

## *Annual Growth Towards 10 Percent*

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### *Executive Summary*

In the light of fully-released October, November, and partly-released December leading indicators, we expect GDP to expand by 5.8 percent on a year-on-year basis for the last quarter of 2021. According to seasonal and calendar-adjusted data, we forecast quarter-on-quarter GDP growth to be 1.7 percent.

There are two sources of economic growth in the last quarter: the increase in demand for services on an annual basis and the positive balance of foreign trade. IMF has recently raised its growth forecast for Turkey for 2021 from 5.8 percent to 9 percent. If the growth rate in the fourth quarter is close to our forecast, then the 2021 growth will be over 10 percent. However, the decrease or stagnation in leading investment indicators, especially in the import of investment goods, is likely to reduce the growth rate in the following periods.

### *Public consumption increases while special consumption tax decreases*

We expect some of the leading seasonally and calendar-adjusted consumption indicators to shrink in the fourth quarter of 2021 compared to the previous quarter. We predict mortgage loans to decrease 3.5 percent and special consumption tax to fall 5 percent on the quarterly basis (Table 2). In our previous forecast, we had predicted that imports would decrease as well, but in November data, import items increased by 10 percent.

We see a one-third decline in the special consumption tax and a 21.7 percent decline in imported consumption on a year-on-year basis. On the other hand, there is an 8.7 percent increase in public consumption (Table 3).

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GDP growth forecasts	2021Q4
Quarter-on-quarter	1.7
Year-on-year	5.8

**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.

	2021Q3	2021Q4
Imports-cons. goods	-10.4	-0.0
Mortgage loans	-3.5	-3.0
Consumer loans + CC	-0.6	-0.6
IPI-nondurable goods	4.1	6.3
IPI-durable goods	-1.4	6.5
Special cons. tax	-2.9	-5.0
Public cons.	3.4	4.7

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

	2021Q3	2021Q4
Imports-cons. goods	-14.6	-21.7
Mortgage loans	-11.8	-13.6
Consumer loans + CC	-1.9	-3.4
IPI-nondurable goods	7.2	10.3
IPI-durable goods	6.5	6.8
Special cons. tax	-29.0	-32.8
Public cons.	5.0	8.7

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

*Investments decrease on the annual basis*

According to seasonally and calendar adjusted data, we observe increases in all indicators of investment in the last quarter of 2021. Public investment increases 12.6 percent (Table 4).

On an annual basis, we calculate that import of investment goods and public investment expenditures decrease by 13.2 percent and 20.3 percent, respectively. Close to 9 percent shrinkage is expected in commercial loans and credit cards (Table 5).

*Break in declining import quarterly basis*

We calculate seasonally and calendar adjusted export to increase by 2.2 percent and imports to remain on the same level in the last quarter of 2021. The long-standing decline in imports is likely to stop this quarter (Table 6).

When we compare the last quarter of 2021 with the same period of 2020, we forecast exports to increase by 13.1 percent while imports to see contraction with 11.8 percent. Thus we expect foreign trade to contribute to growth year-on-year in the last quarter of 2021 (Table 7).

	2021Q3	2021Q4
IPI-inter. goods	1.4	3.4
CUR-invest. goods	2.5	0.8
Imports-invest. goods	-5.9	3.0
Commercial loans + CC	-4.3	1.3
Prod.-last 3 months	4.4	6.2
RT vol. of stock	-1.7	11.3
Public invest.	-2.3	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.

	2021Q3	2021Q4
IPI-inter. goods	12.4	11.7
CUR-invest. goods	3.0	0.4
Imports-invest. goods	0.8	-13.2
Commercial loans + CC	-8.7	-8.8
Prod.-last 3 months	13.4	2.5
RT vol. of stock	-7.3	2.0
Public invest.	33.7	-20.3

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

	2021Q3	2021Q4
Exports	1.5	2.5
Imports	-2.1	0.0
Exports excluding gold	5.0	4.0
Imports excluding gold	-0.2	-0.1

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

	2021Q3	2021Q4
Exports	15.6	13.1
Imports	-7.5	-11.8
Exports excluding gold	29.7	20.2
Imports excluding gold	10.4	-1.8

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

### General Evaluation

Considering the other variables that we use in GDP forecasting, all of the seasonal and calendar day adjusted leading indicators except price expectations show increases (Table 8).

