

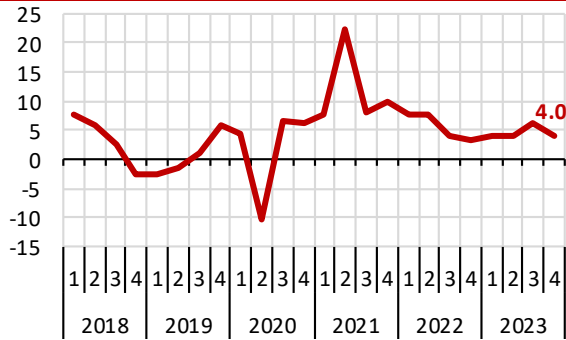
Macro: Domestic demand remains strong as of the last quarter

In the last quarter, Gross Domestic Product (GDP) grew by 4.0% yoy and 1.0% qoq on a seasonally and calendar adjusted basis. Thus, growth in 2023 became 4.5%. Domestic demand remained the main driver of growth in the last quarter. This indicated that, despite the tightening steps, the expected rebalancing across demand components had not yet taken place by the end of 2023. The gradual pace of interest rate hikes, the high course of inflation expectations, the expansionary stance of fiscal policy and wage increases cause domestic demand to remain strong.

2024Q1 growth becomes more important for the course of economic policies. Our models, which incorporate high-frequency indicators, suggest that growth is gaining momentum. The forecast models, which we updated after the last quarter's GDP data, indicate that growth will be in the [4.4%-5.5%] band in the first quarter. The current outlook, combined with the expected higher than forecasted February inflation, increases the probability of a monetary policy tightening in the near future. The current outlook, together with the CBRT's verbal guidance of "additional tightening if necessary", indicates that there is a macro backdrop for an increase in the policy rate in the coming period.

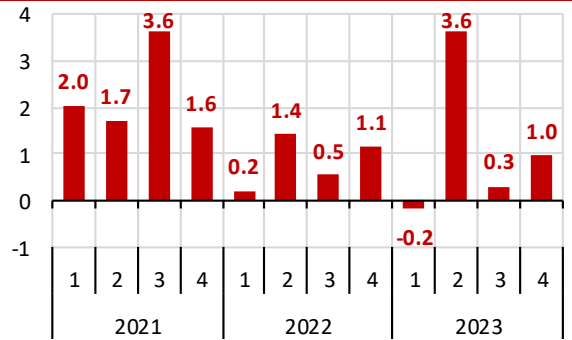
Gross domestic product (GDP) grew by 4.0% yoy in the last quarter, surpassing both our (3.6%) and market expectations (Forex: 3.6%, Bloomberg: 3.5%) (Chart 1). On a seasonally and calendar adjusted basis (s.a.), quarterly growth accelerated to 1.0% (Chart 2). Additionally, annual growth in the first three quarters of the year was slightly revised upwards (Table Annex-1). Thus, the annual growth rate was 4.5% in 2023, which is slightly higher than the MTP forecast of 4.4%. However, it was 1 percentage point lower than the growth rate in 2022 (Table 5).

Chart 1. GDP (y-o-y)



Source: TURKSTAT

Chart 2. GSYİH (seasonally adjusted., q-o-q)



Source: TURKSTAT

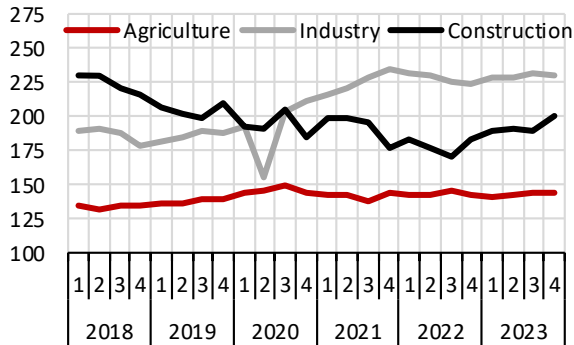
In our previous three GDP development notes, we highlighted that the announced GDP growth and the growth rate derived from the sum of the sub-items constituting the GDP differed significantly due to the chain indexation method. We also mentioned that these deviations, which we expected to be close to zero in the year as a whole, would provide technical support to the annual growth in the last quarter. Developments have largely confirmed this prediction. According to our calculation based on the sum of sectors, annual growth is 3.4% in the last quarter of 2023 and 4.8% in 2023 as a whole. Using the same method, we calculate quarterly growth as 0.6% instead of 1.0%. Therefore, we think that this technical effect also played a role in higher growth than implied by the leading indicators.

