

Grupo de Pesquisa em

Gestão e Planejamento Econômico-Financeiro
Universidade Federal do Rio de Janeiro – UFRJ

The Quarterly Observatory of the U.S. Economy:

Macroeconomic Trends,

3rd Quarter 2023

## **Textos para Discussão**

No. 15 – outubro, 2023.

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#### Título

The Quarterly Observatory of the U.S. Economy: Macroeconomic Trends, 3rd Quarter 2023

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#### Resumo:

O principal objetivo do Observatório Trimestral é avaliar a evolução da economia norte-americana em uma perspectiva de mais longo prazo, e levando em conta um referencial macroeconômico bem definido. Este referencial, assim como as previsões elaboradas no texto, seguem material disponível em outro Texto para Discussão:

"A macro-econometric model containing income distribution, price changes and Government financing: Solutions and dynamic analysis for the US."

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#### **Abstract:**

The main objective of the Quarterly Observatory is to evaluate the path of the U.S. economy in a longer-term perspective and considering a well-defined macroeconomic framework. This framework, as well as the predictions elaborated in the text, follow material available in another Text for Discussion:

"A macro-econometric model containing income distribution, price changes and Government financing: Solutions and dynamic analysis for the US."

https://modelosfinanceiros.com.br/assets/documentos/gpef - texto para discusso no 11 - 20222.pdf

# The Quarterly Observatory of the U.S. Economy: Macroeconomic Trends, 3<sup>rd</sup> Quarter 2023

October 2023

**GPEF** 

Grupo de Pesquisa em Gestão e Planejamento Econômico-Financeiro

#### Introduction

In the third quarter of 2023, the trend of reduced growth in aggregate output, that initiated a year ago, was interrupted – GDP growth was almost 0.7 percentage point higher than in the second quarter. In the case of both aggregate consumption and – especially – private investment, there were increases in the growth rate. On the other hand, total employment in the private sector continued to show declining rates of change – a trend that has been present since 2021.

Inflation rates, as measured by the GDP deflator, continued to trend downward – in the last quarter, there was a reduction of 0.24 percentage point. According to the CPI index, however, inflation accelerated in the third quarter (0.6 percentage point increase). The third quarter of this year was also marked by less favorable fiscal data for the federal government, with a stronger increase in consumption (2.5 percentage points above second quarter's growth), and a significant upward movement of the public debt (second quarter data).

#### 1. GDP growth and its main factors

GDP growth accelerated in the third quarter, with the rate of change more than doubling from the previous period. Two factors contributed to this positive result, namely the growth in aggregate consumption and, in particular, the expansion of private investment in the third quarter.

This favorable performance occurred despite the rise in interest rates in real terms. On the other hand, the trade balance worsened in the third quarter – a trend with a negative effect on growth.

## 1. GDP growth and its main factors

	Units	Last	Previous	Cha	nge (%)										
		III-23	II-23	I-22	11-22	III-22	IV-22	I-23	II-23	III-23					
Real net exports	Bil. 2017 USD	-937.6	-928.1	14.60	-2.17	-12.09	-1.59	-3.15	-0.73	1.01					
Real private		III-23	II-23	I-22	II-22	III-22	IV-22	I-23	II-23	III-23					
consumption	Bil. 2017 USD	15,494.2	15,343.5	-0.00	0.49	0.38	0.29	0.93	0.20	0.98					
Real private		III-23	II-23	I-22	II-22	III-22	IV-22	I-23	II-23	III-23					
investment	Bil. 2017 USD	4,096.0	4,014.1	1.52	-2.76	-1.96	0.83	-2.33	1.27	2.04					
				Real F	Rate (%)						Foreca	st (%)			
Real interest rates		III-23	II-23	I-22	II-22	III-22	IV-22	I-23	II-23	III-23	2023		2025	2026	2027
Moody's Aaa yield	% (GDP Deflator)	1.83	1.13	-3.27	-3.17	-2.48	-1.87	-0.68	1.13	1.83	1.85	1.51	1.34	1.27	1.23
				Cha	nge (%)										
		III-23	II-23	I-22	11-22	III-22	IV-22	I-23	II-23	III-23	2023	2024	2025	2026	2027
Real GDP	Bil. 2017 USD	22,491.5	22,225.3	-0.49	-0.14	0.65	0.63	0.55	0.51	1.19	2.64	2.54	2.36	2.26	2.24

#### 2. Inflation and monetary aggregates

According to the GDP deflator, inflation remains on a consistently lower path after peaking in the second quarter of 2022. However, CPI data show that price changes did accelerate in the third quarter.

