

Economic Growth Continues

Ozan Bakış,¹ Gökhan Dilek²

Executive Summary

In the light of fully-released October and partially released November leading indicators, we expect GDP to expand by 5.9 percent on a year-on-year basis for the fourth quarter of 2020. According to seasonal and calendar adjusted data, we forecast quarter-on-quarter GDP growth to be 2.2 percent for the last quarter.

Nearly all of the leading indicators record significant increases. The impacts of the newly introduced coronavirus measures has not yet been reflected in the data since the measures were taken at the start of December. However, it will not be surprising to see strong economic growth in the fourth quarter of 2020 despite the measures that partially affected December.

Consumption spending increases

Compared to the previous quarter, there are significant increases in all leading consumption indicators except mortgage loans. According to our calculations based on the seasonally and calendar adjusted data, consumption good imports increase by 10.2 percent, public spending by 5.9 percent, and durable consumption goods by 5.2 percent compared to the third quarter. Mortgage loans, on the other hand, decrease mildly with a rate of minus 0.7 percent resulting from the cessation of public banks' low interest rate credit program (Table 2).

On a year-on-year basis, we see growth in all consumption indicators except public spending. Special consumption tax rapidly increases with 41.8 percent rate while mortgage and consumer loans grow by 28.2 and 28.1 percent respectively. Consumption good imports record 18.5 percent rise (Table 3).

¹ Betam, ozan.bakis@eas.bau.edu.tr

² Betam, gokhan.dilek@eas.bau.edu.tr

GDP growth forecasts		2020Q4
Quarter-on-quarter		2.2
Year-on-year		5.9

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.

	2020Q3	2020Q4
Imports-cons. goods	35.0	10.2
Mortgage loans	21.1	-0.7
Consumer loans + CC	13.8	1.9
IPI-nondurable goods	27.4	3.2
IPI-durable goods	45.7	5.2
Special cons. tax	47.4	4.1
Public cons.	-1.9	5.9

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

	2020Q3	2020Q4
Imports-cons. goods	23.2	18.5
Mortgage loans	33.0	28.2
Consumer loans + CC	32.2	28.1
IPI-nondurable goods	6.0	9.2
IPI-durable goods	17.8	15.4
Special cons. tax	40.8	41.8
Public cons.	-2.9	-6.0

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

Investments keep growing

According to seasonal and calendar adjusted data, our calculations suggest surges in all investment indicators compared to the previous quarter, except retail trade stock volume (1.1 percent contraction). We expect strong increases in investment goods imports by 28.0 percent, and production volume in the last three months by 25.5 percent while a milder rate of growth for commercial credits with 5.0 percent (Table 4).

On a year-on-year basis, we see a sharp decline in public investments (minus 31.6 percent), and a smaller decrease in investment goods capacity utilization rate (minus 3.3 percent). The most rapid increases are recorded in investment goods imports with a rate of 38.7 percent while commercial credits grow by 36.9 percent. The production volume in the last three months increases 16.1 percent in the fourth quarter of 2020 compared to the same period of the previous year (Table 5).

Investment spending which increased in the third quarter of 2020 signals positively for the last quarter as well.

Foreign trade grows

In the fourth quarter of 2020, according to seasonal and calendar adjusted data, we expect exports to increase by 5.6 percent compared to the previous quarter while imports to grow at a rate of 2.2 percent (Table 6).

When we compare the fourth quarter of 2020 with the same period of 2019, we forecast exports and imports to grow by 7.8 percent and 6.3 percent respectively (Table 7).

A more rapid growth of exports compared to imports suggests a positive contribution from the foreign trade to the GDP growth in the last quarter of 2020.

	2020Q3	2020Q4
IPI-inter. goods	28.8	3.9
CUR-invest. goods	10.4	2.2
Imports-invest. goods	25.0	28.0
Commercial loans + CC	6.3	5.0
Prod.-last 3 months	88.6	25.5
RT vol. of stock	-7.5	-1.1
Public invest.	-2.1	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.

	2020Q3	2020Q4
IPI-inter. goods	10.8	12.3
CUR-invest. goods	-5.0	-3.3
Imports-invest. goods	19.2	38.7
Commercial loans + CC	32.1	36.9
Prod.-last 3 months	1.4	16.1
RT vol. of stock	3.2	-0.1
Public invest.	-15.5	-31.6

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

	2020Q3	2020Q4
Exports	29.8	5.6
Imports	22.0	2.2
Exports excluding gold	26.4	13.0
Imports excluding gold	16.1	7.2

Table 6: Foreign trade compared to the previous quarter.

