



NATIONAL BANK
OF GREECE

GREECE Macro Flash

GDP Q2:2022

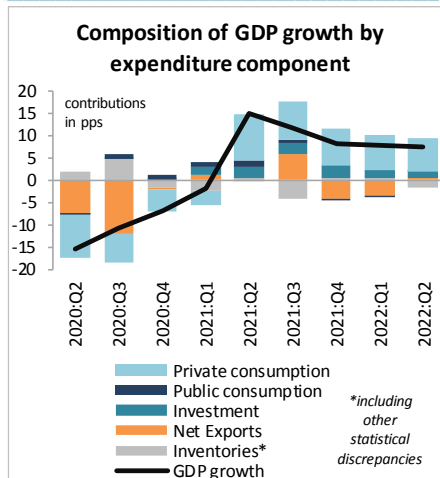
September 2022

Significant upward revision in our GDP growth forecasts for 2022 to 5.7%, as fiscal measures and private sector resilience cushioned the inflationary shock on the real economy

- Greece's GDP growth outpaced consensus estimates in Q2:2022, reaching 7.7% y-o-y (+1.2% q-o-q, s.a.) – remaining one of the highest in the euro area – following an upwardly revised 8.0% y-o-y in Q1:2022 (initial estimate of 7.0%).
- Private consumption had a massive 7.7-pp contribution to Q2 GDP growth in y-o-y terms, on the back of:
 - i) A strong labor market performance, reflected in employment growth of 6.4% in Q2:2022.
 - ii) Additional fiscal measures announced in April in order to cushion the impact of the intensifying energy shock.
 - iii) A resurgence in domestic spending on services, following the full lift of Covid-19 restrictions.
 - iv) Higher use of liquidity reserves, with household bank deposits increasing by €1.1 bn in H1:2022 (+€4.2 bn in H1:2021).
- Business profits and other earnings from unincorporated business activity accelerated to 16.6% y-o-y in Q2:2022 from 11.1% y-o-y in Q1, reaching the highest level, in absolute terms, since H1:2011.
- Boding well for future growth, gross fixed capital formation rose by 8.7% y-o-y in Q2, equivalent to 13.0% of GDP from 10.5% in 2019.
- Net exports contributed 0.7 pps to Q2:2022 GDP growth, as buoyant tourism-led services and goods exports (+20.8% y-o-y) added 7.1 pps to y-o-y GDP growth in this quarter, outweighing the drag from increased imports.
- During the past five years exports of goods and services represent, on average, 36% of GDP, steadily increasing their share from 24%, on average, in 2000-2016.
- Despite the elevated energy risks for the remainder of the year, the strength of high frequency indicators in Q3 and increased fiscal support – including the recent announcements in TIF – suggest that FY:2022 GDP growth will reach 5.5-6.0% even under a scenario of significant drop in activity in Q4 (-1.8% q-o-q, s.a.).
- Nominal GDP grew by an outstanding 16.8% y-o-y in Q2:2022 from 17.5% in Q1:2022, heading to an estimated FY:2022 output level of €207 bn, last observed in 2011.
- Our updated estimate of nominal GDP growth of 13.5% in FY:2022, along with the overperformance against the Budget targets in 7M:2022, are expected to lower the public debt-to-GDP ratio to 170% by end-2022 – 36 pps below its peak in 2020.
- For 2023, with energy prices expected to remain high, real GDP growth is projected to be of the order of 2.0-2.5%.



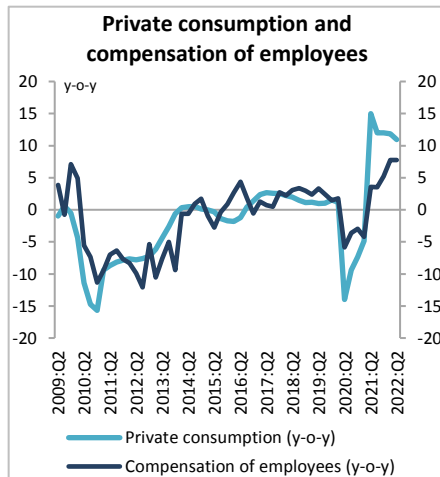
Economic activity outpaced consensus estimates in Q2:2022, with H1:2022 GDP growth at 7.8% y-o-y



Greece remained among the top performers in the euro area for a 5th consecutive quarter



Strong employment growth backed an impressive +11% y-o-y increase of private consumption



