



31 May 2023
QUARTERLY NATIONAL ACCOUNTS (Base 2016)
First Quarter 2023

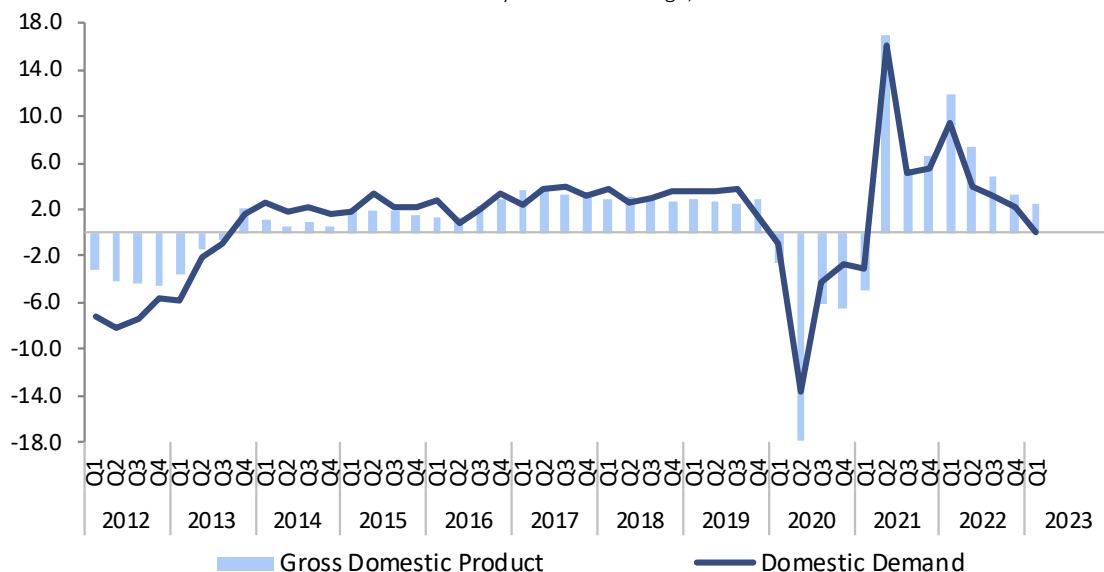
GDP IN VOLUME IN THE FIRST QUARTER WAS 2.5% HIGHER THAN A YEAR AGO AND INCREASED BY 1.6% COMPARED TO THE PREVIOUS QUARTER

Gross Domestic Product (GDP), in real terms, recorded a year-on-year rate of change of 2.5% in the first quarter of 2023 (3.2% in the previous quarter). The contribution of domestic demand to GDP year-on-year growth rate diminished in the first quarter, shifting from 2.3 percentage points in the fourth quarter to a null contribution, as private consumption decelerated and Investment decreased, mainly reflecting the negative contribution of Changes in Inventories, largely associated with the dynamics of international trade flows. Indeed, in the first quarter, Exports of Goods and Services in volume accelerated, while Imports of Goods and Services decelerated, leading to an increase in the net external demand contribution to 2.6 percentage points (0.9 percentage points in the fourth quarter). In nominal terms, the external balance of goods and services was positive in the first quarter (1.6% of GDP), which was not observed since the fourth quarter of 2019, reflecting the combined effect of gains in terms of trade and the positive behaviour in volume.

Compared to the fourth quarter of 2022, GDP increased by 1.6% in volume (0.3% growth in the previous quarter). The contribution of net external demand to quarter-on-quarter GDP rate of change was 2.5 percentage points, after being negative in the fourth quarter (-0.2 percentage points), while domestic demand contribution turned negative from 0.6 percentage points in the fourth quarter to -0.8 percentage points.

Figure 1. Gross Domestic Product and Domestic Demand in volume (reference year =2016)

Seasonally and calendar adjusted data
Year-on-year rate of change, %





In the first quarter of 2023, GDP in volume increased by 2.5% in year-on-year terms and by 1.6% compared with the previous quarter

The year-on-year growth rate of GDP in the first quarter of 2023 was 2.5% in real terms, compared to 3.2% in the previous quarter.

