MAKRO İKTİSAT ÇALIŞMALARI

Editör: Doç.Dr. Şahin Karabulut



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"Bu kitapta yer alan bölümlerde kullanılan kaynakların, görüşlerin, bulguların, sonuçların, tablo, şekil, resim ve her türlü içeriğin sorumluluğu yazar veya yazarlarına ait olup ulusal ve uluslararası telif haklarına konu olabilecek mali ve hukuki sorumluluk da yazarlara aittir."

THE EFFECTIVENESS OF MONETARY POLICIES IN COMBATING INFLATION CAUSED BY SUPPLY SHOCKS

Erkan TOKUCU¹ Ömer Nasuhi ŞAHİN²

1. INTRODUCTION

After the Covid-19 Pandemic and the Ukraine-Russia War, the world economy is experiencing the supply shocks of the 1970s again. The supply shocks have caused many macroeconomic problems both in the world economy as a whole and on a country-by-country basis; many problems such as inflation, increase in unemployment rates, increase in output gap, decrease in world trade volume, job losses and budget deficits due to the expenditures made by governments to prevent output deficits have come to the agenda. These problems have triggered the measures taken by policy makers against these problems on the one hand and academic debates on the other. In this context, issues such as the effectiveness of monetary and fiscal policies implemented to eliminate the problems, the secondary effects that these policies create or may create, the new instruments that can be developed against these secondary effects, and the demand-side and supply-side policies constitute the main topics of discussion. One of the main areas of debate is the effectiveness of monetary policies based on the Taylor Rule

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against supply-side shocks and whether these policy implementations are rational or not. The aim of this study is to explain why the monetary policy preference based on the Taylor Rule to combat rising inflation in the period of supply-side shocks is not rational. For this purpose, firstly, information about the inflationary trends caused by the Covid-19 pandemic and the war between Ukraine and Russia will be given. Then, some explanations will be made on the channels through which supply shocks feed inflationary tendencies at the global level. Finally, after giving brief information about the Taylor Rule-based monetary policies implemented against the inflationary tendencies, information will be given about why these monetary policy implementations are not sufficient and what disruptions they will cause.

2. INFLATIONARY TENDENCIES DUE TO THE COVID-19 PANDEMIC AND THE WAR BETWEEN UKRAINE AND RUSSIA

Due to the COVID-19 pandemic and the subsequent Russian-Ukrainian war, global bottlenecks in supply chains and rapid increases in food and energy prices led to a global increase in inflation. The human losses in the Covid-19 pandemic and the social distancing rules imposed negatively affected the working days and hours in many countries and caused factories to close in certain periods (Lofaro, 2020: 99). China, an important supplier for the world economy, closed some of its factories due to the pandemic, problems in maritime transport, crises in microchips and similar products caused food, energy, and intermediate goods prices to increase rapidly in many countries and multiple supply-side shocks (Storm, 2022; Bandera et al., 2023; Fornaro & Wolf, 2023). The increase in energy, food, and microchip prices, which are important for many countries, in

international markets led to an increase in inflation in many countries (Nikiforos and Grothe, 2023: 2) and led to reverse supply shocks in many countries.

Global Price of Industrial Materials Global Price of Energy Global Price of Food Deep Sea Fright Transportaion

Figure 1. The Post-Pandemic Global Price Shock: Indices for Selected Categories of Goods and Services

Source: Nikiforos and Grothe, 2023: 6. In all Graphs, the year 2022 is taken as 100.

The Figure 2 clearly shows the channels through which price increases caused by the Covid-19 pandemic and the Russian-Ukrainian War due to the bottlenecks in global supply chains caused by the Russian-Ukrainian War and the increases in global energy prices affect inflation in many countries (Storm, 2022: 14). The extent of inflation experienced in countries will differ according to the structural characteristics of each country. For example, countries that are dependent on foreign energy and non-energy intermediate goods and have a current account deficit problem will be more adversely affected by this process than developed countries.

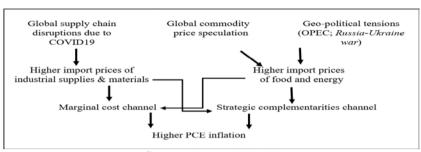


Figure 2. Global Supply Side Causes of Inflation

Source: Storm, 2022: 14

Exogenous developments lead to an increase in inflation in national economies through several channels. Distortions in the global supply chain, price speculation in commodity prices in global markets and geo-political tensions have increased food prices, energy prices and prices of industrial products due to intermediate goods used in industry.

While the global increases in the prices of energy, food and intermediate goods have contributed to the recent significant increase in prices at the global level, it is argued that the recent increase in profits has also contributed to inflation; this increase in inflation due to profits is referred to as profit-driven inflation or seller inflation, and the main reason for this increase in inflation is that sellers increase their mark-up rates (Hein, 2023: 2).

According to Weber & Wasner (2023: 186-187, 193), there are three main stages leading to profit inflation:

- ➤ Due to the peculiar dynamics of the commodity market and the bottlenecks caused by the Covid-19 pandemic and the Ukraine-Russia war, rising prices in systemically important sectors led to windfall profits and further price increases.
- ➤ In order to protect against the adverse effects of rising costs on profit margins, sub- sectors spread price

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- pressures or, in cases where temporary monopolies were formed due to bottlenecks, price pressures increased.
- ➤ In order to compensate for the erosion of labour real wages caused by rising prices, the labour sector responded by raising wages in conflict with capital.

In fact, these three stages reveal that inflation is also a social phenomenon and that conflicts between labour and capital, as well as conflicts between firms themselves, feed inflation. As a matter of fact, there is a new definition that inflation is a social phenomenon and that conflicts between economic units also feed inflation, which is expressed as conflict inflation (Hein, 2023: 2-3).

Conflict inflation refers to the effects of the inflationary process stemming from reverse supply shocks on income distribution. The recent adverse supply shocks have caused firms in the energy sector, on the one hand, and goodsproducing firms, on the other hand, to significantly increase their mark-up rates and increase their profits significantly due to the shift in demand from services to goods in the goods and services market. Again, due to the shortages in some intermediate goods such as microchips, firms producing these goods also increased their profitability by increasing their mark-up rates. Therefore, it can be said that the recent adverse supply shocks initiated an inflationary process that distorts the income distribution in favor of producers but against workers (Wildauer et al., 2023: 1).

3. WHY IS IT NOT SUFFICIENT AND RATIONAL TO REACT TO SUPPLY SHOCKS ONLY WITH MONETARY POLICIES?

Supply shock in macroeconomic terms (Gordon, 1984:

38):

"... is any event which creates an autonomous shift in the aggregate supply curve relating the economywide price level to the level of output or utilization. the consequences of supply shocks for output and inflation depend fundamentally on the aggregate demand policies that are pursued in their wake."

is defined as "supply shocks". As can be seen from the definition, supply shocks lead to an autonomous shift in the aggregate supply line and the impact of the supply shock on aggregate output and inflation depends on the demand policies to be followed after the supply shock; the monetary and fiscal policies to be followed by policymakers after supply shocks will determine the effects of supply shocks on inflation and output.

Whether or not to respond to supply shocks with monetary policy depends on variables such as the degree of the shock, the structural state of the economy affected by the shock, whether the economy is an importer of energy and other imports, and so on. However, it should be noted that the first and best policy response to supply shocks to ensure economic stability is not to use monetary policy instruments. Although the nature and severity of the supply shock determines the optimal policy response to the shock, responding to supply shocks with structural and supply-side policies is the policy that should be implemented in the first place because monetary policies are more appropriate for aggregate demand management than aggregate supply (Bandera et al., 2023: 1).

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The debate on the optimal monetary policy response to supply shocks is not new. The monetary policy response to supply shocks in the 1970s was also subject to disagreement among economists and policy makers; some economists argued that the main cause of inflation was the lagged effects of monetary expansion in previous years and proposed monetarist monetary policies as a solution. According to this view, reducing the rate of monetary growth will reduce inflation in the process. In contrast to this view, some other economists argued that the group of economists ignored the macroeconomic externalities of the decrease in the supply of goods due to stagflation. The second group of economists, on the other hand, proposed a policy that would increase nominal income, which they argued would reduce costs even if it did not eliminate the contractionary effects of the supply shock on aggregate production (Gordon, 1975: 183-184). Again, in the late 1970s, there were similar debates on the effects of the contractionary policies implemented by FED chairman Volcker against the high inflation in the United States. Discussions on what the main responsibilities, goals and objectives of central banks should be and how the monetary policy implementation process should be carried out, and whether the Keynesian model, which was the prevailing theoretical model of the period, and demand-side macroeconomic policies were sufficient or not were the main topics of discussions in the early 1980s (Tobin, 1983: 506; Shapiro, 1987: 1).

Similar debates continue in the aftermath of the recent Covid-19 and Russia-Ukraine supply shocks. The debates are not only about the policies to be implemented against inflation, but also about the source of inflation. In this context, economists intensively discuss whether the slope of the Phillips curve is steepening or not, and whether externalities in aggregate supply and aggregate demand are sufficient to explain inflation (Harding

et al., 2023: 101-102). Stiglitz and Regmi (2022: 8) argue that it is quite difficult to clearly identify the causes of inflation after Covid 19 and the Ukraine-Russia War. The fact that there has never been a worldwide lockdown due to an epidemic like Covid 19 and a simultaneous increase in food and energy prices caused by the war makes it very difficult to determine the root cause of inflation and, accordingly, to decide on the optimal policies to be implemented. Stiglitz and Regmi (2022: 8) continue their views on the cause of inflation and the policy to be implemented against it as follows:

"If demand is the cause, as claimed, then the answer is to restrain demand, which is what conventional monetary policy has been good at, despite long and variable lags. But if, as we believe, there are more microeconomic causes at the root of inflation (specific supply shortages, demand shifts and firms with market power taking advantage of market turbulence to push prices higher) then simply raising interest rates may not work. Solving the inflation problem may even worsen the situation while triggering an economic downturn. The answer to the rhetorical question of whether raising interest rates will increase the supply of food or oil is obvious".

Therefore, central banks' response to an inflation caused by the pandemic and war by following the Taylor Rule and increasing interest rates with demand-side policies may not solve the problem and may even aggravate it.

4. A BRIEF LOOK AT THE TAYLOR RULE

Today, many central banks conduct monetary policies under the Inflation Targeting Strategy based on a rule called the Taylor Rule. In the following explanations, it will be appropriate to give a very brief information about the Taylor Rule, which will include explanations on monetary policies conducted in accordance with the Taylor Rule. In its simplest form, the Taylor Rule is shown as follows (Taylor, 1993: 202):

$$r = p + .5y + .5(p - 2) + 2$$

r = policy interest rate set by the Central Bank

p = inflation rate in the previous four quarters

y= percentage deviation of real GDP from the target

The rule simply tells central banks to raise the policy interest rate if actual inflation exceeds the targeted inflation rate or if actual output exceeds potential output, i.e. if the economy expands. Conversely, if actual inflation falls below the targeted inflation rate or actual output falls below potential output, i.e. the economy contracts, the central bank should lower the policy interest rate. This policy recommendation is mostly suitable for managing aggregate demand; when there are unexpected developments in aggregate supply, i.e. positive or negative supply shocks, the effectiveness of the interest rate policy of the central bank in accordance with this rule will be considerably reduced and may even lead to results that will significantly impair the real production segment of the economy.

According to Vera (2014: 527), the Taylor Rule is based on the classical dichotomy that divides the economy into real and nominal sectors. The nominal side of the economy can be managed by monetary policies, whereas the real side is managed by supply-side policies. Changes in the monetary sector do not affect changes in the real sector. To put it a little more clearly,

aggregate demand in the economy is managed by monetary policies, while aggregate supply is managed by supply-side policies. The main objective of interest rate policies conducted within the framework of the Taylor Rule is to manage the demand side of the economy.

5. SHORTCOMINGS OF MONETARY POLICY BASED ON THE TAYLOR RULE AGAINST SUPPLY SHOCKS

5.1. Deficiencies Arising from the Taylor Rule Itself

There are various criticisms of the monetary policies conducted within the framework of the Taylor Rule in the event of supply shocks, which will be explained below. However, before this, there is a problem inherent in the rule itself. This problem is related to the measurement of the output gap, which refers to the gap between potential output and actual output. Trehan (1999) argues that relying on measures such as the output gap to conduct monetary policy may lead to erroneous results. For example, the difference between potential output and actual output may be due to productivity gains in the economy. The reason for this productivity increase may be the increased use of existing computers in response to a rapid increase in aggregate demand in the short run. Since the use of computers will decrease when the increase in aggregate demand stops, the increase in productivity due to the use of existing computers will be temporary. Alternatively, the increase in productivity may be realized permanently because of the increased use of new machinery and equipment in production processes. This uncertainty regarding productivity growth will also lead to an uncertainty in the measurement of the output gap. Uncertainty in the measurement of the output gap will lead to uncertainty in the Taylor Rule, which is based on the

measurement of the output gap, and in the monetary policies to be implemented based on this rule; mismeasurement of the output gap may lead to unnecessary tightening or expansion of the economy through monetary policies.

5.2. The Absence of a Lasting Decline in Inflation

According to the current mainstream view, when an economy experiences a negative supply shock, both aggregate demand and aggregate supply decrease. However, since the decrease in aggregate demand is smaller than the decrease in aggregate supply, an increase in the general level of prices occurs. Monetary policy can eliminate the effect of a negative supply shock on inflation by reducing aggregate demand. It is also assumed that once the supply shock disappears, the economy will return to its initial level and recover rapidly. However, as underlined by Fornaro and Wolf (2023), empirical evidence suggests that this approach is not very accurate and a prolonged decline in output is likely. In short, it would be overly optimistic to assume that supply shocks are temporary and that monetary policies will be sufficient to counteract their effects on inflation.

It is necessary to consider the arguments of Fornaro and Wolf (2023: 19) that negative supply shocks can cause permanent damage to the economy and further reduce the productive capacity of the economy and raise inflation even in the medium term:

"... negative supply shocks can leave lasting scars on the economy, and this effect can radically alter the macroeconomic consequences of supply disruptions relative to the conventional view. Our view is that negative supply shocks - even if purely temporary - will cause firms to reduce investment and thus destroy the future productive capacity of

the economy. The corresponding fall in wealth depresses consumers' demand so much that the natural rate of interest may fall in response to the supply disruption. Moreover, hysteria effects can reinforce and prolong the rise in inflation triggered by negative supply shocks, as these effects can lead to a prolonged decline in firms' productivity. Monetary tightening can backfire in the medium term by causing a fall in productivity and an increase in inflation. Successful disinflation may therefore require a policy mix of monetary tightening and fiscal interventions aimed at supporting business investment and the productive capacity of the economy".

As can be understood from the quotation, contractionary monetary policies to be implemented against inflation caused by supply shocks should take into account the effects of contractionary monetary policies on the productive capacity of the economy and fiscal policies should also be taken into account. Otherwise, the declining productive capacity of the economy due to high interest rates may cause inflation to rise again in the medium and long run. In addition, negative supply shocks will lead to a decrease in firms' investments, a decrease in the firm's market share and profitability due to decreased investments, and an increase in firms' funding costs. Moreover, negative supply shocks will lead to a decline in firms' investment and productivity, which will indirectly contribute to an increase in their marginal costs and thus to an increase in inflation. A contractionary monetary policy response to a negative supply shock, which makes itself felt through its contractionary effects and increases inflation, may increase the size of the contraction in the economy and may further reduce productivity and potential output. Therefore, responding to negative supply shocks with contractionary monetary policies may reduce inflation in the short run, but may cause inflation to rise again in the medium term due to the decrease in investments and productivity (Fornaro & Wolf, 2023: 20). A similar warning is made by Stiglitz and Regmi (2022: 9); in a situation where the main cause of inflation is supply shocks, the implementation of tightening monetary policies can lead to very costly losses for the economy. Instead of tightening monetary policies, it would be much less costly to turn directly to sectors and implement policies that eliminate bottlenecks in sectors or reduce costs.

5.3. Uncertainty about the Optimal Monetary Policy

Bandera et al. (2023) also criticize the monetary policies to be implemented to reduce inflation during periods of supply shocks. There is a significant uncertainty about the optimal monetary policy in times of supply shocks. As Bandera et al. (2023: 6-10) underline, in an environment where the optimal monetary policy to be implemented even against a temporary or single supply shock is uncertain, the uncertainty about the optimal monetary policy to be implemented against multiple and successive negative supply shocks will be higher.

5.4. Distortive Effects of Monetary Policies on Income Distribution

Another criticism of the monetary policies implemented in the fight against inflation caused by supply shocks is that the effects of the monetary policy on income distribution are ignored. Monetary policy responses to negative supply shocks due to the Covid- 19 pandemic and the Ukraine-Russia War within the framework of the Taylor Rule, where the short-term policy interest rate is the main monetary policy instrument, will worsen income distribution. Using policy interest rates as an important tool during the initial stages of the Covid-19 pandemic and the subsequent inflation period will, on the one hand, cause

speculative movements in financial markets and, on the other hand, distort the distribution of income in favor of the rentier sector and to the detriment of wage and salary earners.

Another important criticism of monetary policies that use short-term policy interest rates as a policy instrument to control inflation after negative supply shocks is the negative effects of this policy on income distribution. Post Keynesians and members of the Sraffian School argue that money is not neutral and that monetary policies will have effects not only on personal income distribution but also on functional income distribution (Lofaro et al., 2023: 1) and criticize interest rate policies based on the Taylor Rule from a different perspective. According to post Keynesian economists, the effects of monetary policies on income distribution are due to the interest rate policies implemented. Within the framework of the Inflation Targeting Strategy, it is accepted that the short-term policy interest rate determined according to the deviations in inflation and output is effective in controlling inflation. However, raising the interest rate to combat the high inflation experienced in many countries due to the recent supply shocks will not only lead to a decrease in productive investments in the economy, but will also provide an income transfer from those who do not earn interest income (wage earners and profit income earners) to those who earn interest income (rentier sector) (Akalın & Tokucu, 2007: 42; Svensson, 2003: 1).

