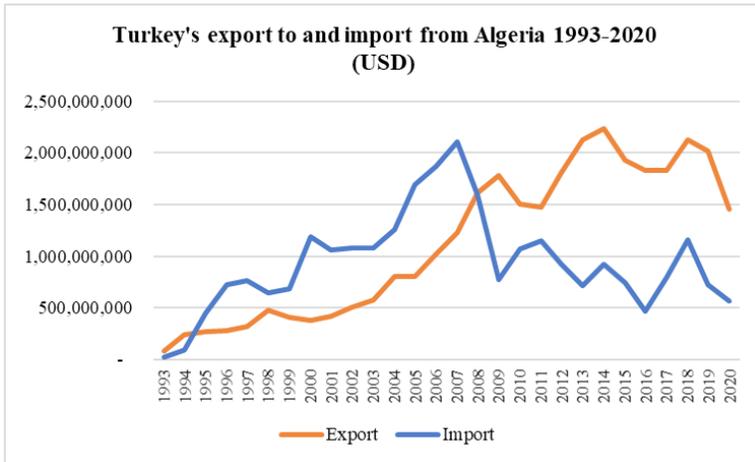


Figure 9: (a) Turkey's Export to and Import from Libya 1993-2020 (USD), **(b)** Comparison of Exports, and **(c)** Comparison of Imports in Three Periods

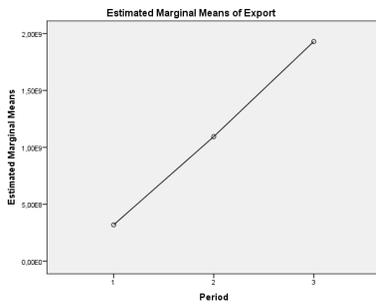
4.2.4. Foreign Trade Between Turkey and Algeria

Net value of Turkey's export to and import from Algeria in USD between 1993-2020 is presented in Figure 10(a). Repeated Measures One Way ANOVA test was conducted for the comparison of export in three periods. Mauchly's Test of Sphericity indicated that the assumption of sphericity had been met ($p=0.096>0.05$). There is statistically significant difference detected between three periods [$F(2, 16)=93.159, p=0.000$]. Bonferroni test, performed for multiple comparison between three periods, indicates that there is statistically significant difference between 1st and 2nd ($p=0.001$), 1st and 3rd ($p=0.000$), and 2nd and 3rd ($p=0.001$) periods at 95% confidence interval. As seen in Figure 10(b) average value of exports exhibit an increasing progress between three periods.

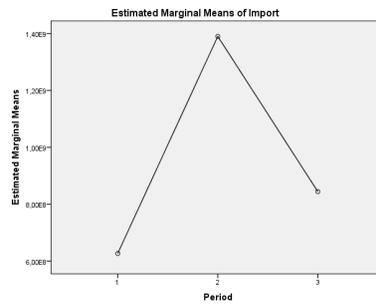
The same analysis was conducted for the comparison of import in three periods. Mauchly's Test of Sphericity indicated that the assumption of sphericity had been met ($p=0.719>0.05$). There is statistically significant difference detected between three periods [$F(2, 16)=8.716, p=0.003$]. Bonferroni test, performed for multiple comparison between three periods, indicates that there is statistically significant difference between 1st and 2nd ($p=0.014$) periods at 95% confidence interval. There is no significant difference detected between 1st and 3rd, and 2nd and 3rd periods. As seen in Figure 10(c) average value of imports exhibit an increasing then decreasing progress between three periods.



(a)



(b)



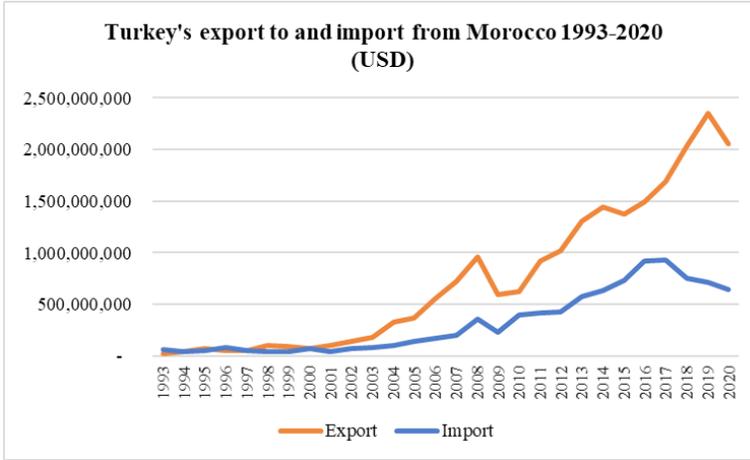
(c)

Figure 10: (a) Turkey’s Export to and Import from Algeria 1993-2020 (USD), (b) Comparison of Exports, and (c) Comparison of Imports in Three Periods

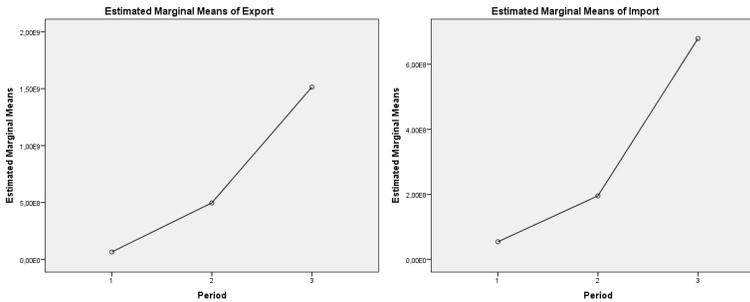
4.2.5. Foreign Trade Between Turkey and Morocco

Net value of Turkey’s export to and import from Morocco in USD between 1993-2020 is presented in Figure 11(a). Repeated Measures One Way ANOVA test was conducted for the comparison of export in three periods. Mauchly’s Test of Sphericity indicated that the assumption of sphericity had been met ($p=0.188>0.05$). There is statistically significant difference detected between three periods [$F(2, 16)=81.010, p=0.000$]. Bonferroni test, performed for multiple comparison between three periods, indicates that there is statistically significant difference between 1st and 2nd ($p=0.002$), 1st and 3rd ($p=0.000$), and

2nd and 3rd ($p=0.000$) periods at 95% confidence interval. As seen in Figure 11(b) average value of exports exhibit an increasing progress between three periods.



(a)



(b)

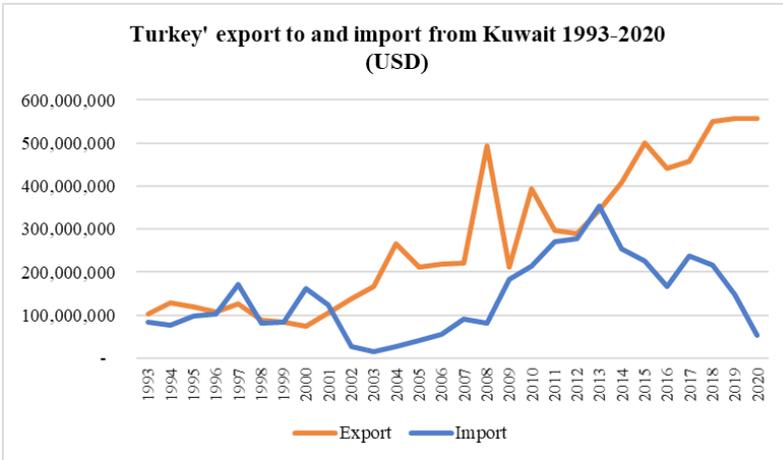
(c)

Figure 11: (a) Turkey's Export to and Import from Morocco 1993-2020 (USD), (b) Comparison of Exports, and (c) Comparison of Imports in Three Periods

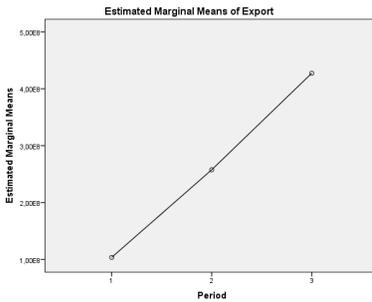
The same analysis was conducted for the comparison of import in three periods. Mauchly's Test of Sphericity indicated that the assumption of sphericity had been met ($p=0.257>0.05$). There is statistically significant difference detected between three periods [$F(2, 16)=87.133, p=0.000$]. Bonferroni test, performed for multiple comparison between three periods, indicates that there is statistically significant difference between 1st and 2nd ($p=0.026$), 1st and 3rd ($p=0.000$), and 2nd and 3rd ($p=0.000$) periods at 95% confidence interval. As seen in Figure 11(c) average value of imports exhibit an increasing progress between three periods.