Production Side:

All main sectors contributed positively to annual growth in the last quarter (Tables 1 and 5). The strongest increase took place in construction value added with 10.8%. Industrial value added increased by 1.9%, which was higher than the increase in IPI (0.7%). The increase in agriculture value added was marginally positive. The annual increase in services value added was 2.2%, the lowest since the pandemic period. Core services consisting of wholesale-retail trade, transport-storage,

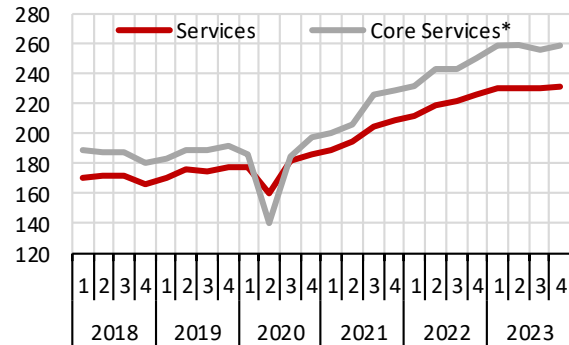
accommodation and food services, and financial services increased by 3.0% and 7.4%, respectively, preventing the services value added from growing at a slower pace. On the other hand, the strong upward trend in the net taxes item continued with 11.0%.

Chart 3. Value Added by Sectors (seasonally adjusted, 2009=100)



Source: TURKSTAT

Chart 4. Value Added by Sectors (seasonally adjusted, 2009=100)



* The sum of retail and wholesale trade, transport and storage, accommodation and catering services
Source: TURKSTAT

According to seasonally adjusted figures, quarterly growth was driven by services and construction sectors. In particular, **construction** value added increased by 6.5% (s.a.) on the back of expenditures for the reconstruction of the earthquake zone and contributed 0.3 points to quarterly growth (Chart 3, Table 3). The **services sector** experienced a moderate increase of 0.6% (s.a.). Nevertheless, as the sector with the largest share, it was able to contribute 0.4 points to quarterly growth. Among services value added, core services and financial services had a stronger increase than other services items, while the contraction in the information and communication sector limited the increase in the services sector (Chart 4, Table 1). On the other hand, **industrial** value added decreased by 0.8%, confirming the slowdown in the industry. Meanwhile, **agricultural** value added remained almost unchanged (Chart 3).

Table 1. The Growth of GDP and Sub-Items from the Production Side (%)

	Annual Growth				Quarterly Growth (seas. adj.)			
	2023-Q1	2023-Q2	2023-Q3	2023-Q4	2023-Q1	2023-Q2	2023-Q3	2023-Q4
GDP	4.0	3.9	6.1	4.0	-0.2	3.6	0.3	1.0
Agriculture	-3.5	-0.8	0.3	0.5	-0.8	1.1	0.8	0.1
Industry	-1.2	-3.0	5.5	1.9	1.5	0.0	1.8	-0.8
Manufacturing	1.2	-2.2	5.9	1.8	2.3	-0.4	1.3	-0.9
Construction	5.3	7.2	7.8	10.8	3.4	0.5	-0.8	6.5
Services	8.9	5.4	3.5	2.2	2.0	0.3	-0.3	0.6
Core Services*	12.3	7.1	4.6	3.0	3.3	0.3	-1.5	1.1
Information and Communication	8.2	1.5	1.1	-3.0	1.0	-2.0	-0.2	-1.2
Financial and Insurance Activities	14.9	8.7	5.1	7.4	4.4	0.9	0.6	1.2
Real Estate Activities	2.0	3.2	2.7	2.8	-0.6	1.3	0.7	1.0
Professional, Administrative and Support Service Activities	10.7	-0.1	-2.1	-1.5	0.5	-2.9	0.5	0.2
Public Administration**	3.3	5.2	4.8	1.9	1.3	1.4	1.4	-0.5
Other Services	7.8	7.3	2.2	2.2	-0.8	1.2	-0.2	1.0
Net Taxes (Tax - Subsidies)	9.3	16.4	16.4	11.0	4.0	6.3	0.2	0.8