	2020Q3	2020Q4
Exports	-1.6	7.8
Imports	16.7	6.3
Exports excluding gold	-21.8	-4.4
Imports excluding gold	-0.1	0.8

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 seasonal and calendar day adjusted leading indicators show increases. The most eye-catching increase is in the services demand with 20.1 percent and in investment expectations in 12 months with 12.4 percent. Other indicators record more moderate growth rates (Table 8).

On a year-on-year basis, investment expectations in 12 months, services demand, and capacity utilization rate show decreases (minus 2.8 percent, minus 2.1 percent, and minus 1.5 percent respectively) despite their quarterly growth. The year-on-year declines are mainly due to the Covid-19 pandemic. The strongest yearly recovery is recorded in retail sector price expectations by 14.3 percent while manufacturing IPI increases by 9.0 percent. On the other hand, the electricity consumption remains nearly the same (0.8 percent growth) (Table 9).

In the light of fully-released October and partially released November leading indicators, we expect GDP to expand by 5.9 percent on a year-on-year basis for the fourth quarter of 2020. According to seasonal and calendar adjusted data, we forecast quarter-on-quarter GDP growth as 2.2 percent for the last quarter. Nearly all of the leading indicators record significant increases. The impacts of the newly introduced coronavirus measures has not yet been reflected in the data since the measures were taken at the start of December. However, it will not be surprising to see strong economic growth in the fourth quarter of 2020 despite the measures that partially affected December.

	2020Q3	2020Q4
IPI-manufacturing	32.3	3.6
RT price exp.	17.6	2.4
CUR	9.2	2.2
Ser. demand turnover	46.4	20.1
Expected invest.-12m	16.8	12.4
Electricity cons.	15.3	2.1

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)

	2020Q3	2020Q4
IPI-manufacturing	9.3	9.0
RT price exp.	14.7	14.3
CUR	-3.5	-1.5
Ser. demand turnover	-21.3	-2.1
Expected invest.-12m	-9.5	-2.8
Electricity cons.	3.6	0.8

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 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.

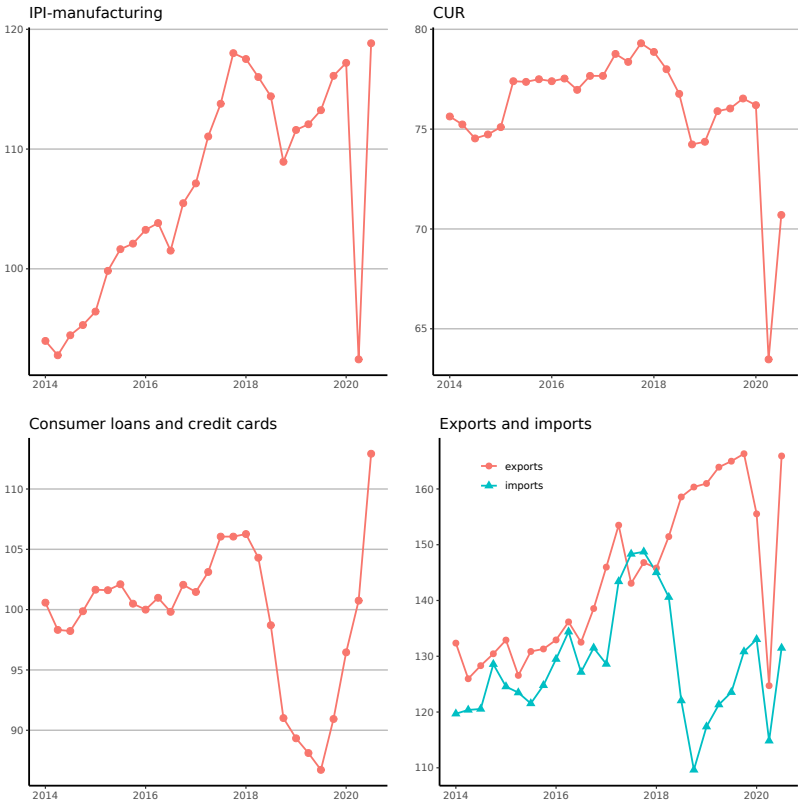


Figure 1: Seasonally and calendar day adjusted quarterly leading indicators. Consumer credits and individual credit cards in the first quarter of 2016 are indexed at 100.