

ETHOS

ECONOMICS | CONSULTING

Monthly Bulletin

June 2022

Summary:

While observing a stagnant trend in the economy, we see a rapid tightening of financial conditions in June. Due to the ongoing financial tightening, we anticipate a slowdown in the economy in the coming months. However, despite this slowdown, we expect inflation to continue rising. We do not predict a decrease in inflation until the 4th quarter of the year. Therefore, we would like to draw attention to the risk of stagflation, where inflation accelerates alongside the expected economic slowdown in the 3rd quarter.

1. OVERVIEW

The Turkish economy exhibits a stagnant performance in June, following above-average growth in the second quarter. Both domestic and foreign demand played a role in contributing to strong growth during this period. However, the ongoing tightness in financial conditions since mid-2021 raises concerns about the sustainability of this growth. In general, the financial and real sectors, which used to move in tandem, have diverged significantly since late 2021. The real sector, which had been growing under the leadership of the financial sector, is finding it increasingly challenging to maintain a similar performance in the third quarter under these conditions. Indeed, our monthly and quarterly forecasts indicate a stagnant performance for the economy in June.

The most crucial finding of our report is the prediction of a slowdown, possibly even a contraction, in the economy around the third quarter. Despite some vitality in demand, we observe a sluggishness in the industry leading to a slowdown. The severity of the contraction will become clearer with upcoming data in the following period. Although we predict a contraction in the third quarter, we do not anticipate a similar decrease in inflation. Our predictions suggest that inflation will persist until the final quarter and that we may see three-digit inflation figures as of July. We expect inflation to begin slowing down due to base effects in the fourth quarter. The third quarter is likely to be a challenging period with both economic slowdown and high inflation.

2. MONTHLY INDICATORS: ECONOMIC AND FINANCIAL INDICATORS

The monthly outlook is monitored through two indices summarizing developments in the real sector and financial markets. These indices are based on the most up-to-date data available for the respective period and are derived from a large dataset with various publication frequencies. By employing advanced statistical methods, we identify common movements in these datasets, allowing us to create straightforward and easily understandable indicators with high predictive power, representing both economic and financial conditions comprehensively.

The Economic Conditions Index (ECI) provides real-time information summarizing the current state of the real sector. On the other hand, the Financial Conditions Index (FCI) illustrates the general stress level in financial markets. Additionally, the Financial Condition Index can be interpreted as a leading indicator for real economic activity. Consequently, a prolonged contraction in the financial sector is likely to eventually lead to a contraction in real economic activity as well.

The Economic Conditions Index (ECI)

According to the model predictions for this month, the Economic Conditions Index (ECI) has increased by 0.02% compared to the previous month in June¹. The changes in May and April were

¹ Note: For ease of interpretation, we have standardized the values, and as a result, we expect the change rates for both the economic and financial condition indicators to fall within the range of -2% to +2%. Values below -2% or above +2% can be considered as low-probability outliers. For example, in the past, these values were observed at -2.08% in November 2008, which was the trough of the 2008 recession, and at -2.17% in July 2016. Therefore, approaching these values close to -2% would provide us with information about the severity of the contraction being experienced.

0.10% and 0.45%, respectively. Therefore, the economic performance, which peaked in April, seems to have slowed down in May and June.

The sub-components of ECI have shown the following changes:

Production: One of the significant indicators in our extensive dataset reflecting the production side of the economy is the industrial production index. According to the latest data available for April, there was no change compared to the previous month's industrial production index. This stagnation in industrial production is one of the main reasons for the overall stagnation in the Economic Conditions Index. Furthermore, the consistent decline observed in the import quantity index for the last three months is an important indicator of the sluggishness in production which is heavily dependent on imports. In addition, the manufacturing PMI indicator has continued to decrease, reaching 49.2 in June, below the critical value of 50.

Demand: Looking at the demand side, retail sales volume showed a 2.0% increase in April. As for foreign demand, we observed a significant 11% increase in the export quantity index. The main driver of this increase is the growth observed in the European economy.

Employment: In the labor market, there was a 1.4% increase in total employment in April. With the labor force participation rate crossing the 50% mark, the upward trend in employment continues.