4.3. Countries in the Arabian Peninsula and the Persian Gulf

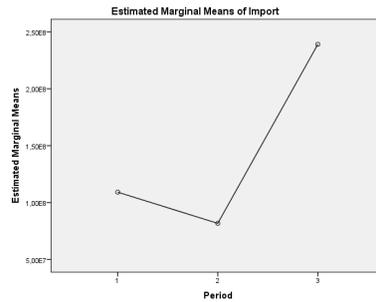
4.3.1. Foreign Trade Between Turkey and Kuwait



(a)



(b)



(c)

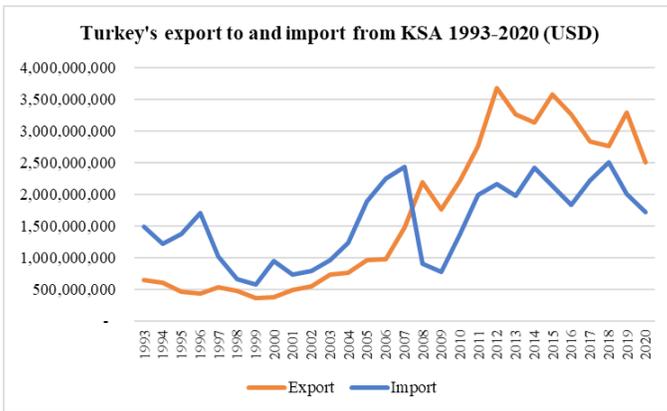
Figure 12: (a) Turkey’s Export to and Import from Kuwait 1993-2020 (USD), (b) Comparison of Exports, and (c) Comparison of Imports in Three Periods

Net value of Turkey’s export to and import from Kuwait in USD between 1993-2020 is presented in Figure 12(a). Repeated Measures One Way ANOVA test was conducted for the comparison of export in three periods. Mauchly’s Test of Sphericity indicated that the assumption of sphericity had been met ($p=0.939>0.05$). There is statistically significant difference detected between three periods [$F(2, 16)=35.820, p=0.000$]. Bonferroni test, performed for multiple comparison between three periods, indicates that there is statistically

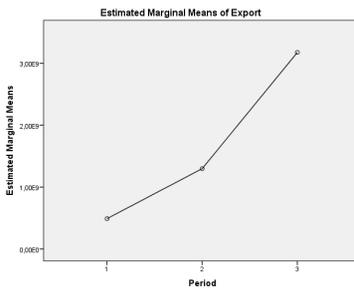
significant difference between 1st and 2nd ($p=0.016$), 1st and 3rd ($p=0.000$), and 2nd and 3rd ($p=0.005$) periods at 95% confidence interval. As seen in Figure 12(b) average value of exports exhibit an increasing progress between three periods.

The same analysis was conducted for the comparison of import in three periods. Mauchly’s Test of Sphericity indicated that the assumption of sphericity had been violated ($p=0.019 < 0.05$). Greenhouse-Geisser correction is used, and statistically significant difference detected between three periods $F(1.192, 9.538)=14.899, p=0.003$. Bonferroni test, performed for multiple comparison between three periods, indicates that there is statistically significant difference between 1st and 3rd ($p=0.003$), and 2nd and 3rd ($p=0.016$) periods at 95% confidence interval. There is no significant difference detected between 1st and 2nd periods. As seen in Figure 12(c) average value of imports exhibit a decreasing then increasing progress between three periods.

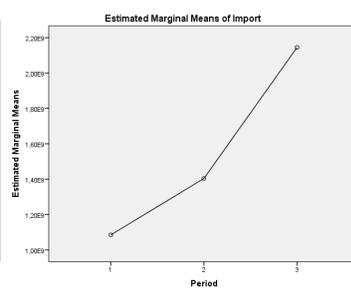
4.3.2. Foreign Trade Between Turkey and Kingdom of Saudi Arabia



(a)



(b)



(c)

Figure 13: (a) Turkey’s Export to and Import from KSA 1993-2020 (USD), (b) Comparison of Exports, and (c) Comparison of Imports in Three Periods

Net value of Turkey's export to and import from KSA in USD between 1993-2020 is presented in Figure 13(a). Repeated Measures One Way ANOVA test was conducted for the comparison of export in three periods. Mauchly's Test of Sphericity indicated that the assumption of sphericity had been violated ($p=0.031<0.05$). Greenhouse-Geisser correction is used, and statistically significant difference detected between three periods [$F(1.226, 9.812)=82.020, p=0.000$]. Bonferroni test, performed for multiple comparison between three periods, indicates that there is statistically significant difference between 1st and 2nd ($p=0.027$), 1st and 3rd ($p=0.000$), and 2nd and 3rd ($p=0.000$) periods at 95% confidence interval. As seen in Figure 13(b) average value of exports exhibit an increasing progress between three periods.

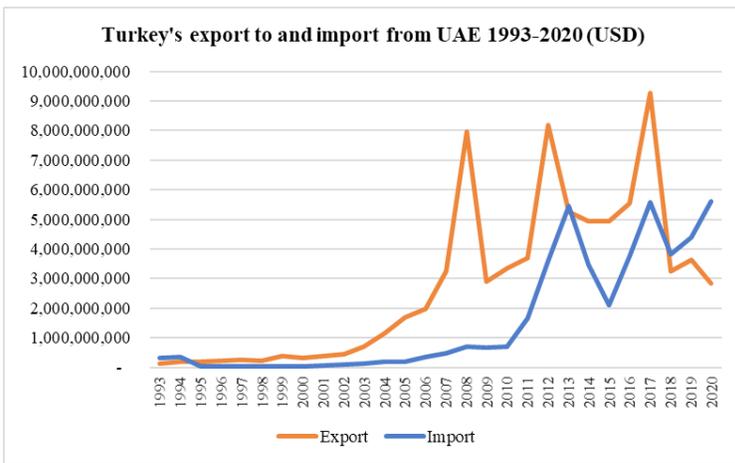
The same analysis was conducted for the comparison of import in three periods. Mauchly's Test of Sphericity indicated that the assumption of sphericity had been met ($p=0.160>0.05$). There is statistically significant difference detected between three periods [$F(2, 16)=12.085, p=0.001$]. Bonferroni test, performed for multiple comparison between three periods, indicates that there is statistically significant difference between 1st and 3rd ($p=0.000$), and 2nd and 3rd ($p=0.050$) periods at 95% confidence interval. There is no significant difference detected between 1st and 2nd periods. As seen in Figure 13(c) average value of imports exhibit an increasing progress between three periods.

4.3.3. Foreign Trade Between Turkey and United Arab Emirates

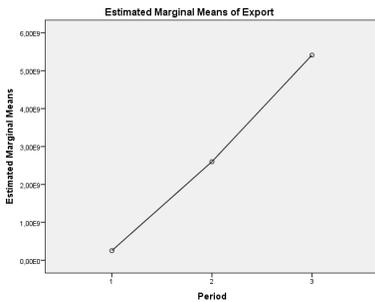
Net value of Turkey's export to and import from UAE in USD between 1993-2020 is presented in Figure 14(a). Repeated Measures One Way ANOVA test was conducted for the comparison of export in three periods. Mauchly's Test of Sphericity indicated that the assumption of sphericity had been met ($p=0.967>0.05$). There is statistically significant difference detected between three periods [$F(2, 16)=25.936, p=0.000$]. Bonferroni test, performed for multiple comparison between three periods, indicates that there is statistically significant difference between 1st and 2nd ($p=0.038$), 1st and 3rd ($p=0.000$), and 2nd and 3rd ($p=0.015$) periods at 95% confidence interval. As seen in Figure 14(b) average value of exports exhibit an increasing progress between three periods.

The same analysis was conducted for the comparison of import in three periods. Mauchly's Test of Sphericity indicated that the assumption

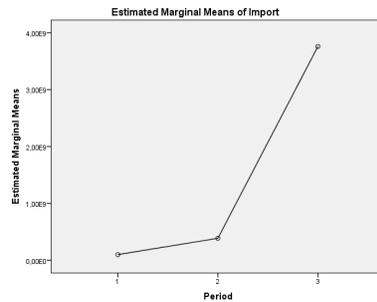
of sphericity had been violated ($p=0.001<0.05$). Greenhouse-Geisser correction is used, and statistically significant difference detected between three periods [$F(1.083, 8.665)=63.579, p=0.000$]. Bonferroni test, performed for multiple comparison between three periods, indicates that there is statistically significant difference between 1st and 3rd ($p=0.000$), and 2nd and 3rd ($p=0.000$) periods at 95% confidence interval. There is no significant difference detected between 1st and 2nd periods. As seen in Figure 14(c) average value of imports exhibit an increasing progress between three periods.



(a)



(b)



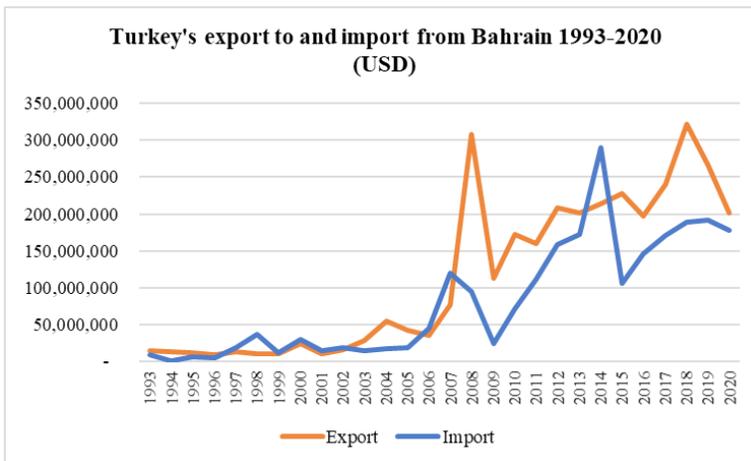
(c)

Figure 14: (a) Turkey’s Export to and Import from UAE 1993-2020 (USD), (b) Comparison of Exports, and (c) Comparison of Imports in Three Periods

4.3.4. Foreign Trade Between Turkey and Bahrain

Net value of Turkey's export to and import from Bahrain in USD between 1993-2020 is presented in Figure 15(a). Repeated Measures One Way ANOVA test was conducted for the comparison of export in three periods. Mauchly's Test of Sphericity indicated that the assumption of sphericity had been met ($p=0.092>0.05$). There is statistically significant difference detected between three periods [$F(2, 16)=35.113, p=0.000$]. Bonferroni test, performed for multiple comparison between three periods, indicates that there is statistically significant difference between 1st and 3rd ($p=0.000$), and 2nd and 3rd ($p=0.004$) periods at 95% confidence interval. There is no significant difference detected between 1st and 2nd periods. As seen in Figure 15(b) average value of exports exhibit an increasing progress between three periods.