In nominal terms, GDP increased by 11.3% comparing with the first quarter of 2022 (10.7% in the previous quarter), with the implicit GDP deflator accelerating to a year-on-year rate of change of 8.5% (7.3% in the fourth quarter of 2022), reflecting a gain in the terms of trade, contrary to what has been observed since the second quarter of 2021.

In the first quarter of 2023, the contribution of domestic demand to the GDP year-on-year rate of change in volume decreased, shifting from 2.3 percentage points, in the fourth quarter, to a null contribution.

Table 1. Decomposition of GDP rate of change (volume)

	4Q 21	1Q 22	2Q 22	3Q 22	4Q 22	1Q 23
	Year-on-Year rate of change (%)					
Domestic Demand	5.5	9.5	3.9	3.1	2.2	0.0
Exports (FOB)	16.3	18.9	25.2	16.3	7.7	10.9
Imports (FOB)	12.9	12.8	15.2	11.7	5.4	4.9
GDP	6.6	11.9	7.4	4.8	3.2	2.5
	Contributions to GDP year-on-year rate of change (percentage points)					
Domestic Demand	5.6	9.8	4.0	3.2	2.3	0.0
External Demand Balance ¹	1.0	2.1	3.3	1.6	0.9	2.6

¹ - External Demand Balance (Exports less Imports)

- Differences may occur due to non-additivity of chain-linked volume data and rounding procedures.

By components of domestic demand, in volume, there was a deceleration of private consumption (Final Consumption Expenditures of Resident Households and Non-Profit Institutions Serving Households), with a year-on-year rate of change of 1.8% in the first quarter (2.8% in the previous quarter). Public consumption (Final Consumption Expenditure of General Government) slightly increased by 0.2% in year-on-year terms, 1.2 percentage points less than in the precedent quarter. Investment decreased by 6.1%, following a 1.0% growth in the fourth quarter.

Table 2. Components of domestic demand

	4Q 21	1Q 22	2Q 22	3Q 22	4Q 22	1Q 23
	Year-on-Year rate of change (%)					
Domestic Demand	5.5	9.5	3.9	3.1	2.2	0.0
Private Consumption ¹	5.5	11.7	4.7	4.4	2.8	1.8
Public Consumption ²	2.7	4.9	1.0	-0.3	1.4	0.2
Investment	8.1	6.8	3.9	1.7	1.0	-6.1

¹ - Final Consumption Expenditure of Resident Households and NPISHs

² - Final Consumption Expenditure of General Government



In the first quarter of 2023, the positive contribution of net external demand to the GDP year-on-year growth rate increased to 2.6 percentage points (0.9 percentage points in the previous quarter). Exports of Goods and Services accelerated, reaching a year-on-year rate of change of 10.9% in the first quarter (7.7% in the precedent quarter), while Imports of Goods and Services decelerated, shifting from a 5.4% growth in the fourth quarter to 4.9%.

Compared to the previous quarter, GDP registered a growth of 1.6% in real terms (rate of change of 0.3% in the fourth quarter), determined by the contribution of net external demand, which stood at 2.5 percentage points in the first quarter (-0.2 percentage points in the previous quarter), while the contribution of domestic demand turned negative (-0.8 percentage points), after being positive in the fourth quarter (0.6 percentage points).

Table 3. Decomposition of GDP rate of change (volume)

	4Q 21	1Q 22	2Q 22	3Q 22	4Q 22	1Q 23
	Quarter-on-quarter rate of change (%)					
Domestic Demand	1.5	1.4	-0.5	0.7	0.6	-0.8
Exports (FOB)	7.9	3.7	3.1	0.8	-0.1	6.8
Imports (FOB)	6.4	1.8	1.5	1.6	0.4	1.3
GDP	1.9	2.3	0.2	0.3	0.3	1.6
Contributions to GDP quarter-on-quarter rate of change (percentage points)						
Domestic Demand	1.5	1.4	-0.5	0.7	0.6	-0.8
External Demand Balance ¹	0.4	0.8	0.7	-0.4	-0.2	2.5

¹ - External Demand Balance (Exports less Imports)

- Differences may occur due to non-additivity of chain-linked volume data and rounding procedures.