Taking all these components into account, the sub-components of ECI have displayed quite volatile movements in the first and second quarters of the year. As a result of these movements, particularly led by production indicators, the index suggests stagnation in June and the following months.

The Financial Conditions Index (FCI)

According to the model predictions for this month, the Financial Condition Index (FCI) has decreased by -0.90% compared to the previous month in June. The changes in May and April were -1.16% and -0.22%, respectively. The prolonged contraction in financial conditions has accelerated this month.

The sub-components of FCI have shown the following changes:

Risk Indicators: Volatility has increased in many sub-components of the index. The realized volatility of the main risk indicator, the BIST-100 index, has shown an increase compared to the previous month. The 5-year CDS premium being above 800 basis points indicates a high level of deterioration in Turkey's risk perception. One of the main reasons for this deterioration is believed to be the high trajectory of inflation and inflation expectations.

Credit Conditions and Reserves: There has been a decrease in gross reserves in June. Looking at credit conditions, although there is a nominal increase in total loans, the total loan volume shows stagnation in real terms due to high inflation. The increase in risk indicators, the low level of reserves, and the real stagnation observed in credit conditions are among the reasons for the continued contraction in the Financial Condition Index for an extended period.

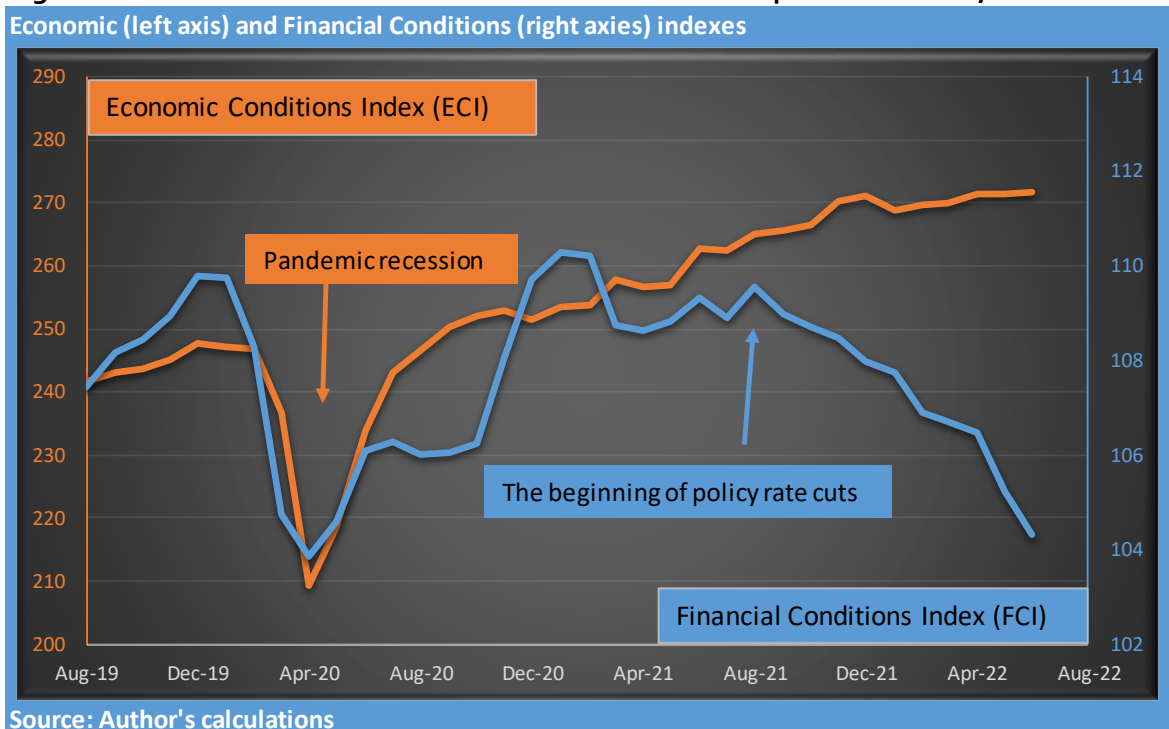
ECI and FCI Trends

Figure 1 illustrates the trend of the Economic Condition Index (ECI) and the Financial Condition Index (FCI) since 2019. The impact of the economic contraction caused by the Covid-19 pandemic in the

first half of 2020 and the subsequent rapid recovery is clearly observed in the ECI. A similar decline and rapid rebound are also evident in the FCI, particularly during the tenure of the former Central Bank Governor, Naci Ağbal.

