31 August 2023 QUARTERLY NATIONAL ACCOUNTS (Base 2016) Second Quarter 2023

GDP IN VOLUME IN THE SECOND QUARTER WAS 2.3% HIGHER THAN A YEAR AGO AND REGISTERED A NIL RATE OF CHANGE COMPARED WITH THE PREVIOUS QUARTER

Gross Domestic Product (GDP), in real terms, recorded a year-on-year rate of change of 2.3% in the second quarter of 2023 (2.5% in the previous quarter). The positive contribution of net external demand to GDP year-on-year growth rate decreased to 1.4 percentage points (2.4 percentage points in the previous quarter), with a more pronounced deceleration of Exports of Goods and Services in volume than that of Imports of Goods and Services. In the second quarter, the rate of change of the imports deflator was negative in year-on-year terms, decreasing significantly compared to the observed in the previous quarter, determining a pronounced increase in gains in terms of trade, despite the slowdown in the deflator of exports. In turn, the positive contribution of domestic demand to the year-on-year rate of change of GDP increased from 0.1 percentage points in the first quarter of 2023 to 1.0, with a less pronounced reduction in investment and a slight slowdown of private consumption.

Compared to the first quarter of 2023, GDP recorded a nil quarter-on-quarter rate of change in volume, after a growth of 1.6% in the previous quarter. The contribution of net external demand to the quarter-on-quarter rate of change in volume of GDP was negative in the second quarter (-0.4 percentage points), after being positive in the first quarter (2.3 percentage points), as a result of the decrease in exports, while the contribution of domestic demand was positive, moving from -0.7 percentage points in the first quarter to +0.4 percentage points, reflecting the acceleration of private consumption and the less intense decrease in investment.

In the second quarter of 2023, GDP in volume increased by 2.3% in year-on-year terms and recorded a nil quarter-on-quarter rate of change

The year-on-year growth rate of GDP in the second quarter of 2023 was 2.3% in real terms, compared to 2.5% in the previous quarter.

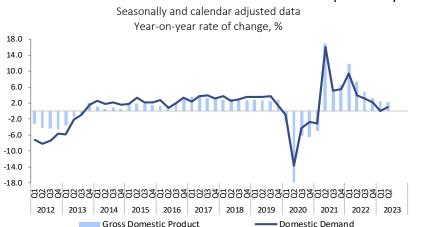


Figure 1. Gross Domestic Product and Domestic Demand in volume (reference year =2016)

QUARTERLY NATIONAL ACCOUNTS – SECOND QUARTER 2023

In nominal terms, GDP increased by 10.2% comparing with the second quarter of 2022 (11.7% in the previous quarter), with the implicit GDP deflator decelerating to a year-on-year rate of change of 7.7% (8.9% in the first quarter of 2023).

In the second quarter of 2023, contribution of domestic demand to the GDP year-on-year rate of change in volume increased, shifting from 0.1 percentage points in the first quarter, to 1.0..

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

	1Q 22	2Q 22	3Q 22	4Q 22	1Q 23	2Q 23	
		Year-on-Year rate of change (%)					
Domestic Demand	9.5	3.9	3.1	2.2	0.1	1.0	
Exports (FOB)	18.9	25.2	16.3	7.6	10.1	4.3	
Imports (FOB)	12.8	15.2	11.7	5.4	4.5	1.3	
GDP	11.9	7.4	4.8	3.2	2.5	2.3	
Contributions to GD	P year-on	-year rate	of chang	e (percer	ntage poin	its)	
Domestic Demand	9.8	4.0	3.2	2.2	0.1	1.0	
External Demand Balance ¹	2.1	3.3	1.6	0.9	2.4	1.4	

¹ - External Demand Balance (Exports less Imports)

By components of domestic demand, in volume, there was a slight 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 1.4% in the second quarter (1.5% in the previous quarter). Public consumption (Final Consumption Expenditure of General Government) increased by 1.1% in year-on-year terms, more 0.9 percentage points than in the precedent quarter. In turn, Investment decreased by 0.6%, following a 4.5% reduction in the first quarter.