Final consumption expenditure of Resident Households

Resident Households' final consumption expenditure recorded a year-on-year rate of change of 1.7% in volume in the first quarter, 1.1 percentage points lower than in the previous quarter.

Households' consumption in services and non-durable goods slowed down, from a year-on-year rate of change of 2.3% in the fourth quarter to 0.9% in the first quarter.

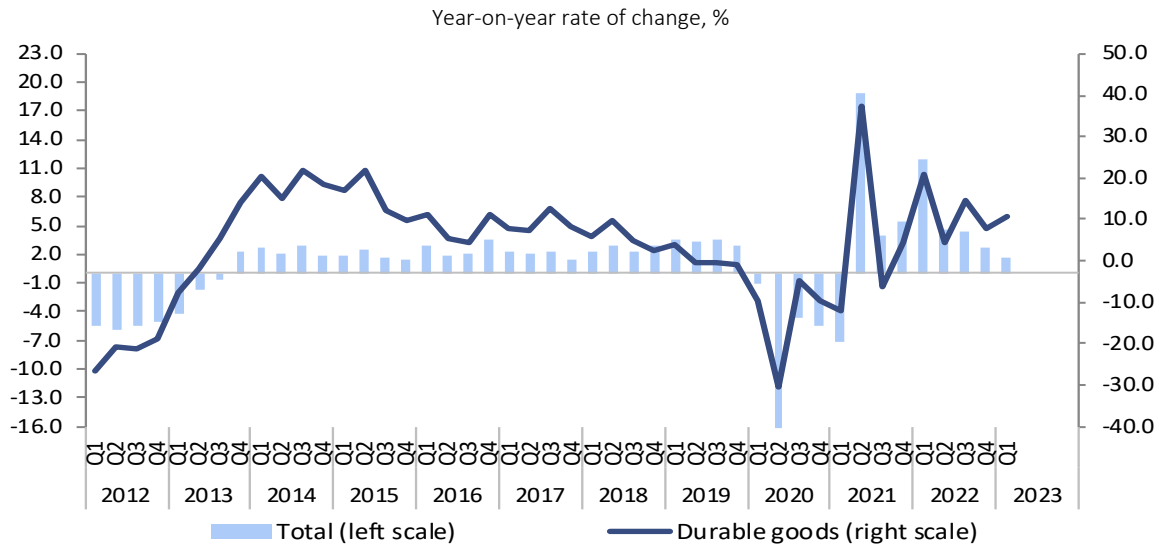
Table 4. Final consumption expenditure of resident households (volume)

	4Q 21	1Q 22	2Q 22	3Q 22	4Q 22	1Q 23
	Year-on-year rate of change (%)					
Total	5.5	11.9	4.7	4.5	2.8	1.7
Durable Component	4.4	21.1	4.5	14.4	7.8	10.6
Non-Durable Component	5.6	11.1	4.7	3.6	2.3	0.9
Of which:						
Food and beverage products	0.2	-2.3	-2.5	-1.3	-3.0	0.2

The component of durable goods accelerated, shifting from rate of change of 7.8% in the fourth quarter to 10.6%, as the expenditure in acquisition of motor vehicles component grew more intensely.



Figure 2. Final consumption expenditure of resident households, volume (reference year=2016)



Compared with the fourth quarter, households' consumption expenditures increased by 0.4% (quarter-on-quarter rate of change of -0.5% in the previous quarter), with a growth rate of 7.6% in expenditures in durable goods, while the non-durable goods and services component diminished by 0.3%.