Among the factors contributing to the reduction of inflationary pressures is the fall in the money supply (M1 stock) observed since the end of last year.\* This trend is certainly related to the rise in interest rates that apply to the economy as a whole (corporate rates). On the other hand, the reduction in money supply was offset in part by the increase in M1 velocity in the third quarter.

Another factor, even more important, contributing to the reduction of inflation rates is the fall in wholesale prices. Nevertheless, in the third quarter of 2023 the decline in the PPI index – all commodities – was less pronounced than in the previous period.

<sup>\*</sup> One major issue with data for monetary variables was the change in the definition of M1 adopted by the Fed in May 2020, which caused a fourfold increase in the figure for that month. To deal with this change, an adjustment has been made to bring recent data in line with the original series.

## 2. Inflation and monetary aggregates

	Units	Last	Previous	Annual Change (%)													
Consumer Price		III-23	II-23	I-22	11-22	III-22	IV-22	I-23	II-23	III-23	_						
Index (CPI)	1982-84 = 100	307.48	303.84	8.51	8.93	8.21	6.44	4.98	3.09	3.68							
				Ann	ual Cha	nge (%)					Forecast (%)						
		III-23	II-23	I-22	11-22	III-22	IV-22	I-23	II-23	III-23	2023	2024	2025	2026	2027		
<b>GDP</b> Deflatior	2017 = 100	122.81	121.76	6.93	7.65	7.25	6.42	5.32	3.48	3.24	4.00	2.93	2.46	2.51	2.48		
		III-23	II-23	I-22	11-22	III-22	IV-22	I-23	II-23	III-23	2023	2024	2025	2026	2027		
Monetary base	Mil. USD	5,567,100	5,608,500	5.05	-8.63	-15.30	-15.70	-9.17	1.85	2.88	3.03	2.78	2.63	2.56	2.55		
		III-23	II-23	I-22	11-22	III-22	IV-22	I-23	II-23	III-23	2023	2024	2025	2026	2027		
M1*	Mil. USD	4,370,372	4,441,813	11.14	6.42	2.06	-3.39	-8.28	-10.26	-10.40	3.03	2.78	2.63	2.56	2.55		
				M1 V	elocity												
M1 income		III-23	II-23	I-22	11-22	III-22	IV-22	I-23	II-23	III-23	_						
velocity	N.A.	4.637	4.553	3.659	3.757	3.891	4.018	4.350	4.553	4.637							
				Ann	ual Cha	nge (%)											
<b>Producer Price</b>		III-23	II-23	I-22	11-22	III-22	IV-22	I-23	II-23	III-23	_						
Index (PPI)	1982 = 100	259.18	253.90	20.93	22.43	13.67	6,.61	-1.13	-9.39	-3.25							
All commodities																	

<sup>\*</sup> See previous page.

#### 3. Broad sectors in the economy

The trajectory of nominal income in the sector with the greatest link with the economy's overall cyclical pattern – Utilities, Construction and Manufacturing – peaked in the second quarter of 2022 and has shown a downward pattern in the nominal rate of change thereafter. In the case of Trade and Transportation, there is not such a distinct trend – instead, up and down movements in the nominal rate of change have been observed.

In relation to financial services, there were mostly negative nominal rates of change in the last four quarters for which data are available. This worsening scenario is undoubtedly affected by the problems in the real estate segment. The sector of personal and business services, as expected, has shown a more regular behavior (in nominal values).

## 3. Broad sectors in the economy: National income

	Units	Last	Previous	Cha	nge (%)	Forecast (real rate, %)										
Utilities, Construc.	_	II-23	I-23	IV-21	I-22	II-22	III-22	IV-22	I-23	II-23	2023 202	1 2025	2026	2027		
and Manufactur.	Bil. USD	3,676	3,675	4.94	3.59	5.34	1.78	1.29	0.31	0.00	3.82 2.7	1 2.50	2.35	2.12		
Trade and	<u></u>	II-23	I-23	IV-21	I-22	II-22	III-22	IV-22	I-23	II-23	2023 202	1 2025	2026	2027		
Transportation	Bil. USD	3,778	3,719	3.71	2.64	2.70	3.75	-0.25	1.43	1.58	3.09 2.7	1.99	2.17	2.18		
	_	II-23	I-23	IV-21	I-22	II-22	III-22	IV-22	I-23	II-23						
Financial services	Bil. USD	3,477	3,527	3.10	0.62	1.87	-0.23	-2.45	0.95	-1.42						
<b>Professional and</b>	<u>_</u>	II-23	I-23	IV-21	I-22	II-22	III-22	IV-22	I-23	II-23						
business services	Bil. USD	3,587	3,555	3.83	3.46	-0.62	2.96	1.09	2.82	0.88						

#### 4. Labor market

The growth (annual rate) of total non-farm employment has been in a diminishing trend since the record rate observed in the last quarter of 2021. A similar pattern is also present in the total employment of the private sector, as well as in the case of services provided by private companies.