The same analysis was conducted for the comparison of import in three periods. Mauchly's Test of Sphericity indicated that the assumption of sphericity had been met ($p=0.070>0.05$). There is statistically significant difference detected between three periods [$F(2, 16)=37.821, p=0.000$]. Bonferroni test, performed for multiple comparison between three periods, indicates that there is statistically significant difference between 1st and 3rd ($p=0.000$), and 2nd and 3rd ($p=0.003$) periods at 95% confidence interval. There is no significant difference detected between 1st and 2nd periods. As seen in Figure 15(c) average value of imports exhibit an increasing progress between three periods.



(a)

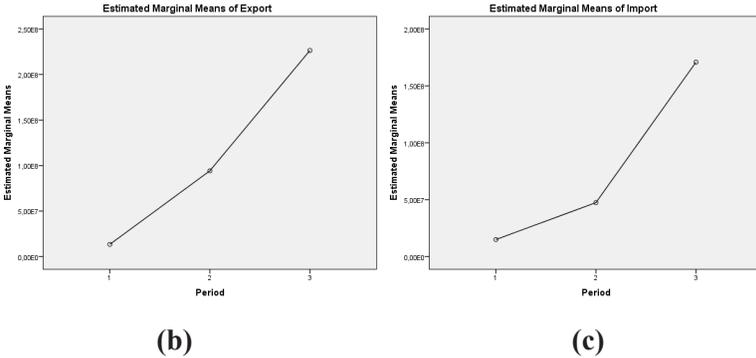
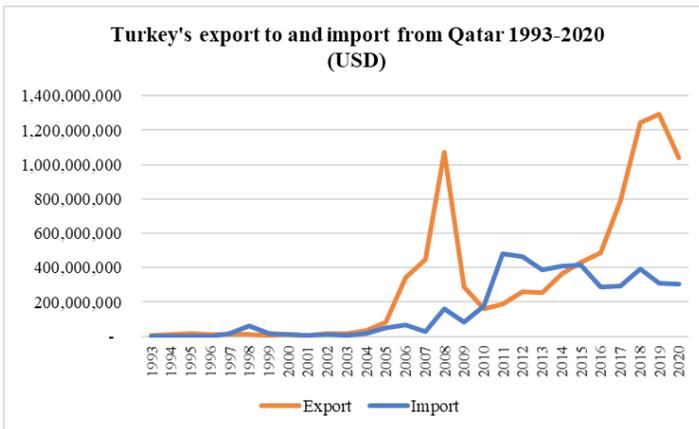


Figure 15: (a) Turkey’s Export to and Import from Bahrain 1993-2020 (USD), (b) Comparison of Exports, and (c) Comparison of Imports in Three Periods

4.3.5. Foreign Trade Between Turkey and Qatar

Net value of Turkey’s export to and import from Qatar in USD between 1993-2020 is presented in Figure 16(a). Repeated Measures One Way ANOVA test was conducted for the comparison of export in three periods. Mauchly’s Test of Sphericity indicated that the assumption of sphericity had been met ($p=0.703>0.05$). There is statistically significant difference detected between three periods [$F(2, 16)=9.236, p=0.002$]. Bonferroni test, performed for multiple comparison between three periods, indicates that there is statistically significant difference between 1st and 3rd ($p=0.010$) periods at 95% confidence interval. There is no significant difference detected between 1st and 2nd, and 2nd and 3rd periods. As seen in Figure 16(b) average value of exports exhibit an increasing progress between three periods.



(a)

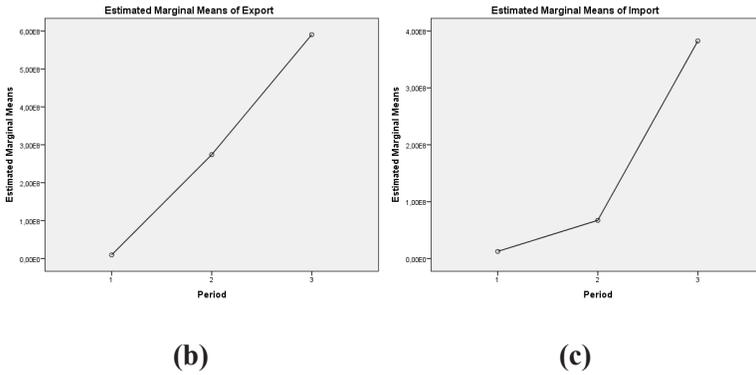
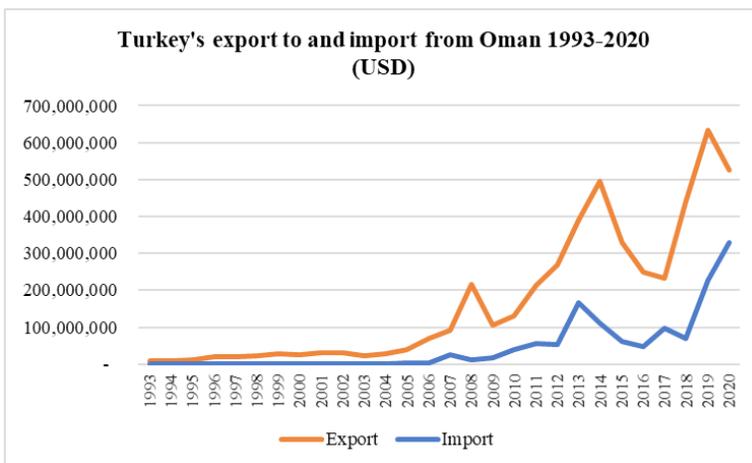


Figure 16: (a) Turkey’s Export to and Import from Qatar 1993-2020 (USD), **(b)** Comparison of Exports, and **(c)** Comparison of Imports in Three Periods

The same analysis was conducted for the comparison of import in three periods. Mauchly’s Test of Sphericity indicated that the assumption of sphericity had been met ($p=0.089>0.05$). There is statistically significant difference detected between three periods [$F(2, 16)=80.687, p=0.000$]. Bonferroni test, performed for multiple comparison between three periods, indicates that there is statistically significant difference between 1st and 3rd ($p=0.000$), and 2nd and 3rd ($p=0.000$) periods at 95% confidence interval. There is no significant difference detected between 1st and 2nd periods. As seen in Figure 16(c) average value of imports exhibit an increasing progress between three periods.

4.3.6. Foreign Trade Between Turkey and Oman



(a)

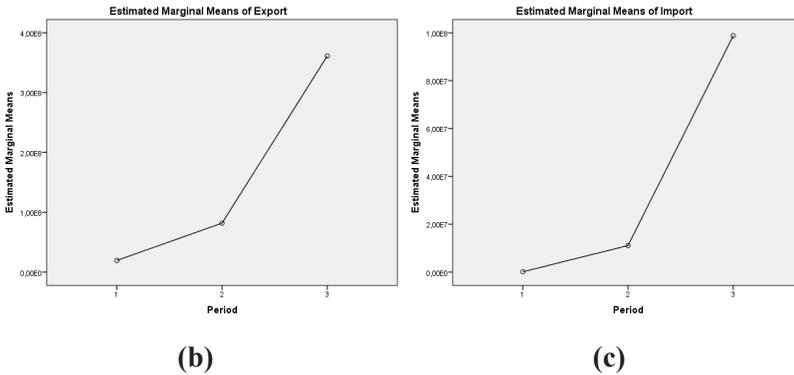


Figure 17: (a) Turkey's Export to and Import from Oman 1993-2020 (USD), **(b)** Comparison of Exports, and **(c)** Comparison of Imports in Three Periods

Net value of Turkey's export to and import from Oman in USD between 1993-2020 is presented in Figure 17(a). Repeated Measures One Way ANOVA test was conducted for the comparison of export in three periods. Mauchly's Test of Sphericity indicated that the assumption of sphericity had been violated ($p=0.024<0.05$). Greenhouse-Geisser correction is used, and statistically significant difference detected between three periods [$F(1.208, 9.666)=39.276, p=0.000$]. Bonferroni test, performed for multiple comparison between three periods, indicates that there is statistically significant difference between 1st and 2nd ($p=0.031$), 1st and 3rd ($p=0.000$), and 2nd and 3rd ($p=0.002$) periods at 95% confidence interval. As seen in Figure 17(b) average value of exports exhibit an increasing progress between three periods.

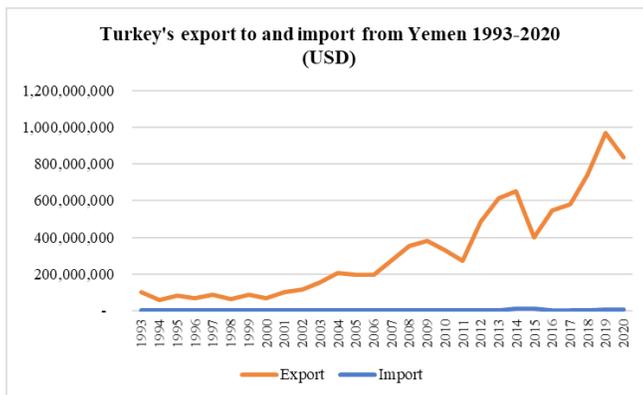
The same analysis was conducted for the comparison of import in three periods. Mauchly's Test of Sphericity indicated that the assumption of sphericity had been violated ($p=0.001<0.05$). Greenhouse-Geisser correction is used, and statistically significant difference detected between three periods [$F(1.067, 8.533)=22.651, p=0.001$]. Bonferroni test, performed for multiple comparison between three periods, indicates that there is statistically significant difference between 1st and 3rd ($p=0.004$), and 2nd and 3rd ($p=0.004$) periods at 95% confidence interval. There is no significant difference detected between 1st and 2nd periods. As seen in Figure 17(c) average value of imports exhibit an increasing progress between three periods.