Table 5. Final consumption expenditure of resident households (volume)

	4Q 21	1Q 22	2Q 22	3Q 22	4Q 22	1Q 23
	Quarter-on-Quarter rate of change (%)					
Total	1.1	1.5	0.7	1.1	-0.5	0.4
Durable Component	5.0	4.8	1.9	2.1	-1.1	7.6
Non-Durable Component	0.8	1.2	0.6	1.0	-0.4	-0.3
Of which:						
Food and beverage products	-0.6	-1.7	0.2	0.8	-2.3	1.5

Investment

In the first quarter, Investment diminished by 6.1% in the first quarter, after a 1.0% growth in the previous quarter. Investment's behaviour in the first quarter was determined, to a large extent, by the evolution of Changes in Inventories, which registered a contribution of -1.2 percentage points to the GDP year-on-year growth rate (-0.2 percentage points in the fourth quarter), in a context where exports of goods and services accelerated, and imports of goods and services decelerated. In turn, total Gross Fixed Capital Formation (GFCF) registered a slight reduction of 0.1% (rate of change of 2.1% in the fourth quarter).



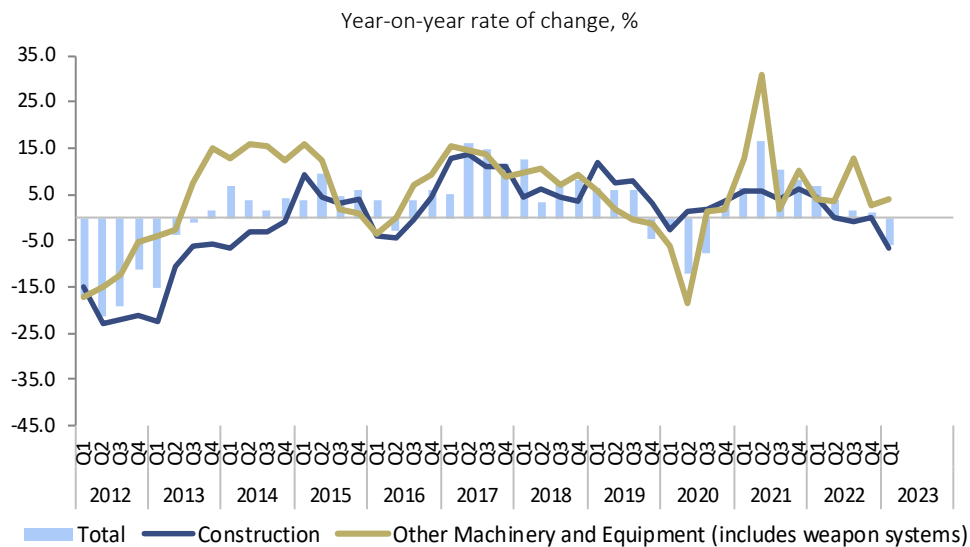
Table 6. Gross Fixed Capital Formation (volume)

	4Q 21	1Q 22	2Q 22	3Q 22	4Q 22	1Q 23
	Year-on-year rate of change (%)					
Total	8.0	5.5	2.1	2.8	2.1	-0.1
Of which:						
Transport Equipment	11.3	17.3	10.0	0.6	10.0	22.2
Other Machinery and Equipment ¹	10.0	4.0	3.5	13.0	2.8	4.1
Construction	6.4	4.6	0.1	-1.0	0.1	-6.5
Intellectual Property Products ²	9.2	5.6	2.7	1.1	3.8	1.8

¹ - Includes weapon systems; ² - includes Research and Development (R&D)

In the first quarter, GFCF in Construction decreased by 6.5% in volume and year-on-year terms, which compares with a growth of 0.1% in the previous quarter and GFCF in Intellectual Property Products slowed down from a growth rate of 3.8% in the fourth quarter to 1.8%. Conversely, GFCF in Transport Equipment and GFCF in Other Machinery and Equipment accelerated to year-on-year rates of change of 22.2% and 4.1% in the first quarter, respectively (10.0% and 2.8% in the fourth quarter).