Table 2. Components of domestic demand

	1Q 22	2Q 22	3Q 22	4Q 22	1Q 23	2Q 23			
	Year-on-Year rate of change (%)								
Domestic Demand	9.5	3.9	3.1	2.2	0.1	1.0			
Private Consumption ¹	11.7	4.7	4.4	2.8	1.5	1.4			
Public Consumption ²	4.9	1.0	-0.3	1.4	0.2	1.1			
Investment	6.8	3.9	1.7	1.0	-4.5	-0.6			

¹ - Final Consumption Expenditure of Resident Households and NPISHs

In the second quarter of 2023, the positive contribution of net external demand to the GDP year-on-year growth rate decreased to 1.4 percentage points (2.4 in the previous quarter), with a deceleration of Exports of Goods and Services in volume (shifting from a year-on-year growth of 10.1% in the first quarter, to 4.3%), more pronounced than that of Imports of Goods and Services (from 4.5% to 1.3%).

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

² - Final Consumption Expenditure of General Government

Compared to the previous quarter, GDP registered a nil quarter-on-quarter rate of change in volume, after a growth of 1.6% in the previous quarter. The contribution of net external demand to the quarter-on-quarter rate of change of GDP was negative in the second quarter (-0.4 percentage points), after being positive in the first quarter (2.3 percentage points), as a result of the decrease of exports, while the contribution of domestic demand was positive (shifting from -0.7 percentage points in the first quarter to +0.4), reflecting the acceleration of private consumption and a less intense decrease in investment.

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

	1Q 22	2Q 22	3Q 22	4Q 22	1Q 23	2Q 23	
	Quarter-on-quarte rate of change (%)						
Domestic Demand	1.4	-0.5	0.7	0.6	-0.7	0.4	
Exports (FOB)	3.7	3.1	0.8	-0.1	6.1	-2.3	
Imports (FOB)	1.8	1.5	1.6	0.4	1.0	-1.6	
GDP	2.3	0.2	0.3	0.3	1.6	0.0	
Contributions to GDP q	uarter-on	-quarter r	ate of ch	ange (per	centage p	oints)	
Domestic Demand	1.4	-0.5	0.7	0.6	-0.7	0.4	
External Demand Balance ¹	0.8	0.7	-0.4	-0.2	2.3	-0.4	

¹ - External Demand Balance (Exports less Imports)

Final consumption expenditure of Resident Households

Resident Households' final consumption expenditure recorded a year-on-year rate of change of 1.4% in volume in the second quarter, less 0.1 percentage points than in the previous quarter.

Households' consumption expenditure in services and non-durable goods recorded a year-on-year growth of 0.6% in the second quarter (0.5% in the first quarter).

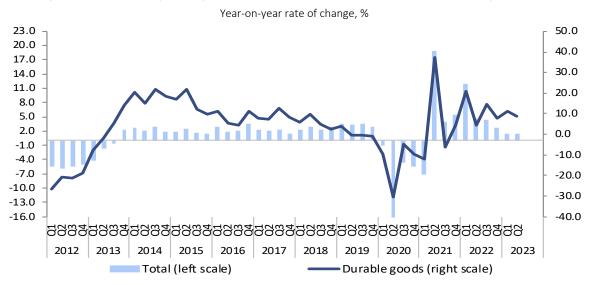
Table 4. Final consumption expenditure of resident households (volume)

	1Q 22	2Q 22	3Q 22	4Q 22	1Q 23	2Q 23					
	Year-on-year rate of change (%)										
Total	11.9	4.7	4.5	2.8	1.5	1.4					
Durable Component	21.1	4.5	14.4	7.8	11.1	9.0					
Non-Durable Component	11.1	4.7	3.6	2.3	0.5	0.6					
Of which:											
Food and beverage products	-2.3	-2.5	-1.3	-3.0	0.3	1.5					

The component of durable goods decelerated, shifting from a rate of change of 11.1% in the first quarter to 9.0%.

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

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



Compared with the first quarter, households' consumption expenditures increased by 0.6% (quarter-on-quarter rate of change of 0.2% in the previous quarter), with a growth rate of 0.7% in expenditures in non-durable goods and services, while the durable goods component registered a nil quarter-on-quarter rate of change (8.0% in the first quarter).