Significant upward revision in FY:2022 GDP growth forecasts to 5.7% despite the intensifying inflationary shock in Q2

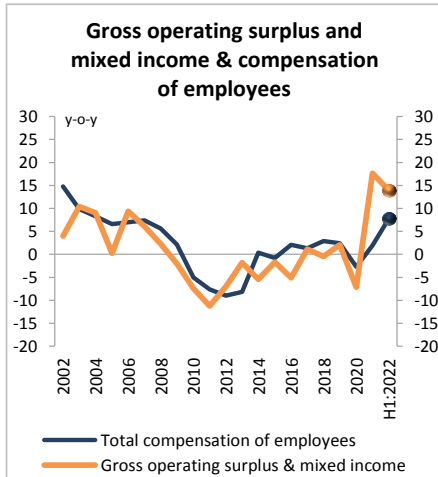
Greece’s GDP growth outpaced consensus estimates in Q2:2022, reaching 7.7% y-o-y (+1.2% q-o-q, s.a.) – remaining one of the highest in the euro area – following an upwardly revised 8.0% y-o-y in Q1:2022 (initial estimate of 7.0%). Economic activity has remained on a steady upward path for 8 consecutive quarters (average expansion of 2.7% in s.a. q-o-q terms, in this period), with H1:2022 GDP exceeding its pre-pandemic level in H1:2019 by 4.6% (or €4.2 bn).

Private consumption had a massive 7.7-pp contribution to Q2 GDP growth in y-o-y terms, increasing by 11% y-o-y (+2.2% q-o-q, s.a.), overcoming the drag from accelerating inflation (11.2% y-o-y in Q2:2022 from 7.4% in Q1) and looming geopolitical tensions. Consumer spending has been bolstered by: i) strong labor market performance, reflected in employment growth of 6.4% y-o-y in Q2:2022, that corresponded to 200K additional employees in H1:2022 compared with the same period in 2021; ii) the new fiscal measures announced in April in order to cushion the impact of the intensifying energy shock, with €2.4 bn of support activated in Q2:2022; iii) a revival in domestic spending on services of nearly 20% (constant price terms), following the full lift of Covid-19 restrictions (as measured by the difference between retail sales volume growth, excluding fuels, of 1.0 % y-o-y in Q2:2022 and total private consumption growth of 11% y-o-y in the same quarter); and iv) the higher use of liquidity reserves, with household bank deposits increasing by only €1.1 bn in H1:2022 compared with a €4.2 bn increase in H1:2021 under more subdued labor market conditions.

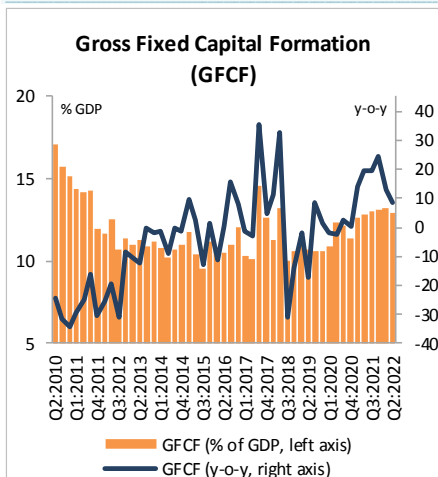
Boding well for future growth, gross fixed capital formation rose by 8.7% y-o-y in Q2, equivalent to 12.9% of GDP from 10.7% in Q2:2019. Higher spending on new machinery and equipment – 25.4% y-o-y in Q2:2022 – added 6.8 pps to total GFCF growth in this quarter. Construction activity accounts for the remaining GFCF growth – with residential construction up by 16% y-o-y and non-residential activity by 10.2% y-o-y. Inventories declined sharply, subtracting 1.6 pps from GDP growth, reflecting stronger than anticipated aggregate demand and the need for their rebuilding looking forward.