However, it can be observed that the FCI has shown a slowdown since September 2021, which has eased this month. On the other hand, the ECI experienced a contraction in early 2022, followed by stagnation. Normally, these two indices should exhibit similar movements, with the FCI leading the ECI. However, since the implementation of new policies in the autumn of 2021, they have significantly diverged from each other. The prolonged decline in the FCI is bound to have an inevitable impact on the real sector.

Figure 1. The Economic and Financial Conditions Indices computed as of June, 2022

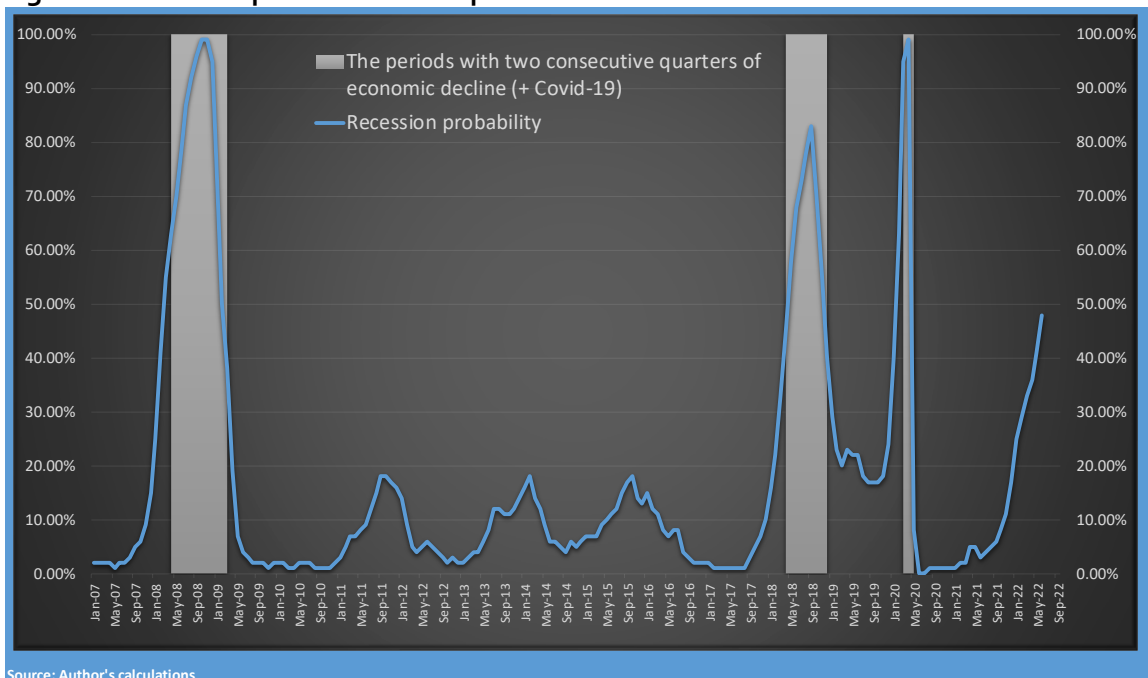


Recession Probabilities

Based on the common movements of the ECI and FCI, the probability of the economy entering a recession in the short term has been computed. These probabilities have shown high predictive capabilities and have served as a critical early warning system by accurately predicting short economic recessions of 2008 and 2020 months ahead. **In June, the probability of the economy experiencing a recession in the short term increased to 48%, a considerably high level.** In this regard, we predict that the prolonged decline in the FCI will lead to a contraction in the real economy by the 3rd quarter.

Figure 2 displays the changes in these probabilities from 2007 to the present. The shaded areas represent consecutive two-quarter contractions, indicating technical recessions. As can be seen, our calculations can accurately predict the likelihood of GDP growth trending below its trend approximately 4-6 months ahead of the actual GDP data.