4.3.7. Foreign Trade Between Turkey and Yemen

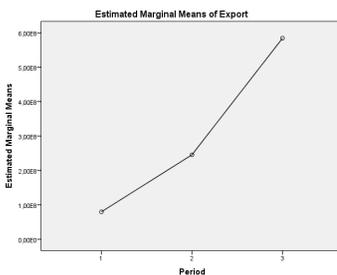
Net value of Turkey's export to and import from Yemen in USD between 1993-2020 is presented in Figure 18(a). Repeated Measures One Way ANOVA test

was conducted for the comparison of export in three periods. Mauchly's Test of Sphericity indicated that the assumption of sphericity had been violated ($p=0.047 < 0.05$). Greenhouse-Geisser correction is used, and statistically significant difference detected between three periods [$F(1.263, 10.105)=50.150, p=0.000$]. Bonferroni test, performed for multiple comparison between three periods, indicates that there is statistically significant difference between 1st and 2nd ($p=0.002$), 1st and 3rd ($p=0.000$), and 2nd and 3rd ($p=0.000$) periods at 95% confidence interval. As seen in Figure 18(b) average value of exports exhibit an increasing progress between three periods.

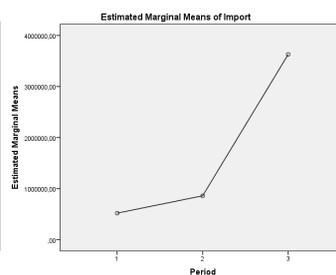
The same analysis was conducted for the comparison of import in three periods. Mauchly's Test of Sphericity indicated that the assumption of sphericity had been violated ($p=0.000 < 0.05$). Greenhouse-Geisser correction is used, and there is no statistically significant difference detected between three periods [$F(1.018, 8.142)=3.645, p=0.092$]. Progress of the average value of imports is presented in Figure 18(c).



(a)



(b)



(c)

Figure 18: (a) Turkey's Export to and Import from Yemen 1993-2020 (USD), (b) Comparison of Exports, and (c) Comparison of Imports in Three Periods

5. Conclusion

Given the analysis results, the remarkable results regarding the foreign trade of Turkey with MENA countries can be summarized as follows. Between the 1st and 2nd periods (1993-2001 and 2002-2010), which can be defined as the period before Arab Spring, there was no difference in imports from 12 countries and there were increases in imports from 6 countries. Between the 2nd and 3rd periods (2002-2010 and 2011-2020), the number of countries with no difference in imports was 7, while there was a decrease in imports from 1 country and there were increases in imports from 10 countries. Between the 1st and 3rd periods (1993-2010 ve 2011-2020) no differences were seen in imports only from 4 countries (Syria, Iraq, Algeria, and Yemen), the imports from these countries have similar averages, whereas there were increases in imports from 14 countries. The number of countries with no difference in imports among three periods was 2; in other words, imports from Iraq and Yemen have not changed in the 28-year period.

In all the periods, the decrease was observed only in the imports from Syria and Libya suffering civil wars. Decreases were observed in imports between the 2nd and 3rd periods for Syria and between the 1st and 3rd periods for Libya. No decrease was observed in exports.

Table 1: Summary of the Analysis Results

Country	Trade Flow	1 st -2 nd	2 nd -3 rd	1 st -3 rd	Country	Trade Flow	1 st -2 nd	2 nd -3 rd	1 st -3 rd
<i>Syria</i>	export	↑	↑	↑	<i>Algeria</i>	export	↑	↑	↑
	import	↔	↓	↔		import	↑	↔	↔
<i>Iran</i>	export	↑	↑	↑	<i>Morocco</i>	export	↑	↑	↑
	import	↑	↔	↑		import	↑	↑	↑
<i>Iraq</i>	export	↑	↑	↑	<i>UAE</i>	export	↑	↑	↑
	import	↔	↔	↔		import	↔	↑	↑
<i>Israel</i>	export	↑	↑	↑	<i>Yemen</i>	export	↑	↑	↑
	import	↑	↑	↑		import	↔	↔	↔
<i>Jordan</i>	export	↑	↑	↑	<i>Kuwait</i>	export	↑	↑	↑
	import	↔	↑	↑		import	↔	↑	↑
<i>Lebanon</i>	export	↔	↑	↑	<i>KSA</i>	export	↑	↑	↑
	import	↑	↔	↑		import	↔	↑	↑
<i>Egypt</i>	export	↔	↑	↑	<i>Bahrain</i>	export	↔	↑	↑
	import	↔	↑	↑		import	↔	↑	↑

Country	Trade Flow	1 st -2 nd	2 nd -3 rd	1 st -3 rd	Country	Trade Flow	1 st -2 nd	2 nd -3 rd	1 st -3 rd
<i>Tunisia</i>	export	↑	↑	↑	<i>Qatar</i>	export	↔	↔	↑
	import	↑	↔	↑		import	↔	↑	↑
<i>Libya</i>	export	↔	↔	↑	<i>Oman</i>	export	↑	↑	↑
	import	↔	↔	↓		import	↔	↑	↑

Source: Prepared by the author

Given Turkey's exports to MENA countries, the number of countries for which increases were detected in each of 3 periods was 13. Between the 1st and 2nd periods (1993-2001 and 2002-2010), which can be defined as the period before Arab Spring, there was no difference in exports to 5 countries and there were increases in exports to 13 countries. Between the 2nd ve 3rd periods (2002-2010 ve 2011-2020) there was no difference in exports to Libya and Qatar, and there were increases in exports to 16 countries. Between the 1st and 3rd periods (1993-2001 ve 2011-2020) there were increases in exports to all of 18 countries.

Considering the results regarding Turkey's foreign trade with MENA countries together, it can be concluded that there was a higher level of increase in Turkey's export when compared to imports. The increase followed a gradual progress. The number of changes between the 1st and 2nd periods remained more limited, whereas the changes between 2nd and 3rd periods were at a higher level and the changes between the 1st and 3rd periods reached the highest level.

Table 1 was prepared by the author in order to examine the analysis results together. The differences in Turkey's export to and import from MENA countries between periods are presented in Table 1. The period between 1993-2001 (1st), the period between 2002-2010 (2nd), and the period between 2011-2020 (3rd) are expressed with period ranks, and the increases (↑), the decreases (↓), and the absence of any change (↔) are expressed with signs.

The present study employs an analysis method comparing the averages and compares the periods. However, it can be seen in the figures illustrating the net export and import values that there were sharp increases and decreases in several countries. These sharp moves sometimes have limited effects on the period averages. Hence, the analysis interpretation reporting that there was an increasing trend doesn't mean a consistent progress.

It is, of course, not possible to say that the increase in exports and imports arose from the foreign policy strategies. But, it can be stated that the foreign

trade is not harmed in the long-term by the foreign policy that Turkey has adopted. On the other hand, it is seen that foreign trade exhibits rapid increases and decreases in foreign trade with the countries that civil war and governmental changes take place (Syria, Egypt and Libya), and the countries that political tension frequently increases (Iran and Israel). The negative effects of increasing opposition against Turkey among GCC countries recently and the sanctions imposed by KSA against Turkey since 2020 (Türko, 2021), naturally cannot be seen in this analysis.

References

- Ansarian, M. (2020). Arap Baharı'nın ekonomik etkileri. *Niğde Ömer Halisdemir Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 2(1), 43-51. <https://dergipark.org.tr/en/download/article-file/1184736>
- Antalyalı, Ö.L. (2006). Varyans analizi (ANOVA-MANOVA). In Ş. Kalaycı (Ed.), *SPSS uygulamalı çok değişkenli istatistik teknikleri* (8th ed., pp. 131-182). Dinamik Akademi.
- Bayraktar, B. (2020). Bölgesel liderlik arayışı ve Suudi Arabistan: Farklılaşan tehditler ve yeni dış politika. *Ortadoğu Etütleri*, 12(1), 16-47.
- Buzkiran, D., & Kutbay, H. (2013). Arap Baharının Türkiye'ye olan ekonomik ve sosyal etkileri. *Sosyal ve Beşeri Bilimler Dergisi*, 5(1), 147-161. <https://dergipark.org.tr/en/download/article-file/117349>
- Göçer, İ., & Çınar, S. (2015). Arap Baharı'nın nedenleri, uluslararası ilişkiler boyutu ve Türkiye'nin dış ticaret ve turizm gelirlerine etkileri. *KAÜ İİBF Dergisi*, 6(10), 51-68. <https://doi.org/10.18025/kauibf.6.10.2015.64979>
- Kahveci, M. (2019). From spring to winter? An analysis of “Arab Spring” impacts on turkey and MENA region foreign trade with gravity approach. *Asian economic and Financial Review*, 9(12), 1320-1334. <https://doi.org/10.18488/journal.aefr.2019.912.1320.1334>
- Keyman, E.F. (2016). Turkish foreign policy in the post-Arab Spring era: from proactive to buffer state. *Third World Quarterly*, 37(12), 2274-2287. <https://doi.org/10.1080/01436597.2016.1199260>
- Kirişçi, K. (n.d.). *The EU, Turkey, and the Arab Spring: Challenges and opportunities for regional integration*. Working Paper 01, Sabancı University Istanbul Policy Center. https://www.iai.it/sites/default/files/GTE_WP_01.pdf