The slightly positive contribution (+0.7 pps) of net exports to Q2 GDP annual growth masks a very strong export performance. Indeed, services exports were buoyant (+47.4% y-o-y) and, in

Labor income increased at the fastest pace in 14 years, whereas business profits grew by 16.6% y-o-y in Q2:2022 to an 11-year high



Gross fixed capital formation remained on an upward trend on the back of strengthened construction activity and spending on equipment



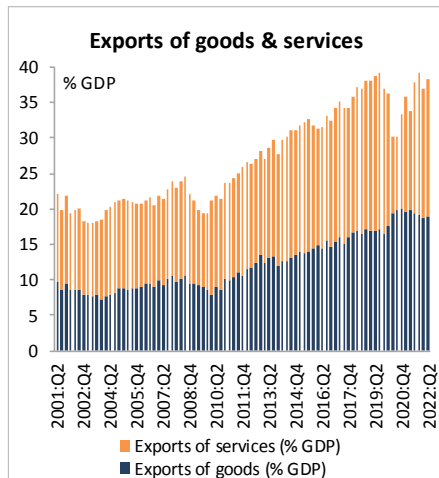
conjunction with resilient goods exports (+3.3% y-o-y), added 7.1 pps to y-o-y GDP growth in this quarter. During the past 5 years exports of goods and services represent, on average, 36% of GDP, steadily increasing their share from 24%, on average, in 2000-2016. Rising imports of goods and services (+15.5% y-o-y in constant prices in Q2:2022) reflect the strong growth of aggregate demand, with the high income elasticity reflecting shortages built up during the pandemic years, as well as the high import content of the economy.

The income-side decomposition of GDP reveals a parallel increase in labor’s and capital’s income that reflects the broad-based improvement in economic conditions. Total compensation of employees increased at a robust pace of 7.8% y-o-y in Q2:2022, as in Q1, whereas business profits and other earnings from unincorporated business activity (as approximated by the gross operating surplus and mixed income) accelerated to 16.6% y-o-y in Q2:2022 from 11.1% y-o-y in Q1, reaching in H1:2022 the highest level, in absolute terms, since H1:2011, underlining their capacity to absorb higher input costs.

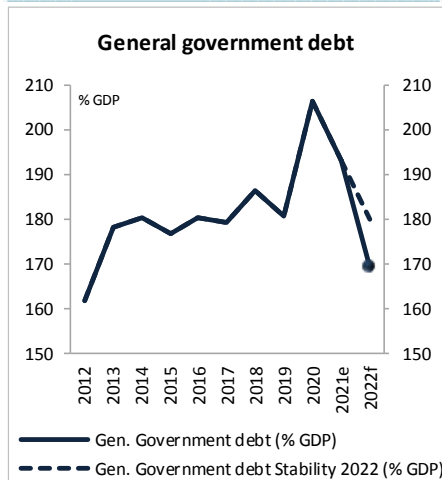
The key growth drivers of the Greek economy remain intact in Q3. Data from inbound-tourism arrivals by air and bookings until early-September suggest that FY:2022 tourism revenue will climb to a new all-time high. Economic sentiment, despite a further weakening to 101.3 on average in July-August, from 105.1 in Q2, remained in expansion territory until August, while business turnover posted another impressive expansion of 44% y-o-y in July, similar to Q2 (+24% and 30% y-o-y, respectively, excluding the direct impact on turnover of energy-related manufacturing sub-sectors). Google mobility indicators also remained strong in July-September, exceeding by 13 pps their average level in the same period in 2021, compared with a 32 pps increase in Q2:2022.

New measures announced in the Thessaloniki International Fair (TIF) add c. €1.0 bn to fiscal support in Q4:2022, with the gross value of measures for FY:2022 now exceeding €13 bn. Furthermore, another €3.0 bn of additional fiscal stimulus has been announced for 2023 and beyond. The largest part of this support is financed by higher revenue from carbon emission rights trade and a clawback on windfall profits of energy producers. Moreover, tax revenue recorded a net overperformance of €2.5 bn vis-à-vis Budget targets in 7M:2022, bolstered by the rapid expansion of the tax base in both real and nominal terms.

Revived tourism and resilient good exports offset the drag from increased imports



Public debt-to-GDP at a 10-year low – on the back of an outstanding 16.8% expansion in Q2:2022 nominal GDP – 36 pps below its 2020 level



Despite the increased energy-related support to the private sector, the State Budget’s primary deficit has been lowered to only €1.2 bn in 7M, compared to €9.1 bn in 7M:2021, with a Budget target of €5.8 bn in 2022. The fiscal policy stance, in its broadest definition, including the estimated value of support through electricity subsidies, is envisaged to provide a net stimulus of 0.5% of GDP to the economy in 2022 compared to a 1-pp drag in 2021.

NBG’s high frequency indicator of economic activity – modified to deal with increasing inflation-related biases on nominal variables – points to a stabilization in Q3:2022 GDP in s.a. q-o-q terms, still implying a solid 5% y-o-y growth in this quarter.