5.5. Causing A Large Trade-Off Between Output and Inflation Rate

Monetary policy responses to negative supply shocks within the framework of the Taylor Rule face a dilemma: A contractionary monetary policy to be implemented for eliminating the impact of a negative supply shock on inflation will lead to a further decline in national income and a further

increase in unemployment. On the other hand, an expansionary monetary policy to eliminate the negative effects of a negative supply shock on national income and unemployment will lead to a further increase in inflation. Supply shocks are different from demand shocks in this respect because they have opposite effects on inflation and output (Ocampo&Joya, 2022: 1).

Harding et al. (2023: 102) argue that the central bank will face a major trade-off between inflation and output stability at high inflation rates while fighting cost-push inflation. The main reason for this

"This is because when actual inflation exceeds targeted inflation, cost-side shocks are transmitted to inflation more strongly than monetary policy shocks A larger transmission to inflation means that the central bank endogenously tightens the policy rate twice as much through policy. As a result of a tighter policy stance and higher inflation, the output gap is reduced twice as much. If the central bank wants to stabilize the output gap it will face a higher inflation, if it prefers to reduce inflation then it will face a larger output gap*".

These results clearly illustrate the difficulties that a central bank would face if it wanted to respond to supply shocks within the framework of the Taylor Rule.

5.6. Ignoring the Structural Problems Specific to Countries

Within the framework of the inflation targeting strategy, many countries, especially developing countries, ignore the structural problems that may lead to inflation and arise from the realities of the country itself while fighting inflation. If a country's production and exports are dependent on imports of

^{*} Harding et al. conduct these analyses within the framework of a model they developed. For more information on the model and the results obtained based on the model, please refer to the study by Harding et al. (2023)

intermediate goods and at the same time it has a current account deficit problem and consequently an external resource problem, the interest rate policy applied within the framework of the Taylor Rule in the fight against inflation will have a very difficult chance of reducing inflation. Excessive dependence on imports of intermediate goods and the current account deficit problem led to the need for external financing and make the economy vulnerable to exchange rate shocks. Especially in an economy with a high exchange rate-to- inflation pass-through, increases in the exchange rate level may significantly reduce the effectiveness of monetary policies that try to reduce inflation through interest rate policy. Unexpected exchange rate movements due to economic and political reasons may even cause a crisis in the country. Due to such reasons, it is very difficult to eliminate inflationary pressures permanently with interest rate policies (Tokucu, 2014). For this purpose, structural measures should be taken and, in this context, micro and macro policies that reduce the dependence on imports of intermediate goods should be implemented. In an economy where inflationary pressures are caused by structural reasons, intervening in inflation only with interest rate policies will not solve the problem and may exacerbate it.

6. CONCLUSIONS AND RECOMMENDATIONS

The Covid-19 pandemic and the war between Ukraine and Russia, which the world economy has faced in recent years, have led to many macroeconomic problems such as inflation, unemployment, decline in production and growth rates, disruption of the functioning of world trade networks and disruptions in input supply. While these problems have led to research on the effectiveness of the policies implemented to combat macroeconomic imbalances caused by these problems,

they have also accelerated the search for new macroeconomic models. In this context, monetary policies based on the Taylor Rule in the fight against inflation caused by the pandemic and war are one of the leading issues discussed.

Since 1990, monetary policies implemented by central banks in many countries of the world have been based on the Taylor Rule developed by John Taylor. In short, this rule, which gives the direction and amount of the interest rate policy to be implemented by the central bank depending on the deviation in inflation and output, has been developed more for the management of the demand side of the economy. When increases and decreases in aggregate demand cause the economy to rise above or fall below the trend growth rate, central banks can increase or decrease the policy interest rate to bring the real growth rate of the economy close to the trend growth rate. However, this monetary policy, which is based on changing interest rates, unfortunately does not lead to the expected effects in the event of supply-side shocks and leads to many negative consequences. First of all, the Taylor Rule has its own shortcomings as a model, such as the inability to reliably measure the output gap. In addition, the uncertainty about the optimal monetary policy that should be implemented within the framework of the Taylor Rule against supply shocks, the distorting effects of monetary policies implemented against high inflation on income distribution, the trade-off between output and inflation, and the attempts to fight inflation without taking into account the unique structural characteristics of countries by attributing universality to the Taylor Rule are the main criticisms of the recent monetary policies.

First of all, since the cause of inflation is supply-side, it is certain that interest rate policies based on the Taylor Rule developed to control the demand side of the economy will not be sufficient in combating high inflation caused by supply shocks

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and will lead to many macroeconomic imbalances. As underlined by Stiglitz and Regmi (2022: 8), "Solving the inflation problem may worsen the situation even as it triggers an economic downturn. The answer to the rhetorical question of whether raising interest rates will increase the supply of food or oil is obvious". In addition, countries' specific structural problems should also be taken into account in the fight against inflation. Conditions such as whether the country is dependent on foreign energy or not, whether they are self-sufficient in non-energy intermediate goods or not should also be taken into consideration when choosing a method to fight inflation.

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SUSTAINABLE DEVELOPMENT INDICATORS IN TURKEY

Demet BETON KALMAZ¹

1. INTRODUCTION

Sustainable development is the ability to continue development forever or for a given time (Stoddart, 2011). According to the 1987 Brundtland report of the World Commission on Environment and Development, sustainable development is described as the development taking place to meet present needs while enabling future generations to meet their own needs. Thus, sustainable development can be expressed as a balanced economic development, social well-being, and environmental protection. The main aim of achieving sustainable development is to ensure intergenerational equity, thus justice and equality for future generations.

The first worldwide attempt to introduce the sustainable development concept as an attainable global goal, highlighting the difference but also high interdependence of economic, social, and environmental issues is accepted to be the United Nations Conference on Environment and Development (UNCED) held in Rio de Janeiro, Brazil, in 1992. UNCED is also known as the Earth Summit which brought together politicians, nongovernmental organizations (NGOs), scientists, academicians, and representatives of media from 179 countries. In 2015, the 2030 Agenda for Sustainable Development Goals (SDGs) are

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adopted by all the members of United Nations, composed of 17 main topics including 1- No Poverty; 2- Zero Hunger; 3- Good Health and Well-being; 4- Quality Education, 5- Gender Equality; 6- Clean Water and Sanitation; 7- Affordable and Clean Energy; 8- Decent Work and Economic Growth; 9- Industry, Innovation and Infrastructure; 10- Reduced Inequalities; 11- Sustainable Cities and Communities; 12- Responsible Consumption and Production; 13- Climate Action; 14- Life Below Water; 15- Life on Land; 16- Peace, Justice, and Strong Institutions; 17- Partnerships for the Goals. The main purpose of the Agenda is to address how those goals are integrated and can be achieved in a global partnership by both developed and developing countries hand in hand (United Nations, 2024).

Since a clear definition of the concept of sustainable development was established by the Brundtland Report in 1987, there have been several methods developed to measure the sustainable development level of the countries (Hajian & Kashani, 2021). Measuring the sustainable development level of the countries is crucial to be able to design appropriate policies to achieve the desirable sustainable development goals. The measurement techniques vary depending on the variety of the fields such as economic, social, and environmental perspectives, in addition to the viewpoints such as short-, medium- and longterm perspectives. The differences between the measurement techniques also depend on the individual characteristics of the countries taking sustainable development actions. The Human Development Index (HDI) is known to be the pioneering measurement introduced in 1990 by the United Nations Development Programme (UNDP) (UNDP, 1990). HDI focuses on more human-centered quality such as life expectancy at birth, education, and income, considering not only economic aspects but also social outcomes. Another commonly used measurement is the Ecological Footprint developed by the University of British Columbia (Wackernagel & Rees, 2004) in the 1990s, measuring the human-stimulated environmental impacts on Earth. In other words, ecological footprint takes into account the use of natural resources by the human population for consumption and assimilation of related waste (Rees and Wackernagel, 2008). Another recently developed index to measure sustainable development is the Happy Planet Index (HPI) developed by the New Economics Foundation in 2006 (Abdallah & Marks, 2023). HPI takes into account both the human components and ecological components into account simultaneously, which is measured as the function of subjective life satisfaction, life expectancy, and ecological footprint. A more recent attempt to develop an index to measure sustainable development is the Sustainable Development Index (SDI) introduced by Hickel in 2020. SDI is created via the modification of the HDI by the inclusion of ecological realities into the index measurement. In short, the value of SDI is calculated by the division of the development index (which involves the life expectancy index, education index, and income index) into the ecological impact index (which involves material footprint and carbon dioxide (CO₂) emissions) (Hickel, 2020). A country might have a very high level of HDI indicating high development might have a very low score of SDI indicating that the country is still developing. In other words, a country with a high level of HDI accompanied by a low level of SDI, can not be ranked as 'developed' but is considered to be still 'developing' and has to reduce the value of the ecological index to achieve a score of SDI high enough to reach the level of 'developed' country category. Conversely, countries having low levels of both HDI and SDI need to improve the development index significantly.

Turkey is one of the emerging economies located in the Mediterranean Sea and endowed with plentiful resources. According to 2022 records of the World Bank, the gross domestic

product (GDP) of Turkey accounts for 907.1 billion USD, and the per capita GDP is 10,674.50 USD (Worldbank, 2024). Turkey is a member of the Organisation for Economic Cooperation and Development (OECD) since 1961 and a candidate country of the European Union (EU) since 1999. To be able to suggest appropriate policies to enhance sustainable development in Turkey, this study aims to shed light on the sustainable development level, particularly SDI and its main components in Turkey. Furthermore, the differences between Turkey and OECD and EU averages over the years between 1990 and 2019 are highlighted to underline the needed improvements to catch up with EU and OECD averages of the SDI components. Moreover, the changes over the considered years are illustrated for both Turkey, OECD, and EU averages, to provide a brief knowledge about one of the main concerns of the UN which is to achieve the SDGs

This book chapter aims to provide brief information about the SDI and its main components in Turkey over the period from 1990 to 2019. The following section which is the second section of the chapter, follows with a focus on SDI in Turkey with a comparison of EU and OECD averages. The third section provides further concentration on the main components of SDI in Turkey, specifying the measurements of each component. Each component of SDI in Turkey is also compared with the EU and OECD averages to offer a better understanding of how far Turkey is from the EU and OECD averages.

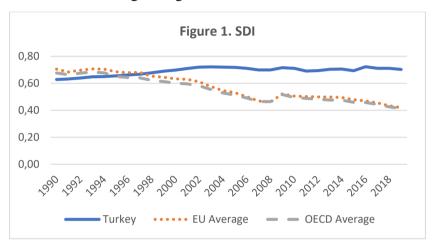
2. SUSTAINABLE DEVELOPMENT OF TURKEY AND COMPARISON WITH EU AND OECD

SDI is a recently developed index to measure the sustainability level of countries considering economic, social, and environmental aspects simultaneously. As the value of the index

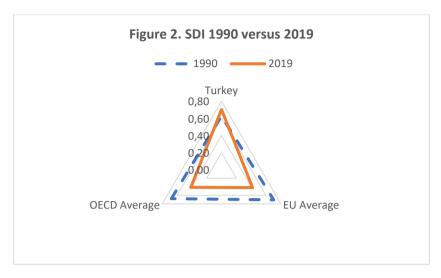
increases the development level of the country improves. Equation (1) below illustrates the SDI formula as;

$$SDI = \frac{Development\ Index}{Ecological\ Impact\ Index} \tag{1}$$

The SDI of the EU average, OECD average, and Turkey are illustrated in Figure 1 given below.



As can be seen from Figure 1., the SDI of Turkey has been increasing throughout 1990-2019. OECD and EU averages show similar trends over the same years. At the beginning of the considered period SDI of Turkey was below both the OECD and EU averages nevertheless at the end of the considered period SDI of Turkey turned out to be significantly higher than both the OECD and EU averages. Figure 2 below shows the SDI progress of Turkey, the EU average, and the OECD average between 1990 and 2019.



The SDI of Turkey experienced a slight improvement over the years from 1990 to 2019, while there has been a shrink of the SDI of the EU and OECD on average. There have been decreases of 40.5 percent and 38.9 percent respectively in the SDI of EU and OECD averages, while the SDI of Turkey improved by 11.94 percent over the entire period of the study.

However, one should have a closer look at the components of SDI since it might not indicate progress in all components.

3. A BRIEF LOOK AT THE SUSTAINABLE DEVELOPMENT INDICATORS

SDI is composed of two main indicators as Development index and the ecological index. This section focuses on the main components of those indexes and their main elements.

3.1. Development Index

The development index of the SDI has three main components first the life expectancy index, second the education index and third the income index. The first element of the development index, the life expectancy index, is measured by giving life expectancy in a range of a maximum value of 85 and a minimum value of 20 (Hickel, 2020). Equation (2) determines the life expectancy index value.

Life Expectancy Index =
$$\frac{LE-20}{85-20}$$
 (2)

where LE stands for the years of life expected at birth.

The life expectancy years of the EU average, OECD average, and Turkey are illustrated in Figure 3 given below for the years throughout 1990 and 2019.

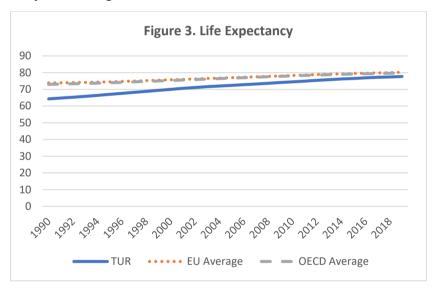
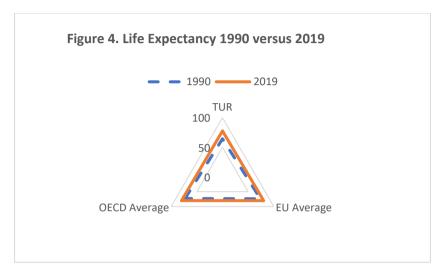


Figure 3 demonstrates that the number of years of life expected after birth has shown significant progress in Turkey over the years from 1990 to 2019. However, the life expectancy of Turkey remains below both the EU and OECD averages for the entire period of the study.

Figure 4 below shows the life expectancy progress of Turkey, the EU average, and the OECD average between 1990 and 2019.



The years of life expected after birth increased from 64.3 to 77.7 in Turkey from 1990 to 2019. As seen in Figure 4 Turkey showed higher progress of the life expectancy than EU and OECD averages over the years considered by the study. There has been 20.8 percent, 8.66 percent, and 9.42 percent improvement in life expectancy in Turkey, the EU, and the OECD respectively. However, years of life expectancy in Turkey remains below EU and OECD averages.

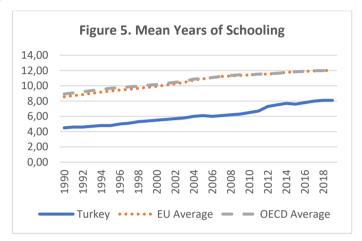
The second element of the development index is the education index which includes two subcategories the mean years of schooling index and the expected years of schooling index. Equation (3) illustrates the education index.

$$Education\ Index = \frac{MYSI + EYSI}{2}$$
 (3)

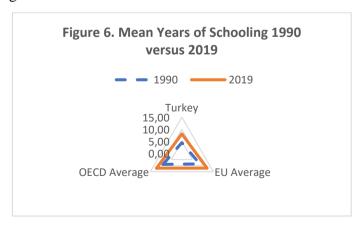
where MYSI stands for the mean years of schooling index and EYSI denotes the expected years of schooling index.

MYSI is measured by dividing mean years of schooling by 15, where 15 stands for the maximum years of schooling projected for 2025, while the minimum value is 0 (Hickel, 2020).

The mean years of schooling of the EU average, OECD average, and Turkey are shown in Figure 5 provided below for the years between 1990 and 2019.



As illustrated by Figure 5 above, mean years of schooling in Turkey is increasing, however, for the entire period of the study mean years of schooling in Turkey remains far below the EU and OECD averages. Figure 6 below shows the mean years of schooling progress of Turkey, the EU average, and the OECD average between 1990 and 2019.



We can conclude that there have been significant improvements in mean years of schooling when the 1990 and 2019 records are compared. Thus the gap between the records of Turkey and EU and OECD averages is closing. Mean years of schooling improved by 80 percent in Turkey, 40.9 percent in the EU, and 35.3 percent in the OECD over the years covered by the study. However, there is still a long way for Turkey to catch the EU and OECD averages.

EYSI is the second component of the education index measured by dividing expected years of schooling by 18, where 18 years is considered to be the maximum years of expected schooling where a master's degree is taken into account (Hickel, 2020).

The expected years of schooling of the EU average, the OECD average, and Turkey are shown in Figure 7.

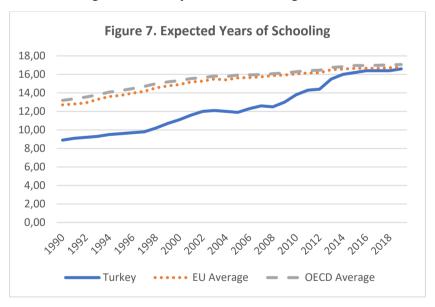
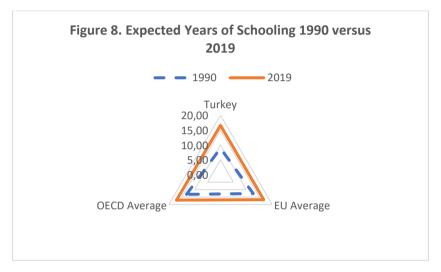


Figure 7 demonstrates that there has been highly significant progress in expected years of schooling in Turkey over the years covered by the study. The expected years of schooling

in Turkey at the beginning of the period was nearly half of the EU and OECD averages, however, at the end of the covered period Turkey almost reached the same records as the EU and the OECD averages. Figure 8 illustrates the expected years of schooling progress in Turkey, the EU average, and the OECD average between 1990 and 2019.



