

## *Severe recession in the 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 minus 3.5 percent in the fourth quarter of 2018. Seasonally and calendar day adjusted quarter-on-quarter growth is expected to decrease by 2.2.

In the New Economy Program (NEP), the projected GDP growth target was 3.8 percent for 2018. Since the first three quarters' growth rates were 7.4 percent, 5.3 percent and 1.6 percent, respectively, the target will be at risk of being missed in case of a negative growth in the fourth quarter.

### *Consumption is decreasing*

Compared to the third quarter of 2018, apart from durable consumption goods production, we expect that all seasonally and calendar day adjusted consumption leading indicators to decrease in the fourth quarter of 2018. We see the sharpest decline in special tax revenue with 22.8 percent. On the other hand, the harsh decline in consumption goods imports continues to accelerate. Nondurable consumption goods production, which declined in the second quarter and stagnated in the third quarter, is expected to decrease again by 2.6 percent. Durable consumption goods production is another notable indicator as it is expected to grow only by 1.6 percent after a growth of 6 percent in the third quarter (Table 2).

Compared to the same quarter of the previous year, we observe a decline in all consumption leading indicators except nondurable consumption goods production in the fourth quarter of 2018. The decreases in consumption goods imports and special consumption tax revenue are remarkable (respectively, 42.9 and 40.4 percent). The falls in mortgage loans, consumer loans and credit cards are also keeping growing. Notwithstanding, we expect a slight growth for durable consumption production both on yearly and quarterly basis. Despite all the other negative indicators, we explain the persistent positive growth in durable consumption production with the special consumption tax incentives created for white goods and automobiles along with the exports (Table 2 and 3).

In the light of the considerations above, we do not expect any increases in consumption in the fourth quarter of 2018.

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GDP growth forecasts	2018Q4
Quarter-on-quarter GDP	-2.2
Annual GDP	-3.5

**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. "Annual" growth rate refers to overall real GDP growth rate forecast of the current year compared to the previous year.

	2018Q3	2018Q4
Imports-cons. goods	-18.2	-19.8
Mortgage loans	-5.2	-7.8
Consumer loans + CC	-4.9	-6.8
IPI-nondurable goods	0.5	-2.6
IPI-durable goods	6.0	1.6
Special cons. tax	-15.2	-22.8
Public cons.	-1.1	-0.9

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

	2018Q3	2018Q4
Imports-cons. goods	-27.6	-42.9
Mortgage loans	-8.8	-16.5
Consumer loans + CC	-5.9	-13.2
IPI-nondurable goods	3.4	-2.0
IPI-durable goods	-3.0	3.2
Special cons. tax	-22.1	-40.4
Public cons.	3.3	-2.1

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

### Drop in private investments

Compared to the third quarter of 2018, apart from current volume of stock of retail trade sector and public investments, we expect all seasonally and calendar day adjusted investment leading indicators to decrease more in the fourth quarter of 2018. While the decline in investment good imports is striking, the accelerating fall of intermediate goods imports is also notable. As to public investments, we anticipate a rise by 8 percent in the fourth quarter; even though, we observed a sharp decline in the third quarter (Table 4).

Compared to the same quarter of the previous year, we expect similar developments: we anticipate decreases in all investment leading indicators except current volume of stock of retail trade sector. While investment goods imports shrinks by 36.1 percent, as another remarkable indicator, the level of production for the last three months fell by 27.5 percent compared to the same three months of the last year. Public investments, in which we expect an increase on quarterly basis, are contrarily expected to decrease by 39.9 on yearly basis. Intermediate goods production which had declined by 0.9 percent in the third quarter, is expected to fall down by 10 percent in the fourth quarter. This incident is one of the most important factors affecting our GDP growth rate assumption on yearly basis (Table 5).

In the light of summarized observations above, we can say that investments and consumption will decrease.

### Effect of exchange rate on foreign trade continues

When we look at seasonally and calendar day adjusted figures, we expect the decline in both real imports and gold-excluded real imports index to continue. We also expect the rise in the real exports to continue despite a slight slowdown. As to the rise in real exports, we expect to slow down but still continue. However, the increase in gold-excluded exports will gear up in the fourth quarter. The 8.7 percent decrease in real imports and the 9.8 percent decrease in gold-excluded real imports are remarkable (Table 6).

We expect high declines in imports in the fourth period of 2018 compared to same quarter of 2018. Real imports will decrease by 26.6 percent, while real exports will increase by 15.2 percent (Table 7).

We anticipate that the high exchange rate effect on foreign trade will be more evident in the fourth quarter of 2018.