Figure 3. Investment, volume (reference year=2016)



Comparing with the fourth quarter of 2022, total investment decreased by 5.5% (quarter-on-quarter rate of change of 4.0% in the previous quarter), with a contribution of -0.9 percentage points from Changes in Inventories to the GDP quarter-on-quarter rate of change and a decrease of 0.8% in total GFCF.



Table 7. Gross Fixed Capital Formation (volume)

	4Q 21	1Q 22	2Q 22	3Q 22	4Q 22	1Q 23
	Quarter-on-Quarter rate of change (%)					
Total	4.3	1.4	-2.3	-0.5	3.6	-0.8
Of which:						
Transport Equipment	0.7	11.8	-10.9	0.4	10.1	24.2
Other Machinery and Equipment ¹	11.4	0.3	-0.3	1.5	1.3	1.5
Construction	3.1	0.5	-2.7	-1.9	4.2	-6.0
Intellectual Property Products ²	0.2	1.5	-0.5	-0.1	2.8	-0.5

¹ - Includes weapon systems; ² - includes Research and Development (R&D)

Exports and Imports

Exports of Goods and Services in volume accelerated in the first quarter, recording a year-on-year rate of change of 10.9% (7.7% in the previous quarter), with contributions in the same direction of the two components. Exports of goods rose by 6.3% in the first quarter, 2.1 percentage points more than in the previous quarter and exports of services shifted from a rate of change of 15.1% in the fourth quarter to 20.4%, with particular emphasis on the significant contribution of the tourism component to the aforementioned acceleration.

In the first quarter, Imports of Goods and Services in volume decelerated to a year-on-year rate of change of 4.9% (5.4% in the previous quarter), due to the less intense growth of imports of goods, which stood at 4.1% (5.3% in the fourth quarter). In the opposite direction, imports of services accelerated, registering an increase of 9.5%, which compares with a growth rate of 6.3% in the fourth quarter.

Table 8. Exports and Imports (volume)

	4Q 21	1Q 22	2Q 22	3Q 22	4Q 22	1Q 23
	Year-on-year rate of change (%)					
Exports	16.3	18.9	25.2	16.3	7.7	10.9
Goods (FOB)	4.3	4.6	14.4	11.5	4.2	6.3
Services	54.7	65.9	56.8	27.8	15.1	20.4
Imports	12.9	12.8	15.2	11.7	5.4	4.9
Goods (FOB)	11.1	10.7	12.9	11.5	5.3	4.1
Services	22.7	25.4	27.8	12.9	6.3	9.5

Comparing with the previous quarter, total exports increased by 6.8% in real terms (rate of -0.1% in the previous quarter), as exports of goods rose by 4.8% and imports of services by 10.8% (rates of change of -2.8% and 5.6% in the fourth quarter, respectively). Total imports registered a quarter-on-quarter rate of change of 1.3% (0.4% in the fourth quarter), with an increase of 1.8% in the goods component and a decrease of 1.1% in the services component (rates of 0.4% and 0.7% in the fourth quarter, respectively).



Table 9. Exports and Imports (volume)

	4Q 21	1Q 22	2Q 22	3Q 22	4Q 22	1Q 23
	Quarter-on-Quarter rate of change (%)					
Exports	7.9	3.7	3.1	0.8	-0.1	6.8
Goods (FOB)	4.0	2.8	3.9	0.4	-2.8	4.8
Services	17.2	5.9	1.3	1.6	5.6	10.8
Imports	6.4	1.8	1.5	1.6	0.4	1.3
Goods (FOB)	6.3	3.0	0.1	1.7	0.4	1.8
Services	7.0	-4.0	8.7	1.1	0.7	-1.1

In the first quarter, implicit prices of international trade flows slowed down again markedly, particularly in imports, leading to gains in terms of trade, contrary to that observed since the second quarter of 2021. The deflator for Imports of Goods and Services shifted from a year-on-year rate of change of 13.0% in the fourth quarter to a rate of 3.9% and the deflator for Exports of Goods and Services increased by 7.4%, after a growth of 12.2% in the previous quarter.

