Bahçeşehir Üniversitesi Ekonomik ve Toplumsal Araştırmalar Merkezi
Betam

Economic Growth and Forecasts: October 2022

BAHÇEŞEHİR ÜNİVERSİTESİ

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Growth Decelerates

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Executive Summary

In light of fully-released July, August and partly-released September leading indicators, we expect GDP to increase by 4.2 percent year-on-year in the third quarter of 2022. According to seasonal and calendar-adjusted data, we forecast quarter-on-quarter GDP growth to be -0.1 percent.

The figures of this forecast for third quarter are higher than our initial one, as the newly released economic indicators are better than those in July.

GDP growth forecasts	2022Q3
Quarter-on-quarter	-0.1
Year-on-year	4.2

Table 1: Periodical and annual real GDP growth forecasts. Source: Betam. **NOTE:** "Quarter-on-quarter" growth rate refers to seasonally and calendar-day adjusted real GDP growth forecast; "Year-on-year" growth rate refers forecasted real GDP growth compared to the same quarter of the previous year.

Different signals in consumption leading indicators

In the third quarter of 2022, despite a decrease around 3 percent in industrial production indices compared to the previous quarter, we estimate solid rises in public consumption (20.7 percent) and imports of consumption goods (10.3 percent) (Table 2).

Compared to the same quarter of the previous year, we observe a soaring in imports of consumption goods and a sharp decrease in loans. enormous the decrease in production and credits is seen much more clearly. The production index of non-durable goods increase by 5 percent and the production index of durable goods decrease by 2 percent. We calculate special consumption tax and public consumption to rise by 15 and 17 percent, respectively (Table 3).

	2022Q2	2022Q3
Imports-cons. goods	9.0	10.3
Mortgage loans	-8.0	-1.4
Consumer loans + CC	-5.7	1.6
IPI-nondurable goods	2.3	-2.4
IPI-durable goods	-1.9	-3.5
Special cons. tax	15.8	-2.6
Public cons.	0.8	20.7

Table 2: Consumption expenditures compared to the previous quarter. **IPI:** Industrial production index; **Cons.:** Consumption tax; **CC:** Credit Cards.

	2022Q2	2022Q3
Imports-cons. goods	6.5	35.1
Mortgage loans	-31.7	-29.7
Consumer loans + CC	-25.3	-23.6
IPI-nondurable goods	17.9	4.8
IPI-durable goods	5.9	-2.1
Special cons. tax	19.9	14.7
Public cons.	-1.2	17.1

Table 3: Consumption expenditures compared to the same quarter of the previous year.

Stable overview in investments

According to seasonally and calendar-adjusted investment data, we expect stability in most of the indicators (commercial loans and credit cards, capacity utilization rate of investment goods, current volume of stock of retail trade sector) in the third quarter of 2022. We expect industrial production index and production in last 3 months to decrease but imports of investment goods and public investments expenditures to increase (Table 4).

Similar to quarter-on-quarter data, the decrease in year-on-year investment indicators draws attention. Despite sharp declines in commercial loans and credit cards, there are strong signs of an increase in imports of investment goods, stock levels, and public investment expenditures (Table 5).

	2022Q2	2022Q3
IPI-inter. goods	-0.7	-5.3
CUR-invest. goods	-0.5	0.3
Imports-invest. goods	1.2	12.9
Commercial loans + CC	-4.9	0.2
Prod.-last 3 months	-4.0	-5.7
RT vol. of stock	-0.4	0.8
Public invest.	24.9	3.8

Table 4: Investment expenditures compared to the previous quarter. **CUR:** Capacity Utilization Rate. CUR is reported as percentage points changes unlike other indices; **RT vol. of stock:** Current volume of stock of retail trade sector; **Invest.:** Investment.

	2022Q2	2022Q3
IPI-inter. goods	7.2	-5.1
CUR-invest. goods	2.7	0.5
Imports-invest. goods	5.7	31.9
Commercial loans + CC	-23.1	-18.5
Prod.-last 3 months	-2.5	-10.7
RT vol. of stock	17.6	20.5
Public invest.	13.2	20.2

Table 5: Investment expenditures compared to the same quarter of the previous year.

Increase in exports excluding gold is high

In the third quarter of 2022, we expect a 2.8 percent increase in exports and a 2.2 percent increase in imports when we look at the seasonal and calendar-adjusted gold excluded foreign trade figures. However, there is a decrease of 2.9 percent in total exports (Table 6).

Compared to the same quarter of the previous year, gold excluded exports increase by 11 percent, and total exports increase by 0.6 percent. We expect gold excluded imports and total imports to increase by 4.2 and 9 percent, respectively (Table 7).

	2022Q2	2022Q3
Exports	3.8	-2.9
Imports	-0.4	2.2
Exports excluding gold	2.6	2.8
Imports excluding gold	-0.3	2.2

Table 6: Foreign trade compared to the previous quarter.

	2022Q2	2022Q3
Exports	6.5	0.6
Imports	2.3	9.1
Exports excluding gold	17.8	10.9
Imports excluding gold	1.1	4.2

Table 7: Foreign trade compared to the same quarter of the previous year.