The expected years of schooling increased from 8.90 to 16.60, 12.72 to 16.77, and from 13.19 to 17.06 according to the records of Turkey, EU average, and OECD average respectively, indicating the improvement of the expected years of schooling by 86.5 percent in Turkey, 31.9 percent in EU, and 29.3 percent tin OECD.

The third and last component of the development index is the income index, which is measured as illustrated by Equation (4).

Income Index =
$$\frac{\ln(GNIpc) - \ln(100)}{\ln(20,000) - \ln(100)}$$
 (4)

where GNIpc stands for the gross national product per capita. The maximum value for GNIpc is taken to be \$20,000, while the minimum value is taken as \$100 (Hickel, 2020).

The GNIpc which is an indicator of the income level of the EU average, the OECD average, and Turkey is shown in Figure 9.

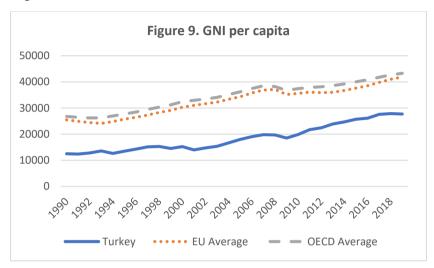
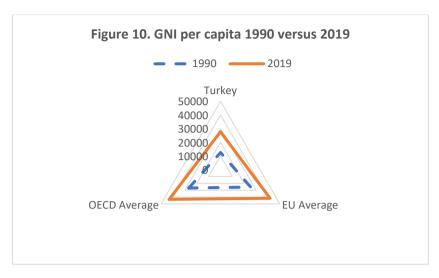


Figure 9 shows that even though there has been progress of GNI per capita in Turkey over the years covered by the study, still there exists a considerably significant gap between Turkey's GNI per capita and the EU and OECD averages. The GNI per capita of Turkey remains far below the EU and the OECD averages. One can easily observe that even though there has been an increase in GNI per capita, there is not enough progress in Turkey's GNI per capita to decrease the gap with the EU and OECD averages.

Figure 10 given below shows the GNI per capita progress of Turkey, the EU average, and the OECD average between 1990 and 2019.



The GNI per capita in Turkey increased from \$12,514 to \$27,701 over the years from 1990 to 2019. Even though there has been a 121.4 percent increase in the GNI per capita of Turkey, while the EU average and OECD average increased by 64.3 and 61.4 percent respectively, the per capita GNI of Turkey remains almost at half of the EU and OECD averages.

3.2. Ecological Impact Index

The ecological Impact Index of the SDI is the second main component, which is calculated as follows;

Ecological Impact Index =
$$1 + \frac{e^{AO} - e^1}{e^4 - e^1}$$
 (5)

AO in Equation (5) represents the average overshoot calculated taking the material footprint (MF) and the carbon dioxide emissions (CO₂) under consideration, as follows;

$$AO = \sqrt[2]{\left[\frac{MF}{Boundary} \ge 1\right] * \left[\frac{CO_2}{Boundary} \ge 1\right]}$$
 (6)

Boundary, the MF and CO₂ are divided in Equation (6) determines the per capita planetary boundary that varies according to the population size for each year (Hickel, 2020). In

short, the ecological impact component of the SDI is calculated through the use of two indicators, one being the material footprint and the other being the carbon dioxide emissions.

The MF of the EU average, OECD average, and Turkey are illustrated in Figure 11 given below for the years covered in this study.

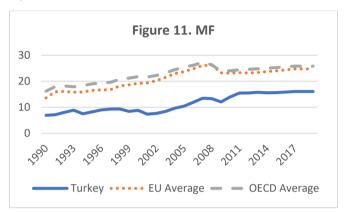
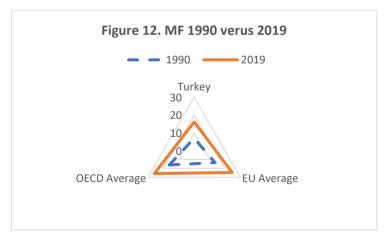


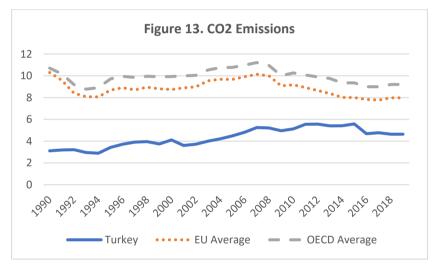
Figure 11 shows that the material footprint of Turkey is far below the average levels of both the EU and the OECD. However, it has to be mentioned that there has been an increase in MF in Turkey since 1990.

Figure 12 below illustrates the MF changes from 1990 to 2019 in Turkey, the EU average, and the OECD average.



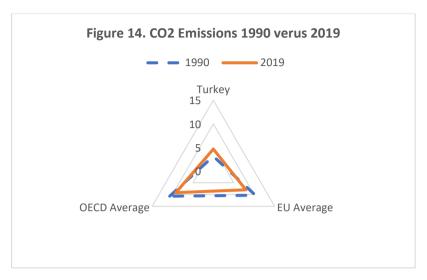
The MF in Turkey increased from 6.91 to 16.07 over the years from 1990 to 2019, while increased from 16.19 to 25.84 and from 13.60 to 24.74 in OECD and EU respectively. The increase of MF from 1990 to 2019 in Turkey is 132.56 percent, while MF increased by 52.59 percent and 81.87 percent in the OECD and EU respectively. Comparing, the percentage changes in MF in Turkey, the EU, and OECD, it is evident that the fastest increase is occurring in Turkey.

The records for 1990 and 2019 of CO₂ in Turkey, EU, and OECD at averages are illustrated in Figure 13 as follows;



It is clear from Figure 13 that CO₂ in the EU and OECD on average has declined, while in Turkey there has been an increase over the years from 1990 to 2019.

Figure 14 shows the change of the CO₂ patterns providing a more detailed illustration from 1990 to 2019.



As it is more clear from Figure 14, there has been progress in declining the CO₂ emissions in both the EU and OECD, however, CO₂ emissions in Turkey have increased, indicating worsening of the environmental quality. CO₂ emissions in the EU declined by 22.58 percent and in OECD by 14 percent, however in Turkey increased by 49.2 percent over the period from 1990 to 2019.

It should be noted that not only MF has increased in Turkey but also there has been a significant increase in CO₂ emissions which verifies an increase in environmental degradation.

4. CONCLUSION

This study focuses on the SDI and its main components in Turkey and compares the records of Turkey with EU and OECD averages over the period from 1990 to 2019. The main aim is to picture the main areas that Turkey has to progress to be able to increase sustainability within the country. Even though the SDI of Turkey is ranked considerably high, focusing on each component illustrates that there is still a long way for Turkey to

catch up with the EU and OECD averages regarding development indicators. Furthermore, even though the environmental indicators of Turkey are lower than the EU and OECD averages, the values of both the CO₂ emissions and the material footprint show increasing trends in Turkey, while the situation is the reverse in the EU and OECD. If Turkey does not take action to control the increase in environmental indicators, while boosting the development index, the decline of SDI will be inevitable.

In addition to the increasing environmental problems arising from the use of non-renewable resources, Turkey is an energy-dependent country, where 81.3 percent of the primary energy supply consists of nonrenewable energy sources, while 74 percent of the non-renewable energy sources are imported (Statista, 2024).

Turkey is endowed with remarkable environmental and ecological diversity. However, rapid urbanization, industrialization, and population growth foster environmental pressures. The use of renewable energy sources should be promoted in Turkey since her geographical location allows the opportunity of the use of most of the renewable energy sources, such as hydropower, geothermal, solar, wind, etc. (Dumrul, et al., 2024). Thus, the environmental index can be controlled while allowing for improvements in development indicators, which in turn improves the SDI.

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MONETARY POLICY EXPECTATIONS AND NEWS¹

Burçin KISACIKOĞLU²

1. INTRODUCTION

Monetary policy expectations are at the core of modern macroeconomic analysis. In economies where fiscal policy is passive and monetary policy is active (Leeper, 1991) managing business cycle fluctuations is the duty of the central bank. But the policy makers can only be effective to the extent of their influence private sector behavior. consumer and In modern macroeconomic models, policy decisions affect optimal decisions of consumers and price setters and since these agents are forwardlooking, they base their current choices on the expected monetary policy actions going forward. Therefore, it is important for academics and policy makers to understand how expectations are formed and how they respond to macroeconomic developments.

In this paper we study the effects of macroeconomic shocks on monetary policy expectations. To identify the causal effects of the shocks we follow the standard event study approach and use market-based measures of monetary policy expectations followed by macroeconomic surprises as proxy for shocks. Note that the word "proxy" is a deliberate choice. A macroeconomic surprise is defined as the difference between a data release and its corresponding survey expectation. If agents observe the state of the economy perfectly, then shocks and surprises are the same by

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construction. However, more realistically, if agents have imperfect information about the state the surprise would reflect revisions to the estimate of the state and the unobserved macro shock (Gürkaynak et al., 2021). Using market-based measures for expectations and shocks allows us to clearly identify the causal impact of shocks on the expectations without resorting to any recursiveness assumption like the one followed in the VAR literature (see Christiano et. al., 1999).

We show that monetary policy expectations are revised upwards if the market participants consider a certain type of surprise as a signal for stronger demand conditions in the future. We show that monetary policy expectations respond more to core CPI, a measure of supply side index, and capacity utilization where surprises in these variables make agents revise their expectations upward. Next, we decompose monetary policy expectations into expected real rates and expectation using inflation swaps. We show that surprises that signal economic weakness implies lower expected rates and higher inflation expectations in the same horizon.

Our contribution is twofold. First, we use overnight index swaps (OIS) as measures of monetary policy expectations. OIS has been widely used in the literature as a measure of expectations but has not been studied in terms of their response to news and their dynamics as measures of policy expectations. Second, we decompose expectations into their components and further investigate the reasons for revisions to expectations.

The paper is structured as follows. Section 2 describes data and methodology used in the analysis, section 3 provides results, and section 4 concludes.

2. DATA AND METHODOLOGY

In the following subsections we provide details of the methodology and data used in the analysis.

2.1. Methodology

To examine the effects of news on monetary policy expectations we need to have measures of policy expectations and the news. There are different ways of inferring agents' perceptions about monetary policy. One way is using surveys, another way is to use market-based measures. The former is about directly asking agents about their policy expectations for various horizons. Even though this is an important source of information, there are caveats to this methodology. First, they are infrequent. Higher frequency for surveys is monthly at best. From the moment that a participant responds to a question until it gets published, other macro news may make the information in the surveys stale. Another caveat is that it is not clear if expectations reported in the surveys are a result of actual belief or strategic interaction. This comes about especially if the respondent does not have a "skin in the game." Gemmi and Valchev (2023) have shown that there are such concerns for Survey of Professional Forecasters. Moreover, it is possible that survey participants report numbers that are not consistent with their actual forecasts, which induces measurement errors.

Due to the shortcomings of survey forecasts, academics and policy makers have started using market-based measures of policy expectations as a remedy. Essentially, market-based measures are asset prices that have their payoffs tied to overnight interest rates. Since overnight interest rates are mostly influenced by policy, forward-looking nature of these asset prices imply expectations of future policy. They do not suffer from the problems that surveys have. First, the information is not stale since these prices can be monitored in short time intervals, mostly

intraday. Second, these are market prices that reflect actual trades and are observed with no measurement error whatsoever.

There are different assets that are used in the literature to reliably measure policy expectations in the US such as fed funds futures (Kuttner 2001, Gürkaynak et al. 2005, Piazzesi and Swanson 2008), Eurodollar futures (Bauer et al. 2022, 2024), and overnight index swaps (Gürkaynak et al., 2022). Note that all these assets have their payoffs tied to the overnight policy rate. Fed funds futures are bets on the average effective fed funds rate that will prevail in a particular month, Eurodollar futures are expectations regarding dollar deposit rates in Europe, and overnight index swaps are bets on the cumulative overnight effective fed funds rate over a specific period of time. In this paper we are going to use overnight index swaps as measures of policy expectations.

Once we set a measure for monetary policy expectations, the next step is to measure revisions in expectations to shocks. To do so, we will use the event study methodology that is widely used in literature (Fleming and Remolona, 1997; Andersen et al., 2007; Gürkaynak and Wright, 2013; Gürkaynak, Kısacıkoğlu and Wright, 2020). Event studies relate changes in asset prices around data releases to the surprises that measuring news. In this setup, the change in asset prices can only be a result of incoming news since asset prices are forward looking and only unanticipated component of data releases would make asset prices respond.

This argument can be justified by a simple Kalman filtering framework where a change in agents' perception about macroeconomic fundamentals would elicit asset price response (Faust et al., 2007). To do so assume that the equilibrium overnight index swap rate at time t for maturity n can be written as a function f where:

$$i_t^{(n)} = f(x_t, x_{t|t})$$

where $i_t^{(n)}$ is the overnight index swap rate, x_t is the vector of all possible state variables that could affect the swap rates that includes slow moving variables such as capital stock, and productivity and fast moving variables such as inflation and broad financial conditions, and $x_{t|t}$ is the market participants' best estimate of the true state x_t conditional on the information set at time t.

We can linearize function f to have the following representation:

$$i_t^{(n)} \approx f_1 x_t + f_2 x_{t|t}$$

where f_1 is the partial derivative of the function with respect to the true state, and f_2 is the derivative of the function with respect to the perceived state. Since this approximation holds for any time period, we can take intraday or daily changes of the swap rate to have:

$$\Delta i_t^{(n)} \approx f_1 \Delta x_t + f_2 \Delta x_{t|t}$$

Where $\Delta i_t^{(n)}$ represents an intraday or a daily change in the swap rates. By assumption the true state variable does not change within a day, hence the approximation is equal to $f_2\Delta x_{t|t}$. Note that $\Delta x_{t|t} = x_{t|t} - x_{t-1|t}$ is the change in the perception of the state variable, where in a Kalman filtering setting has the following representation:

$$x_{t|t} = x_{t|t-1} + Ks_t$$

where is the Kalman gain and s_t is the news arriving within a day. Then we have:

$$\Delta i_t^{(n)} \approx f_2 K s_t$$

$$\Delta i_t^{(n)} = \beta s_t + \varepsilon_t$$

where $\beta = f_2 K$.

For measuring news, we follow the event study literature and use "surprises" as measures of incoming macroeconomic news. Surprises are defined as the difference between the data release and the median survey expectation associated with that release. In theory, as the agents are surprised, they update their beliefs of macroeconomic fundamentals, as pure news would imply.

Once we have the overnight index swaps and a measure of news, the regression equation is operational. Here the parameter of interest is β . To estimate it we run an OLS on announcement days where the right-hand side has macroeconomic news (measured as surprises) and the left-hand side has the change in the overnight index swap for different maturities.

An important concern in macroeconomics is to identify the causality between asset prices and macroeconomic fundamentals. In lower frequency (monthly or quarterly) it is hard to pin down the direction of causality. The standard approach for identification is using a vector autoregression where the researchers assume a recursive structure, which allows to estimate the response of variables to certain shocks by imposing exclusion restrictions in a dynamic setting. These restrictions eliminate the reverse causality among endogenous variables.

Event studies provide a natural remedy for reverse causality concerns. This is due to the nature of measurement of news. In this setup the news measure is a surprise, unanticipated component of the data release. However, the data release is exogeneous to the change in asset price at time t because macroeconomic data is measured with a lag. The February release for inflation is about January, which is unaffected by the asset prices in February. This makes data release and the associated surprise exogeneous to the change in the asset prices. This

structure provides a clear identification of the response parameter β .

2.2. Data

We measure monetary policy expectations with overnight index swaps. An overnight index swap is a contract where parties agree to exchange a fixed (called the OIS rate) and a floating payment, where the latter is tied to the overnight effective federal funds rate. The floating leg of the payment is given by:

$$i_{t,flt}^{(n)} = \left(\prod_{j=1}^{n} \left[\left(1 + \frac{r_j}{360}\right) - 1 \right] \times \frac{360}{n} \right)$$

where r_j is the effective federal funds rate. Under risk neutral pricing the present value of the floating leg must be equal to the OIS fixed rate. In other words, the expected compounded overnight effective fed funds rate is equal to the OIS fixed rate:

$$i_{t,fix}^{(n)} = E_t \left[i_{t,flt}^{(n)} \right]$$

where $E_t \Big[i_{flt,t}^{(n)} \Big]$ is the risk neutral expectation of the compounded overnight effective fed funds rate. A change in the fix rate between time t and t+1 is equal to the change in expectations for the floating leg:

$$i_{t+1,t+n}^{fix} - i_{t,t+n}^{fix} = (E_{t+1} - E_t) [i_{t,flt}^{(n)}]$$

where $(E_{t+1} - E_t)$ is the operator showing revisions in expectations for an n period floating leg of the swap. The change in the fix rate is equal to the change in the floating leg, which is interpreted as revisions to policy rate expectations. Note that this equality holds for change in any horizon. For the event study regressions, we consider daily changes in the fix rates to gauge daily changes in policy expectations due to incoming macro news. We calculate daily changes of the OIS rates for 1-, 3-, 6-

month and 1-, 2-, 5-year maturities around announcement days. Data are from Bloomberg. Note that having a short window for changes is very crucial for identification. As the window gets wider, other confounding factors would affect the response of expectations to incoming news. Therefore, it is important to keep windows as tight as possible.