* Retail-Wholesale Trade, Transport-Storage, Accommodation-Catering

** Public Administration, Education, Human Health and Social Work Activities

Source: TURKSTAT, Akbank

In 2023, construction was the highest growing sector with 7.8% (Table 2) and caught back its level in 2021. We think that the housing and infrastructural expenditures to be made for the earthquake zone

will ensure that the construction value added will increase in 2024 as well. Services value added slowed down significantly compared to the last year with 4.8%. The slowdown was widespread, but we should not forget that the normalization after the rapid recovery after the pandemic, especially tourism, was effective in this development. Industrial value added growth also slowed to 0.8%. It's worth noting that the decrease in external demand played a role in this development. On the other hand, net taxes contributed 1.4 percentage points to growth, marking the highest increase since 2020 at 13.3%.

Table 2. Annual Growth Rates of Subcomponents of GDP by Production and Contributions to Annual Growth

	Annual Growth (%)				Contribution to Annual Growth (% pts)			
	2020	2021	2022	2023	2020	2021	2022	2023
	GDP	1.9	11.4	5.5	4.5	1.9	11.4	5.5
Agriculture	5.8	-3.0	1.3	-0.2	0.4	-0.2	0.1	0.0
Industry	2.9	17.3	1.7	0.8	0.6	3.4	0.3	0.2
Manufacturing	3.0	18.6	4.3	1.6	0.5	3.0	0.7	0.3
Construction	-5.5	-0.6	-7.1	7.8	-0.4	0.0	-0.4	0.4
Services	0.8	13.2	10.2	4.8	0.5	7.4	5.8	2.9
Core Services*	-5.6	21.1	12.7	6.4	-1.3	4.6	3.0	1.6
Information and Communication	13.9	23.2	8.2	1.3	0.4	0.8	0.3	0.0
Financial and Insurance Activities	23.5	-6.4	20.7	9.0	1.0	-0.3	0.9	0.5
Real Estate Activities	2.8	3.6	6.3	2.7	0.2	0.3	0.5	0.2
Professional, Administrative and Support Service Activities	-5.4	17.0	11.1	1.2	-0.3	0.8	0.6	0.1
Public Administration**	3.1	6.8	3.3	3.8	0.3	0.7	0.3	0.4
Other Services	4.3	24.8	10.4	4.6	0.1	0.5	0.2	0.1
Net Taxes (Tax - Subsidies)	10.4	1.6	0.2	13.3	1.2	0.2	0.0	1.4

* Retail-Wholesale Trade, Transport-Storage, Accommodation-Catering

** Public Administration, Education, Human Health and Social Work Activities

Note: Totals may not sum up to GDP growth due to chain index method.

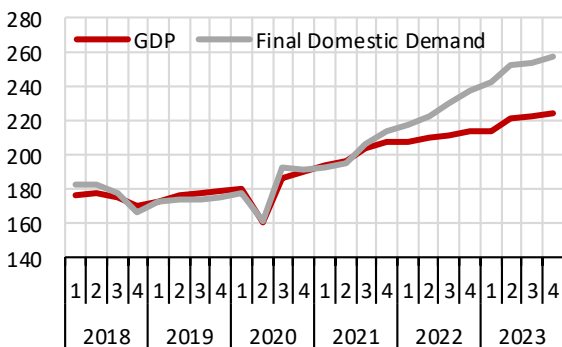
Source: TURKSTAT, Akbank

Expenditure Side:

Domestic demand was the main driver of growth in 2023Q4 as well (Charts 5 and 9; Table 3).