	2018Q3	2018Q4
IPI-inter. goods	-2.2	-7.2
CUR-invest. goods	-2.4	-2.7
Imports-invest. goods	-8.1	-13.0
Commercial loans + CC	-3.8	-7.5
Prod.-last 3 months	-3.3	-6.0
RT vol. of stock	3.7	7.3
Public invest.	-21.5	8.0

**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.

	2018Q3	2018Q4
IPI-inter. goods	-0.9	-10.0
CUR-invest. goods	-5.2	-8.6
Imports-invest. goods	-21.2	-36.1
Commercial loans + CC	-3.4	-13.2
Prod.-last 3 months	-8.3	-27.5
RT vol. of stock	8.2	13.7
Public invest.	-15.0	-39.9

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

	2018Q3	2018Q4
Exports	7.7	2.2
Imports	-10.7	-8.7
Exports excluding gold	3.2	4.1
Imports excluding gold	-9.5	-9.8

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

	2018Q3	2018Q4
Exports	8.9	15.2
Imports	-19.1	-26.6
Exports excluding gold	6.3	14.7
Imports excluding gold	-14.1	-24.7

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

### General Evaluation

Among other variables that we use in GDP forecasting, seasonally and calendar day adjusted price for the retail sector and electricity consumption index are expected to decrease by 11 percent and 3.3 percent, respectively. Manufacturing production index, which turned negative in the previous quarter, is expected to decrease more by 4.7 percent. We anticipate a shrinkage also in demand for services by 12.1 percent (Table 8). Compared to the same quarter of the previous year, we foresee a remarkable decrease in demand for services. In the third quarter, the expectation of prices for next three months had been an increase by 25.5 percent compared to the same quarter of 2017. As to the fourth quarter, the fact that it is anticipated to be 1.2 percent is a crucial indicator signaling a shrinkage in the overall demand (Table 9).

In the light of fully-released October, November and partially-released December leading indicators, quarter-on-quarter growth is expected to be minus 2.2 and year-on-year growth rate is expected to be minus 3.5 percent in the fourth quarter of 2018. Even though the fully-released December data is likely to slightly change the growth rate, we can say that there will be an obvious stagnation in the economy in the fourth quarter.

### 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:

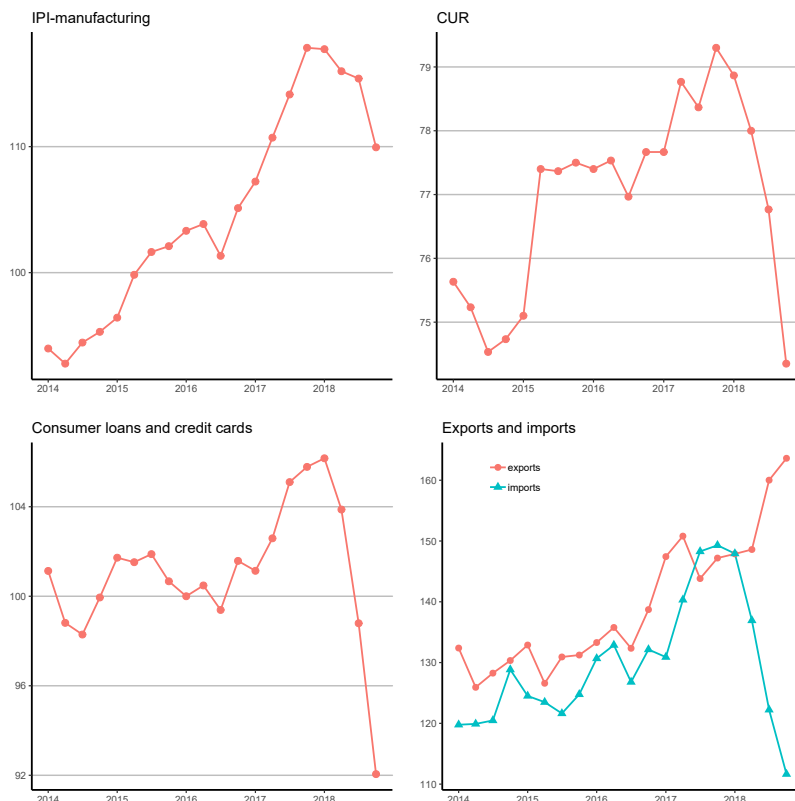
For the direct forecast of GDP we use 16 leading indicators. While forecasting the components of GDP (consumption, investment, export and import) we use 26 leading indicators. We prefer to represent variables, which are remarkable within the current period and successful in the forecast, instead of representing all of them in the research brief and tables.

	2018Q3	2018Q4
IPI-manufacturing	-0.5	-4.7
RT price exp.	7.8	-11.1
CUR	-1.2	-2.4
Ser. demand turnover	-8.0	-12.1
Expected invest.-12m	-7.9	-7.5
Electricity cons.	1.9	-3.3

**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)

	2018Q3	2018Q4
IPI-manufacturing	0.2	-7.1
RT price exp.	25.5	1.2
CUR	-1.8	-4.8
Ser. demand turnover	-18.9	-25.2
Expected invest.-12m	-7.2	-14.4
Electricity cons.	0.0	-5.0

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



**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.