

## *High GDP Growth in the Third Quarter*

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### *Executive Summary*

In light of the fully-released July, August and partly-released September leading indicators, we expect GDP to increase by 6.2 percent year-on-year in the third quarter of 2023. According to seasonal and calendar-adjusted data, we forecast quarter-on-quarter GDP growth to be 1.3 percent.

GDP growth forecasts	2023Q3
Quarter-on-quarter	1.3
Year-on-year	6.2

**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.

### *Increase in imports of consumption goods*

In the third quarter of 2023, we expect an increase in imports of consumption goods (14 percent) and in public consumption (3 percent) while expenditures on Mortgage loans decrease by 12.5 percent and consumer loans and credit cards decrease by 5.4 percent (Table2).

Compared to the same quarter of the previous year, we observe a soar in imports of consumption goods (60.1 percent) and a sharp decrease in Mortgage loans (17.6 percent). We expect a 0.6 percent decrease in non-durable consumption goods index while a 6.8 percent increase in durable consumption goods index. We calculate special consumption tax revenue and public consumption to rise by 63.3 and 34.8 percent, respectively (Table 3).

	2023Q2	2023Q3
Imports-cons. goods	9.7	14.0
Mortgage loans	4.0	-12.5
Consumer loans + CC	13.8	-5.4
IPI-nondurable goods	0.5	-1.0
IPI-durable goods	1.8	-0.9
Special cons. tax	17.8	13.3
Public cons.	4.2	3.0

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

	2023Q2	2023Q3
Imports-cons. goods	60.0	60.1
Mortgage loans	-8.7	-17.6
Consumer loans + CC	30.8	20.1
IPI-nondurable goods	-5.3	-0.6
IPI-durable goods	3.8	6.8
Special cons. tax	35.9	63.3
Public cons.	47.4	34.8

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

*Decrease in public investment*

According to seasonally and calendar-adjusted investment data, we observe 6.9 percent increase in imports of investment goods in the third quarter of 2023. The retail sector stock level shrinks by 3 percent while public investment expenditures decline by 12.6 percent (Table 4).

Compared to the same quarter of the previous year, production expectations for the last three months increase by 11.4 percent, and the intermediate goods production index increase by 4 percent. While imports of investment goods rise by 32.8 percent, public investment expenditures increase by 3.4 percent (Table 5).

*Sharp decrease in imports*

When we look at the seasonal and calendar-adjusted gold-excluded foreign trade figures in the third quarter of 2023, we expect a 2.3 percent increase in exports and a 3 percent increase in imports (Table 6).

Compared to the same quarter of the previous year, gold-excluded exports and total exports increase by 1.4 percent and 0.8 percent, respectively. While gold-excluded imports increase by 17 percent, total imports increase by 19 percent (Table 7).

	2023Q2	2023Q3
IPI-inter. goods	1.0	1.0
CUR-invest. goods	0.4	-1.7
Imports-invest. goods	4.5	6.9
Commercial loans + CC	6.1	-8.1
Prod.-last 3 months	1.0	4.8
RT vol. of stock	-4.5	-3.0
Public invest.	6.2	-12.6

**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.

	2023Q2	2023Q3
IPI-inter. goods	-8.5	4.0
CUR-invest. goods	4.5	0.8
Imports-invest. goods	28.0	32.8
Commercial loans + CC	10.5	0.0
Prod.-last 3 months	-0.1	11.4
RT vol. of stock	-6.5	-9.4
Public invest.	23.0	3.4

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

	2023Q2	2023Q3
Exports	4.6	1.4
Imports	-0.1	2.4
Exports excluding gold	1.4	2.3
Imports excluding gold	2.5	3.0

**Table 6:** Foreign trade compared to the previous quarter.

	2023Q2	2023Q3
Exports	-5.1	0.8
Imports	14.6	19.0
Exports excluding gold	-2.0	1.4
Imports excluding gold	13.3	17.0

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

General Evaluation

Considering the other seasonal and calendar-adjusted leading indicators we use in GDP forecasting, we observe an increase of 0.3 in the manufacturing sector production index and 1.9 percent decrease in demand for the service sector. Also, a 4.5 percent increase in prices for the retail sector is expected (Table 8).

Compared to the previous year, we expect a 5.6 percent increase in industrial production index of manufacturing. While electricity usage grows by 10.7 percent, investment expectation (next 12 months) falls by 1.9 percent (Table 9).

In light of the fully-released July and August and partly-released September leading indicators, we expect GDP to increase by 6.2 percent year-on-year in the third quarter of 2023. According to seasonal and calendar-adjusted data, we forecast quarter-on-quarter GDP growth to be 1.3 percent.

	2023Q2	2023Q3
IPI-manufacturing	2.3	-0.3
RT price exp.	0.6	4.5
CUR	0.9	0.1
Ser. demand turnover	0.7	-1.9
Expected invest.-12m	2.9	-1.6
Electricity cons.	0.5	5.9

**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)

	2023Q2	2023Q3
IPI-manufacturing	-2.7	5.6
RT price exp.	-3.3	2.0
CUR	-1.7	-0.8
Ser. demand turnover	-0.8	-1.6
Expected invest.-12m	-5.4	-1.9
Electricity cons.	-4.4	10.7

**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:**

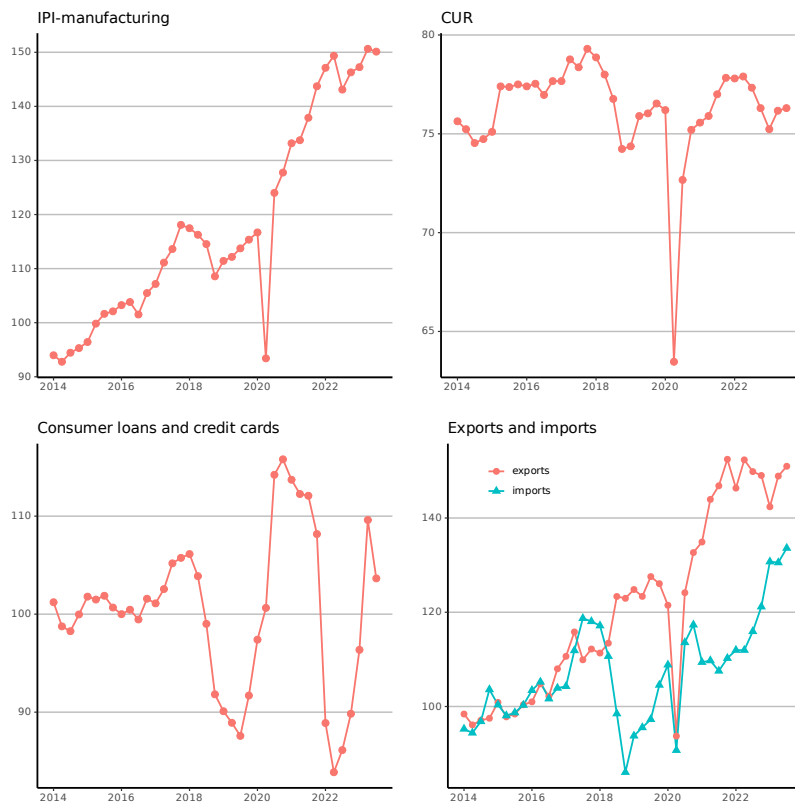
While forecasting the quarter-on-quarter GDP growth rate, we adjust all series for seasonal and calendar day effects. If institutions release an adjusted series, we use this released adjusted series, and if not, BETAM performs seasonal and calendar day adjustments. The status of variables used in this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