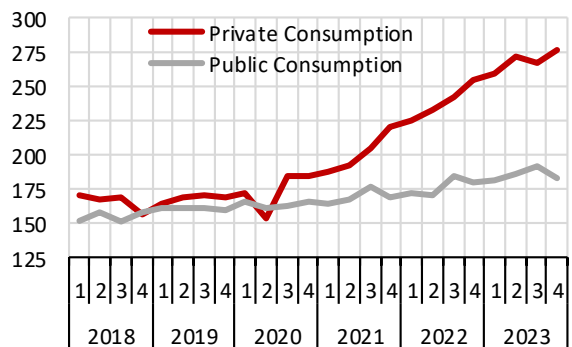
Consumption expenditures increased significantly by 2.4% qoq (s.a.), led by private consumption (Chart 6, Table 3), while investment expenditures declined by 0.8% (s.a.). The divergence in the main components of investment expenditures is notable (Chart 7). Construction expenditures increased by 6.8% qoq due to expenditures for the earthquake zone, while machinery-equipment investments, which had been on an uptrend for a long time, contracted by 6.5%. The 4.3% fall in public consumption expenditures also limited growth (Chart 6). Net exports, on the other hand, added 0.3 points to quarterly growth, while contributing negatively to annual growth by 0.6 points (Table 3). Both exports and imports declined in the fourth quarter. The slowdown in gold imports played a role in imports.

Chart 5. GDP ve Final Domestic Demand (Seasonally adjusted, 2009=100)



Source: TURKSTAT, Akbank

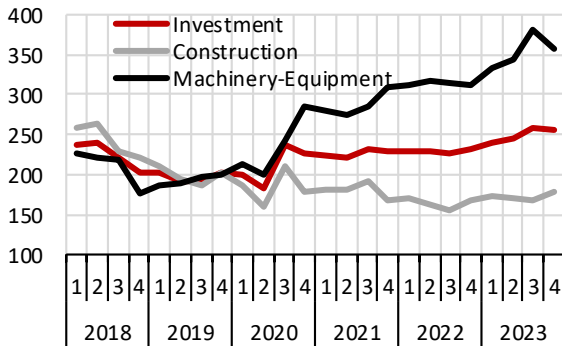
Chart 6. Consumption Expenditures (Seasonally adjusted, 2009=100)



Source: TURKSTAT, Akbank

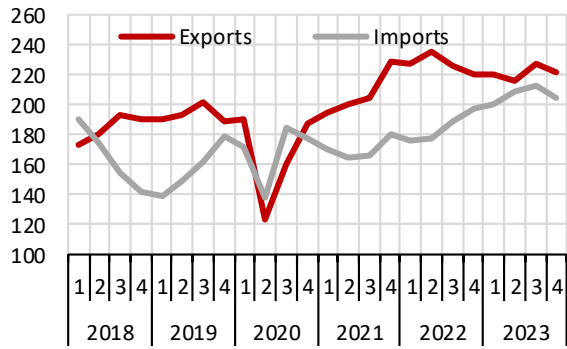


Chart 7. Investment Expenditures (Seasonally adjusted, 2009=100)



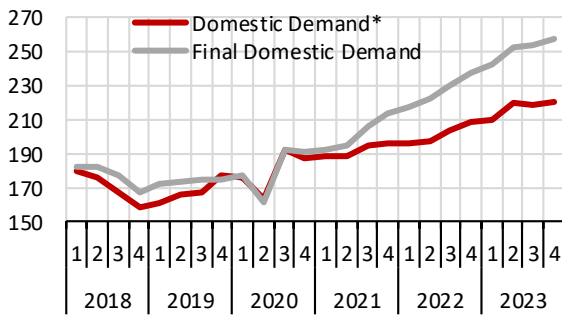
Source: TURKSTAT, Akbank

Chart 8. Goods and Services Exports and Imports (Seasonally adjusted, 2009=100)



Source: TURKSTAT

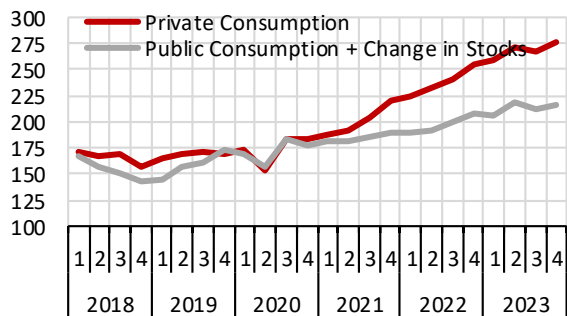
Chart 9. Domestic demand (Seasonally adjusted, 2009=100)



* Domestic demand is the sum of final domestic demand and change in stocks.

