Bahçeşehir Üniversitesi Ekonomik ve Toplumsal Araştırmalar Merkezi
Betam

Economic Growth and Forecasts:
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BAHÇEŞEHİR ÜNİVERSİTESİ

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Economic Recovery in Fourth Quarter

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Executive Summary

In the light of fully-released October, November and partly-released December leading indicators, our estimate for the year-on-year GDP growth is 5.4 percent for the fourth quarter of 2019. Our estimate for seasonally and calendar day adjusted quarter-on-quarter growth is 1.8 percent for the fourth quarter of 2019.

Relatively high growth numbers reflect a combination of base effect, due to contraction in the fourth quarter of 2018, and economic recovery, as seasonal and calendar day adjusted quarterly figures suggest.

GDP growth forecasts	2019Q4
Quarter-on-quarter	1.8
Year-on-year	5.4

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.

Recovery in loans

Compared to the third quarter of 2019, we anticipate all leading indicators to increase except special consumption tax in the last quarter of 2019. In particular, we expect mortgage and consumer loans, which decreased in the third quarter, to increase by 2.0 percent and 3.6 percent, respectively (Table 2).

Compared to the same quarter of the previous year, although the outlook in credit growth continues to be negative in the fourth quarter of 2019, we can say that it is recovering compared to the third quarter. Among consumption leading indicators, the highest yearly increase is expected to be in special consumption tax, with 16.6 percent. We estimate that imports of consumption goods, which decreased by 8.2 percent in the third quarter, will increase by 8.5 percent in the last quarter of 2019 (Table 3).

	2019Q3	2019Q4
Imports-cons. goods	7.1	3.7
Mortgage loans	-3.0	2.0
Consumer loans + CC	-1.2	3.6
IPI-nondurable goods	2.8	0.3
IPI-durable goods	-7.9	2.1
Special cons. tax	8.1	-4.8
Public cons.	3.0	2.3

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

	2019Q3	2019Q4
Imports-cons. goods	-8.2	8.5
Mortgage loans	-20.0	-9.1
Consumer loans + CC	-11.6	-1.2
IPI-nondurable goods	6.3	5.4
IPI-durable goods	-10.1	-8.9
Special cons. tax	4.0	16.6
Public cons.	6.2	8.7

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

Increase in production volume

Compared to the third quarter of 2019, we expect positive growth in all seasonal and calendar-day adjusted investment leading indicators except public investment expenditures. We expect commercial loans and credit cards, which decreased by 3.2 percent in the third quarter, to increase by 1.8 percent in the fourth quarter. While the production volume in the last three months increases by 11.2 percent, we estimate that public investment expenditures will decrease by 12.5 percent (Table 4).

Compared to the same quarter of the previous year, we expect public investment expenditures to fall to half of the level of the last year. On the other hand, we expect strong increases in growth of intermediate goods and production volume in the last three months, after the decrease in the third quarter (Table 5).

	2019Q3	2019Q4
IPI-inter. goods	1.7	1.3
CUR-invest. goods	0.9	0.2
Imports-invest. goods	9.7	3.7
Commercial loans + CC	-3.2	1.8
Prod.-last 3 months	2.0	11.2
RT vol. of stock	-2.2	1.4
Public invest.	0.9	-12.5

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.

	2019Q3	2019Q4
IPI-inter. goods	-2.8	6.4
CUR-invest. goods	-2.0	1.1
Imports-invest. goods	-3.7	3.4
Commercial loans + CC	-12.0	-2.2
Prod.-last 3 months	-1.2	19.8
RT vol. of stock	-1.6	-7.9
Public invest.	5.0	-52.6

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

Imports increase at a faster rate than exports

In the fourth quarter of 2019, when we look at the seasonally and calendar adjusted foreign trade figures, we expect that exports will increase by 0.1 percent, and imports will increase by 4.8 percent (Table 6).

When we look at the same quarter of the previous year, we see that imports will increase very strongly in the fourth quarter of 2019 (15.3 percent). Exports will increase by 6.3 percent as well (Table 7).

In light of the above forecasts, we see that the positive contribution of net foreign trade in the fourth quarter has ended both on a quarterly and annually basis.