Compared with the same quarter of the previous year, demand for services is expected to increase more than 30 percent (Table 9).

In the light of fully-released October, November, and partly-released December leading indicators, we expect GDP to expand by 5.8 percent on a year-on-year basis for the last quarter of 2021. According to seasonal and calendar-adjusted data, we forecast quarter-on-quarter GDP growth to be 1.7 percent.

	2021Q3	2021Q4
IPI-manufacturing	1.9	3.8
RT price exp.	2.5	-2.2
CUR	1.1	0.6
Ser. demand turnover	10.1	4.6
Expected invest.-12m	1.1	3.0
Electricity cons.	1.6	0.1

**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)

	2021Q3	2021Q4
IPI-manufacturing	9.1	7.7
RT price exp.	-2.1	-4.2
CUR	4.4	2.5
Ser. demand turnover	36.5	33.8
Expected invest.-12m	32.1	16.6
Electricity cons.	6.4	2.2

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

### BOX: EXPLANATIONS

#### Explanation on seasonal and calendar day adjustment:

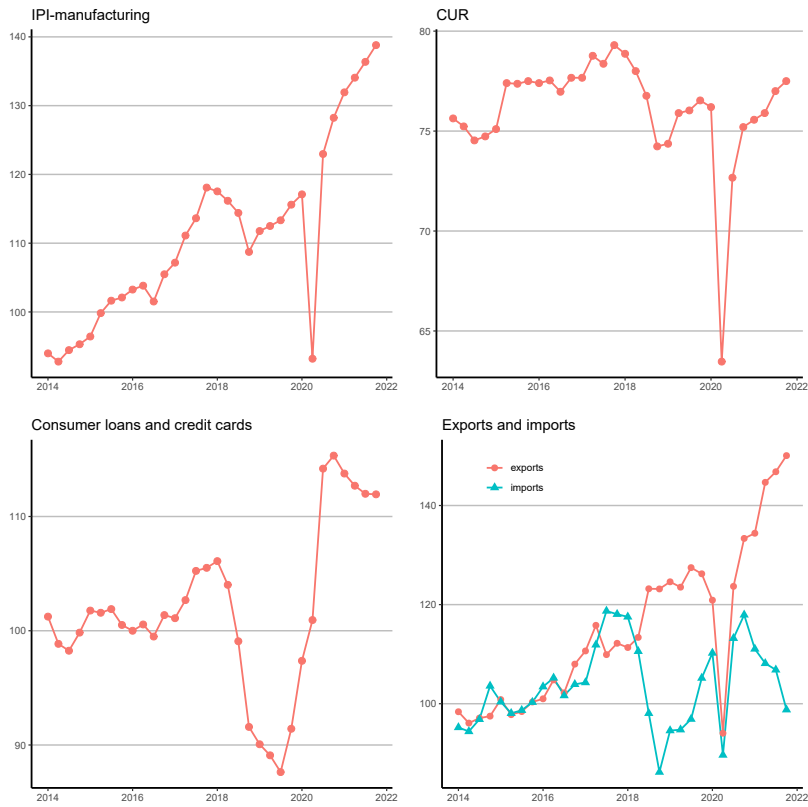
While forecasting the quarter-on-quarter GDP growth rate, we adjust all series for seasonal and calendar day effects. If there is an adjusted series released by institutions, we use this released adjusted series and if not, BETAM performs seasonal and calendar day adjustments. Status of variables used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

- Central Bank of the Republic of Turkey (TCMB): Capacity utilization rate of manufacturing industry (CUR), Real sector confidence index.
- Turkstat (TUIK): Industrial production index (IPI) and its sub-components; export, import and import sub-components with respect to 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 leading indicators.

**Explanation on leading indicators:** Betam share three forecasts for each quarter. For some indicators of the quarter, of which growth rate is forecasted, last two months' observations and for others last month's observation are missing when we run forecasting model. While estimating growth rates of leading indicators, for missing months we use forecasts based on previous observations of each series. 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 variables, which are remarkable within the current period and successful 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.