We use macroeconomic surprises as measures of news. To calculate surprises, we subtract the median survey forecast associated with a particular release:

$$s_d^j = a_d^j - E_{d-1}[a_d^j]$$

where s_t^j is the surprise associated with release j on day d, a_d^j is the announcement or data release on day d for variable j (say inflation), and $E_{d-1}[a_t^j]$ is the median survey expectation taken the day before the announcement. Median expectations are taken from Bloomberg. The announcements used in the analysis, their sources and frequency are provided in Table 1. Since all announcements are in different units, we standardize surprises by their individual standard deviations to facilitate interpretation. The set of announcements selected are standard in literature (Altavilla et al., 2017).

Table 1. List of Announcements Used in The Event Study

Data Release	Source	Freq.	Sample Start	Sample end	Units	Release Time
Nonfarm Payrolls	BLS	M			Thou.	08:30
U. of Mich. Sentiment	University of Michigan	Bi- M			Index	10:00
ISM Manufacturing	Institute for Supply Management	M			Index	10:00
ISM Price	Institute for Supply Management	M			Index	10:00
Housing Starts	U.S. Census Bureau	M			Thou.	08:30
GDP (Advance release)	BEA	Q			Percent	08:30
Factory Orders	U.S. Census Bureau	M			Percent	10:00
CPI	BLS	M			Percent	08:30
Durable Goods Orders	U.S. Census Bureau	M			Percent	10:00
Core CPI	BLS	M			Percent	08:30
Initial Claims	Department of Labor	W			Thou.	08:30
Capacity Utilization	Federal Reserve Board	M			Percent	09:15

BLS: Bureau of Labor Statistics, BEA: Bureau of Economic Analysis, ISM: Institute of Supply Management. M: Monthly, Bi-M: Bimonthly, Q: Quarterly, W: Weekly, Thou: Thousands. Release time is US Eastern.

After analyzing the effects of shocks on policy expectations, we take a step further and decompose expectations into expected real rates and expected inflation. Any nominal interest rate can be decomposed into ex-ante real rates and exante inflation. For this decomposition we use market-based measures of both. There are two reasons for this choice. First, model dependent decomposition may not be robust to model specification. Second, most decompositions in the literature are based on low frequency data (such as monthly or quarterly).

For market-based inflation expectations, we use inflation swaps. Inflation swaps are contractual agreements where one party is required to make periodic floating rate payments indexed to reference price index³ (the inflation payer) and the other party is required to make periodic fixed rate payments (the inflation receiver). The fixed payments are called the inflation swap rate. For our analysis we use zero-coupon swaps from Bloomberg. Inflation swaps rates are expected inflation and risk premium:

$$\pi_{t,T} = E_t \mu_{t,T} + R P_t^{\mu}$$

where $\pi_{t,T}$ is the fixed rate for a T year swap, $E_t\mu_{t,T}$ is the expected inflation between time t and T, and RP_t^{μ} is the inflation risk premium. However, in practice, inflation swaps have an indexation lag (due to the publication lag in inflation), which implies that the floating leg of the payment has about 2.5 months lag in adjusting the payment. Considering this complication, we can express the swap rate as a function of past inflation, expected inflation, and risk premium. If the indexation lag is m then the swap rate is:

$$\pi_{t,T} = \frac{m}{T - t} \mu_{t-m,T} + \frac{T - m - t}{T - t} E_t \mu_{t,T-m} + R P_t^{\mu}$$

The first term on the right is the past inflation (m period ago inflation) and the second term is the expected inflation from time t to T-m. For a 1-year inflation swap with 3-month indexation lag, the swap rate has 3-month ago inflation and 9-month ahead expected inflation as components. For our analysis we use inflation swaps with 1-, 2-, and 5-year maturities to minimize the effects of indexation lag. The longer the maturity of the swap, less affected they are from the indexation lag. Another

The daily reference index for day d in month t is calculated as: $RefIndex = CPI_{t-3} - \frac{d-1}{N}(CPI_{t-2} - CPI_{t-3})$ where d is the day of the month, N is the number of the days in the month t.

alternative for market-based inflation expectations could be breakeven inflation defined as the difference between the nominal yields and real yields (TIPS). An important problem with this measure is the existence of a liquidity premium, which increases during market stress. This implies inflation expectations that are measured by breakeven inflation look artificially higher relative to true expectations. Swaps are less affected by liquidity premia due to the market size. Note that in the absence of market frictions inflation swaps and breakeven inflation would be equal.

We subtract inflation swap rates from OIS rates to estimate expected real interest rates at various horizons. Like breakeven inflation one could directly use TIPS to measure ex ante real rates. However, like breakeven inflation, TIPS yields are subject to sizable and volatile liquidity premia. To limit its effect on real rates we use OIS rates and inflation swaps, which both are more liquid than TIPS.

3. RESULTS

To analyze the effects of news on policy expectations, we have the following regression specification for the analysis:

$$\Delta i_{t,fix}^{(n)} = \alpha_n + \sum_{j=1}^k ||\beta_{n,j} s_t^j + \varepsilon_t|$$

Note that we run the regression on announcement days only meaning that we need at least one announcement on a given day for this regression to work. We assume that surprises are zero for announcements that do not take place on that day.

Table 2 shows the results. For monetary policy expectations ISM manufacturing index and core CPI inflation are two important releases. They both have positive coefficients, implying that market participants revise their policy rate

expectations upward if there is a one standard deviation positive surprise (higher than expected manufacturing or higher than expected inflation) in these variables. This is intuitive, since ISM manufacturing shows that aggregate demand is high, which may signal an overheating economy. Core CPI similarly implies higher inflation going forward, which implies higher policy expectations. Durable goods, CPI, and capacity utilization releases have positive effects for most maturities. Higher than expected releases for these variables imply higher expected interest rates going forward. Nonfarm payrolls and Michigan consumer sentiment affects expectations in the medium to long term, whereas factory order affects short term policy expectations.

Table 2. Heteroskedasticity-Robust Standard Errors in Parentheses

	OIS1M	OIS3M	OIS6M	OIS1Y	OIS2Y	OIS5Y
Nonfarm	0.104	0.0422	0.186	0.342	0.588	0.840*
	(0.0966)	(0.0448)	(0.169)	(0.298)	(0.418)	(0.430)
Michigan	0.00252	0.0577	0.116	0.341	0.653*	0.982***
	(0.109)	(0.0928)	(0.176)	(0.280)	(0.345)	(0.366)
ISM	0.388***	0.211**	0.743***	1.288***	1.737***	2.107***
	(0.120)	(0.0827)	(0.172)	(0.238)	(0.342)	(0.415)
ISM Price	0.0930	0.113	0.0168	0.0669	-0.0153	0.169
	(0.151)	(0.127)	(0.196)	(0.243)	(0.313)	(0.396)
Housing	0.124	0.166	0.221	0.439*	0.571*	0.687**
_	(0.104)	(0.106)	(0.145)	(0.250)	(0.333)	(0.318)
GDP	-0.219	-0.116	-0.00658	0.302	0.594	0.760
	(0.299)	(0.295)	(0.271)	(0.424)	(0.592)	(0.718)
Factory	0.322**	0.287*	0.210	0.267	0.450	0.191
	(0.144)	(0.152)	(0.160)	(0.208)	(0.340)	(0.453)
CPI	0.560*	0.397	0.738**	0.855*	0.865*	0.964
	(0.304)	(0.275)	(0.363)	(0.455)	(0.503)	(0.598)
Durable	0.0666	-0.0267	0.258**	0.490**	0.612**	0.565*
	(0.0641)	(0.0697)	(0.115)	(0.206)	(0.282)	(0.305)
Core CPI	0.496**	0.193	0.821**	1.250***	1.596***	1.301***
	(0.250)	(0.187)	(0.362)	(0.454)	(0.470)	(0.466)
Claims	-0.0400	-0.0386*	-0.0492	-0.0898	-0.180	-0.248
	(0.0324)	(0.0221)	(0.0447)	(0.0809)	(0.128)	(0.171)
Capacity	0.176	0.0782	0.383*	0.658**	0.968**	0.944**
	(0.143)	(0.113)	(0.211)	(0.329)	(0.392)	(0.423)
Obs.	5,689	5,667	5,713	5,713	5,705	5,642
R-squared	0.014	0.006	0.018	0.019	0.019	0.017

^{***} p<0.01, ** p<0.05, * p<0.1. Columns show the OIS maturities and rows show the surprises used in the regression. Sample is from 14 February 2002 to 02 February 2024. Constant term is ignored.

Even though macro news affect revisions to monetary policy expectations, the explanatory power of these regressions are very low. This is a standard result in the event study literature that daily regressions have lower R-squares than intraday regressions. The reason is that there is substantial amount of noise within the day, where intraday regressions are less affected by the existence of daily noise.

An important concern with these regression results is the existence of risk premia in the OIS term structure. If risk premia are responsible for the reactions, it would be misleading to relate changes in the OIS rates to monetary policy expectations since this relationship is true under risk neutrality. If risk premia are stable, then all reactions will be the result of the revision in monetary policy expectations. Lloyd (2021) shows that OIS rates have very stable risk premia for maturities up to 2-years. Similarly, Schmelling et al. (2022) shows that OIS rates up to 1year are reliable measures of monetary policy expectations, and the deviation of these expectations from surveys is just expectation errors. These errors are unpredictable and stable. However, for longer term maturities risk premia is more volatile. Kısacıkoğlu (2024) shows that risk premia are sizable and volatile for maturities longer than 2-years. Hence for 2-, and 5-year maturity OIS rate responses could be due to changes in the risk premia but not expectations. If risk premium is a slow-moving variable, it is reasonable to assume that daily changes in asset prices would imply very minimal change in risk premiums.

To estimate the effects of news on expected real and inflation rates, we regress daily changes of inflation swaps and expected real rates on macroeconomic surprises. Results are provided in Tables 3 and 4 for expected real rates and expected inflation, respectively. For expected real rates core CPI surprises have the largest coefficients, however they are negative and only significant for the 1 and 2-year horizons. This shows that markets

expect lower real interest rates in the medium term. Similarly initial claims have negative coefficients, which are all statistically significant for all horizons. This is intuitive: a positive initial claims surprise implies a bad state of the economy, which in turn decreases real interest rates at the equilibrium. However, unlike high core CPI and low initial claims, there is no reason why positive surprises in capacity utilization should increase expected real rates. In standard models like Smets and Wouters (2007), capacity utilization is a supply shock: higher values increase production capacity, hence lower inflation and policy rates. This implies lower real rates in return. The event study coefficients provide evidence for the contrary, where from the market participants perspective, capacity utilization behaves like a demand shock. After a higher-than-expected capacity utilization release, medium to long term OIS rates increase, and this increase is solely due to an increase in the expected real rates. Inflation swaps do not respond to capacity utilization surprises in a statistically significant way since they are related to the real variables and not to the nominal ones such as inflation. Even though this may hint at a change in the real risk premium, at high enough frequency it is unlikely that risk premium would move quickly to changes in capacity utilization.

Table 3. Heteroskedasticity-Robust Standard Errors in Parentheses

	RR1Y	RR2Y	RR5Y
Nonfarm	-0.892***	-0.272	0.104
	(0.143)	(0.253)	(0.216)
Michigan	2.441*	0.515	0.986***
C	(1.302)	(0.613)	(0.356)
ISM	0.745	0.776	0.885*
	(0.594)	(0.607)	(0.467)
ISM Price	-1.796**	-0.322	-0.536
	(0.765)	(0.765)	(0.510)
Housing	0.599	0.819	0.675*
J	(0.527)	(0.515)	(0.406)
GDP	0.223	0.296	-0.322
	(1.164)	(0.939)	(0.887)
Factory	-0.195	1.328	0.978
	(0.582)	(1.352)	(0.921)
CPI	-2.250**	-0.951	0.254
	(0.985)	(0.861)	(0.843)
Durable	-0.0472	0.378	0.749*
	(0.633)	(0.415)	(0.389)
Core CPI	-3.209***	-1.275**	-0.278
	(0.897)	(0.613)	(0.509)
Claims	-0.737***	-0.693***	-0.648***
	(0.126)	(0.105)	(0.0935)
Capacity	-0.872	0.351	1.223***
	(2.777)	(0.849)	(0.450)
Constant	0.0627	0.00683	0.0219
	(0.150)	(0.110)	(0.0893)
Observations	5,013	4,940	4,976
R-squared	0.016	0.008	0.009

^{***} p<0.01, ** p<0.05, * p<0.1. RR1Y: 1-year ex-ante real interest rate, RR2Y: 2-year ex-ante real interest rate, RR5Y: 5-year ex-ante real interest rate. Sample is from 21 July 2004 to 02 February 2024.

Table 4. Heteroskedasticity-Robust Standard Errors in Parentheses.

	INFSW1Y	INFSW2Y	INFSW5Y
Nonfarm	1.148***	0.714***	0.587***
	(0.159)	(0.102)	(0.119)
Michigan	-2.114*	0.174	0.140
C	(1.274)	(0.611)	(0.314)
ISM	0.240	0.572	0.754***
	(0.588)	(0.493)	(0.291)
ISM Price	2.059***	0.565	0.996***
	(0.795)	(0.683)	(0.353)
Housing	-0.177	-0.220	0.128
_	(0.496)	(0.417)	(0.298)
GDP	-0.0931	0.0168	0.735
	(1.155)	(0.978)	(0.707)
Factory	0.534	-0.657	-0.573
	(0.560)	(1.269)	(0.623)
CPI	3.086***	1.729**	0.643
	(1.045)	(0.750)	(0.525)
Durable	0.394	-0.0274	-0.365
	(0.638)	(0.415)	(0.364)
Core CPI	4.590***	2.990***	1.684***
	(0.883)	(0.547)	(0.401)
Claims	0.659***	0.533***	0.420***
	(0.120)	(0.0836)	(0.125)
Capacity	1.589	0.802	0.0275
	(2.667)	(0.834)	(0.423)
Constant	-0.00995	0.0204	-0.00899
	(0.147)	(0.0995)	(0.0659)
Observations	5,017	4,949	5,029
R-squared	0.027	0.022	0.018

*** p<0.01, ** p<0.05, * p<0.1. Columns show inflation swaps for 1-, 2-, and 5-year maturities. INFSW1Y: 1-year zero coupon inflation swap rate, INFSW2Y: 2-year zero coupon inflation swap rate, INFSW3Y: 3-year zero coupon inflation swap rate, INFSW4Y: 4-year zero coupon inflation swap rate, INFSW5Y: 5-year zero coupon inflation swap rate. Sample is from 21 July 2004 to 02 February 2024. Data are from Bloomberg.

Inflation swaps tell a similar story. Core CPI is the most important surprise for inflation swaps, and CPI surprises show a similar pattern. This is expected since inflation news has direct effects on inflation expectations. We observe a similar response from swaps to nonfarm payroll surprises. Higher than expected

nonfarm payroll release, change inflation expectations. However contrary to headline and core CPI releases, the effect monotonically decreases with maturity, whereas there are others that have similar effects on all horizons. Higher than expected initial claims increase inflation expectations. This response may seem puzzling. To explain these results, one should keep in mind that inflation expectations measure is for the medium to long-term. If initial claims release is higher than expected, this signals a slowdown in the economy, which implies a fall in the ex-ante real rates. As ex-ante real rates fall, agents expect a recovery, which results in higher inflation. This mechanism is reflected in the swap responses.

In summary OIS, inflation swap, and ex-ante real rate responses are consistent with economic theory. News that reflects better demand conditions in the future makes policy expectations to be revised upward, due to a combination of revisions in inflation and real rate expectations.

4. CONCLUSION

In this paper we show that monetary policy expectations in the US are affected by news. Using event study design, we show that monetary policy expectations get revised upward if ISM, core CPI, Michigan consumer sentiment, and durable goods orders releases are higher than expected. A further decomposition of policy expectations into real rate and inflation expectations show that ISM, and initial claim, and capacity utilization are important releases for expected real rates. Higher than expected ISM and capacity utilization release increase expected real rates, whereas higher than expected initial claims releases decrease expected real rates. We show that for inflation swaps core CPI, nonfarm payrolls, and CPI releases are the most important releases. If these releases are higher than expected inflation

expectations are revised upward. Similarly higher than expected initial claims release increase expected inflation.

These results have implications for understanding policy expectations and their response to shocks as well as macroeconomic modeling. Models where policy expectation dynamics are consistent with these empirical results would be an important avenue for research, which we leave for future work.

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TÜRKİYE'NİN DOĞRUDAN YABANCI YATIRIM PERFORMANSINI ETKİLEYEN FAKTÖRLERİN KEARNEY DOĞRUDAN YABANCI YATIRIMLAR GÜVEN ENDEKSİ 2023 VERİLERİ DOĞRULTUSUNDA DEĞERLENDİRİLMESİ¹

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1. GİRİŞ

Doğrudan Yabancı Sermaye Yatırımların tanımında yer alan "yabancı" kelimesi herhangi bir ülkenin sınırları dışından olmak anlamında kullanılmakladır. "Doğrudan" kelimesi ise çalışmanın konusu olan yabancı sermaye yatırımlarını portföy yatırımlarından ayırmaktadır. Portföy yatırımları bir yabancı ülkede çıkarılan hisse senedi ve tahvillerin uluslararası sermaye piyasalarından satın alınması yoluyla yapılan yatırımları ve böylece sermayenin bir ülkeden diğerine gitmesini ifade etmektedir. Doğrudan yatırımı portföy yatırımlarından ayıran ana faktör; sermaye ile birlikle teknoloji, işletmecilik bilgisi ve kontrol unsurlarının da yönlendiği ülkeye gitmesidir. Doğrudan yabancı yatırım (DYY), bir firmayı satın alma veya yeni bir firma için ilk sermayeyi temin etme veya mevcut bir firmanın sermayesini artırma yoluyla bir ülkede bulunan firmalar

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¹ Çalışma Kearney Doğrudan Yabancı Yatırımlar Güven Endeksi 2023'ten yararlanılarak hazırlanmıştır. Endeksi kullanmak için Kearney firmasından 25.03.2024 tarihinde E-mail yoluyla izin alınmıştır. https://www.kearney.com/service/global-business-policy-council/foreign-direct-investment-confidence-index

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tarafından başka bir ülkede bulunan firmalara yapılan yatırımdır. Bu yatırım; teknolojiyi, işletmecilik bilgisini ve yatırımcının kontrol yetkisini beraberinde götürmektedir (Kırankabeş, 2004).