	2019Q3	2019Q4
Exports	3.5	0.1
Imports	4.2	4.8
Exports excluding gold	3.2	-2.5
Imports excluding gold	4.1	1.4

Table 6: Foreign trade compared to the previous quarter.

	2019Q3	2019Q4
Exports	7.1	6.3
Imports	2.3	15.3
Exports excluding gold	13.2	9.9
Imports excluding gold	0.0	8.8

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 positive growth, even if limited, except electricity consumption. We calculate that the demand for services is expected to increase by 4.7 percent and electricity consumption is expected to decrease by 1.2 percent (Table 8).

Compared to the same quarter of the previous year, We expect the demand for services, which decreased by 10 percent in the second quarter of 2019 and increased by 5 percent in the third quarter, to increase by more than 25 percent in the last quarter of 2019. The reversal in investment expectation for the next 12 months from negative to positive is worth to notice. (Table 9).

In the light of fully-released October, November and partly-released December leading indicators, in the fourth quarter of 2019, our estimate for the seasonal and calendar day adjusted quarter-on-quarter GDP growth is 1.8 and year-on-year growth is expected to increase by 5.4 percent.

	2019Q3	2019Q4
IPI-manufacturing	1.8	0.9
RT price exp.	-7.6	2.2
CUR	0.1	0.3
Ser. demand turnover	8.5	4.7
Expected invest.-12m	0.4	2.4
Electricity cons.	-0.2	-1.2

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)

	2019Q3	2019Q4
IPI-manufacturing	1.2	3.9
RT price exp.	-17.9	-1.6
CUR	-0.7	2.3
Ser. demand turnover	5.2	26.0
Expected invest.-12m	-2.6	8.1
Electricity cons.	-1.5	-3.1

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 montly 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 forcasting 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.

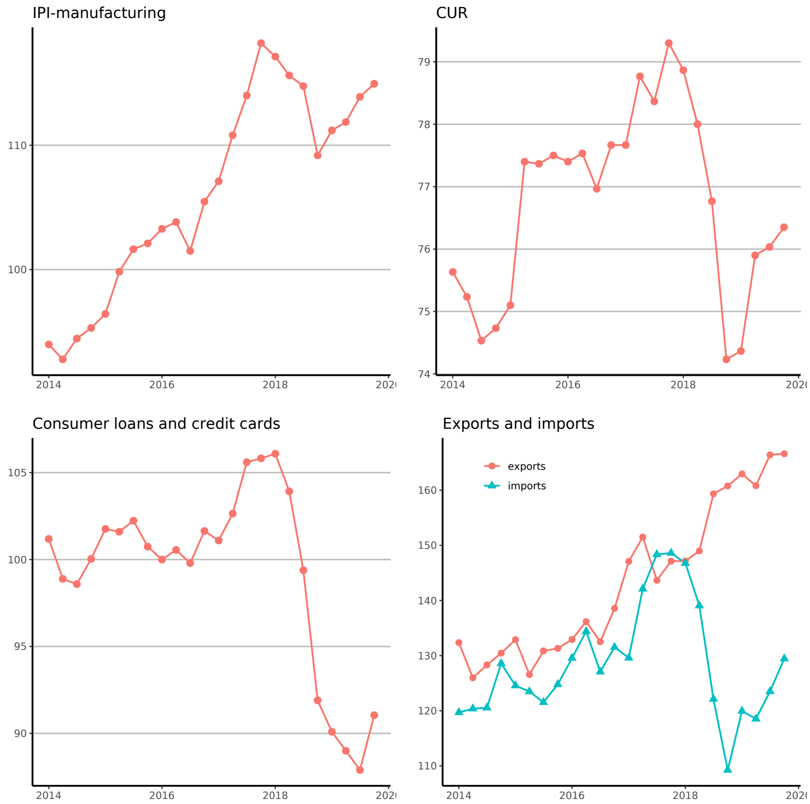

Figure 1: Seasonally and calendar day adjusted quarterly leading indicators. Consumer credits and individual credit cards in the first quarter of 2016 are indexed at 100.