In both the construction and manufacturing sectors, however, the highest rate of growth of employment occurred in the second quarter of 2022 – two quarters after the peak of labor increase in the overall economy.

As expected, the pattern of the productivity level in the private sector is less regular, with a succession of small increases and decreases in comparison with the previous year's data. In the second quarter of 2023, there was a more robust increase in productivity.

## 4. Labor market

	Units	Last	Previous	Anr	nual Cha	nge (%)										
Employment		III-23	II-23	I-22	II-22	III-22	IV-22	I-23	II-23	III-23						
Total non-farm	Thousands	156,874	156,075	4.91	4.54	3.99	3.20	2.67	2.40	2.07						
				Anr	nual Cha	nge (%)					Forecast (%)					
Employment		III-23	II-23	I-22	II-22	III-22	IV-22	I-23	II-23	III-23	2023	2024	2025	2026	2027	
Total private	Thousands	134,012	133,427	5.63	5.26	4.56	3.53	2.74	2.39	1.95	2.13	2.08	1.71	1.52	1.51	
Employment		III-23	II-23	I-22	II-22	III-22	IV-22	I-23	II-23	III-23						
Construction	Thousands	8,014	7,955	4.01	4.71	4.34	3.48	2.57	2.65	2.78						
Employment		III-23	II-23	I-22	II-22	III-22	IV-22	I-23	II-23	III-23						
Manufacturing	Thousands	13,011	12,985	3.63	4.42	3.85	3.09	2.04	1.29	0.72						
Employment		III-23	II-23	I-22	II-22	III-22	IV-22	I-23	II-23	III-23						
Private services	Thousands	112,342	111,845	5.98	5.38	4.64	3.56	2.81	2.49	2.01						
Labor productivity		II-23	I-23	IV-21	I-22	II-22	III-22	IV-22	I-23	II-23						
in private sector	2012=100	114.23	113.29	1.52	-0.90	-2.38	-1.48	-1.75	-0.34	1.37						

## 5. Government budget

The tax receipts of the Federal Government had a major decrease in this year's first quarter, and in the following period, the growth rate was close to zero.

Federal Government's consumption had a relatively strong expansion in the third quarter of 2023, following a more moderate rate in the previous period.

After an increase in the first quarter, the Federal Government's net transfers had negative rates of growth afterwards.

The major growth in the Federal Government's deficit that occurred in the first quarter (34.8%) contributed to a relatively strong expansion of the debt in the following period (5.8% increase).

## 5. Government budget

	Units	Last	Previous	Change (%)											
Federal Govmt.		II-23	I-23	IV-21	I-22	II-22	III-22	IV-22	I-23	II-23	3_				
tax revenue	Mil. USD	2,791,582	2,781,062	3.68	9.99	1.85	0.08	-1.69	-9.64	0.37					
Federal Govmt.		III-23	II-23	I-22	II-22	III-22	IV-22	I-23	II-23	III-23	_				
consumption	Mil. USD	1,344,236	1,307,174	-0.52	0.26	1.89	2.88	2.76	0.32	2.83					
Federal Govmt. net		III-23	II-23	I-22	11-22	III-22	IV-22	I-23	II-23	III-23	-				
transfer payments	Mil. USD	3,964,099	4,030,353	-0.65	0.70	-0.05	0.22	1.95	-0.41	-1.64					
Federal Govmt.		II-23	I-23	IV-21	I-22	II-22	III-22	IV-22	I-23	II-23	_,				
net saving	Mil. USD	-1,660,654	-1,673,710	-33.69	-32.87	-1.42	11.68	15.70	34.84	-0.78					
				Ann	nual Chan	ge (%)					Fo	recast	(%)		
		II-23	I-23	IV-21	I-22	II-22	III-22	IV-22	I-23	II-23	2023	2024	2025	2026	2027
Total federal debt	Mil. USD	32,332,274	31,458,438	6.73	8.06	7.14	8.79	6.08	3.47	5.76	4.18	3.13	3.40	3.17	3.01