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

	1Q 22	2Q 22	3Q 22	4Q 22	1Q 23	2Q 23				
	Quarter-on-Quarter rate of change (%)									
Total	1.5	0.7	1.1	-0.5	0.2	0.6				
Durable Component	4.8	1.9	2.1	-1.1	8.0	0.0				
Non-Durable Component	1.2	0.6	1.0	-0.4	-0.6	0.7				
Of which:										
Food and beverage products	-1.7	0.2	0.8	-2.3	1.6	1.4				

Investment

In the second quarter, Investment diminished by 0.6% in the second quarter, after a 4.5% reduction in the previous quarter. Gross Fixed Capital Formation (GFCF) registered a growth of 1.0% (0.3% in the first quarter), while the contribution of Changes in Inventories to the GDP year-on-year growth rate was -0.3 percentage points, after being -0.9 percentage points in the first quarter.

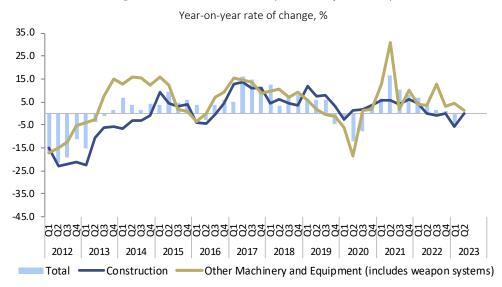
Table 6. Gross Fixed Capital Formation (volume)

	1Q 22	2Q 22	3Q 22	4Q 22	1Q 23	2Q 23				
	Year-on-year rate of change (%)									
Total	5.5	2.1	2.8	2.2	0.3	1.0				
Of which:										
Transport Equipment	17.3	10.0	0.6	10.2	21.5	8.6				
Other Machinery and Equipment ¹	4.0	3.5	13.0	3.0	4.4	1.5				
Construction	4.6	0.1	-1.0	0.1	-5.8	0.0				
Intellectual Property Products ²	5.6	2.7	1.1	3.8	2.1	0.0				

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

In the second quarter, GFCF in Construction in volume recorded a nil rate of change in year-on-year terms, which compares with a reduction of 5.8% in the previous quarter. GFCF in Intellectual Property Products also recorded a nil year-on-year rate of change, after growing by 2.1% in the first quarter. GFCF in Transport Equipment and GFCF in Other Machinery and Equipment decelerated to year-on-year growths of 8.6% and 1.5% in the second quarter, respectively (21.5% and 4.4% in the first quarter).

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



Comparing with the first quarter of 2023, total investment decreased by 0.5% (quarter-on-quarter rate of change of -3.9% in the previous quarter), with a decrease of 1.6% in total GFCF and a contribution of +0.2 percentage points from Changes in Inventories to the GDP quarter-on-quarter rate of change.

Table 7. Gross Fixed Capital Formation (volume)

	1Q 22	2Q 22	3Q 22	4Q 22	1Q 23	2Q 23				
	Quarter-on-Quarter rate of change (%)									
Total	1.4	-2.3	-0.5	3.6	-0.5	-1.6				
Of which:										
Transport Equipment	11.8	-10.9	0.4	10.3	23.2	-20.4				
Other Machinery and Equipment ¹	0.3	-0.3	1.5	1.5	1.6	-3.0				
Construction	0.5	-2.7	-1.9	4.2	-5.4	3.3				
Intellectual Property Products ²	1.5	-0.5	-0.1	2.8	-0.1	-2.6				

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

Exports and Imports

Exports of Goods and Services in volume decelerated in the second quarter, recording a year-on-year rate of change of 4.3% (10.1% in the previous quarter), with a less intense growth of the two components. Exports of goods grew by 0.8% in year-on-year terms in the second quarter, 4.5 percentage points less than in the previous quarter, and exports of services shifted from a growth of 20.0% in the first quarter to 12.0%.

In the second quarter, Imports of Goods and Services in volume slowed down to a year-on-year rate of change of 1.3% (4.5% in the previous quarter), with the goods component shifting from a growth of 4.0% to 1.6% and imports of services from 7.2% to a nil growth rate.

