

# Economic Growth and Forecasts: January 2024



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## Quarterly growth is negative

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#### Executive Summary

In light of the fully-released October and November, and partly-released December leading indicators, we expect GDP to increase by 4.4 percent year-on-year in the fourth quarter of 2023. According to seasonal and calendar-adjusted data, we forecast quarter-on-quarter GDP growth to be 0.7 percent.

### Imports of consumption goods on the rise

In the fourth quarter of 2023, imports of consumption goods continue to increase quarter-on-quarter (7 percent). We expect a quarter-on-quarter decline in all consumption leading indicators except for imports of consumer goods. (Table2).

Compared to the same quarter of the previous year, imports of consumer goods increase sharply (55 percent), while housing loans decrease (23.5 percent). Consumer loans and credit cards as well as special consumption tax and public consumption expenditures continue to increase at a slower pace. (Table 3).

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| GDP growth forecasts | 2023Q4 |
|----------------------|--------|
| Quarter-on-quarter   | -0.7   |
| Year-on-year         | 4·4    |

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.

|                      | 2023Q3 | 2023Q4 |
|----------------------|--------|--------|
| Imports-cons. goods  | 11.1   | 7.0    |
| Mortgage loans       | -15.4  | -10.4  |
| Consumer loans + CC  | -6.9   | -2.6   |
| IPI-nondurable goods | -1.8   | -3.9   |
| IPI-durable goods    | -1.1   | -0.6   |
| Special cons. tax    | 13.5   | -1.0   |
| Public cons.         | 2.2    | -8.4   |

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

|                      | 2023Q3 | 2023Q4 |
|----------------------|--------|--------|
| Imports-cons. goods  | 52.1   | 55.0   |
| Mortgage loans       | -19.9  | -23.5  |
| Consumer loans + CC  | 18.6   | 9.9    |
| IPI-nondurable goods | 0.9    | -4.2   |
| IPI-durable goods    | 10.8   | -1.2   |
| Special cons. tax    | 61.5   | 32.9   |
| Public cons.         | 32.8   | 22.1   |

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

#### Production expectations are positive

According to seasonally and calendar-adjusted data, we calculate an increase in public investment spending of 8.5 percent in the fourth quarter of 2023. Changes in other investment leading indicators are between an increase of 1.5 percent and a decrease of 3.3 percent (Table 4).

On an annual basis, imports of investment goods continue to increase (21.2 percent), albeit at a slower pace compared to the previous quarter. Production expectations for the last 3 months with an increase of 15 percent show a more positive trend in this quarter compared to the previous year. We calculate an annual decline of 19.6 percent in public investment expenditures (Table 5).

#### Deceleration in imports

In the fourth quarter of 2023, we expect a 1.2 percent increase in exports and a 0.2 percent decrease in imports based on seasonally and calendar day adjusted foreign trade figures excluding gold (Table 6).

Compared to the same quarter of the previous year, exports excluding gold increase by 2.6 percent, while total exports increase by 4.8 percent. Imports excluding gold increase by 6.2 percent, while imports including gold are estimated to increase by 3.9 percent (Table 7).

|                       | 2023Q3 | 2023Q4 |
|-----------------------|--------|--------|
| IPI-inter. goods      | 0.5    | -0.8   |
| CUR-invest. goods     | -1.4   | 1.5    |
| Imports-invest. goods | 5.0    | 1.4    |
| Commercial loans + CC | -9.3   | -3.3   |
| Prodlast 3 months     | 4.9    | 1.5    |
| RT vol. of stock      | -2.0   | -0.9   |
| Public invest.        | 4.0    | 8.5    |

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.

|                       | 2023Q3 | 2023Q4 |
|-----------------------|--------|--------|
| IPI-inter. goods      | 5.0    | 1.4    |
| CUR-invest. goods     | 1.4    | 1.1    |
| Imports-invest. goods | 26.9   | 21.2   |
| Commercial loans + CC | -2.1   | -6.6   |
| Prodlast 3 months     | 10.4   | 15.0   |
| RT vol. of stock      | -8.4   | -7.0   |
| Public invest.        | 4.8    | -19.6  |

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

|                        | 2023Q3 | 2023Q4 |
|------------------------|--------|--------|
| Exports                | 3.2    | -1.0   |
| Imports                | 0.2    | -1.3   |
| Exports excluding gold | 2.4    | -1.2   |
| Imports excluding gold | 1.1    | -0.2   |

Table 6: Foreign trade compared to the previous quarter.

|                        | 2023Q3 | 2023Q4 |
|------------------------|--------|--------|
| Exports                | 4.5    | 4.8    |
| Imports                | 14.5   | 3.9    |
| Exports excluding gold | 4.2    | 2.6    |
| Imports excluding gold | 14.7   | 6.2    |

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 a 1.4 percent decline in the manufacturing industry production index and a 3.3 percent fall in the demand for services. Prices in the retail sector are expected to fall by 6.8 percent (Table 8).

Compared to the same period of the previous year, we expect the manufacturing industry production index to decline by 1.5 percent and retail price expectations to decline by 4.3 percent. We calculate annual increases of 1.3 percent in the capacity utilization rate and 1 percent in electricity consumption (Table 9).

In light of the fully-released October and November, and partlyreleased December leading indicators, we expect GDP to increase by 4.4 percent year-on-year in the fourth quarter of 2023. According to seasonal and calendar-adjusted data, we forecast quarter-on-quarter GDP growth to be 0.7 percent.

|                      | 2023Q3 | 2023Q4 |
|----------------------|--------|--------|
| IPI-manufacturing    | -0.7   | -1.4   |
| RT price exp.        | 4.0    | -6.8   |
| CUR                  | 0.3    | 0.7    |
| Ser. demand turnover | -2.8   | -3.3   |
| Expected invest12m   | -1.5   | -1.6   |
| Electricity cons.    | 9.3    | -6.0   |

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)

|                      | 2023Q3 | 2023Q4 |
|----------------------|--------|--------|
| IPI-manufacturing    | 7.4    | -1.5   |
| RT price exp.        | 1.6    | -4.3   |
| CUR                  | -0.6   | 1.3    |
| Ser. demand turnover | -2.5   | -4.0   |
| Expected invest12m   | -1.8   | -1.9   |
| Electricity cons.    | 9.8    | 1.0    |

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 subcomponents 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.

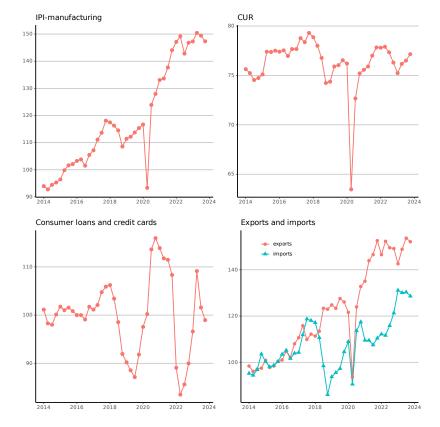


Figure 1: Seasonally and calendar day adjusted quarterly leading indicators. Consumer credits and individual credit cards in the first quarter of 2016 are indexed at 100.