Literatürde yapılan çalışmalarda DYY yönlendikleri ülkelerde ekonomik büyümesini hızlandırdığı tespit edilmiştir (Edrak ve diğerleri, 2014; Iqbal, Hassan ve Rawat, 2012; Masron, Zulkafli ve Ibrahim, 2012). Üstelik son birkaç on yılda dünyada küreselleşmenin bir sonucu olarak hem DYY akışında hem de DYY stokunda hızlı bir artış gözlemlenmiştir (Hill ve McKaig, 2015). DYY, ev sahibi ülkelerin ekonomik büyümesine teknoloji transferi, is yaratma, ithal ikameleri ve ihracat hacmini genisletme dahil olmak üzere farklı sekillerde katkıda bulunur (Chen, Melachroinos ve Chang, 2010). Literatür, doğrudan yabancı yatırımların ev sahibi ülke ekonomilerine etkilerinin araştırıldığı çalışmalar bulunmaktadır. Örneğin perakende sektöründe (Iqbal ve diğerleri, 2012); imalat sektöründe (Masron ve diğerleri, 2012); bankacılık sektöründe (Tare, madencilik sektöründe (Rutaihwa ve Simwela, 2012): telekomünikasyon sektöründe (Fathima, Ahmed ve Kumar, 2013) yapılan doğrudan yabancı yatırımların ev sahibi ekonomilerine etkileri konusunda literatürde birçok çalışma bulunmaktadır. Sonuclar, doğrudan yabancı yatırımların ekonomilere sektörlere ulusal olumlu katkılarını göstertirmiştir (Le, 2021, s.852).

Doğrudan yabancı yatırımlar pek çok farklı şekilde ev sahibi ülkeye girebilir. Doğrudan Yabancı Yatırımlar; Şube Açma ve Yeni Bir Tesis Kurma, Şirket Evlilikleri (birleşme) veya Satın Alma, Uluslararası Ortak Girişimler (Joint Ventures), Lisans Anlaşmaları şeklinde olabileceği gibi Özelleştirme Yoluyla Gerçekleşen Yatırımlar şeklinde de görülebilir (Kırankabeş, 2004). Doğrudan yabancı yatırım, küreselleşmenin temel itici gücüdür. Tüm gelişmiş gelişmekte olan veya az gelişmiş ekonomiler için doğrudan yabancı yatırım girişleri finansal

istikrar sağlayabilir, ekonomik kalkınmayı teşvik edebilir ve toplumların refahını artırabilir.

Çalışmaya temel oluşturan Kearney firması³, 1926 yılında Andrew Thomas tarafından kurulmuş günümüzde 40'tan fazla ülkede 5.700'den fazla çalışanı olan bir danışmanlığı firmasıdır. Kearney, Fortune Global 500 listesinde yer alan firmaların dörtte üçünden fazlasına ve birçok ülkenin önemli devlet kuruluşlarına danışmanlık hizmeti sunmaktadır. Kearney danışmanlık firması küresel boyutta ekonomik görünüm, küresel hizmet sektörü, küresel lojistik sektörü gibi konularda danışmanlık sunmakta ve raporlar hazırlamaktadır. Firmanın yılık bazda hazırladığı raporlardan biri Kearney Doğrudan Yabancı Yatırımlar Güven Endeksidir. Çalışmada ilk olarak Kearney Doğrudan Yabancı Yatırımlar Güven Endeksi 2023 verileri kullanılarak DYY'ları sonra bu bilgiler etkileyen faktörler incelenmiştir. Daha Türkiye'nin doğrultusunda DYY performansi ve değerlendirilmiştir.

2. KEARNEY DOĞRUDAN YABANCI YATIRIMLAR GÜVEN ENDEKSİ

Kearney, küresel doğrudan vabancı sermaye yatırımlarının seyrine iliskin her yıl Doğrudan Yabancı Sermaye Yatırımları Güven Endeksi (FDI Confidence Index) raporunu yayınlamaktadır. Yıllık ciroları 500 milyon doların üzerinde küresel bazda doğrudan yabancı yatırımlarının yüzde 95'ini gerçekleştiren şirketlerin üst düzey yöneticilerinin katıldığı Doğrudan Yabancı Sermaye Yatırımları Güven Endeksi araştırması, Kearney tarafından her yıl hazırlanıyor. 2023 yılı raporu, küresel şirketlerin yöneticilerinin 2023 yılında doğrudan yabancı sermaye yatırımlarını artırma

³ https://www.kearney.com/

eğiliminde olduğunu ortaya koydu. Rapora göre dünya genelinde doğrudan yabancı sermaye yatırımları 2022 yılında bir önceki yıla göre 64 milyar dolar artarak 2 trilyon 132 milyon dolara yükseldi. Araştırmaya katılan üst düzey yöneticilerin yüzde 82'si 2023'te geçtiğimiz yıla göre daha fazla uluslararası yatırım yapmayı planladıkları yönünde görüş bildirdiler.

Araştırma, uluslararası şirket yöneticileri ile yapılan ankete göre doğrudan yabancı sermaye yatırımı için en çok tercih edilen ülkeleri belirliyor. Endeks "Dünya Sıralaması" ve "Gelişmekte Olan Pazarlar" adları altında iki ayrı kategoride doğrudan yabancı yatırım endeksi hazırlamaktadır. Buna göre Dünya sıralaması endeksinde en çok DYY çeken ülke ABD 2.314 puan ile zirvede yer alıyor. ABD'yi 2.209 puanla Kanada, 2.065 puanla Japonya izliyor. Kearney Doğrudan Yabancı Sermaye Yatırımları Güven Endeksinin 25 yıllık tarihinde ilk kez 2023 yılında "Gelişmekte Olan Pazarlar" adı altında DYY için en çok tercih edilen gelişmekte olan ülkeleri de açıkladı.

Türkiye, cirosu 500 milyon doların üzerindeki küresel şirketlerin yöneticileri arasında yapılan ankete göre hazırlanan "Gelişmekte Olan Pazarlar" endeksinde Katar, Tayland, Malezya, Endonezya, Filipinler, Vietnam ve Mısır gibi ekonomik güç anlamında daha düşük ülkelerin ardından 15. sırada yer almaktadır. Raporda, Türkiye'nin çok sayıda bölgesel pazara erişimi olan coğrafi konumu, güçlü altyapısı ile olumlu bir uluslararası yatırım ortamı sunmaya devam ettiği belirtilmiştir. Bu değerlendirme Türkiye'nin DYY anlamında oldukça önemli bir potansiyele sahip olduğunu göstermektedir. Bununla beraber endeksteki yeri ile potansiyelin altında bir performans sergilemekte olduğu da bir gerçektir.

Kearney Doğrudan Yabancı Yatırımlar Güven Endeksi temel bulgularından biri küresel olumsuzlukların yatırımcıların zihinlerinde hala yer almaya devam ediyor olmasıdır. Bu olumsuz

bakışın altında birçok neden yatmaktadır. Bunlarda biri gün geçtikçe artış gösteren korumacılık akımlarının başta ABD ve Avrupa Birliği olmak üzere kilit ticaret ortakları arasında sürtüşmeye neden olmasıdır. Bu sürtüşmeler küresel tedarik zincirinde baskılara neden olmaktadır. Diğer önemli bir olumsuzluk jeopolitik sıkıntılardan dolayı yatırımcıların iyimserliklerinin azalmasıdır.

Yatırımcılar emtia fiyatlarındaki artışları, artan jeopolitik gerilimleri ve gelişmekte olan ülkelerdeki siyasi istikrarsızlığı 2023 vılı raporunda en muhtemel riskler değerlendiriyorlar. Enerji fiyatları da özellikle Avrupa'da tarihte benzeri görülmemiş seviyelere yükseldi. Bunun temel nedeni bilindiği gibi devam eden Rusya-Ukrayna savaşıdır. Ayrıca emtia fiyatlarındaki dalgalanmalar ve yüksek enflasyon dahil olmak üzere Covid 19 pandemisinin devam eden etkileri de henüz sürmektedir. Belirtilen olumsuzluklar dolayısıyla küresel enflasyon 2022'de yüzde 7,8 gibi çarpıcı bir seviyesinde gerçekleşti.

Bilindiği gibi doğrudan yabancı yatırımların en önemli sürükleyici gücü küreselleşme sürecidir. Kearney Doğrudan Yabancı Yatırımlar Güven Endeksi hazırlanırken birçok alanda olduğu gibi küresellesme sürecine dair anketten yararlanılmaktadır. Ankete katılanların %66 gibi büyük çoğunluğu önümüzdeki üç yıl içinde küreselleşmede artış beklediklerini ifade etmişlerdir. Bu durumun pandemi döneminde dijital ticarette yaşanan önemli düzeydeki artışla ilişkili olduğu düşünülmektedir. Bununla beraber özelikle Rusya-Ukrayna savaşı, Taliban güçlerinin Afganistan'da yönetimi devralması ve benzeri jeopolitik nedenlerden dolayı halen ulusal hükümetlerin korumacı önlemler alabilecekleri düşünülmektedir.

2023 Doğrudan Yabancı Yatırım Güven Endeksinde vurgulanan diğer bir konu Oxford Economics'in verilerine göre,

2022'deki küresel doğrudan yabancı yatırım girişleri, 2021'de tahmin edilen 2 trilyon 68 milyar dolarlık seviyesinden önemli bir düzeyde artış göstererek 2 trilyon 132 milyar dolara ulaşmasıdır. Bu artışı gösteren Grafik 1 aşağıda verilmektedir.

Grafik 1. Küresel Doğrudan Yabancı Yatırım Akımları (Milyar dolar)

Kaynak: Kearney Doğrudan Yabancı Yatırımlar Güven Endeksi 2023, Oxford Economics

2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022

0

Çalışmada ele alınan diğer bir konu küresel ekonomide yaşanacak değişikliklerin yönü hakkındadır. Katılımcıların küresel ekonominin görünümüne ilişkin düşüncelerinde 2023 yılında, 2022 yılı ile kıyaslandığında önemli bir değişim bulunmamaktadır. Değişim sadece kararsızlardan kötümserlere kayan 2 puanlık bir geçiştir. Grafik 2'de görüldüğü gibi yatırımcıların küresel ekonomiye yönelik iyimser beklentileri her iki yılda %63 düzeyindedir. Katılımcılardan küresel ekonominin görünümüne ilişkin olumsuz beklentiler taşıyanların oranı tedarik zincirindeki aksaklıklar ve yüksek enflasyonun neden olduğu küresel ekonomik olumsuzluklara rağmen 2023 yılında sadece iki puan artarak %35 düzeyine çıkmıştır.

2015 2016 2017 2018 2019 2020 2021 2022 2023

Olumlu Bekletti % Olumsuz Beklenti % Beklentide Değişim Olmamış %

Grafik 2. Katılımcılardan Küresel Ekonominin Görünümüne İlişkin Beklentileri (%)

Kaynak: Kearney Doğrudan Yabancı Yatırımlar Güven Endeksi 2023,

2.1.Doğrudan Yabancı Yatırım Güven Endeksi Değerlendirme Kategorileri

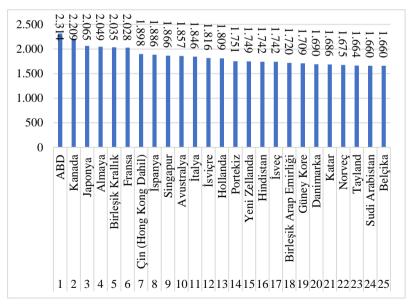
Kearney Doğrudan Yabancı Yatırımlar Güven Endeksinde ülkeler göstermiş oldukları performanslarına göre farklı kategorilerde değerlendirilmektedirler. Bu kategoriler "Dünya Sıralaması", "Gelişmekte olan Pazarlar" başlıkları altında değerlendirilmektedir. 2023 endeksinde ele alınan her bir kategori aşağıda değerlendirilmektedir.

2.1.1. Dünya Sıralaması

Bu kategoride 25 ülke değerlendirilmektedir. Dünya sıralaması kategorisinde ilk 10 ülkeden sekizi geçen yılda ilk on içinde yer almaktaydı. Grafik 3'te görüldüğü gibi yatırımcılar bu kategoride yer alan 25 ülke içinde gelişmiş piyasa ekonomisine sahip olan ABD, Kanada Japonya gibi 19 ülkeyi tercih etmişlerdir. Dünya sıralaması kategorisinde yer alan Çin Halk Cumhuriyeti, Hindistan, Birleşik Arap Emirliği, Katar, Tayland ve Sudi Arabistan ise gelişmekte olan piyasalardır. Dünya sıralaması kategorisinde Amerika Birleşik Devletleri (ABD) üst üste 11 yıldır ilk sırada yer almaktadır. Kanda 2022 yılında 3. sıra iken 2023 endeksinde 2. sıraya yükselmiştir. Benzer şekilde Japonya geçen sene 4. Sırdayken 2023 endeksinde 3. sıraya yükselmiştir.

Almanya, 2023 yılında muhtemelen Doğu Avrupa'daki jeopolitik kriz nedeniyle karşılaştığı enerji maliyetlerindeki artış ve benzeri zorluklardan dolayı 2022 yılına kıyasla iki sıra gerileyerek dördüncü sıraya düstü. 2023 endeksinde Birlesik Krallık besinci sıradaki verini korudu. 2023 yılında gelismekte olan piyasaların DYY performansı genel olarak artış göstermiştir. Bu kapsamda en iyi performans gösteren ülke Cin Halk Cumhuriveti olmustur. Cin 2023 endeksinde 2022 ile kıyaslandığında üç basamak ilerleverek 7. sıraya yükselmistir. Gelismekte olan piyasa ekonomilerinde 2023 yılında 16. sıraya yükselen Hindistan. 23. sıraya yükselen Tayland ve 24. sıraya yükselen Suudi Arabistan 2023 yılı Doğrudan Yabancı Yatırım Güven Endeksinde ilk 25 ülke arasında yerini almıştır.

Grafik 3. Dünya Sırlaması Kategorisinde Yer Alan Ülkeler ve Endeks Değerleri



Kaynak: Kearney Doğrudan Yabancı Yatırımlar Güven Endeksi 2023,

Grafik 3'te görüldüğü gibi ABD, 2023 yılında da Dünya sıralaması kategorisinde ilk sırada yer almaktadır. Daha önce de belirtildiği gibi ABD, her yıl yayımlanan Kearney Doğrudan

Yabancı Yatırımlar Güven Endeksinde 11 yıl üst üste ilk sırada yer alarak muhteşem bir performans sergilemiştir. Bu durum yatırımcıların doğrudan yabancı yatırım tercilerinde gelişmiş ekonomilere olan güveni ve inancı yansıtmaktadır. Benzer sekilde Grafik 3'te görüldüğü gibi ilk sıralarda yer alan Kanada, Japonya, Almanya, Birleşik Krallık gibi ülkeler bu savı doğrulamaktadır. Burada Almanya için ayrı bir başlık açmak gereklidir. 2022 endeksinde ikinci sırada yer alan Almanya 2023 endeksinde dördüncü sıraya gerilemistir. Bu durum. Doğu Avrupa'daki jeopolitik kriz nedeniyle karsılastığı ekonomik ve enerji zorluklarının sonucudur. Fransa altıncı sıradaki yer almıştır. Çin Halk Cumhuriyeti 2022 endeksinde 10 sırda yer alırken 2023 endeksinde 7. Sıraya yükselmiştir. Bu durum Çin Halk Cumhuriyeti'nin Covit 19 pandemisi sonrası yatırımcıların güvenini tekrar sağladığı yönünde yorumlanabilir. 2023'teki önemli değişikliklerden biri de Hindistan, Tayland ve Suudi Arabistan'ın sırasıyla 16., 23. ve 24. sırada tekrar endekse girmeleridir. Diğer dikkat çekici bir nokta Grafik 3'te görülen 12 Avrupa ülkesi gelişmiş ekonomiler kategorisine dahil olan ülkelerin neredeyse yarısını oluşturmaktadır. Yani Avrupa ülkeleri DYY performansı açısından oldukça basarılıdır.