Figure 2. Recession probabilities computed as of June 2022

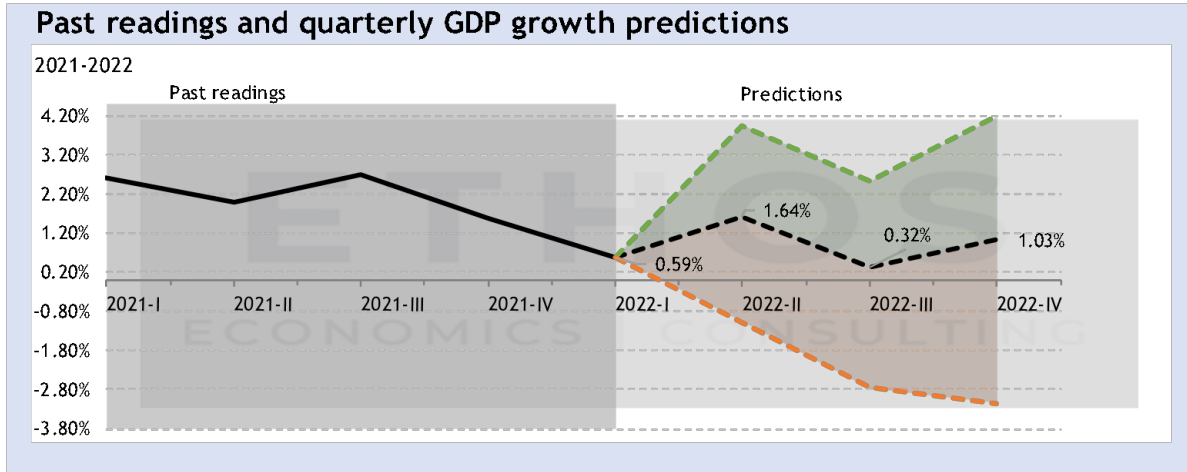


Source: Author's calculations

3. QUARTERLY INDICATORS: GDP OUTLOOK

Figure 3 displays the probability distribution of quarterly GDP growth forecasts based on our econometric "nowcast" model. The goal of these forecasts, using the extensive dataset, is to paint a picture of the current economic situation in terms of GDP and to create predictions about potential outcomes in both optimistic and pessimistic scenarios. The model aims to provide a comprehensive understanding of the economic conditions, considering various possible growth scenarios.

Figure 3. Quarterly GDP growth predictions as of June 2022



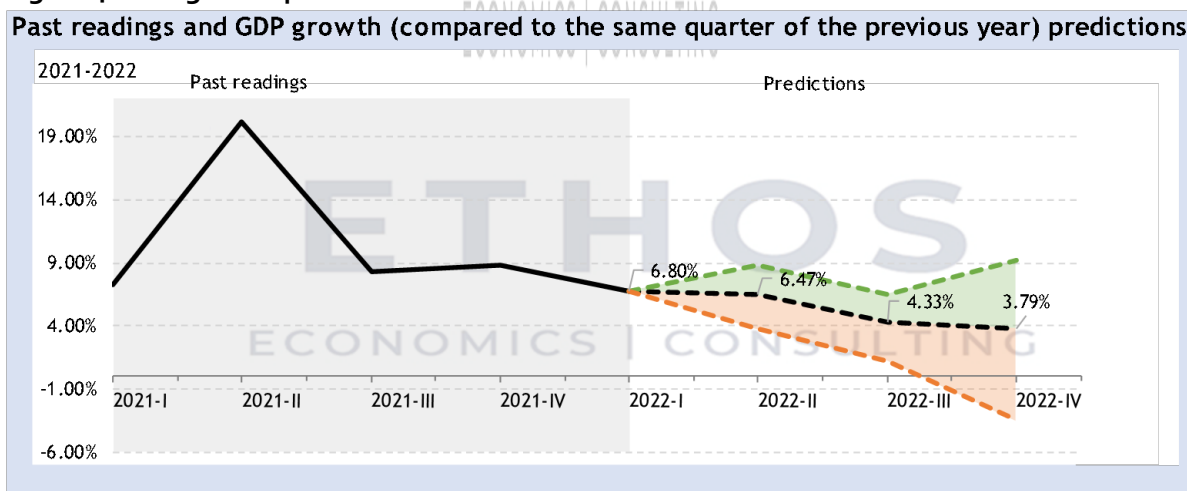
According to our nowcasting model, the GDP will grow by approximately 1.64% in the second quarter of 2022 compared to the previous quarter. However, our forecasts not only estimate the expected average growth but also calculate what we should expect in the best and worst-case scenarios.