Table 10. Implicit deflators of exports and imports of goods (FOB) and services

	4Q 21	1Q 22	2Q 22	3Q 22	4Q 22	1Q 23
	Year-on-year rate of change (%)					
Exports	10.8	12.6	17.7	17.1	12.2	7.4
Imports	14.9	18.0	22.6	21.7	13.0	3.9
Terms of Trade	-3.6	-4.6	-4.0	-3.7	-0.7	3.4

In nominal terms, the External Balance of Goods and Services was positive in the first quarter (1.6% of GDP), which has not been observed since the fourth quarter of 2019 (-2.4% of GDP in the fourth quarter of 2022 and -2.8% of GDP in the first quarter of 2022), reflecting both the gain in the terms of trade and the positive volume effect.



Gross Value Added (GVA) at basic prices

In the first quarter of 2023, GVA at base prices recorded a year-on-year growth of 2.9% in volume (3.8% in the previous quarter).

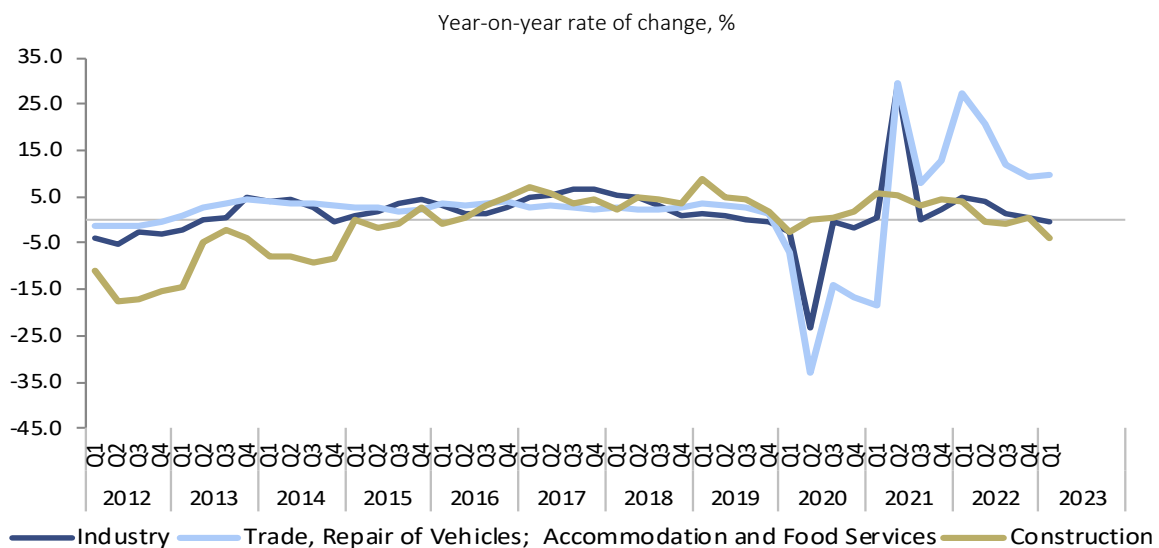
Table 11. Gross Value Added, volume (reference year=2016)

	4Q 21	1Q 22	2Q 22	3Q 22	4Q 22	1Q 23
	Year-on-Year rate of change (%)					
GVA at basic prices	5.3	9.9	7.3	4.5	3.8	2.9
Agriculture, Forestry and Fishing	3.7	-0.5	-3.4	-4.3	-3.3	-2.4
Industry	2.4	5.1	4.0	1.5	0.5	-0.4
Energy, Water Supply and Sewerage	1.3	0.6	1.8	0.5	0.4	1.9
Construction	4.4	3.9	-0.2	-0.6	0.4	-3.7
Trade, Repair of Vehicles; Accommodation and Food Services	12.8	27.5	20.9	12.0	9.4	9.6
Transportation and Storage; Information and Communication	13.6	15.5	12.7	12.3	8.2	7.2
Financial, Insurance and Real Estate Activities	2.2	2.3	1.5	0.2	1.4	0.1
Other Services Activities	2.9	8.8	5.4	3.6	3.4	2.3
Taxes less subsidies on products	16.5	22.9	11.0	7.4	-2.8	2.0