Asya-Pasifik ülkelerinden Hindistan, Tayland, Çin Halk Cumhuriyeti, Japonya Singapur, Avustralya 2023 yılı Doğrudan Yabancı Yatırım Güven Endeksinde yer almışlardır. Daha önce belirtildiği gibi bu ülkeler arasında performansı dikkat çeken ülkelerden ilki Çin Halk Cumhuriyeti'dir. Asya-Pasifik ülkelerinden 2023 yılında dikkat çeken diğer bir ülke Singapur'dur. Geçen sene ile kıyaslandığında Singapur dokuz sıra yükselerek 9. sırada yer almıştır. Ayrıca bu grupta 2023 yılında tekrar listeye giren Hindistan'ın performansı dikkat çekicidir. Amerika Kıtası'nda bu yıl sadece ABD ve Kanada endekste yer almıştır. Orta Doğu ve Kuzey Afrika grubunda ise 3 ülke bulunmaktadır. Birleşik Arap Emirlikleri 18. sırada, Katar

21. sırada ve Suudi Arabistan 24. sırda yer almaktadırlar. 2023 Doğrudan Yabancı Yatırım Güven Endeksinde Birleşik Arap Emirlikleri, 2022'ye göre dört kademe gerilemiştir. Buna rağmen, özellikle Dubai'nin Ocak 2023'ün başlarında ticareti, yatırımı artırmaya ve küresel bir merkez olarak statüsünü geliştirmeye yönelik 8,7 trilyon dolarlık bir ekonomik plan⁴ duyurmasının ardından yatırımcılar için çekici olmaya devam etmektedir.

2.1.2. Gelişmekte Olan Pazarlar Endeksi

Doğrudan Yabancı Yatırım Güven Endeksi 25 yıllık geçmişinde ilk kez, 2023 endeksinde gelişmekte olan pazarlara özel bir endeks oluşturulmuştur. Bu endeksin amacı iş dünyası liderlerine, gelişmekte olan piyasaların yatırım için ne düzeyde elverişli olduğu konusunda fikir vermektir. Grafik 4'e gelişmekte olan pazarlar endeksi görülmektedir.

Gelişmekte olan pazarlar endeksinde Çin, Hindistan, Birleşik Arap Emirlikleri, Katar, Tayland ve Suudi Arabistan ilk altı sırada ver almaktadır. Bilindiği gibi Suudi Arabistan dünya sıralaması endeksinde de yer almaktaydı. İlk altı ülke dışında gelişmekte olan pazarlar endeksinde Latin Amerika ülkeleri de bir performans sergilemektedir. Latin güçlü ülkelerinden Brezilya, Meksika ve Arjantin sırasıyla 7., 8. ve 9. sırayı alıyor. Benzer şekilde Güneydoğu Asya ülkeleri de güçlü bir performans sergiliyor. Güneydoğu Asya ülkelerinden Malezya, Endonezya, Filipinler ve Vietnam sırasıyla 10. sırdan 13. sıraya kadar endekste yer almaktadır. Endekste Türkiye, Mısır'ın ardından 15. sırada yer almaktadır. Bu anlamda sıralamadaki yeri itibariyle Türkiye gibi jeopolitik konumu ve genç nüfusu vb. gibi doğrudan yabancı yatırım çekme potansiyeli olan bir ülkenin daha üst sıralarda hatta dünya sıralaması

https://www.cnbc.com/2023/01/04/dubai-announces-8point7-trillion-economic-plan-to-boost-trade-investment.html

içerisinde yer alması arzu edilirdi. Türkiye'nin doğrudan yabancı yatırım çekme konusunda güçlü ve zayıf yönleri aşağıda detaylı olarak ele alınmıştır.

Gelişmekte olan piyasalar sıralamasında Bangladeş, Rusya, Pakistan, Küba ve Gana son beşte yer alıyor. Özellikle Rusya'nın, 2022 yılında 1,622 olan endeks puanı (Rusya-Ukrayna savaşı öncesi) 2023 yılında 1,212'ye düşmüştür. Bu düşüş, yatırımcıların tahmin edilebileceği üzere jeopolitik krizden olumsuz etkilendiklerinin göstergesidir.

1.413 1.442 1.450 1.452 1.463 1.472 1.502 1.502 1.507 1.561 1.587 1.660 2.000 1.800 .600 .400 .000 800 600 400 200 0 Vietnam Misir Meksika Malezya Endonezya Peru Suudi Arabistan Arjantin Filipinler Türkiye Fas Bangladeş Çin (Hong Kong Dahil) Hindistan Birleşik Arap Emirliği **Fayland** Güney Afrika Kolombiya Jominik Cumhuriyeti 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25

Grafik 4. Gelişmekte Olan Pazarlar Kategorisinde Yer Alan Ülkeler ve Endeks Değerleri

Kaynak: Kearney Doğrudan Yabancı Yatırımlar Güven Endeksi 2023,

2.2. Doğrudan Yabancı Yatırım Kararlarını Etkileyen Kriterler

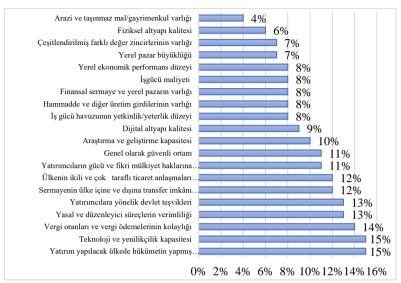
Doğrudan Yabancı Sermaye Yatırımları Güven Endeksinde değerlendirilen diğer bir husus doğrudan yabancı yatırım kararı alacak firmaların hangi değerlendirme kriterini öncelikli olarak dikkate aldıklarıdır. Yatırımcılar, 2023 yılında

DYY kararı alırken değerlendirdikleri kriterler aşağıda yer alan Grafik 5'te detaylı olarak görülmektedir.

2023 Doğrudan Yabancı Sermaye Yatırımları Güven Endeksinde, 2022 yılında olduğu gibi yabancı yatırım yapacak firmaların yatırım kararı alırken öncelikli olarak değerlendirdiği üç kriter şu şekilde sıralanmaktadır. Firmalar için ilk ve en önemli kriter %15 endeks değeri ile "yatırım yapılacak ülkede hükümetin yapmış olduğu regülasyonların şeffaflığı ve yolsuzluğun olmaması" kriteridir. Yine 15 endeks puanına ile ikinci en önemli DYY kriteri "Teknoloji ve yenilikçilik kapasitesi" kriteridir. yabancı vatırım kararı alırken Doğrudan firmaların değerlendirdiği üçüncü en önemli kriter %14 endeks değeri ile "vergi oranları ve vergi ödemelerinin kolaylığı" kriteri olarak karşımıza çıkmaktadır.

4. kriter "Yasal ve düzenleyici süreçlerin verimliliği" husussudur. 5. Kriter "yatırımcılara yönelik devlet teşvikleri" kriteridir. 6. kriter "sermayenin ülke içine ve dışına transfer imkânı (sermaye mobilitesinin varlığı) kriteridir. 7. kriter "ülkenin ikili ve çok taraflı ticaret anlaşmaları katılım" kriteridir. 8. kriter "yatırımcıların gücü ve fikri mülkiyet haklarına riayet" kriteridir. 9. kriter "genel olarak güvenli ortam" kriteridir. 10. kriter "araştırma ve geliştirme kapasitesi" kriteridir. 11. kriter "dijital altyapı kalitesi" kriteridir. 12. kriter "iş gücü havuzunun yetkinlik/yeterlik düzeyi" kriteridir. 13. kriter "ham madde ve diğer üretim girdilerinin varlığı" kriteridir. 14. kriter "finansal sermaye ve yerel pazarın varlığı" kriteridir. 15. kriter "işgücü maliyeti "kriteridir. 16. kriter "yerel ekonomik performans düzeyi" kriteridir. 17. kriter "yerel pazar büyüklüğü" kriteridir. 18. kriter "çeşitlendirilmiş farklı değer zincirlerinin varlığı" kriteridir. 19. kriter "fiziksel altyapı kalitesi" kriteri ve son olarak ta 20. kriter "arazi ve taşınmaz mal/gayrimenkul varlığı" kriteridir.

Grafik 5. Doğrudan Yabancı Yatırım Kararlarının Verilmesinde Değerlendirilen Faktörler



Kaynak: Kearney Doğrudan Yabancı Yatırımlar Güven Endeksi 2023,

Doğrudan Yabancı Sermaye Yatırımları Güven Endeksinde yatırımcıların hangi sebeplerden dolayı yatırım yapmaktan kaçındıkları da sorgulamaktadır. Tespit edilen sebepler gelişmiş ekonomiler, gelişmekte olan ekonomiler ve az gelişmiş ekonomiler için farklılık göstermektedir. Yatırımcıların hangi nedenlerden dolayı doğrudan yabancı yatırım yapmaktan kaçındıkları gelişmiş, gelişmekte olan ve az gelişmiş ekonomiler için ayrı ayrı aşağıda yer alan Grafik 6, 7 ve 8'de görülmektedir.

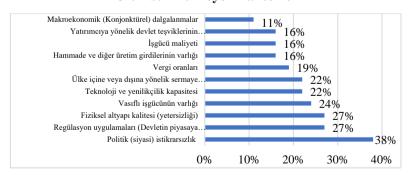
Grafik 6. Gelişmiş Ekonomilere Yönelik DYY Kararları Olumsuz Etkileyen Faktörler



Kaynak: Kearney Doğrudan Yabancı Yatırımlar Güven Endeksi 2023.

Grafik 6'da görüldüğü gibi gelişmiş ekonomilere doğrudan yabancı yatırım yapılmasını en olumsuz etkileyen ve yatırımcıyı caydıran en önemli neden %40 oranla hammadde ve diğer girdilerin bulunabilirliği sorunudur. Bundan sonraki en önemli ikinci, üçüncü ve dördüncü olumsuzluk %30 oranla işgücü maliyetinin yüksekliği, %30 oranla hükümetlerin yapmış olduğu regülasyon uygulamaları ve yine %30 oranla fiziksel altyapı yetersizliğidir. Diğer faktörler yukarıda yer alan Grafik 6'da görülmektedir.

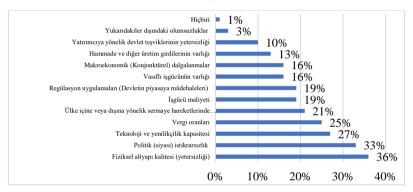
Grafik 7. Gelişilmekte Olan Ekonomilere Yönelik DYY Kararları
Olumsuz Etkileyen Faktörler



Kaynak: Kearney Doğrudan Yabancı Yatırımlar Güven Endeksi 2023.

Gelişmekte olan ekonomilere yatırım yapılmasını caydıran nedenlerin başında siyası istikrarsızlık gelmektedir. Siyasi istikrarsızlık %38 oran ile yatırımcıların gelişmekte olan piyasalara doğrudan yabancı yatırım yapmaktan caymasına sebep olan açık ara en önemli nedendir. Gelişmekte olan ekonomilerde siyasi iktidarsızlıktan sonraki yatırımcıyı yatırım yapmaktan caydıran ikinci en önemli olumsuzluk %27 ile piyasa müdahaleleri veya diğer bir deyişle regülasyon (düzenleyici) uygulamalarıdır. Üçüncü en önemli olumsuzluk ise yine aynı yüzde değeri ile fiziksel altyapı kalitesinin yetersizliği sorunudur.

Grafik 8. Az Gelişmiş Ekonomilere Yönelik DYY Kararları Olumsuz Etkileyen Faktörler



Kaynak: Kearney Doğrudan Yabancı Yatırımlar Güven Endeksi 2023.

Son olarak az gelişmiş ekonomilerde DYY yapılması ile ilgili olarak karşılaşılan en önemli olumsuzluk %36 oranla altyapı kalitesi veya diğer bir değişle altyapı yetersizliğidir. Az gelişmiş ekonomiler için ikinci en önemli sorun %33 oranla siyasi istikrarsızlıktır. Az gelişmiş ekonomilerdeki DYY çekme konusunda üçüncü en önemli sorun ise bu ülkelerdeki teknoloji ve yenilikçilik kapasitesinin düşüklüğüdür. Az gelişmiş ekonomiler için doğrudan yabancı yatırım çekme konusunda yaşanan diğer olumsuzluklar yukarıda yer alan Grafik 8'de detaylı olarak görülmektedir.

2023 Doğrudan Yabancı Sermaye Yatırımları Güven Endeksinde katılımcılara gelecek yıl ne tür risklerin ve olası olabileceği sorulmuştur. gelismelerin Calısmava katılan yatırımcılar emtia fiyatlarındaki artısı, jeopolitik gerilimlerdeki artısı ve gelismekte olan pazardaki siyasi istikrarsızlığı bu yılın en olası riskleri olarak gördüklerini belirtmişlerdir. Belirtilen riskler aşağıda yer alan Grafik 9'da görülmektedir. Bu endişeler muhtemelen Rusya-Ukrayna savaşının ve Covid 19 pandemisinin devam eden yansımalarının yanı sıra emtia fiyatlarındaki dalgalanmalar ve yüksek enflasyonun bir sonucudur. Yatırımcılar ayrıca 2023 yılı için gelişmiş ve gelişmekte olan ülkelerde ekonomik kriz olasılığını güçlü bir şekilde vurgulamışlardır.

Ayrıca, küresel siber güvenlik endişeleri de yatırımcıların jeopolitik gerilimlerle ilgili endişelerini artırmaktadır. Küresel siber saldırılar 2022'de %38 oranında artış göstermiştir. 2022 yılında siber saldırıya uğrayan ülkelerin başında bir önceki yıla oranla %77 artışla Birleşik Krallık gelmektedir. Birleşik krallığı %57 artışla ABD izlemektedir.

Diğer bir olumsuzluk küresel enflasyondur. Küresel enflasyonun, düşük uluslararası emtia fiyatlarının da desteklediği sıkı para politikası nedeniyle 2022'de yüzde 8,7'den 2023'te yüzde 6,9'a ve 2024'te yüzde 5,8'e istikrarlı bir şekilde düşeceği tahmin ediliyor (IMF, 2023). Küresel manşet⁵ enflasyonun 2025'te ise yüzde 4,4'e düşmesi, 2025 tahmininin ise aşağı yönlü revize edilmesi bekleniyor (IMF, 2024).

Enerji fiyatları da özellikle Avrupa'da benzeri görülmemiş seviyelere ulaştı. Şubat ve Temmuz 2022 arasında Ukrayna'daki çatışma devam ederken Avrupa'da gaz ve elektrik toptan satış

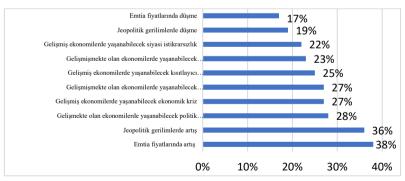
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⁵ TÜFE çok kullanılan fiyat endeksidir. Medya asıl olarak TÜFE'deki değişimleri enflasyon göstergesi olarak kullanır ve manşete çeker. Bu çerçevede TÜFE, manşet enflasyon olarak anılmaktadır.

fiyatları sırasıyla %115 ve %237 düzeyinde artış gösterdi. Enerji fiyatları savaşın ilk dönemine göre bir miktar geri çekilmiş olsa da Rusya -Ukrayna savası devam ettiği sürece 2023 yılında fiyatlarda dalgalanma olacağı ve yapılan vadeli işlem sözleşmeleri göz önüne alındığında özellikle Avrupa ülkelerinde doğal gaz fiyatlarının savaş öncesi seviyelerin üzerinde kalacağını öngörülüyor.

Raporda gelişmekte olan piyasalardaki siyasi istikrarsızlığın yatırımcıların kaygılandığı diğer bir husus olduğu belirtilmektedir. Bu kaygı siyasi şiddetin ve yaygın protestoların sürtüşmeye neden olduğu Brezilya⁶ ve Peru gibi Latin Amerika ülkeleriyle, İran'da kitlesel protestoların yeniden artmasıyla ve Taliban yönetiminin Afganistan'da kontrolü yeniden ele geçirmesiyle ilişkili olabileceği belirtilmektedir. Daha önce belirtildiği gibi 2023 Doğrudan Yabancı Sermaye Yatırımları Güven Endeksinde katılımcılara gelecek yıl ne tür risklerin ve olası gelişmelerin olabileceği sorulmuştur. Aşağıda yer alan Grafik 9'da bu soruya verilen cevaplar görülmektedir.

Grafik 9. 2023 Yılında Ne Tür Risklerin ve Olası Gelişmelerin Olabileceği Beklentisi



Kaynak: Kearney Doğrudan Yabancı Yatırımlar Güven Endeksi 2023.

https://www.usip.org/publications/2023/01/assault-brazils-government-raiseshemispheric-alarm-bells

Makro İktisat Calısmaları

Küreselleşme dünva capında ulusal ekonomileri bütünleştiren güçtür (Velde, 2005). Aynı zamanda ekonomik kalkınmayı önemli düzeyde destekler (Iqbal vd., 2012). Teknolojik gelisme ile küresellesme sürecinin yaygın etkileri 1980'li yıllarda önemli düzeyde hissedilmeye baslanmıs ve bu süreç DYY akışlarında ve stokunda önemli artışlara yol açmıştır. Hill ve McKaig (2015) doğrudan yabancı yatırımı "bir firma tarafından bir (kaynak) ülkeden başka bir (ev sahibi) ülkede fiziksel sermayenin edinilmesi veya insa edilmesi" olarak tanımlamıştır (Hill ve McKaig, 2015, s. 228). Doğrudan yabancı yatırımlar, ev sahibi ülkelerin ekonomilerine birçok fayda sağlamaktadır (Büthe ve Milner, 2008). Sonuç olarak, doğrudan yabancı yatırım iş yaratmayı kolaylaştırır, GSYİH'yi artırır, altyapıyı geliştirir, rekabeti teşvik eder ve ev sahibi ülkelerin verimliliğini artırır (Edrak vd., 2014).