Source: TURKSTAT, Akbank

Chart 10. Private Consumption (Seasonally adjusted, 2009=100)



Source: TURKSTAT, Akbank

Table 3. The Growth of GDP and Sub-Items from the Expenditures Side (%)

	Annual Growth				Quarterly Growth (seas. adj.)			
	2023-Q1	2023-Q2	2023-Q3	2023-Q4	2023-Q1	2023-Q2	2023-Q3	2023-Q4
GDP	4.0	3.9	6.1	4.0	-0.2	3.6	0.3	1.0
Total Consumption	14.9	13.9	10.6	8.1	1.7	4.3	-1.1	2.4
Private Consumption	16.6	15.3	11.1	9.3	1.9	4.6	-1.7	3.6
Public Consumption	6.0	6.4	7.6	1.7	0.7	2.7	2.6	-4.3
Investment	3.8	5.7	14.8	10.7	3.5	2.7	4.9	-0.8
Construction	1.5	3.8	8.0	7.5	2.8	-0.5	-2.6	6.8
Machinery and Equipment	5.8	7.3	23.6	14.0	6.3	3.6	10.7	-6.5
Other Assets	1.2	5.0	2.7	11.0	-5.9	9.7	3.2	3.7
Exports	-3.4	-9.4	1.2	0.2	-0.3	-1.6	5.2	-2.5
Imports	13.5	19.7	14.5	2.7	1.4	4.3	1.6	-3.9
Domestic Demand	7.9	11.0	9.1	4.6	0.2	5.1	-0.5	0.7
Final Domestic Demand	12.3	12.0	11.5	8.6	2.1	4.0	0.2	1.7

Source: TURKSTAT, Akbank

Domestic demand was also the main driver of growth in 2023 (Table 4). Financial conditions, especially in the first half of the year, led private consumption to follow a strong course. Investments, on the other hand, increased at the highest rate since 2015. Machinery and equipment investments displayed a relatively better performance. The contribution of net exports to growth turned negative (-3.1) due

to the strong domestic demand and weakening external demand. In 2024, we anticipate a more balanced demand composition.

Table 4. Annual Growth Rates of GDP Subcomponents from Expenditures Side and Contributions to Annual Growth

	Annual Growth (%)				Contribution to Annual Growth (% pts)			
	2020	2021	2022	2023	2020	2021	2022	2023
GDP	1.9	11.4	5.5	4.5	1.9	11.4	5.5	4.5
Total Consumption	3.0	13.0	16.3	11.6	2.2	9.6	12.2	9.6
Private Consumption	3.2	15.4	18.9	12.8	1.9	9.2	11.7	8.9
Public Consumption	2.2	3.0	4.2	5.2	0.3	0.4	0.6	0.7
Investment	7.3	7.2	1.3	8.9	1.8	1.9	0.3	2.2
Construction	-7.1	-2.3	-9.1	5.3	-0.9	-0.3	-1.0	0.5
Machinery and Equipment	21.3	21.8	9.6	12.9	1.9	2.3	1.1	1.6
Other Assets	27.6	-5.6	7.0	5.4	0.8	-0.2	0.2	0.2
Changes in Inventories	-	-	-	-	3.0	-5.1	-7.7	-4.1
Net Exports	-	-	-	-	-5.2	5.0	0.7	-3.1
Exports	-14.6	25.1	9.9	-2.7	-3.8	5.4	2.4	-0.7
Imports	6.8	1.7	8.6	11.7	-1.4	-0.4	-1.7	-2.4
Domestic Demand	7.4	6.4	5.1	8.0	7.0	6.4	4.8	7.6
Final Domestic Demand	4.1	11.5	12.5	11.0	4.0	11.5	12.5	11.7

* Retail-Wholesale Trade, Transport-Storage, Accommodation-Catering

** Public Administration, Education, Human Health and Social Work Activities

Note: Totals may not sum up to GDP growth due to chain index method.