- Laerd Statistics. (2021). *Repeated Measures ANOVA*. <https://statistics.laerd.com/statistical-guides/repeated-measures-anova-statistical-guide.php>
- Lecha, E.S. (2011). The EU, Turkey, and the Arab Spring: From parallel approaches to a joint strategy? In *Turkey and the Arab Spring implications for Turkish foreign policy from a Transatlantic perspective* (pp. 25-34). Mediterranean Paper Series 2011, The German Marshall Fund of the United States. https://www.iai.it/sites/default/files/mediterranean-paper_13.pdf
- Metin, M., & İspiroğlu, F. (2017). Türkiye'nin MENA ülkeleri ile dış ticareti: Bir makroekonomik değerlendirme. *Kahramanmaraş Sütçü İmam Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi*, 7(1), 23-38. <http://iubfdergisi.ksu.edu.tr/tr/download/article-file/334514>
- Munassar, O. (2021). *National role conceptions and orientations of Turkey, Iran, and Saudi Arabia as competing regional powers in the Middle East: 1979-2020*. (Unpublished doctoral thesis). Bursa Uludağ University.
- Oğuzlu, T. (2012). Türkiye ve Avrupa Birliği ilişkilerinde Arap Baharı'nın etkisi. *Ortadoğu Analiz*, 4(48), 20-29. https://orsam.org.tr/d_hbanaliz/2tarikoguzlu.pdf
- Öncel, A., & Malik, A. (2015). The Arab Spring and its impact on the foreign trade of Turkey. *Bilgi*, 31, 17-36.
- Özpek, B.B., & Demirağ, Y. (2014). Turkish foreign policy after the 'Arab Spring': From agenda-setter state to agenda-entrepreneur state. *Israel Affairs*, 20(3), 328-346. <https://doi.org/10.1080/13537121.2014.922806>
- Öztürkler, H. (2014). Arap Baharı'nın ekonomik analizi. *Akademik ORTADOĞU*, 8(2), 1-16. http://www.akademikortadogu.com/belge/ortadogu16makale/harun_ozturkler.pdf
- Türko, E.S. (2021). Boycott or embargo: The effects of economic sanctions imposed by Kingdom of Saudi Arabia against Turkey. In M.E. Kalgı, & A. Klich (Eds.), *International European Conference on Interdisciplinary Scientific Research-IV, August 8-9 2021, Warsaw/Poland, Full Text book Vol. II* (pp. 745-760).
- UN Comtrade Database. (2021). Trade statistics. <https://comtrade.un.org/data/>
- Uzun, Ö.S. (2013). The "Arab Spring" and its effect on Turkish-Iranian relations. *Ortadoğu Etütleri*, 4(2), 145-164.
- Yazıcıoğlu, M.S., & Asal, U.Y. (2021). Türk dış politikası ve İslam dünyası ilişkilerinin seçilmiş ülkeler üzerinden analizi: Mısır, İran, Suudi Arabistan ve Birleşik Arap Emirlikleri örneği. *Bariş Araştırmaları ve Çatışma Çözümleri Dergisi*, 9(1), 212-255.

CHAPTER X

CONTINUITIES AND DISCONTINUITIES OF STATE IDENTITY IN TURKISH FOREIGN POLICY, IN THE 2000'S

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1. Introduction

This paper aims to analyze changes and continuities in the Turkish state identity which has emerged in Turkish foreign policy in the last twenty years. This period corresponds to the AKP's governing years including the systemic transformation in Turkish political life. Defining new directions of Turkish foreign policy, I will focus on the continuing and changing parts of the state identity during the 2000s. The identity formation process of the state includes cooperations and conflicts in certain political and geographical regions. To analyze the main elements of the state identity, I will attempt to determine foreign policy discourse related to these regions and the prominent themes appearing during the Turkish state's interactions with these regions.

The discussion on change has been the most prevalent debate during the 2000s in Turkish politics. It partly stemmed from the ruling party, the AKP's, discourse formulating the idea of change with the binary phrase of "old Turkey" and "new Turkey". In this discourse, the expression of *old* represents the Kemalist nation-state project along with statist economy, military tutelage and a defensive foreign policy. On the contrary, the *new* represents a substantive political authority from the military, a conduct of economy compatible with the free market and a proactive foreign policy with a goal of being a global actor.

The implicit discussion in this sketch is about Westernization. Although AKP governments have never rejected the Western orientation of political system and foreign policy, their commitment to the Western world and ideals have often been a highly questionable subject both at domestic and international levels. Their Islamist roots, alongside certain policies and speeches have triggered this debate on and off. Perceptions of Westernization and Ottoman heritage are the basic dimensions of this dispute between the different layers of the Turkish elites.

Analyzing the Turkish state identity, this paper approaches the debate on Turkish foreign policy's change as a dispute on Turkish modernization. The first part includes a short description of the place of identity conception in international relations theory. The second section examines the basic trends and arguments of the debate on change in Turkish foreign policy. Finally, the third part evaluates the elements of identity discourse related to this debate on change.

2. Conception

In social research and theory, identity implies the relational, subjective and interactive dimensions of human action. (Cornell&Hartmann, 1997) It mainly refers to interactions between the individual and the society, self and the other(s), the agent and the structure. In international relations theory, identity mostly refers to state identity. It is also essential to notice the difference between national identity and state identity. Although the two concepts are interrelated, they don't overlap totally. Considering that point, two conceptual premises would be essential to emphasize in this study. The first one is that identity refers to state identity, reflecting a combination of norms and rules stemming from national and international structures. State identity is a continuum of certain ideas, principals and practices which a state adopts and identifies with. (Çalış, 1999) In this context, national identity is a very important source of a state identity, but not the only one. As Weber (p. 15-26, 1997) points out, national identity may derive from diverse sources such as economic and social structures - the internal power structure, with its impact on the customs and shared political memories, religion, language and finally racial features. He especially underlines the internal link between nation and political power.

Despite this close link between the nation and the state/political power, Gellner (p. 52-69, 1997) emphasizes that they are not the same contingency.

With his words, “the state has certainly emerged without the help of the nation. Some nations have certainly emerged without the blessings of their own state.” Nation is the artefact of men’s convictions, loyalties and solidarities and the recognition of belonging by the people in his definition. As it is known, it is the source of social compliance that a political power needs. Thus, national identity provides the elements of belonging to the political authority as a manifestation of collective approval. Even this brief recollection from the theory denotes the dynamic relation between nation and the state.

Drawing a constructivist framework, Alexander Wendt (1994) claims that the internal and external impacts of this relation operate as different sources of different identities of states. He makes a distinction between the corporate and the social identities of states. The corporate identity’s roots lie in the domestic politics, while social identity is constructed in the process of agents’ relations to each other in the international arena. Thus, actors have usually multiple social identities, while they have one corporate identity. (Bozdağlıoğlu, p.19, 2003)

Understanding the state identity allows us to determine the cooperation and conflict fields in which self and the otherness constituted are intrinsic to that identity and vice versa. In fact, that is the second point to be stressed for this frame. David Campbell analyzes the foreign policy as a specific sort of boundary-producing political performance central to production and reproduction of the identity in whose name it operates. (Campbell p. 69-75, 1992) In this sense, “Foreign policy is concerned with the reproduction of an unstable identity at the level of the state, and the containment of the challenges to that identity.” (Campbell, p. 78, 1992) Searching for the continuities and discontinuities as a part of that instability in Turkish state identity, initially I will briefly describe the discussion on Turkey’s changing foreign policy considering the period of post-Cold War.

3. Debate on the Change of Turkish Foreign Policy in the AKP’s Period

Examining the foreign policy in the AKP era, the first question would be about the exact character of the change. Is it a radical change of international orientation of the state as asserted or only a change of plans, means and ways? (Altunışık&Martin, 2011; Kaya, 2015) Among several arguments emerged in this debate to answer this question, the most common and discussed one has been the assertion of shift of axis. Related to this, some termed the new tendencies in Turkish foreign affairs as Middle Easternization. (Oğuzlu, 2008)

Counter arguments claimed that the new directions of foreign policy must be understood as augmentation and diversification of roles and aims rather than a radical change. It is analyzed as the necessity of being an active regional power and as being compatible with the regionalization trends of multipolar world politics. In this respect, Turkey's multiple roles in diverse regions such as Euro-Asia, the Balkans, the Black Sea, the Mediterranean and the Middle East become a multilateral approach of foreign policy.

To understand the change in foreign policy, it is essential to determine that the AKP era does not have a single and homogeneous foreign policy pattern, rather it has a flexible, changeable foreign policy behavior depending on the needs of diverse regional identities, roles and interests. (Öniş&Yılmaz, 2009) This makes most of the arguments in this debate, even the ones opposite of each other, applicable in certain aspects. Beyond the AKP period, it is also essential to determine a more general trend in Turkish foreign policy related to the historical contexts of the international system.

The stance of Turkish foreign policy in the post-Cold War era differs from that during the Cold War. While it was relatively passive or reactive in the Cold War era, it shifted to activism after the Cold War. Turkish foreign policy in the post-Cold War era is characterized by three distinct phases: an initial wave of foreign policy activism just after the Cold War; a second wave of activism during the AKP's governing period marked by Europeanization and, a third wave reflecting a tension between Europeanization and Euro-Asianism (Öniş&Yılmaz et. al., 2009). According to this analysis, there is a remarkable continuity in terms of foreign policy activism during the AKP era, even though there are some discontinuities or shifts from Europeanization at the same time.

Thus, it may be convenient to briefly specify some themes, explaining the character of the change reflecting continuities and ruptures. I argue that the themes that have emerged in this debate, Europeanization and/or Eurasianism, have very close ties and relations to Turkish state identities including its conflicts. This fact also demonstrates how the state's multiple policy behaviour is attached to its identities asserted both domestically and abroad.