GVA in Trade and Repair of Vehicles, and Accommodation and Food Services maintained a high growth in the first quarter, with a year-on-year rate of change of 9.6% (9.4% in the fourth quarter) and a contribution to the year-on-year growth rate of total GVA (including taxes net of subsidies) of 1.6 percentage points (1.5 percentage points in the fourth quarter). Also noteworthy, were the 7.2% GVA growth in the Transport and Storage and Information and Communication branches, and 2.3% growth in the Other Service Activities branches, both with a contribution of 0.6 percentage points to total GVA.

On the other hand, there was a decrease in GVA in Construction of 3.7% in the first quarter, after the slight increase of 0.4% observed in the previous quarter.

Figure 4. Gross Value Added, volume (reference year=2016)



Taxes less Subsidies on Products grew by 2.0%, in real terms, in the first quarter of 2023, after a 2.8% reduction in the previous quarter.



Employment

In the first quarter, employment (measured in number of individuals and seasonally adjusted) grew by 0.3% in year-on-year terms, for all sectors of economic activity (0.4% in the previous quarter). The number of employees (also seasonally adjusted) recorded a 1.8% growth, 0.5 percentage points lower than that observed in the fourth quarter.

Considering employment measured in hours worked, there was an increase of 1.0% in the first quarter, after increasing by 3.1% in the previous quarter.

Table 12. Employment – Quarterly National Accounts

	4Q 21	1Q 22	2Q 22	3Q 22	4Q 22	1Q 23
	Year-on-Year rate of change (%)					
Employment						
Persons	1.8	4.3	2.0	1.4	0.4	0.3
Hours worked	-2.1	9.8	-1.2	0.6	3.1	1.0
Employees						
Persons	2.6	4.5	3.3	3.3	2.3	1.8
Hours worked	-1.3	8.1	-0.2	2.3	4.9	2.0

Compared to the fourth quarter, total employment (measured in number of individuals) increased by 1.2% in the first quarter, after a reduction of 0.8% in the previous quarter and hours worked increased by 1.0%, the same rate as in the fourth quarter.

Table 13. Employment – Quarterly National Accounts

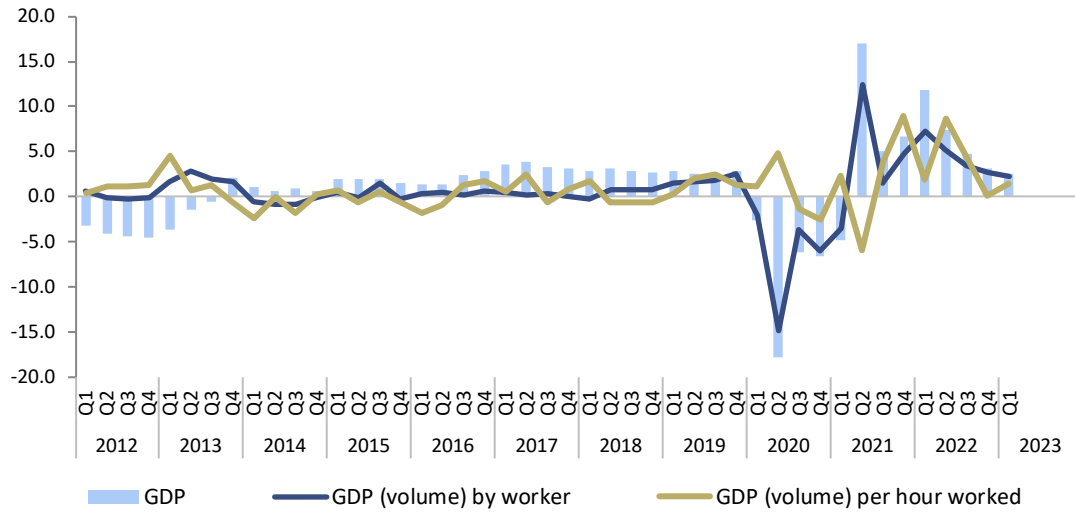
	4Q 21	1Q 22	2Q 22	3Q 22	4Q 22	1Q 23
	Quarter-on-Quarter rate of change (%)					
Employment						
Persons	0.1	1.4	0.1	-0.2	-0.8	1.2
Hours worked	-1.4	3.1	-1.8	0.8	1.0	1.0
Employees						
Persons	0.8	0.8	1.1	0.4	-0.1	0.4
Hours worked	-0.9	3.4	-1.4	1.2	1.7	0.5