General Evaluation

Considering the other seasonal and calendar day-adjusted leading indicators we use in GDP forecasting, we calculate a decrease of 2 percent in electricity consumption and 4 percent in the manufacturing sector production index (Table 8).

When compared to the same period of the previous year, the stagnation in the demand for the service sector is salient. The price expectation in retail sector continues (Table 9).

In light of fully-released July, August and partly-released September leading indicators, we expect GDP to increase by 4.2 percent year-on-year in the third quarter of 2022. According to seasonal and calendar-adjusted data, we forecast quarter-on-quarter GDP growth to be -0.1 percent.

	2022Q2	2022Q3
IPI-manufacturing	1.4	-3.9
RT price exp.	1.9	0.2
CUR	0.1	-0.6
Ser. demand turnover	-0.1	-0.9
Expected invest.-12m	3.0	-4.7
Electricity cons.	-4.1	-1.9

Table 8: Some of leading indicators compared to the previous quarter. **RT price exp.:** Expected price for the retail sector (next 3 months); **Ser. demand turnover:** Demand for services (last 3 months), **Expected invest.-12m:** Investment expectations (next 12 months) ;**Expected invest.-12m:**: Investment expectations (next 12 months)

	2022Q2	2022Q3
IPI-manufacturing	12.3	0.1
RT price exp.	8.0	5.4
CUR	1.9	0.1
Ser. demand turnover	15.2	0.3
Expected invest.-12m	6.1	0.0
Electricity cons.	1.2	0.3

Table 9: Some of the leading indicators compared to the same quarter of the previous year.

BOX: EXPLANATIONS

Explanation on seasonal and calendar day adjustment:
While forecasting the quarter-on-quarter GDP growth rate, we adjust all series for seasonal and calendar day effects. If institutions release an adjusted series, we use this released adjusted series, and if not, BETAM performs seasonal and calendar day adjustments. The status of variables used in this brief can be summarized as follows:

- Central Bank of the Republic of Turkey (TCMB): Capacity utilization rate of the manufacturing industry (CUR), Real sector confidence index.
- Turkstat (TUIK): Industrial production index (IPI) and its sub-components; export, import, and import sub-components concerning goods categories (intermediate goods, investment goods, and consumption goods); sectoral confidence indices and its components (retail trade, services, and construction sectors)
- Betam: The rest of the leading indicators.

Explanation on leading indicators: Betam shares three forecasts for each quarter. For some indicators of the quarter, of which the growth rate is forecasted, the last two months' observations and for others' last month's observations are missing when we run the forecasting model. While estimating growth rates of leading indicators, we use forecasts based on previous observations of each series for missing months. Since there are no missing monthly observations in series while running the third forecast, there is no need for this forecast.

Explanation on forecasting model:
For the direct forecast of GDP, we use 16 leading indicators. While forecasting the components of GDP (consumption, investment, export, and import), we use 26 leading indicators. We prefer to represent remarkable variables within the current period and success in the forecast instead of representing all of them in the research brief and tables.

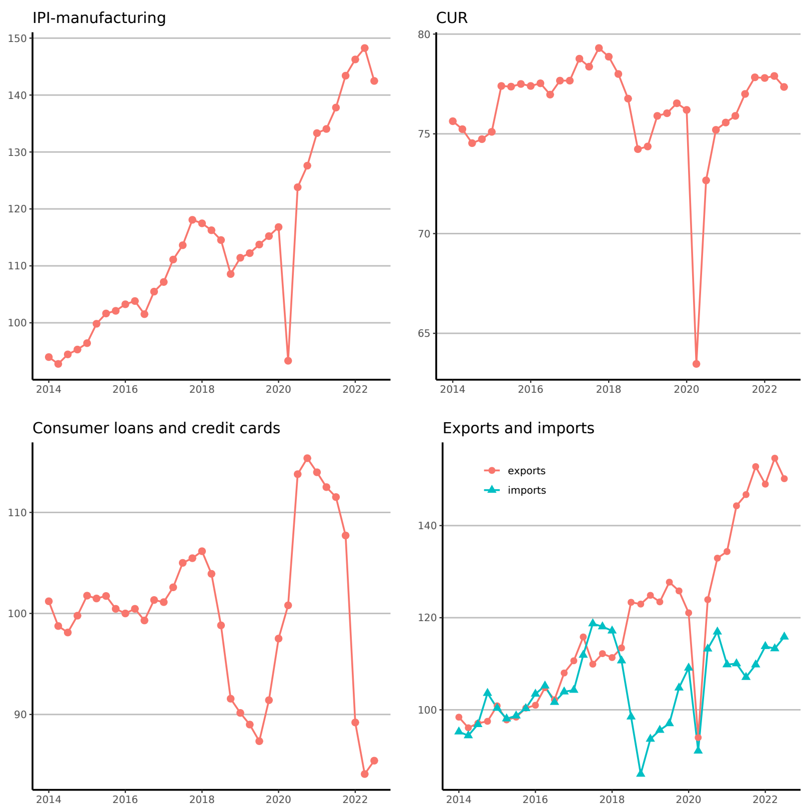

Figure 1: Seasonally and calendar day adjusted quarterly leading indicators. Consumer credits and individual credit cards in the first quarter of 2016 are indexed at 100.