3.1. Europeanization and Euro-Asianism

Europeanization is one of the fitful trends of foreign policy in the AKP era, not only because of Turkish governments' attitudes, but also because of the EU's decisions and internal process. The term Europeanization specifically

corresponds to all efforts of Turkey in the EU accession process as a part of European integration. It includes the organization of domestic affairs and foreign policy in accordance with fulfilment of EU requirements. In a broader sense, Europeanization implies a change of institutions - political, social, and economical - both at a domestic and international level in terms of rules, norms and practices presented by Europe and the European Union.

In respect of continuities and discontinuities in Turkish foreign policy, Europeanization may be determined as the most continuous orientation, even though it is often interrupted by both domestic and international factors. The Europeanization trend is not just the consequence of AKP governments' policies, rather it has been a part of the Westernization tendency of the Turkish Republic since its foundation. The AKP era has reflected a decisive intention of the same trend too, despite its interruptions. In the context of Europeanization, the confirmation of Turkey's candidacy in the European Council meeting in Helsinki in 1999 was a turning point of Turkey-EU negotiations. Following the Helsinki Summit, Turkey has attempted profound reforms to comply with Copenhagen's criteria. The first part of this harmonization process was held by the 1999-2002 coalition government, just before the AKP governments. Thus, the AKP governments decisively pursued the Europeanization process started in the 1990's. During its governing, the period of 2002-2005 has especially been marked by economic growth, a series of major reforms towards democratization, and the conduct of foreign policy. (Öniş&Yılmaz, 2009) Besides multilateral foreign policy activism, Turkey has presented itself as having a global role through emphasizing its historical legacy, geo-strategic position and cultural/religious identities. In fact, an Islamic country's candidacy in EU and its meaning and possible consequences for European enlargement have been a public debate at both domestic and international levels and, both negatively and positively, since the 1990's.

In addition to this, after September 11, 2001 global politics passed to a securitization context from democratization. The Alliance of Civilizations Initiative emerged under the umbrella of the UN in this post-September 11 context, to tackle the polarized global environment through restoring the cultural ties and relations between Muslim and Western societies against prejudice, misperceptions and distrust. It was considered as an effort which would function both at the institutional and civil society levels (Balci&Mis, 2008). Turkey participated in this project undertaking a leading role with

Spanish Prime Minister Jose Zapatero. The Alliance of Civilizations Initiative suggested by Zapatero in 2004 was launched by Zapatero and Turkish Prime Minister of Recep Tayyip Erdogan in 2005. Although the Alliance consists of 146 members, including member states and international organizations, it has gradually lost its primary place for Turkish foreign policy. But, it is still a significant indication reflecting the identity discourse of Turkey within the interaction with international community during the Europeanization period.

As mentioned, Europeanization puts pressure on Turkish governments both at domestic and international levels because of European conditionality. The requirements of the accession process triggers Turkey's certain identity issues closely related to both domestic politics and foreign affairs. For instance, the Armenian issue, the Kurdish dimension of relations with Syria, Iraq and Iran, disagreements on the Cyprus issue are all such cases. Of course, there is a distinction between the identity issues Turkey deals with inside and Turkey's own identity inside and outside. They do not overlap, but still, they are quite interrelated with each other. They concomitantly compose the interaction fields of Turkish national and state identities. Thus, Europeanization, especially in terms of the EU accession dimension, exposes tense interactions in identity issues of Turkey, causing a pressure on its own identity simultaneously.

Analyzing Turkey-EU relations during the AKP era, two sub-phases are identified: The first is between the years of 2002-2005 mentioned above. The second phase is characterized by a retreat to a kind of 'loose Europeanization' or soft Euro-Asianism strategy. In line with this inference, inclining to Eurasia has grown over time in Turkish foreign policy. As Europeanization, the AKP period's foreign policy toward Central Asia represents a continuity with the immediate post-Cold War's orientation of Turkey. Some scholarly works examine this context through the concept of civilizational geopolitics adopted by the AKP's foreign policy discourse, underlining its identity based content. (Bilgin&Bilgiç, 2011) But some others analyze the relations with Central Asia during the AKP era as more pragmatic in comparison to 1990's identity-based and emotional motivations of policy. (Öniş&Yılmaz, 2009)

Indeed, the discourse of connections with Eurasia stemming from the past and cultural commonality took place in the identity context of domestic and international politics of Turkey during both periods. It is called Neo-Ottomanism which introduced to foreign policy advocacy during Turgut Ozal's leadership in the early 1990's to define adaptation of Turkish foreign policy

to the post-Cold war context. It implies the ideal of Turkey's permeation in the old Ottoman geography. We also see that the term is used along with the Middle Easternization and the Islamization of Turkey's identity. The policy makers during the AKP era has been reluctant to embrace this term, but still the governing elite has sometimes taken the term positively. Notwithstanding their attitudes about the term, the discourse of civilizational geopolitics and the elements of the strategic depth doctrine which draws the AKP's foreign policy frame includes remarkable Neo-Ottoman connotations. Of course, there are several dimensions besides cultural explaining the rapprochement with Eurasia regarding the post-Cold war context. For instance, in terms of relations with Russia, the intention to become an 'energy hub' was expressed by the Turkish governments during the 1990s and this projection grew into a reality in a continuity with the latter foreign policies. However, in some foreign policy analysis, the civilizational geopolitics approach is considered as a distinctive character of the AKP era's Eurasia orientation. (Bilgin & Bilgiç et. al., 2011) Likewise, its content composed of geographical and cultural elements present a significant amplifier for identity discourse of Turkey in the region. Thus, the relations with Euroasia in the context of civilizational terms become crucial to examine the identity discourse of the state along with its national roots.

3.2. Shift of Axis and Middle Easternization

Shift of axis has been an argument voiced very often during AKP governments, especially since the Europeanization tended to get looser. This term implies the state's dissociation from certain relations and alliances while it is inclining new orientations in international system. It is used for defining the change in Turkish foreign policy as a shift from its traditional alliances to the relations with Eastern countries. Thus, it is considered as a 'paradigm shift' that mainly reflects a rupture from Westernization which is the foundational direction of Turkish Republic in terms of institutions, norms and values. As mentioned above, the change in Turkish foreign policy did not start with AKP governments. Rather it was one of the consequences of change in the international system towards a multipolar structure which vitalizes regional politics. (Kardaş, 2011) However, the AKP's foreign policy activism towards diverse regions still caused a debate as such, because of the AKP's Islamist roots. It has been a prevalent debate both domestically and internationally.

At the international level, two issues were important to raise a trend of divergence from the Western policies in the Middle East. (Altunışık&Martin, 2011) The first one was related to Turkey-Israel relations and the Israel-Palestine conflict. The second was related to Turkey's improving relations with Iran. The relations with Israel entered in a process of deterioration with the Gaza War in 2009. A panel session in the 2009 World Economic Forum at Davos turned into a serious crisis in relations between the two countries since the Turkish prime minister Erdogan strongly criticized Shimon Peres, the president of Israel, because of the war. The second significant event in terms of the relations with the West, was about a ballot in the UN Security Council. In 2010, the UN Security Council adopted a resolution imposing additional sanctions on Iran because of the nuclear program. Suggesting diplomatic implements instead of sanctions, Turkey and Brazil voted against the resolution. These events represented the divergent attitudes of Turkey from its traditional allies that evoked the view of a shift from the Western world. It would also be essential to stress the Arab Spring as another significant event, following these. Ulusoy (p. 422, 2020) evaluates the Arab Spring as a watershed for overall alliance patterns in the region, shaking the authoritarian regimes of the Middle East and Northern Africa. According to this analysis, Arab uprisings provided an opportunity for Turkey's geopolitical vision and foreign policy activism in the region, at first. However, it positioned Turkey and Israel on the opposite sides too. (Ulusoy et. al., 2020)

Domestically, the shift of axis view reflects the assertion of Turkish foreign policy's dissociation from the traditional Western alliances towards the Arab world. It is understood as moving away from the direction of Westernization which is one of the Republic's constitutive elements. At a domestic level, it is not only a debate on foreign policy, rather it is a critical stance interpreting the new foreign policy dynamics as a move from secularism to Islamism, from the West to the East, from the EU to the Middle East. According to this claim, rapprochement with the Middle East stems from the AKP's Islamist roots and its sympathy with the Arab world. This new tendency in foreign policy is known as Middle Easternization and has been the subject of criticism along with the view of shift of axis.

Middle Easternization is also used for describing Turkish foreign policy's raising interest and activism towards the Middle East during the AKP governments. However, Oğuzlu (2008) argues that "Middle Easternization does not suggest a break with the West but rather the growing salience of the

Middle East in Turkey's relations with the West." This argument projects that the Middle East's determinative role in Turkish foreign policy will gradually increase during the AKP's ruling. Following the same analysis, this orientation toward the Middle East is marked by several factors. They are the rise of Islam in Turkey's identity, threat perceptions from the Middle East and acting as a European country in the Middle East. It is asserted that these factors make Turkey's approach to the West more pragmatic rather than ideational. (Oğuzlu, 2008) Through a similar implication, some other analysts treat the Middle East orientation as an indispensable part of Europeanization too. (Duran, 2008; Özcan, 2008) They understand new trends of foreign policy on the very basis of interests and changing dynamics of the international system which may be interpreted as basically a realist perspective. But even in this frame, identity is a principal variable which triggers the new alliances and disputes. The debate on shift of axis and Middle Easternization have strong connotations of a controversy about what Turkey's identity is or should be.