Based on this, for the second quarter of 2022:

- There is a 5% probability that the worst-case scenario could result in a growth rate lower than -1.1%.
- There is a 5% probability that the best-case scenario could result in a growth rate higher than 4.0%.

Using these quarterly GDP growth predictions, we have also calculated the annual growth predictions compared to the same quarter of the previous year. Figure 4 illustrates these annual growth predictions.

Figure 4. GDP growth predictions as of June 2022

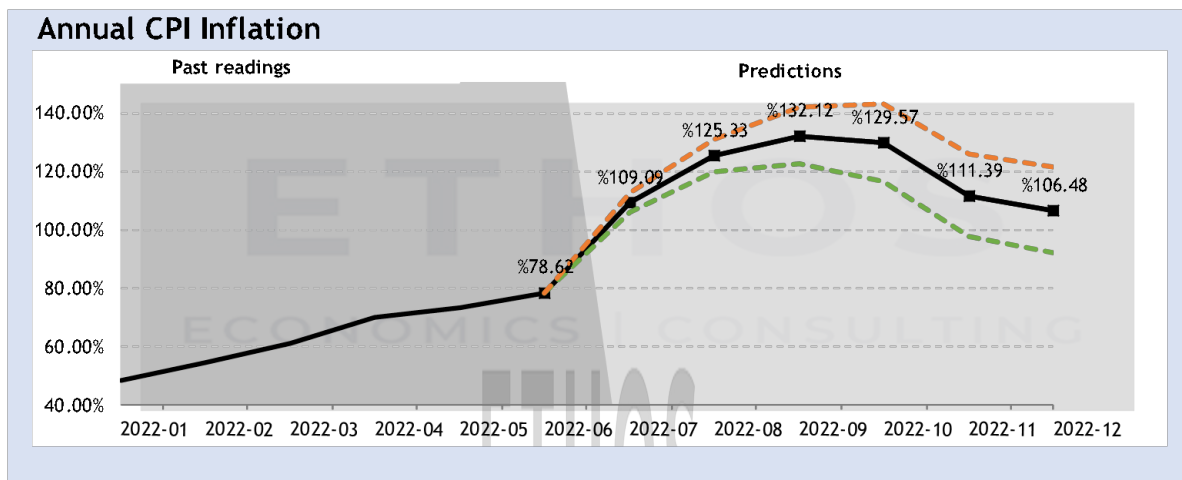


According to our nowcast model, the GDP will grow by approximately 6.6% in the second quarter of 2022 compared to the same quarter of the previous year. This prediction, based on a rich dataset, indicates that the economy is experiencing high growth in the second quarter of 2022. However, it also suggests that without implementing new supportive policies, the economy is trending toward

a slowdown. The projected slowdown is primarily driven by weakening demand due to the prevailing high inflation environment and a lack of strong investment appetite. These factors play significant roles in underpinning the observed trend. Additionally, the recent regulations imposed by the Banking Regulation and Supervision Agency (BDDK) restricting firms holding significant amounts of foreign currency from accessing TL loans are expected to contribute to this slowdown. To counteract this slowdown, it is expected that further interest rate cuts or fiscal stimulus measures will be necessary in the second half of the year. **Without such measures, the growth rate is expected to gradually decelerate, leading to an estimated year-end growth rate of 5.2%.**

4. Inflation Outlook

Figure 5. Annual CPI Inflation predictions



The calculations indicate the presence of a strong upward trend in inflation. The impact of interest rate cuts and macro-prudential measures that encouraged lending in the first half of the year is expected to lead to a surge in inflation, reaching double-digit levels by July. In the third quarter, inflation is projected to peak at 132% and then gradually slow down to around 106% by the end of the year, driven by base effects.