Doğrudan Yabancı Sermaye Yatırımlarının devamı için en önemli unsur küreselleşme sürecidir. Doğrudan Yabancı Sermaye Yatırımları Güven Endeksi 2023 kapsamında yapılan anket sonuçları, küreselleşmenin önümüzdeki yıllarda da doğrudan yabancı yatırımlarda merkezi bir güç olduğunu ve öyle kalacağını gösteriyor. Grafik 10'a görüldüğü gibi küreselleşme sürecinde belirgin bir artış bekleyenlerin oranı %19 düzeyinde, orta düzeyde bir artış bekleyenlerin oranı %29 düzeyinde ve sınırlı artış bekleyenlerin oranı ise %21 düzeyindedir. Yatırımcıların toplamda %66'sı önümüzdeki üç yıl içinde küreselleşmenin artacağını öngörmektedir. Bu muhtemelen pandemi dönemi boyunca dijital ticaret ve hizmetlerde görülen carpici artisin bir sonucu olabileceği belirtilmektedir.⁷ Buna karşın ankete katılan yatırımcıların toplamda sadece %23'ü küreselleşme sürecimde düşüş öngörmektedir. Olumlu veya

https://unctad.org/system/files/official-document/ditctab2023d1 en.pdf

olumsuz bir değişim olmayacağını düşünenlerin oranı ise sadece %11 düzeyindedir.

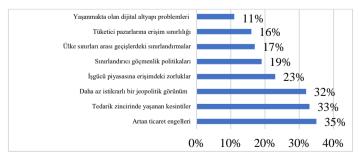
Grafik 10. Gelecek Üç Yıl İçinde Küreselleşme Sürecine Yönelik Beklentiler



Kaynak: Kearney Doğrudan Yabancı Yatırımlar Güven Endeksi 2023,

Küresellesme sürecinde düsüs olacağını belirten katılımcılar bu düsüsün nedenleri olarak asağıda ver alan Grafik görülmekte olan olumsuzlukları sıralamıslardır. Küreselleşme sürecinde yavaşlama bekleyen katılımcıların %35'i artan ticaret engelleri, %33'ü ticaret zincirinde yaşanan kesintiler ve %32'si ise daha az istikrarlı jeopolitik görünüm olduğunu belirtmişlerdir. Grafik 11'de görüldüğü gibi diğer nedenler işgücü piyasasına erisimdeki zorluklar, sınırlandırıcı göcmenlik politikaları, ülke sınırları arası geçişlerdeki sınırlandırmalar, tüketici pazarlarına erişim sınırlılıkları ve yaşanmakta olan dijital altyapı problemleri olarak sırlanmaktadır.

Grafik 11. Gelecek Üç Yıl İçinde Küreselleşme Sürecinde Yavaşlama Beklenti Nedenleri



Kaynak: Kearney Doğrudan Yabancı Yatırımlar Güven Endeksi 2023

Raporda yukarıda belirtilen nedenlerden dolayı sürecinde yavaşlama küresellesme olacağını ifade eden yatırımcıların yanında doğrudan yabancı yatırım akımları için küresellesme sürecinin en iyi birinci strateji olduğunun ifade eden %56'lık bir çoğunluk bulunduğu da belirtilmektedir. Ayrıca bu görüşü savunan yatırımcıların %82'lik büyük bir çoğunluğu gelecek üç yıl boyunca küresel bir stratejiyi sürdürmeyi veya genişletmeyi öngördüklerini belirtilmektedirler.

3. TÜRKİYE'YE YÖNELİK DOĞRUDAN YABANCI YATIRIMLAR

Türkiye'ye yönelik doğrudan yatırım girişleri 2007 yılında 22 milyar dolar ile tarihi yüksek seviyeye yükselmiş ancak izleyen yıllarda bu ivme korunamamış ve 2020 yılında 7,7 milyar dolara kadar gerilemiştir. İstisnai yıllar 2011 ve 2015'tir ve doğrudan yabancı yatırım kaynaklı girişler sırasıyla 16,2 milyar dolar ve 19,3 milyar dolar olmuştur. Net doğrudan yatırım girişlerinin seyri de buna paraleldir; 2007 yılında 19,9 milyar dolar ile zirve yapmış, 2020 yılında ise incelenen dönemin en düşük seviyesine (4,5 milyar dolar) gerilemiştir. Pandemi sonrasında 13-14 milyar dolar aralığında seyreden doğrudan yatırım girişleri, 2023 yılı dördüncü çeyreği itibarıyla 10,6 milyar dolara gerilemiş ve net girişler 4,7 milyar dolar düzeyinde gerçekleşmiştir (TEPAV, 2024, s.2).

Aşağıda yer alan Grafik 12'de 2014 -2023 yılları arasında ödemeler dengesi istatistikleri altındaki uluslararası doğrudan yatırım verileri kullanılarak hazırlanan Türkiye'ye yönelik uluslararası doğrudan yatırım girişleri görülmektedir. Tabloda görüldüğü gibi pandemi döneminde yaşanan önemli düzeydeki DYY düşüşü hariç DYY girişlerinin yatay bir seyir izlediği söylenebilir. Bununla beraber 2015 yılında Türkiye'ye gelen DYY miktarı 19 milyar doları geçenken DYY girişleri 2023

yılında 10 milyar 642 milyon dolar düzeyine gerilemiştir. Bu rakamlar 2015 yılı ile karşılaştırıldığında 2023 yılında DYY girişlerinde %45 oranında azalma olduğu anlamına gelmektedir. Bunun yanında tabloda görülen diğer bir çarpıcı sonuç 2022 yılına göre 2023 yılında ülkemize giren DYY'lar %22,13 düzeyinde gerilemiş olduğudur.

Tablo 1. 2014-2023 Türkiye'ye Yönelik DYY Girişleri (Net Yükümlülük Oluşumu)

(Milyon ABD doları)	2014	2015	2016	2017	2018	201 9	202 0	2021	2022	2023	2022- 2023 Değişim (%)
Uluslararası Doğrudan Yatırım Girişi (Net Yükümlülük Oluşumu) *	13.3 37	19.2 63	13.8 35	11.1 90	12.4 50	9.5 07	7.6 75	12.8 95	13.6 66	10.6 42	-22,13%
Sermaye	8.37 1	11.8 17	6.95 8	5.53 2	6.22 9	5.5 12	4.4 01	6.87	6.40	5.21 4	-18,57%
Yatırım	8.63 2	12.1 81	7.57 9	7.40 1	6.69 9	5.8 81	5.7 91	7.09 8	6.98 5	5.58 8	-20,00%
Tasfiye	261	364	621	1.86 9	470	369	1.3 90	225	582	374	-35,74%
Diğer Sermaye (Net)**	645	3.29 0	2.98 7	1.01 5	306	- 984	- 680	388	990	1.86 8	88,69%
Gayrimenkul (Net)	4.32 1	4.15 6	3.89 0	4.64 3	5.91 5	4.9 79	3.9 54	5.63 4	6.27	3.56 0	-43,25%
* TCMB tarafından yayımlanan öde	emeler d	engesi is	tatistikle	eri altınd	laki ulus	lararası	doğrud	lan yatır	ım verile	eri IMF .	Altıncı El

^{*} TCMB tarafından yayımlanan ödemeler dengesi istatistikleri altındaki uluslararası doğrudan yatırım verileri IMF Altıncı E Kitabına göre düzenlenmiştir.

** Uluslararası Sermayeli Firmaların Yabancı Ortaklarından Aldıkları Kredi

Kaynak: https://sanayi.gov.tr/istatistikler/yatirim-istatistikleri/mi0803011615

Tablo 1'de alt kırılımlar dikkate alındığında 2023 yılında bir önceki yıla göre en önemli değişim %43.25 ile Gayrimenkul sektöründe yaşanmıştır. 2022 yılında gayrimenkul sektöründe zirve yapan DYY girişleri 2023 yılında öneli düzeyde azalmıştır. Bu durum Kearney Doğrudan Yabancı Yatırımlar Güven Endeksinde belirtilen Rusya-Ukrayna savası dolayısıyla 2021 ve 2022 yıllarında ülkemize gelen yatırımcıların 2023 yılında ülkemize yönelik ilgisinin önemli düzeyde azaldığını göstermektedir.

TEPAV (Türkiye Ekonomi Politikaları Araştırma Vakfı) tarafından yayımlanan Doğrudan Yatırımlar Bülteni 2023 Dördüncü Çeyrek verilerine göre, 2023 yılı dördüncü çeyreğinde yabancılara yapılan konut satışı yüzde 61,3 düşmüş ve 6 bin 968'ya gerilemiştir. Satışların yüzde 27'si Rus uyruklu

vatandaşlara yapılmıştır. Yabancılara yapılan konut satışlarının 1877'si Rus, 674'ü İran ve 318'i Irak uyruklu vatandaşlar tarafından satın alınmıştır. Geçen yılın aynı dönemine göre kıyaslandığında, konut satışları Rus uyruklu vatandaşlarda yüzde 73,2, İran uyruklu vatandaşlarda yüzde 60 ve Irak uyruklu vatandaşlarda yüzde 67,7 gerilemiştir. Satışların 2 bin 330'u Antalya, 2 bin 264'ü ise İstanbul'da yapılmıştır. Antalya ve İstanbul'da yabancılara yapılan konut satışları yıllık olarak sırasıyla yüzde 67,7 ve yüzde 57,8 düşmüştür (TEPAV,2024, s.4).

Tablo 1'de görüldüğü gibi 2023 yılında Türkiye'ye yönelik uluslararası doğrudan yatırım girişlerinde yaşanan tek artış uluslararası sermayeli firmaların yabancı ortaklarından aldıkları kredilerde olmuştur. Uluslararası sermayeli firmaların yabancı ortaklarından aldıkları kredilerde 2023 yılında 1 milyar 868 milyon dolara çıkarak 2022 yılına göre %88,68 oranında artış göstermiştir. Bu kalem döviz girişi sağlaması anlamında önemli olmasına rağmen yeni bir yatırım olarak gelmediği için uzun vadeli etkisi diğer kalemlere göre daha düşüktür. Nitekim Uluslararası Sermayeli Firmaların Yabancı Ortaklarından Aldıkları Krediler 2019 ve 2020 yıllarında sırasıyla -984 ve -680 milyon dolar olarak gerçekleşmiştir.

Kearney Doğrudan Yabancı Yatırımlar Güven Endeksi raporuna göre gelişmekte olan ekonomilere yatırım yapılmasını caydıran nedenlerin başında siyası istikrarsızlık gelmektedir. Çalışmaya katılan yatırımcıların %38'i gelişmekte olan ekonomilere yatırım yapmamaktan çekinmelerinin nedeni olarak siyası istikrarsızlığı en önemli neden olarak belirtmişlerdir. Ülkemiz içinde bu konu dikkat edilmesi gereken hususlardan biridir.

Kearney 2023 Doğrudan Yabancı Sermaye Yatırımları Güven Endeksinde katılımcılara gelecek yıl ne tür risklerin ve olası gelişmelerin olabileceği sorulmuştur. Çalışmaya katılan

yatırımcılar Enerji fiyatlarındaki artışı, jeopolitik gerilimlerdeki artışı ve gelişmekte olan pazardaki siyasi istikrarsızlığı bu yılın en olası riskleri olarak gördüklerini belirtmişlerdir. Bu endişeler muhtemelen Rusya-Ukrayna savaşının ve Covid 19 pandemisinin devam eden yansımalarının yanı sıra emtia fiyatlarındaki dalgalanmalar ve yüksek enflasyonun bir sonucudur. Yatırımcılar ayrıca 2023 yılı için gelişmiş ve gelişmekte olan ülkelerde ekonomik kriz olasılığını güçlü bir şekilde vurgulamışlardır. Tablo 1'de görüldüğü gibi Türkiye'ye yapılan DYY'lar 2022 yılı ile kıyaslandığında 2023 yılında %22,13 düzeyinde gerilemiştir. Bu gerileme büyük olasılıkla 2023 yılı Kearney Doğrudan Yabancı Yatırımlar Güven Endeksinde belirtilen ve yukarıda saydığımız her bir risk unsuru ile belirli oranlarda ilişkilidir.

4. SONUÇ

Kearney 2023 Doğrudan Yabancı Yatırım Güven Endeksi'nin en önemli sonuçları, yatırımcıların doğrudan yabancı küresellesme ve küresel ekonomive vatırım. iliskin beklentilerinin çok olumsuz olmamasına rağmen artan emtia fiyatları ve artan jeopolitik sorunların kaygı verici olduğudur. Bu ve benzeri olumsuzluklar yatırımcıları ağırlıklı olarak refah düzeyi yüksek, şeffaf hükümet düzenlemelerinin olduğu ve güçlü teknolojik altyapıya sahip piyasalara vönlendirmektedir. Endeksin en üstünde ver alan ABD, Kanada, Japonya, Almanya ve Birleşik Krallık gibi ülkeler bu anlamda en çok DYY çeken ülkeler olarak karşımıza çıkmaktadır.

2023 Doğrudan Yabancı Yatırım Güven Endeksi'nin sonuçları aynı zamanda Asya ve Orta Doğu'da artan ekonomik dinamizmi de yansıtmaktadır. Asya bölgesi için Tayland ve Hindistan'ın bu yılki endekse eklenmesi bunun bir göstergesidir. Orta Doğu bölgesinden Suudi Arabistan'ın bu yıl endekse

katılması ve Birleşik Arap Emirlikleri ile Katar'ın ilk 25'te yer alması önemli göstergelerdir.

Türkiye, Kearney 2023 Doğrudan Yabancı Yatırım Güven Endeksinde "Gelişmekte Olan Pazarlar" kategorisinde yer almaktadır. Gelişmiş ilk 20 (G20) ülke içinde yer alan Türkiye gelişmekte olan pazarlar endeksinde; Katar, Tayland, Malezya, Endonezya, Filipinler, Vietnam ve Mısır gibi ekonomik güç anlamında daha düşük ülkelerin ardından 15. sırada yer almaktadır. Asya ve Avrupa'nın arasında avantajlı jeopolitik konum, teknolojik alt yapı, güçlü bir tedarik zinciri, gelişmiş bir bankacılık sistemi, dinamik genç nüfus gibi birçok avantaja sahip olan Türkiye'nin daha üst sıralarda hatta Kearney 2023 Doğrudan Yabancı Yatırım Güven Endeksinde "Dünya Sıralaması" kategorisi içerisinde yer alması arzu edilirdi. OECD Doğrudan Yabancı Yatırım istatistiklerine göre 2022 yılında 1 trilyon 310 milyar 057 milyon dolarlık toplam DYY'ın sadece 13 milyar 143 milyon dolarlık kısmını Türkiye'ye yönlenmiştir. Yani Türkiye 2022 yılında Dünya Genelinde ülkelere yönlenen toplam DYY akımlarının sadece %1'ini çekebilmiştir (OECD, Veri Bankası).

Özelikle bizim de önemli düzeyde etkilendiğimiz Avrupa Birliği bölgesinde yaşanan enerji fiyatlarındaki artış, komşu ülkelerde yaşanmakta olan jeopolitik gerilimler, gelişmekte olan ülkelerdeki siyasi istikrarsızlık, Rusya-Ukrayna savaşı, Covid 19 pandemisinin devam eden yansımalarının sonucu emtia fiyatlarındaki dalgalanmalar ve küresel yüksek enflasyon önemli sorunlardır. Ülkemiz için DYY'ların en olumsuz etkilendiği hususlar belirtilen bu sebeplerin yanında uzun zamandan beri mücadele etmekte olduğumuz yüksek enflasyon, makro ekonomik sorunlardır. Grafik 11'de görüldüğü gibi Türkiye'ye yapılan DYY'lar 2022 yılı ile kıyaslandığında 2023 yılında %22,13 düzeyinde gerilemiştir. Bu gerileme büyük olasılıkla 2023 yılı Kearney Doğrudan Yabancı Yatırımlar Güven

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Endeksinde belirtilen her bir risk unsuru ile belirli oranlarda ilişkilidir.

2023 Doğrudan Yabancı Yatırım Güven Endeksi çalışmasına katılmış olan yatırımcılar büyük bir çoğunluğu küreselleşmenin faydalarına inanmakta ve %66'sı önümüzdeki üç yıl içinde küreselleşmenin artacağını öngörmektedir. Bununla beraber katılımcılar önümüzdeki üç yıl içinde daha fazla bölgeselleşme ve ulusal hükümetlerin kendi kendine yeterliliği artırmaya yönelik stratejiler izleyeceğini de öngörmekteler. Küresel boyutta yasanmakta olan tüm zorluklara rağmen katılımcıların büyük çoğunluğu doğrudan yabancı yatırımların artmasını beklemekteler. Ayrıca yatırımcıların yaklasık yarısı küresel yatırım duruşlarını genişletme niyetinde olduklarını belirtmiştir. En temel sonuç, küreselleşme devam ederken bölgeselleşme ve kendi kendine yeterlilik çabalarının artmasıyla küresel yatırımların doğasının ve yönünün değisebileceğidir. Bu değerlendirme ülkemiz içinde dikkate alınması gereken bir olgudur. Sonuçta gelecekte başarılı olmak, küreselleşmenin değişen doğası çerçevesinde hızla gelişen risklerin ve fırsatların yakından takip edilmesini gerektirecektir.

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UNVEILING THE IMPACT OF GOVERNMENT SIZE ON LABOR MARKETS IN ECOWAS¹

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1. INTRODUCTION

Several economic crises, particularly in emerging nations, have exerted detrimental consequences on various facets of those nations' growth. Considering these crises, policymakers and researchers have been more interested in this discourse, pushing for government intervention to control economic conditions. This is because even though the long-term economic development is endogenous, government policy impacts it positively or Bvstabilizing and influencing economic negatively. circumstances, the government may make sure that economic growth is sustainable and beneficial to society. Policy makers in many countries often utilize fiscal policy as a means to address

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market failures and mitigate their adverse effects. In a broader sense, fiscal policy is implemented to manage expenditure levels, regulate taxation, and make effective resource allocations. In essence, fiscal policy operates as a way through which a state governs the economy (Anayochukwu, 2012). As Falade and Folorunso (2015) underlined, budgetary policy can be utilized to stimulate the economy via influencing expenditure and taxes. Diminishing unemployment rates and fostering economic growth are the key objectives of fiscal policy.