In the study of foreign policy, most of the analysis with regards to shift of axis and Middle Easternization concludes that even though there is an apparent shift in Turkish foreign policy, it may not be conceptualized as a rupture from the Western orientation. Rather it might be considered as concurrence of continuities and discontinuities. Notwithstanding their differences, as mentioned, diverse stances in this debate demonstrate that the content of paradigm shift argument is very connected to the issue of Turkey's identity both domestically and internationally. That is not only because of the critical assertions on the subject, but also because of the ways AKP governments impose themselves in foreign policy. Hence, while the critical claims about the shift are indicating modern culture, values and norms of the Western world, the ruling elite maintained a discourse based on the cultural, historical and religious identities of Turkey. The following section argues this debate's connections to the identity issue and Turkey's identity discourse in foreign policy.

4. Identity Discourse in Turkish Foreign Policy

In response to these arguments, the AKP governments have defended their political positions in the Middle East and Eurasia as a requirement of being a regional power and, even a global actor. Furthermore, they explain the new preferences of foreign policy through a concept map including items

such as soft power, modal-country, center state, vision-oriented, proactive diplomacy, multi-dimensional foreign policy, and order-building actor. (Yeşiltaş&Balcı, 2011) Regarding these concepts, the discourse may be considered as a reflection of state behaviour totally focused on self-interest and the requirements of new systemic trends. It reminds us of the assumption of structuralist systemic approach proposing that the desire of the unit is to survive and self-help is the ordering principle of action in an anarchic order. (Bozdağlıoğlu, 2003, p.13; Mercer, 1995) However, this foreign policy discourse also includes some crucial concepts such as strategic depth based on the historical and geographical depth, civilizational geopolitics based on civilization and culture perceptions. The basis of Ahmet Davutoğlu's (the foreign minister in AKP governments), geopolitical perspective is an identity discourse composed of Turkish-Islamic-Ottoman elements which is suggested instead of a Western centered geopolitical identity discourse. (Yeşiltaş&Balcı et. al., 2011)

In this section, I will focus on these discursive elements of the AKP era's new foreign policy formulations in comparison with 1990s foreign policy orientations. Doing this allows us to understand how the state identity appeared in foreign policy has been revised and adapted to post-Cold war context. Likewise, these are two sub-phases of the post-Cold war period not only for Turkish foreign policy, but also for the international system because of the terror attacks in September 11, 2001 which represents a shift away from democratization to a securization context.

4.1. Foreign Policy Discourse during the 1990's: Geopolitical Identity and Neo-Ottomanism

As mentioned above, most of the arguments asserted in the debate of foreign policy change in the AKP era implies some orientations rooted in a 1990s post-Cold War context. Rapprochement with the Middle East, Euro-Asianism and Neo-Ottomanism are such arguments. However, there is a critical difference between these periods in terms of relations with the West. Developing relations with Russia and the former Soviet Republics, Central Asia and the Caucasus, Turkey's state behaviour as a regional actor occurred after the Cold War ended. It was a part of the new regionalist direction of the international system responding to the dissolution of bipolar world order.

On the other hand, foreign policy studies notice that Turkey's regional orientation during the 1990's was still determined by the state's constitutive dynamic of Westernization. (Oğuzlu, 2008) It means that all of the relations with non-Western regions including cooperations and agreements are shaped in accordance with Turkey's Western alliances to consolidate relations with them. In the meantime, it is stated that the groundwork of Turkey's current regional policies towards Central Asia and the Middle East - known as "a new sense of neighborhood" or "zero-problem policy" by policy-makers - was first introduced by the governments in the 1990s. (Bilgin&Bilgiç, 2011; Uzgel, 2011)

During the 1990s, the coalition governments especially regarded economic relations as improving trade and investment with the Middle East. Comparing with the 2000s, Turkey's activities in this region, including involvement in northern Iraq, engaging Syria and Iran and aligning itself with Israel, were limited to its immediate neighbors, mostly tied to the Kurdish issue and focused on security. (Altunışık&Martin, 2011)

Another description for the main axis of 1990s' Turkish foreign policy is a triangle composed of Turkey, the United States and Israel containing security and intelligence cooperation. (Öniş&Yılmaz, 2009) For Turkey and Israel, it was mainly reflecting the national security goal against domestic and foreign threat perceptions linked to Syria and Iran. Because of these patterns 1990's foreign policy is evaluated as highly securitized using mostly military means. (Altunışık&Martin et. al., 2011)

Examining 1990s foreign policy discourse, it seems crucial to notice two related frames which introduced foreign policy advocacy in that period. Geopolitical vision and Neo-Ottomanism. These frames were not efficient only in 1990's foreign policy discourse. They also shaped that of the 2000's. Geopolitical discourse has been important for Turkish foreign policy since World War 2. (Bilgin&Bilgiç, 2011) Despite their differences, various worldviews - secular-nationalist or conservative-Islamist - utilized geopolitical notions for their political projections both in domestic and foreign policies. Geopolitics has a distinguishing place to understand the AKP era's foreign policy discourse because of the strategic depth doctrine based on a geopolitical stance encircled with civilizational terms. But it is still not a completely new discourse for Turkish state identity. Especially the Eurasianist trend of the 1990's in domestic and foreign policy has played a significant role in restoring relations with this region.

The coalition government's policies between 1999-2002 were very influential in creating a new geopolitical discourse which represents a shift from a Western-centered geopolitical image to a Eurasian-centered one (Yeşiltaş, 2013). The foreign minister Ismail Cem, tried to conceptualize a geopolitical discourse with reference to Turkey's cultural and geopolitical identity. Cem, distinctively applied the concept of "world state" referring to cultural assets, historical experiences and strategic attributes. (Yeşiltaş, 2013; Bilgin&Bilgiç, 2011) In his conceptual frame, Turkey's geography connecting the East and the West, Asia and Europe is emphasized, but in the meantime suggested to go beyond the bridge metaphor as a world state. (Yeşiltaş et. al., 2013)

Since geopolitical discourse refers to the tenets of cultural and historical heritage, it has been well articulated with the discourse of Ottoman legacy. During the leadership of Turgut Özal (prime minister between 1983 and 1989, president between 1989 and 1993) it was often attributed to Ottoman legacy to resolve internal sociocultural tensions and also to determine foreign policy by nationalist and conservative policymakers. (Çolak, 2006) Özal labeled his approach as Neo-Ottomanism. Neo-Ottomanism implies a Turkish-Islamic political discourse to reformulate the Ottoman's *millet* system (Islamic-Ottoman form of multi-legal entities) in the context of modern liberal multiculturalism. (Çolak et. al., 2006)

Yavuz (1998) defines neo-Ottomanism referring to three points: 1) the rearticulation of Turkish nationalism and increased political and cultural tolerance for diversity as in the Ottoman past, 2) the elimination of economic borders among the Balkan, Caucasian and Middle Eastern countries and, 3) respect for the political borders of neighboring countries. These definitions demonstrates that neo-Ottomanism operated in two ways in Turkish political discourse. First, it is considered as a functional frame to overcome the Turkey's inner ethnic and religious-sectarian identity tensions, working as a kind of new nation project, a revised nationalism discourse which is capable of encompassing the outsiders of the Kemalist nation project in the foundation of the Republic. The policymakers of the 1990's anticipated that Ottoman's diversity intrinsic to imperial legitimacy would provide a stronger articulation for political unity in a hegemonic manner.

Second, neo-Ottomanism presented a convenient frame for Turkish foreign policy to respond to the international system's new tendencies. Remembering that the Ottoman heritage is a kind of collective memory revival

which restructures Turkey's place and role in the neighboring region. During the 1990's the discourse was not a call for either Islamic unity or a new regional design, rather it was an intent to locate itself in the region as an agent in the name of a shared past. Neo-Ottomanism was not an anti-Western or a counter-hegemonic project that challenges the norms and values of the West. (Çolak et. al., 2006) It was an attempt to reconstruct a vernacular common identity in a modern, global context which is compatible with free market and liberal democracy.

Competing perceptions of self and other as a result of change in the composition of Turkish elites caused the neo-Ottoman debate. (Yavuz, 1998) In fact, these different perceptions concerning different worldviews, were inherent in the foundation of the Turkish Republic. The founders as products of the Ottoman modernization, pioneered a Western style modern nation-state's building. The Kemalist project of the nation-state arose from the contradictory elements of Ottoman modernization which continued in many aspects during the Republic period too. One of the distinctive 'other' perceptions in Kemalism was Ottoman itself. (Uzer, p.58, 2011) In a sense Ottoman was the anti-thesis of the Republic. (Çalış, 1999) After the military coup in 1980, liberalization - political and economical - process caused a growing transformation in many spheres of society. In fact, the discursive turn on Ottoman legacy in domestic politics in concern with a change of elite composition may be interpreted as a continuity with that transformation. Thus, the dynamics of the domestic field including the composition of the ruling elite and internal conflicts of national projects transformed the state discourse in foreign policy. This effect continued in 2000's politics too.

4.2. Foreign Policy Discourse during the 2000's: Strategic Depth and Civilizational Geopolitics

The neo-Ottomanist approach along with the emphasis of geo-strategic identity which was introduced to foreign policy discourse under Özal's leadership appeared much more prominently in the AKP era through strategic depth perspective by Ahmet Davutoğlu who was the chief advisor to the prime minister Erdoğan and then the foreign minister. His book published with this title just before his position of government official strongly influenced foreign policy such that the term "strategic depth" is still used to imply the transformation of Turkish foreign policy in the 2000's. According to this doctrine, strategic

depth is composed of historical depth and geographical depth which provide links between the history, culture and geography of a country. Turkey has a great depth in geo-political, geo-cultural and geo-economic aspects due to its historical legacy of the Ottoman Empire which presents today a civilizational identity.