However, energy risks remain elevated, as natural gas prices in the spot market have doubled in July-August, compared to their average level in Q2, while market-based forecasts for Q4:2022 and Q1:2023 have also been revised upwards, reflecting the specter of energy shortages in the EU in the coming winter.

FY:2022 GDP growth is likely to reach 5.5-6.0%, even when conservatively assuming a sharp contraction in Q4:2022 GDP of nearly 2% q-o-q, caused by escalating energy pressure and a fading-out of tourism-related support.

Nominal GDP grew by an outstanding 16.8% y-o-y in Q2:2022, from 17.5% in Q1:2022 – with a GDP deflator of 8% y-o-y, on average, in H1:2022 – reaching €51.5 bn, the highest quarterly level since Q2:2011, corresponding to an updated FY:2022 estimate of €207 bn for the first time since 2011. Our updated estimate of nominal GDP growth of 13.5% in FY:2022, along with the overperformance against the Budget targets in 7M:2022, are expected to lower the public debt-to-GDP ratio, to 170% by end-2022, around 36 pps below its peak in 2020.

For 2023, with energy prices remaining relatively high – 86 USD/barrel for crude oil (brent) and 190 €/MWh for European natural gas (Dutch TTF) – real GDP growth is expected to be in the order of 2.0-2.5% compared with euro area growth estimates of 0.9% (ECB staff macroeconomic projections, September 2022).



Greece – GDP decomposition (expenditure components)

Greece: GDP Growth Decomposition & Outlook															
	2019	2021	2019	2020	2021	2022f	2023f	2021				2022f			
	in € bn								Q1	Q2	Q3	Q4	Q1	Q2	Q3f	Q4f
GDP (real, % y-o-y, s.a.)			1,8	-8,7	8,0	5,7	2,0-2,5	-1,8	15,0	11,7	8,3	8,0	7,7	5,0	2,2
GDP (real, % q-o-q, s.a.)	183,3	180,8	...	...	...	...	...	3,2	1,5	2,4	0,9	2,9	1,2	-0,1	-1,8
Domestic Demand (y-o-y)	184,5	190,2	1,1	-3,5	6,8	5,7	2,2	-3,0	14,0	5,1	12,0	11,1	6,5	4,8	0,8
Final Consumption (y-o-y)	161,9	164,2	1,3	-5,2	6,9	6,2	1,0	-2,7	13,1	8,2	10,1	10,2	8,1	5,5	1,2
Private Consumption (y-o-y)	126,5	126,6	1,2	-7,4	8,1	6,9	1,2	-4,9	15,0	12,0	12,0	11,9	11,0	4,6	0,9
Gross Fixed Cap. Formation (y-o-y)	19,6	23,3	-3,4	-0,4	19,3	10,1	14,1	14,2	19,4	19,4	24,2	13,0	8,7	8,2	10,6
Inventories* (contribution to GDP)	3,0	2,8	0,3	1,1	-1,4	-0,9	-0,4	-2,2	0,5	-4,2	0,5	0,5	-1,6	-0,9	-1,6
Net exports (contribution to GDP)	-1,2	-9,4	0,6	-5,2	0,8	-0,3	-0,1	1,3	-0,1	6,0	-4,0	-3,4	0,7	-0,1	1,3
Exports (y-o-y)	70,1	67,0	4,9	-21,5	21,9	13,8	8,1	-2,0	26,1	49,6	24,0	9,8	20,8	14,6	10,9
Exports of goods (y-o-y)	30,9	35,3	2,1	4,1	9,7	0,5	0,9	9,0	16,9	9,6	4,1	2,9	3,3	-1,6	-2,6
Exports of services (y-o-y)	39,1	31,0	7,4	-42,6	38,1	30,7	14,9	-15,3	50,0	97,9	63,2	22,8	47,4	30,0	26,0
Imports (y-o-y)	71,3	76,4	3,1	-7,9	16,4	12,9	7,3	-5,2	20,9	19,5	33,3	18,1	15,5	12,7	6,5