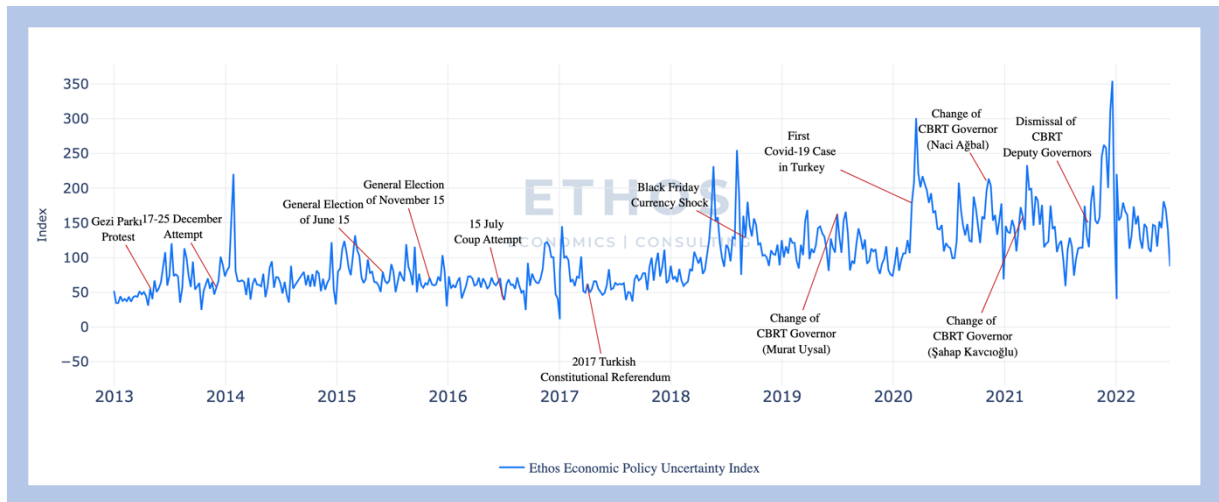
5. The Outlook for Economic Uncertainty

The Economic Policy Uncertainty Index we created to measure uncertainty is another indicator shedding light on the current and future state of the Turkish economy. The Economic Policy Uncertainty Index is updated daily using Natural Language Processing methods on Twitter data. It calculates the values in our uncertainty index by comparing the number of words related to "economy," "politics," and "uncertainty" found in the tweets of 662 "selected" individuals who are experts in finance and economics, to the total word count in their tweets.

As of June 2022, our updated index is presented in Figure 6. The Economic Policy Uncertainty Index is plotted daily from January 1, 2013, to June 30, 2022. As the uncertainty created by various political, financial, and economic events in Turkey, stemming from both local and global reasons, increases, the values of the index also rise. The Economic Policy Uncertainty Index was high and volatile during this period. It peaks during the COVID-19 shock and begins to decline with the recoveries in the global and Turkish economies. However, as of September 2021, following the Turkish Central Bank's departure from orthodox policies and the subsequent interest rate cuts, currency shocks, and the introduction of new instruments and regulations, it reaches its historical record level in early 2022.

Although the index showed a decline in the months leading up to June 2022, it is still following a volatile trajectory above its average value.

Figure 6. Economic Policy Uncertainty Index



Uncertainty affects economic growth through consumption expenditure, investment (fixed capital formation), and domestic saving. Numerous theoretical and empirical studies in the related economic literature show the rise in uncertainty leads to a decrease in firm investment through the wait-and-see channel. In this context, we estimate an investment model based on a micro-level sample covering 28,389 firms operating in the non-financial sector of Turkish economy from 2013 to 2022. These firms represent more than 50% of the revenue announced by the Turkish Statistical Institute. The results based on this estimation provide significant messages to policymakers. If uncertainty doubles in the first quarter of a given year, the average firm's net investment rate at the end of the fourth quarter of the same year decreases by 0.017 unit, corresponding to 7% of the average net investment rate in the sample.