In the first quarter, productivity measured by the ratio between GDP in volume and the number of people employed increased by 2.3% in year-on-year terms, 0.4 percentage points less than in the previous quarter. In turn, productivity measured based on the number of hours worked recorded a year-on-year rate of change of 1.5%, after a rate of change of 0.1% in the fourth quarter.



Figure 5. GDP (volume) and productivity

Year-on-year rate of change, %





METHODOLOGICAL NOTE

Revisions:

Regarding Flash estimates and QNA for the previous quarter, current QNA incorporate new information, causing revisions in some aggregates for the most recent quarters. In particular, the information coming from:

- The latest version for the short-term statistics (retail trade turnover, industry turnover, industrial production, prices in industrial production and services turnover);
- The latest information of the Monetary and Financial Statistics and Balance of Payments compiled by the Bank of Portugal, with changes in imports and exports of services;
- The March 2023 preliminary version of the international goods trade statistics. In what concerns, the deflators for external trade of goods for the first quarter of 2023, the Unit Value Quarterly Indices were used, calculated based on the statistics of the International Trade of goods related to March 2023. It should be noticed that this information was not available when the flash estimates were compiled.

Comparing with the flash estimate previously for the first quarter released by Statistics Portugal on April 28, the incorporation of the new data mentioned above did not imply any revision in the GDP rates of change.

Methodological issues:

The information in volume presented in this press release is chain linked data, with 2016 as reference year. GDP quarterly aggregates for demand and production approaches are estimated using seasonally and calendar effects adjusted quarterly indicators. The seasonal adjustment procedure used is indirect, i.e. seasonally adjusted GDP is the sum of its seasonally and calendar effects adjusted components. This procedure is based in probabilistic models estimated with the software X-13 Arima. Consequently, the estimated figures are subject to minor revisions as new observations become available.

It should be noted that in the concept of employment underlying the National Accounts, only individuals who work in resident production units (domestic employment) are counted, that is, total employment includes individuals who carry out a productive activity included within the scope of production limits of national accounts. This concept is not exactly coincident with that of the Labour Force Survey. In effect, National Accounts follow the concept of domestic employment, considering resident and non-resident individuals employed in resident production units, while in the Labour Force Survey, the concept of employment covers resident individuals employed by resident production units and non-residents. In addition, the employment data of Quarterly National Accounts are adjusted for seasonal fluctuations, so the published employment levels differ from those in the Labour Force Survey.



The estimates currently published may be revised in some aggregates as a result of new information, notably due to the compilation of the National Accounts by Institutional Sector. The revised estimates will be published with the release of the National Accounts by Institutional Sector for the first quarter 2023.

Reference date of the primary data used:

These estimates were calculated using information available until May 29, 2023.

ABBREVIATIONS

NPISH – Non-Profit Institutions Serving Households.

Gross Capital Formation (Investment); includes: Gross Fixed Capital Formation (GFCF), Acquisitions less Disposals of Valuables and Changes in Inventories.

Exports (FOB) – Exports of Goods at FOB (Free On Board) prices and Services.

Imports (FOB) – Imports of Goods at FOB (Free On Board) prices and Services.

GDP – Gross Domestic Product at market prices.

GVA – Gross Value Added at basic prices.

ESA – European System of National and Regional Accounts

Next releases of National Accounts - National Accounts by Institutional Sector for the first quarter of 2023 are scheduled for June 23, 2023.