The Ottoman past provides a commonality spring from shared cultural and historical assets beyond the territory in the former Ottoman region. Davutoğlu argues that Kemalist foreign policy strategy did not utilize these advantages of the country. As a strategically located country at the core of the Afro-Eurasian landmass, it has multiple regional identities that cannot be reduced to a single one. (Öniş&Yılmaz, 2009) Regarding this assumption, Turkey is devised as a pivotal country/center state along with a key role in respect of transformation of the international system and world politics. (Yeşiltaş&Balçı, 2011) Thus, the concepts of geo-political and historical depth, civilizational identity, center state and global actor are contextualized in the strategic depth discourse. It was a rearticulation of the Turkish-Islamic synthesis approach which was introduced into Turkish political discourse during Özal's leadership in a new context. (Murinson, 2006) In this new context, geopolitical vision with civilizational terms and neo-Ottomanism may be determined as two distinctive interrelated themes which shape state identity discourse.

In the geopolitical approach, the view before nation-state, the connection between identity and civilization and Turkey's role in the international order arise as the constitutive elements. (Yeşiltaş, 2013) Yeşiltaş argues that geopolitical vision displaced the Kemalist discourse on state identity, while criticizing the nation-state-based modernization project of Kemalism. In this frame, it seems significant that new geopolitical discourse dislocate nation-state and national identity and move from territory to cultural region. Turkish foreign policy is described with reference to transnational interactions, including liberal economy, religion and civilization. This civilizational approach calls for the co-existence of different civilizations, dialog between diverse civilizations and objects Western-centered global orientation. The different element of this discourse from the 1990s frame is that of locating Turkey outside of Western civilization and considering it as the leader of its own civilization, not as part of Western civilization. (Bilgin&Bilgiç, 2011) This strong emphasis on civilizational identity intrinsically functions with so-called neo-Ottoman premises in the strategic depth doctrine.

5. Conclusion

Above, I determine certain foreign policy dynamics of Turkey to argue the distinctive elements of state identity. In fact, there are various dynamics of Turkish foreign policy affected by diverse regional developments in last decade, such as Syrian civil war, Israel-Palestinian conflict or trade agreements between Turkey and Russia including military. Examining all of them would provide a productive source to analyze changing trends and new alliances of Turkish foreign policy. In this paper, I look for the main contentions that shape state identity, probably effective in all these trends and alliances.

Scholarly written articles usually notice the reformulation of nation and nationalism through foreign policy discourse in the neo-Ottomanist approach. (Saraçoğlu&Demirkol, 2015; Çınar, 2018; Öngür, 2015; Çolak 2007; Murinson, 2006) They tackle the new foreign policy orientation as a constitutive component of a new nationalist project constructed by the AKP and a quest for a new conception of the nation. (Saraçoğlu&Demirkol, 2015) They suggest that although the AKP's nationalism shares some common symbols and elements with Kemalist nationalist discourse, these mostly contain different meaning and content, challenging the premises of Kemalist nationalism. "A geographical location with a historical narrative" becomes the tool of constructing a nation in the former Ottoman territories through a shared history. (Saraçoğlu& Demirkol et. al., 2015)

This kind of analysis demonstrates that two layers of political transformation are harnessed in terms of international relations. While the discourse of national identity is changing inside due to domestic parameters of politics, the state identity is being reconstructed through foreign policy discourse and vice versa. Of course, neither of them are completely new, carrying out continuities and ruptures in accordance with Turkish modernization project's internal conflicts. Regarding three discursive frame in Turkish foreign policy, sketched above, strategic depth, civilizational geopolitics and neo-Ottomanism, the state identity emerged in new foreign policy discourse may reflect the elements below:

- 1) a modernist country in terms of political and economical systems, but not Western in civilizational terms,
- 2) instead of a Westist single identity and orientation, having multiple identities springing from multiple geopolitical belongings,

- 3) representative of a remembered and imagined civilization beyond territorial ties,
- 4) a facilitator between diverse civilizational cultures, specifically Christian and Arab worlds
- 5) instead of a bridge between the East and the West, a distanced, global actor with an identity of a predominantly Muslim country governed by a secular, Western style liberal democracy manifested in the Alliance of Civilizations Initiative.

As stated above identity construction is an ongoing, dynamic process which is open to diverse effects from internal and external sources. Therefore, it always includes a potential uncertainty. In the case of Turkey, the identity issue is one of the most contentious fields due to Turkish modernization project's sui generis contradictions. The AKP's coming to governance has unveiled some of the controversial realms of this process. Robins (2007) denominates it as cohabitation in the meaning of two traditions – the Kemalism and post-Islamism of Turkish politics - governing together.

In addition to this vernacular dynamic, the interaction between the changing international system in the post-cold war context and Turkey's changing domestic politics along with foreign policy shape state identity. Thus, each point mentioned above, related to state identity is fluxional and argumentative over time depending on the agents' and system's mutual responses.

References

- Altunışık, M., & Martin, L. (2011). Making Sense of Turkish Foreign Policy in the Middle East Under AKP. *Turkish Studies*, 12 (4), 569-587.
- Bilgin, P., & Bilgiç, A. (2011). Turkey's "New" Foreign Policy toward Eurasia. *Eurasian Geography and Economics*, 52(2), 173-195.
- Bozdağlıoğlu, Yücel (2003). *Turkish Foreign Policy and Turkish Identity*. London, Routledge.
- Cornell, S.& Hartmann, D. (1997), *Ethnicity and Race: Making Identities in a Changing World*. London, Sage.
- Çalış, Şaban (1999). Ulus Devlet ve Kimlik Labiretinde Türk Dış Politikası (Turkish Foreign Policy in the Nation-State and Identity Labyrinth). *Liberal Düşünce*, Kış (Winter), 5-21.

- Çınar, M. (2018). Turkey's Western or Muslim Identity and the AKP's Civilizational Discourse. *Turkish Studies*, 19(2), 176-197.
- Çolak, Y. (2006). Ottomanism vs. Kemalism: Collective Memory and Cultural Pluralism in 1990s Turkey. *Middle Eastern Studies*, 42(4), 587-602.
- Duran, Burhanettin (2008). Türk Dış Politikası Ortadoğululaşılıyor mu? (Is Turkish Foreign Policy Middle-Easternized?). In K. Inat, M. Ataman & B. Duran (Eds.), *Ortadoğu Yıllığı* (Middle East Yearbook) (pp. 385-402). İstanbul, Türkiye: Küre Yayınları.
- Gellner, E. (1997). Nationalism as a product of industrial society. In Guibernau&Rex (Eds.). *The Ethnicity Reader* (pp. 52-69). Cambridge, UK: Polity Press.
- Kardaş, Şaban (2011). Türk Dış Politikasında Eksen Kayması mı? (A Shift of Axis in Turkish Foreign Policy?). *Akademik Ortadoğu*, 5 (2), 19-42.
- Kaya, E.(2015). Dış Politika Değişimi: AKP Dönemi Türk Dış Politikası (Foreign Policy Change: Turkish Foreign Policy in the AKP Era). *KSBD*, 12 (Spring), 71-91.
- Mercer, J. (1995). Anarchy and Identity. *International Organization*, 49(2), Spring, 229-252.
- Murinson, A.(2006). The Strategic Depth Doctrine of Turkish Foreign Policy. *Middle Eastern Studies*, 42(6), 945-964.
- Oğuzlu, T. (2008). Middle Easternization of Turkish Foreign Policy: Does Turkey Dissociate from the West. *Turkish Studies*, 9(1), 3-20.
- Ongur, H. (2015). Identifying Ottomanisms: The Discursive Evolution of Ottoman Pasts in the Turkish Presents. *Middle Eastern Studies*, 51(3), 416-432.
- Öniş, Z., &Yılmaz, S. (2009). Between Europeanization and Euro-Asianism: Foreign Policy Activism in Turkey during the AKP Era. *Turkish Studies*, 10(1), 7-24.
- Robins, P. (2007). Turkish Foreign Policy Since 2002. *International Affairs*, 83(1), 289-304.
- Özcan, M. (2008). *Harmonizing Foreign Policy: Turkey, the EU and the Middle East*. London, Routledge.
- Saraçoğlu, C., &Demirkol, O. (2015). Nationalism and Foreign Policy Discourse in Turkey Under the AKP Rule: Geography, History and National Identity. *British Journal of Middle Eastern Studies*, 42(3), 301-319.

- Ulusoy, K. (2020). Turkey and Israel: Changing Patterns of Alliances in the Eastern Mediterranean. *Journal of Balkan and Near Eastern Studies*, 22(3), 415-430.
- Uzer, Umut (2011). *Identity and Turkish Foreign Policy*. London, London: I.B. Tauris.
- Uzgel, I. (2011, October 02). Türk Dış Politikasının Özerkliği (The Autonomy of Turkish Foreign Policy). *Radikal*.
- Yavuz, H. (1998). Turkish Identity and Foreign Policy in Flux: The Rise of Neo-Ottomanism. *Critique: Journal for Critical Studies of the Middle East*. 7(12), 19-41.
- Yeşiltaş, M. (2013). The Transformation of the Geopolitical Vision of Turkish Foreign Policy, *Turkish Studies*, 14(4), 661-687.
- Yeşiltaş, M., & Balcı, A. (2011). Ak Parti Dönemi Türk Dış Politikası Sözlüğü: Kavramsal Bir Harita (Turkish Foreign Policy Dictionary in AKP Era: A Conceptual Map). *Bilgi*, 23 (Winter), 9-34.
- Weber, M. (1997), What is an ethnic group? In Guibernau & Rex (Eds.). *The Ethnicity Reader* (pp.15-26). Cambridge, UK: Polity Press.
- Wendt, A. (1994). Collective Identity Formation and the International State. *The American Political Science Review*, 88(2), June, 384-396.