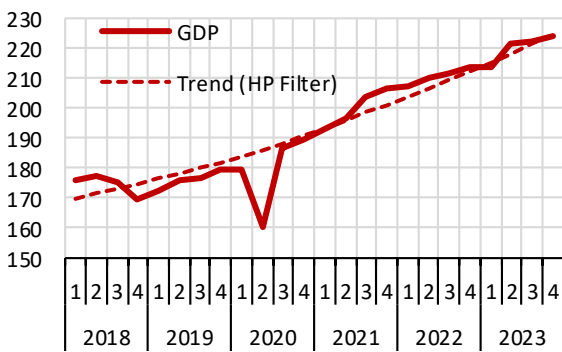
Source: TURKSTAT, Akbank

Output Gap:

The analysis of GDP and expenditure components together with their trends provides important information about the boom and bust phases of the economy. Accordingly (Charts 11 -14):

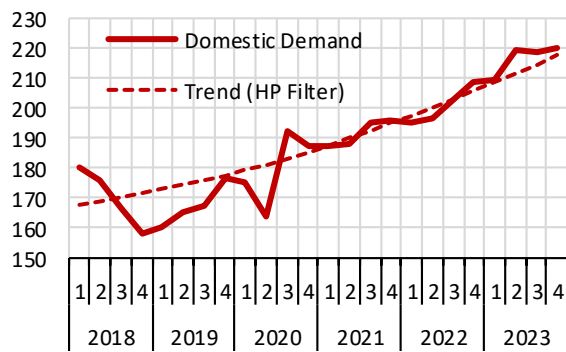
- GDP converged to its long-term trend.
- Domestic demand continues to hover above its long-term trend, albeit losing momentum. This points to an inflationary domestic demand level.
- Exports of goods and services fell below long-term trend again.
- As of Q4, there is not yet a rebalancing between domestic and external demand components

Chart 11. GDP Trend (Seasonally adjusted, 2009=100)



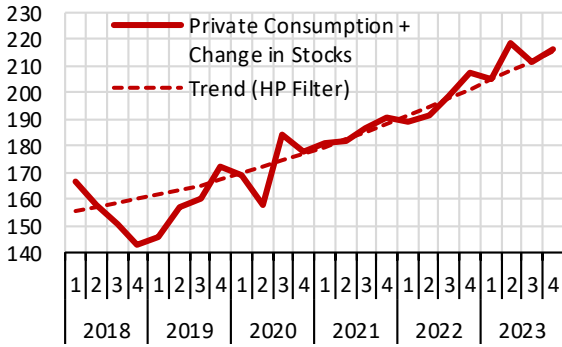
Source: TURKSTAT, Akbank

Chart 12. Domestic Demand Trend (Seasonally adjusted, 2009=100)



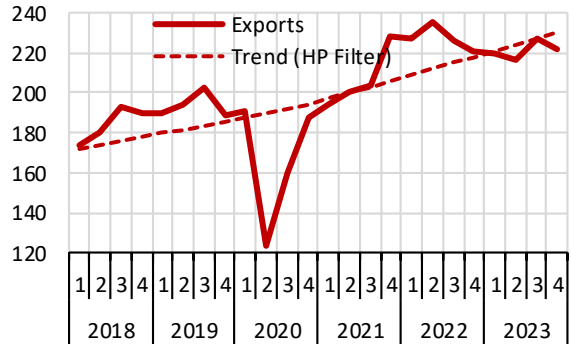
Source: TURKSTAT, Akbank

Chart 13. Private Consumption Trend (Seasonally adjusted, 2009=100)



Source: TURKSTAT, Akbank

Chart 14. Exports of Goods and Services Trend (Seasonally adjusted, 2009=100)