Table 8. Exports and Imports (volume)

	1Q 22	2Q 22	3Q 22	4Q 22	1Q 23	2Q 23				
		Year-on-year rate of change (%)								
Exports	18.9	25.2	16.3	7.6	10.1	4.3				
Goods (FOB)	4.6	14.4	11.5	4.1	5.3	0.8				
Services	65.9	56.8	27.8	15.1	20.0	12.0				
Imports	12.8	15.2	11.7	5.4	4.5	1.3				
Goods (FOB)	10.7	12.9	11.5	5.2	4.0	1.6				
Services	25.4	27.8	12.9	6.3	7.2	0.0				

Comparing with the previous quarter, total exports decreased by 2.3% in real terms (rate of 6.1% in the previous quarter), as exports of goods declined by 0.6% and imports of services by 5.4% (rates of change of +3.9% and +10.3% in the first quarter, respectively). Total imports registered a quarter-on-quarter rate of change of -1.6% (+1.0% in the first quarter), with a decrease of 2.2% in the goods component and an increase of 1.4% in the services component (rates of +1.8% and -3.2% in the first quarter, respectively).

Table 9. Exports and Imports (volume)

	1Q 22	2Q 22	3Q 22	4Q 22	1Q 23	2Q 23				
		Quarter-on-Quarter rate of change (%)								
Exports	3.7	3.1	0.8	-0.1	6.1	-2.3				
Goods (FOB)	2.8	3.9	0.4	-2.9	3.9	-0.6				
Services	5.9	1.3	1.6	5.6	10.3	-5.4				
Imports	1.8	1.5	1.6	0.4	1.0	-1.6				
Goods (FOB)	3.0	0.1	1.7	0.3	1.8	-2.2				
Services	-4.0	8.7	1.1	0.7	-3.2	1.4				

In the second quarter, the rate of change of the imports deflator was negative in year-on-year terms, decreasing significantly compared to the previous quarter, leading to a significant increase in terms of trade gains despite the slowdown in the export deflator. It should be noted that the gains in terms of trade observed in 2023 are influenced by a base effect, since in 2022 there were significant losses in the terms of trade. The deflator of Imports of Goods and Services shifted from a year-on-year rate of change of 3.5% in the first quarter to a rate of -5.1% and the deflator of Exports of Goods and Services increased by 0.8% in the second quarter, after a growth of 7.4% in the previous quarter.

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

	1Q 22	2Q 22	3Q 22	4Q 22	1Q 23	2Q 23					
		Year-on-year rate of change (%)									
Exports	12.6	17.7	17.1	12.2	7.4	0.8					
Imports	18.0	22.6	21.7	13.0	3.5	-5.1					
Terms of Trade	-4.6	-4.0	-3.7	-0.7	3.8	6.2					

In nominal terms, the External Balance of Goods and Services was positive in the first and the second quarters, which has not been observed since the fourth quarter of 2019 (1.6% of GDP in the first quarter of 2023 and 2.2% in the second quarter of 2023), reflecting both the gain in the terms of trade and the positive volume effect.

Gross Value Added (GVA) at basic prices

In the second quarter of 2023, GVA at base prices recorded a year-on-year growth of 2.5% in volume (3.1% in the previous quarter).

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

	1Q 22	2Q 22	3Q 22	4Q 22	1Q 23	2Q 23		
		Year-on-Year rate of change (%)						
GVA at basic prices	9.9	7.3	4.5	3.8	3.1	2.5		
Agriculture, Forestry and Fishing	-0.5	-3.4	-4.3	-3.3	-2.4	-1.1		
Industry	5.1	4.0	1.5	0.5	-0.2	-3.6		
Energy, Water Supply and Sewerage	0.6	1.8	0.5	0.4	2.1	0.3		
Construction	3.9	-0.2	-0.6	0.4	-3.2	0.8		
Trade, Repair of Vehicles; Accommodation and Food Services	27.5	20.9	12.0	9.5	9.7	6.3		
Transportation and Storage; Information and Communication	15.5	12.7	12.3	8.2	7.3	7.3		
Financial, Insurance and Real Estate Activities	2.3	1.5	0.2	1.4	0.1	0.9		
Other Services Activities	8.8	5.4	3.6	3.4	2.4	3.1		
Taxes less subsidies on products	22.9	11.0	7.4	-2.8	1.8	0.0		

GVA in Trade and Repair of Vehicles, and Accommodation and Food Services recorded a year-on-year growth of 6.3% in real terms (9.7% in the first quarter) and a contribution to the year on-year growth rate of total GVA (including taxes net of subsidies) of 1.1 percentage points (1.6 in the first quarter). In turn, the GVA of the Transport and Storage and Information and Communication continued to grow by 7.3% and maintained a contribution of 0.6 percentage points, while the GVA of the Other Service Activities accelerated to a rate of change of 3.1% (2.4% in the first quarter) and increased the contribution to 0.8 percentage points to total GVA.