In this chapter, we explore the relationship between government size and unemployment in the Economic Community of West African States (ECOWAS) between 1991 - 2021. 4 In addition, we also aim to observe how the relation of government size and unemployment varies within the region by comparing the two existing economic and monetary unions: WAEMU and WAMZ. Our findings indicate the presence of a significant and relationship between government unemployment rate within the ECOWAS region. This outcome remains consistent across all three estimation methods used. Hence, a percentage rise in government size in the ECOWAS region will likely result in a corresponding rise in unemployment rate. This finding is aligned with the Abrams (1999) curve and is also consistent with the results of Okunola (2021), which explored the link between ECOWAS' employment dynamics and its fiscal policy. However, the relationship between government investment spending and unemployment is negative, meaning a

⁴ Benin, Burkina Faso, Cape Verde, Cote d'Ivoire, The Gambia, Ghana, Guinea, Guinea-Bissau, Liberia, Mali, Niger, Nigeria, Senegal, Sierra Leone, and Togo are currently the fifteen (15) West African nations that comprise the Economic Community of West African States (ECOWAS).

bigger government investment expenditure has a prospect to reduce unemployment. While population growth shows strong positive relationships, FDI, Inflation and GDP per capita growth illustrate weak relationships. When WAEMU and WAMZ regions are compared, interesting findings emerge. While the relationship between government size and unemployment rate shows negative coefficient across the WAEMU region, it appears to be positive in WAMZ regions.

2. DATA AND METHODOLOGY

To explore the connection in relation to government size and rate of unemployment, we use data available in the World Bank's WDI database. Overall, the analysis encompasses twelve of the available fifteen ECOWAS countries. Countries like Liberia, Guinea, and Cabo Verde were excluded due to inadequate data availability. To ensure consistency and address any potential issues with missing data, the study carefully selected panel data from the aforementioned countries, covering 1991 and 2021. Rate of unemployment (UNEMP), measured as a proportion of overall labor force, is dependent variable in this research. Primary independent variables examined involved general government consumption expenditure (GOV_SIZE) and gross fixed capital formation (GOV_INV), both expressed as percentages of GDP. In addition, several control variables are included in the analysis. These consist of inflation (INF), yearly proportion change in CPI; GDP per capita (Y) growth rate; and population (POP) growth rate. These control variables are incorporated to consider their potential impact on unemployment rate. By employing this comprehensive dataset and considering various relevant variables, the research seeks to the interaction regarding government size unemployment of ECOWAS. It also aims to analyze potential variations or discrepancies in relation to the size of government and unemployment within two sub- unions of ECOWAS: WAEMU and WAMZ.

We explore the relationship linking unemployment and the size of government of ECOWAS countries. As we delve into this study, we seek to discover if effect of size of government on the rate of unemployment varies in the West African region by comaparing the West African Economic and Monetary Union (WAEMU) and the West African Monetary Zone (WAMZ). The government's connection with size of the respect unemployment appeared to be a complicated one that defies a single theoretical explanation. However, we adhere to the Keynesian theory which suggests that unemployment is primarily caused by insufficient aggregate demand in the economy. Therefore, government intervention through expansionary measures is necessary to stimulate economic activity and address unemployment issues.

Hence, the panel data regression takes the following form:

$$UNEMP_{it} = \alpha + \beta_1 GOV_SIZE_{it} + \beta_2 GOV_INV_{it} + \beta_3 FDI_{it} + \beta_4 INF_{it} + \beta_5 Y_{it} + \beta_6 POP_{it} + \mu_{it}$$

We use the DOLS model introduced by Stock and Watson (1993). This technique utilizes a parametric approach to estimate long-term connection in a given regression with integrated variables in different orders but cointegration exists among the variables.

3. RESULTS AND DISCUSSIONS

3.1. Summary Statistics

Prior to initiating the analysis, it is crucial to perform descriptive statistics to summarize the research data. The key

variables' summary statistics and their discussions are illustrated below.

Variable	Obs.	Mean	Std. Dev.	Min	Max
UNEMP	372	4.870	2.605	0.32	11.71
GOV_SIZE	372	11.985	4.337	.911	26.065
GOV_INV	372	18.642	7.523	-2.424	48.4
FDI	372	2.43	3.093	-2.545	32.301
INF	372	7.97	13.039	-7.797	102.697
Y	372	1.141	4.305	-29.413	19.457
POP	372	2 733	0.672	-1 765	5 785

Table 1. Summary Statistics- ECOWAS

The data reveals important patterns and characteristics among the variables. Government Investment Expenditure is observed to have a higher average value (18.642) compared to Government Size (11.985) across ECOWAS member states. The prioritization of investment expenses implies a strategic concentration on sustained economic development, recognizing the importance of allocating resources to crucial domains like education and infrastructure.

Among the variables, the indicators displaying the lowest average figures are FDI and GDP per capita. This implies that, the countries in the sample have relatively lower levels of income per person and foreign investment inflows on average. On the other hand, inflation demonstrates a moderate mean value, but it stands out with the highest standard deviation, almost twice as large as the next variable. This wide variation in inflation rates among ECOWAS countries signifies substantial heterogeneity, with some nations experiencing significantly higher or lower inflation than the average. Such divergence in inflation rates can have significant implications for economic stability and performance. Rapidly rising inflation rates erode consumers' purchasing power and introduce uncertainties for businesses, while persistently low inflation may signal sluggish demand and

below-par economic growth. Consequently, it becomes imperative to analyze the underlying factors contributing to these divergences in inflation rates. Such analysis can assist policymakers in formulating appropriate monetary and fiscal policies aimed at fostering price stability and enhancing overall economic prosperity.

Table 2. Summary Statistics-WAEMU

Variable	Obs	Mean	Std. Dev.	Min	Max
UNEMP	248	4.26	2.466	.32	11.71
GOV SIZE	248	13.647	3.815	6.408	26.065
GOV INV	248	18.611	5.841	5.885	48.397
FDI	248	1.79	2.245	-2.545	18.818
INF	248	4.381	9.831	-7.797	69.584
Y	248	1.088	3.88	-29.413	14.583
POP	248	2.825	.556	68	4.467

Table 3. Summary Statistics- WAMZ

Variable	Obs	Mean	Std. Dev.	Min	Max
UNEMP	124	6.088	2.452	3.388	11.212
GOV SIZE	124	8.662	3.287	.911	15.308
GOV INV	124	18.702	10.108	-2.424	48.4
FDI	124	3.709	4.033	971	32.301
INF	124	15.15	15.517	918	102.697
Y	124	1.247	5.065	-22.488	19.457
POP	124	2.547	.83	-1.765	5.785

Tables 2 and 3 reveals notable distinctions regarding the West Africa Economic and Monetary Union (WAEMU) in connection to the West African Monetary Zone (WAMZ). The notables are government size, inflation rate, and unemployment rate. Firstly, WAEMU exhibits a larger government size, as indicated by a mean value of 13.647, compared to WAMZ with a mean value of 8.662. Despite this disparity, both blocs display similar levels of variation in government size, as reflected by their comparable standard deviation figures. Moreover, a prominent contrast arises in the inflation rates between the two unions. On average, the inflation rate of WAMZ is three times more

compared to WAEMU. Especially, the inflation rate in the WAMZ exhibits considerable volatility, evidenced by a substantial standard deviation value of 15.15, surpassing its average rate. In contrast, the WAEMU region displays a lower mean inflation rate, yet still possesses a relatively higher standard deviation, implying significant fluctuations in inflation across both blocs. While the rate of unemployment in WAEMU is approximately half that of WAMZ, both regions exhibit comparable levels of variation in unemployment rates. This indicates a comparable level of ambiguity and heterogeneity in employment trends within both economic unions.

3.2. Panel Empirical Results

Table 4. Panel Regression Results

	(1)	(2)	(3)
VARIABLES	ECOWAS	WAEMU	WAMZ
GOV_SIZE	0.8674***	-0.5579***	0.4177***
	(0.1277)	(0.0672)	(0.0620)
GOV_INV	-0.4336***	0.2338***	0.1550***
	(0.0584)	(0.0319)	(0.0156)
FDI	-0.0093	-0.2502***	-0.1532***
	(0.0401)	(0.0144))	(0.0191)
INF	-0.1511***	0.0442***	0.1103***
	(0.0453)	(0.0141)	(0.0116)
Y	-0.0448	-0.5196***	0.0473*
	(0.0545)	(0.0247)	(0.0254)
POP	0.3049	-3.4503***	0.7104***
	(0.3588)	(0.1835)	(0.1213)

Notes: (***), (**) and (*) represent statistical significance at 1%, 5% and 10% levels respectively. standard errors are in parentheses.

The results for the ECOWAS region support the Abrams curve, originally introduced by Abrams (1999), which establishes positive nexus connecting government size and unemployment. Similar conclusions have been drawn in other studies, including

those conducted by Aysu et al. (2011), Christopoulos & Tsionas (2002), and Feldmann (2006).

Upon analyzing the outcomes for WAEMU and WAMZ, distinct patterns emerge, showcasing mixed results between the two sub-blocs. Regarding the sort of linkage between size of government and rate of unemployment, there exist contrasting findings. Within the WAEMU sub-bloc, DOLS estimation shows unemployment coud potentially be reduced by 0.558% with just a 1% increament in government size. Conversely, for the WAMZ sub-bloc, the scenario takes a completely different turn, as all methods unveil a correlation of government size and unemployment is positive at significance level 1%. In addition, the DOLS estimation suggest that if government size expand by 1%, that of unemployment will also go up for about 0.418%.

These diverging results on the influence of government size on unemployment can be attributed to the distinct economic conditions prevailing within each sub-bloc. These varying circumstances could contribute to the different outcomes observed between the two regions. Although both WAEMU and WAMZ share the objective of aligning macroeconomic policies across their member states, they diverge in terms of their government size and associated policies.

WAEMU has a regional surveillance mechanism that monitors and evaluates the compliance of member states with the fiscal regulation and other macroeconomic instruments that are in line with the implementation of the common policies and programs of the union. Therefore, fiscal policy decisions such as expenditures are coordinated and monitored in such a way that allow discipline spending and putting resources into sectors that are development oriented. Hence, creating a platform for effective and responsible spending policies in the region as member states are bound by the regulation that oversee the

convergence criteria in the WAEMU states. According to Manasse et al. (2005) and Buti et al. (2001), this measure is essential to the economic synchronization of nations, and adherence with it enables economic integration and ensures growing level of fiscal discipline. The existence of common currency and policy restrictions within this bloc makes it more resistible to market inefficiencies and also encourages responsible and discipline spending. As a result, Kebalo and Zouri (2022) reached the conclusion that implementing the fiscal convergence criterion in the bloc enhances the improvement of business cycles harmonization through the coordination of economic policies. In contrast, there exists no such mechanism in WAMZ countries. This is because the bloc has a more decentralized structure that heavily depends on national authorities and working groups to report their data on key fiscal variables such as expenditure.

Although a goal of achieving a unified fiscal outlook exists, the member states are not under any urgency to harmonize their expenses. Additionally, WAMZ has more room for adjustment and independence of fiscal policy as they enjoy fiscal sovereignty and policy flexibility. But this self control and autonomy has a cost as it exposes countries within WAMZ to more economic and market shortcomings. For example, the exchange rate regime in WAMZ countries is flexible, and the rate of the respective nation's currencies are decided by the influences of demand and supply. Since these countries are import dependent, the demand for foreign currencies is usually high, which often leads to inflationary pressures and hence increases the cost of imported goods and services. This eventually raises the amount of money the government spends on consumption, which is found to have a positive relationship with unemployment. For WAEMU, on the other hand, a fixed exchange rate regime exists. This is because they have a single

currency, the CFA franc, which is fixed to the Euro. Thus, they are less sensitive to market shortcomings.

Moreover, within the WAEMU region, there exists a fiscal regulation as a component of its convergence criteria, which restricts the overall fiscal deficit to 3% of GDP. In contrast, the WAMZ countries adopt a more lenient approach by setting the overall fiscal deficit limit at 4% of GDP. Despite the challenges faced by both countries in meeting and maintaining the regulatory threshold, it appears that the countries within WAEMU derived greater advantages from the aforementioned regulation. Generally, many believe that WAMZ members, due to their economic freedom and autonomy, should experience a more promising economic outlook characterized by progress and development. This is because the individual countries have their own central banks and their governments are often free from interference, so they are expected to govern their economic affairs effectively. Contrary to expectations, the findings of this study have revealed a contrasting reality, evident in the disparity of government size between the WAMZ and WAEMU regions. In the context of the WAMZ, a larger government size appears to have an undesirable bearing on unemployment, whereas in the case of WAEMU, it demonstrates a positive impact.

One potential rationale for the favorable influence of government size on unemployment rates in countries within the West African Economic and Monetary Union (WAEMU) is linked to its association with its previous colonial power, France. WAEMU countries share a single currency pegged to the Euro, with the central bank of the region maintaining an account with the Treasury of France. Under this particular monetary framework, the West African Central Bank is mandated to deposit half of its foreign currency reserves into the coffers of the French Treasury, obligating itself to directing no less than 20% of its foreign currency balances towards sight liabilities, and the bank

is also constrained in its ability to access no more than 20% of the previous year's revenue (Ibrahim, 2020). The purpose of this action is to ensure the continued sustainability of the West African CFA franc in the global market through the prevention of occurrences such as inflation hikes, currency devaluation, and fiscal turmoil. Although there have been accusations of neocolonialism against Paris, the conditions associated with the CFA franc zone have generally proved to be effective in promoting increased stability and growth within the economies of WAEMU, when compared to those of WAMZ. This is becasue due to limited financial resources at their disposal and the existence of oversight measures, WAEMU countries are forced to determine the sectors into which they inject their financial funds. For the West African Monetary Zone (WAMZ), the situation presents a marked contrast. Devoid of any colonial-related pressures, the individual countries are free to administer their internal affairs, including monetary and fiscal policies. This, however, can lead to an increase in imprudent spending and unsound policy decisions.

WAEMU and WAMZ countries can also be distinguished based on their employment culture. As per Faujas Alain (2012), the deputy chairman of the French Council of Investors, Bouthelier Anthony, claims that nations with an Anglo-Saxon culture tend to prioritize business and entrepreneurship, and individuals in such nations are less willing to aspire for public service positions compared to those with a French cultural background. Thus, it can be inferred that citizens of WAMZ are mainly preoccupied with generating job prospects for themselves, therefore placing less reliance on the government to secure employment. In such countries, the authorities are not forced to allocate financial resources towards areas that primarily generate employment, thereby leading to the channeling of funds into sectors that do not directly influence employment prospects. Hence, an increase in government size will likely lead to a

corresponding rise in unemployment rates, which has a detrimental impact on the economy. Conversely, countries that belong to the WAEMU bloc are more prepared to be absorbed by the public sector for employment. The appetite towards job seeking rather than entrepreneurialism is evident among them. This social tendency compels the government to devise and allocate their expenditures towards initiatives that can yield sustainable employment prospects for their populace. As a result, an upsurge in the size of government could potentially decrease unemployment rate, as the government continues to devote more funds into sectors that are inclined towards generating employment opportunities.

4. CONCLUSION

This chapter analyzed the nexus between the size of government and unemployment rate in ECOWAS from 1991 to 2021. Apart from examining the overall relationship between these variables across ECOWAS, we studied potential variations or discrepancies in this relation within WAEMU and WAMZ.

Our results revealed a consistent and substantial positive connection concerning government size and unemployment within the ECOWAS region. Based on the discoveries, a percentage surge in government size is linked by a corresponding rise in the rate of unemployment within the region. Specifically, the rate of unemployment is projected to rise by 0.867% in the ECOWAS region for the DOLS, this evidence shows expansionary fiscal policies, often advocated by Keynesian economics, are not effective in addressing high unemployment rates of ECOWAS. Actually, the findings suggest that as government size expands, the unemployment rate tends to rise, holding all other factors constant. These findings align with the Abrams (1999) curve and is also consistent with the results of

Okunola (2021), who explored the link regarding employment dynamics and government policy in ECOWAS and found that when government expenditure goes up employment levels falls. However, when WAEMU and WAMZ regions are compared, interesting findings emerged. While the relationship is estimated to be negative in the WAEMU regions, its coefficients are positive in WAMZ regions. This huge variation in the connection pertaining to government size and unemploynet rate is owed to the distinct nature of the economic conditions prevailing within the two sub-blocs.

It is evident that several key variables affect the rate of unemployment in the **ECOWAS** region. Accordingly, should prioritize redirecting policymakers unnecessary government consumption spending towards labor-reliant public investments and underline the attraction of foreign direct investment while implementing measures to control inflation. It is evident that undisciplined government expenditure, particularly in non-labor-driven areas, will exacerbate the unemployment rate in the region. Therefore, governments within the ECOWAS region should strongly consider reducing the size of their government as a crucial mechanism for addressing the unemployment challenge. Additionally, it is imperative for the governments to actively pursue strategies aimed at promoting investment in vital areas of the economy, like infrastructure and education, as they play an important function in mitigating escalating rate of unemployment in the long run. Strategic investments in sectors that bolster economic growth and create employment opportunities will undoubtedly pose an influence on addressing challenges of unemployment in ECOWAS.

Furthermore, it becomes essential for government to adopt measures aimed at reducing general government consumption expenditure, as excessive spending in inappropriate sectors can impose significant restrictions on economic growth and impede

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employment opportunities. By implementing a comprehensive approach that includes efforts to strengthen economic growth, aiming government and foreign direct investments, and responsible consumption expenditure, governments in the region can pave the way for a more viable labor force, ultimately contributing to the lessening of unemployment in the region.

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