Source: TURKSTAT, Akbank

Table 5. Contribution to GDP Growth (Percentage Point)*

	Annual Growth				Quarterly Growth (seas. adj.)			
	2023-Q1	2023-Q2	2023-Q3	2023-Q4	2023-Q1	2023-Q2	2023-Q3	2023-Q4
GDP	4.0	3.9	6.1	4.0	-0.2	3.6	0.3	1.0
Agriculture	-0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Industry	-0.3	-0.6	1.0	0.4	0.3	0.0	0.3	-0.2
Manufacturing	0.2	-0.4	0.9	0.3	0.4	-0.1	0.2	-0.2
Construction	0.3	0.4	0.4	0.5	0.2	0.0	0.0	0.3
Services	5.4	3.3	2.0	1.3	1.2	0.2	-0.2	0.4
Core Services**	3.0	1.8	1.2	0.8	0.9	0.1	-0.4	0.3
Information and Communication	0.3	0.1	0.0	-0.1	0.0	-0.1	0.0	0.0
Financial and Insurance Activities	0.8	0.5	0.2	0.3	0.2	0.0	0.0	0.1
Real Estate Activities	0.2	0.3	0.2	0.2	0.0	0.1	0.0	0.1
Professional, Administrative and Support Service Activities	0.5	0.0	-0.1	-0.1	0.0	-0.2	0.0	0.0
Public Administration***	0.4	0.5	0.5	0.2	0.1	0.1	0.1	-0.1
Other Services	0.2	0.1	0.0	0.1	0.0	0.0	0.0	0.0
Net Taxes (Tax - Subsidies)	0.9	1.7	1.7	1.2	0.4	0.7	0.0	0.1
Total Consumption	12.0	11.3	8.6	7.0	1.5	3.8	-0.9	2.1
Private Consumption	11.2	10.5	7.7	6.7	1.4	3.4	-1.3	2.7
Public Consumption	0.8	0.8	1.0	0.2	0.1	0.4	0.3	-0.6
Investment	0.9	1.4	3.4	2.6	0.8	0.7	1.2	-0.2
Construction	0.1	0.4	0.7	0.6	0.3	0.0	-0.2	0.6
Machinery and Equipment	0.7	0.9	2.7	1.7	0.7	0.5	1.4	-0.9
Other Assets	0.0	0.1	0.1	0.4	-0.2	0.3	0.1	0.1
Change in Stocks	-5.5	-2.5	-3.4	-5.0	-2.1	0.5	-0.8	-1.2
Net Exports	-3.4	-6.3	-2.6	-0.6	-0.4	-1.3	0.8	0.3
Exports	-0.8	-2.5	0.3	0.1	-0.1	-0.4	1.2	-0.6
Imports	-2.6	-3.8	-2.9	-0.6	-0.3	-1.0	-0.3	0.9
Domestic Demand	7.4	10.2	8.6	4.6	0.2	5.0	-0.5	0.7
Final Domestic Demand	12.9	12.7	12.0	9.6	2.3	4.5	0.3	1.9

* The items may not sum up to GDP due to chain-linking methodology

** Retail-Wholesale Trade, Transport-Storage, Accommodation-Catering

*** Public Administration, Education, Human Health and Social Work Activities

Source: TURKSTAT, Akbank

Table Annex-1. The Revision in Annual Growth Rates from the Production Side (%)

	GDP			Agriculture			Industry			Construction			Services			Net Tax		
	Curr.	Prev.	Diff.	Curr.	Prev.	Diff.	Curr.	Prev.	Diff.	Curr.	Prev.	Diff.	Curr.	Prev.	Diff.	Curr.	Prev.	Diff.
23-1	4.0	4.0	0.00	-3.5	-2.4	-1.04	-1.2	-1.0	-0.20	5.3	4.5	0.77	8.9	8.8	0.04	9.3	9.3	0.00
23-2	3.9	3.9	0.04	-0.8	0.2	-1.02	-3.0	-2.7	-0.25	7.2	6.6	0.60	5.4	5.1	0.40	16.4	17.2	-0.81
23-3	6.1	5.9	0.14	0.3	0.3	-0.01	5.5	5.7	-0.19	7.8	8.1	-0.28	3.5	3.2	0.35	16.4	16.5	-0.07

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