Year-on-year rate of change, %

35.0
25.0
15.0
-5.0
-5.0
-25.0
-35.0
-45.0

Industry Trade, Repair of Vehicles; Accommodation and Food Services Construction

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

Taxes less Subsidies on Products recorded a nil year-on-year rate of change, in real terms, in the second quarter of 2023, after an increase of 1.8% in the previous quarter.

Employment

In the second quarter, employment (measured in number of persons and seasonally adjusted) grew by 1.5% in year-on-year terms, for all sectors of economic activity (0.3% in the previous quarter). The number of employees (also seasonally adjusted) recorded a 2.8% growth, 1.0 percentage points lower than that observed in the first quarter.

Considering employment measured by hours worked, there was an increase of 2.4% in the second quarter, after increasing by 1.1% in the previous quarter.

Table 12. Employment - Quarterly National Accounts

	1Q 22	2Q 22	3Q 22	4Q 22	1Q 23	2Q 23				
		Year-on-Year rate of change (%)								
Employment										
Persons	4.3	2.0	1.4	0.4	0.3	1.5				
Hours worked	9.8	-1.2	0.6	3.1	1.1	2.4				
Employees										
Persons	4.5	3.3	3.3	2.3	1.8	2.8				
Hours worked	8.1	-0.2	2.3	4.9	2.0	3.3				

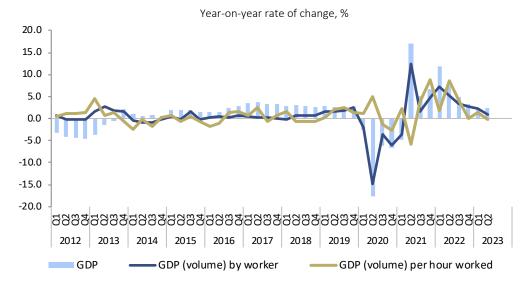
Compared to the first quarter, total employment (measured in number of persons) increased by 1.3% in the second quarter (1.2% in the first quarter) and hours worked decreased by 1.0% (quarter-on-quarter growth rate of 1.4% in the first quarter).

Table 13. Employment - Quarterly National Accounts

	1Q 22	2Q 22	3Q 22	4Q 22	1Q 23	2Q 23
	Qua	rter-on-	-Quarter	rate of	change	(%)
Employment						
Persons	1.4	0.1	-0.2	-0.8	1.2	1.3
Hours worked	3.4	-2.4	1.2	0.9	1.4	-1.0
Employees						
Persons	0.8	1.1	0.4	-0.1	0.4	2.2
Hours worked	3.4	-1.4	1.2	1.7	0.5	-0.1

In the second quarter, productivity measured by the ratio between GDP in volume and the number of people employed increased by 0.9% in year-on-year terms, 1.3 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 -0.1%, after a rate of change of 1.4% in the first quarter.

Figure 5. GDP (volume) and productivity



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 June 2023 preliminary version of the international goods trade statistics. In what concerns, the deflators for external trade of goods for the second quarter of 2023, the Unit Value Quarterly Indices were used, calculated based on the statistics of the International Trade of goods related to June 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 second quarter released by Statistics Portugal on July 31, 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.

Following the usual production calendar of National Accounts, the release of final Annual Accounts for 2021 and provisional for 2022 will imply revisions on Quarterly National Accounts series. The revised estimates will be published in the National Accounts section of the Statistics Portugal website on September 22, together with the publication of the National Accounts by Institutional Sector for the second quarter of 2023.

Reference date of the primary data used:

These estimates were calculated using information available until August 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 second quarter of 2023 are scheduled for September 22, 2023.