*also including other unallocated expenditure / Sources: ELSTAT & NBG estimates

Greece – Indicators of Economic Activity in high frequency

	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22
PMI (index level)	54,4	56,2	42,5	29,5	41,1	49,4	48,6	49,4	50,0	48,7	42,3	46,9	50,0	49,4	51,8	54,4	58,0	58,6	57,4	59,3	58,4	58,9	58,8	59,0	57,9	57,8	54,6	54,8	53,8	51,1	49,1	48,8
Industrial confidence (index level)	3,1	5,3	2,4	-8,1	-20,6	-19,1	-13,2	-16,1	-17,1	-8,5	-11,8	-6,6	-5,2	-4,4	-4,6	-5,1	5,5	2,3	7,9	9,6	2,2	8,5	8,9	8,6	13,1	9,7	9,6	2,9	5,1	0,0	-0,2	-1,5
Manufacturing production (y-o-y)	4,7	-1,0	1,4	-12,3	-9,3	-0,6	0,1	-0,9	-3,7	-2,4	7,1	0,8	1,6	2,7	3,5	23,1	14,5	7,2	5,7	6,2	12,1	14,7	9,6	6,0	1,9	8,4	5,1	-0,6	5,9	8,3	6,5	
Industrial production (y-o-y)	-0,6	-2,9	0,0	-10,8	-8,2	-4,6	-0,1	-3,9	-2,1	-3,2	8,9	3,8	3,6	4,3	5,8	22,7	14,1	9,1	8,1	10,1	10,1	16,5	8,4	8,4	-0,7	5,3	8,6	-4,5	3,9	8,9	7,0	
Services confidence (index level)	23,2	31,7	25,5	1,8	-47,6	-52,2	-36,0	-29,0	-27,3	-24,7	-27,3	-27,3	-24,9	-14,7	-8,1	-8,0	16,1	30,8	30,0	29,9	35,7	40,8	45,5	34,4	33,2	42,4	36,5	19,3	20,3	16,9	15,3	19,0
Consumer confidence (index level)	-12	-8	-24	-42	-40	-33	-36	-34	-41	-39	-45	-37	-39	-43	-40	-38	-22	-25	-31	-32	-38	-40	-39	-38	-41	-39	-51	-55	-51	-53	-55	-54
Retail confidence (index level)	23,6	25,7	17,6	-1,4	-31,8	-13,5	-24,9	-21,7	-17,0	-9,6	-3,8	-12,0	-8,3	-6,4	-0,2	2,5	-0,8	2,3	9,3	9,9	4,1	21,0	13,4	21,3	15,0	9,2	5,8	0,0	0,4	-1,9	2,3	-4,9
Retail trade volume (y-o-y)	6,2	2,5	-2,4	-24,6	-3,0	-3,8	-2,8	-0,6	-4,0	4,7	-7,4	-11,5	-2,5	-2,8	-0,7	39,8	15,0	11,3	11,3	5,3	9,6	8,4	16,7	19,6	7,6	10,8	12,3	8,7	-4,6	1,2		
Construction Permits (y-o-y)	44	71	54	-18	5	11	18	-11	-14	-13	-15	14	4	22	33	116	100	51	20	57	39	61	76	14	24	32	-6	2	-15			
House prices (y-o-y, quarterly series)	6,7	6,7	6,7	4,3	4,3	4,3	3,9	3,9	3,9	3,2	3,2	3,2	4,5	4,5	4,5	6,9	6,9	6,9	8,7	8,7	8,7	9,7	9,7	9,7	9,3	9,3	9,3	9,4	9,4	9,4		
Construction confidence (index level)	-25	-29	-29	-88	-82	-57	-30	-43	-52	-47	-30	-38	-14	-9	-5	-4	-9	-10	3	-5	10	2	-3	-7	-10	-3	1	-7	-25	-15	-35	-32
Employment (y-o-y)	1,3	0,2	-3,9	-9,4	-13,9	-11,3	-4,2	-0,4	-0,7	-3,5	-6,0	-4,3	-4,0	-3,2	-1,0	5,3	17,2	15,0	7,1	4,3	4,9	6,7	11,1	9,8	7,8	12,0	13,3	10,4	4,9	4,1	3,3	
Interest rate on new private sector loans (CPI deflated)	3,5	4,1	4,1	5,6	5,4	5,6	5,9	6,0	5,9	5,9	6,2	6,1	5,8	5,1	5,7	4,1	3,8	2,9	2,7	2,3	1,6	0,5	-1,1	-1,4	-2,3	-3,5	-5,0	-6,0	-7,5	-8,1	-7,9	
Credit to private sector (y-o-y)	-0,6	-0,8	0,1	0,3	0,7	0,4	1,5	1,9	2,4	2,5	2,6	3,5	3,7	3,7	2,9	2,4	2,2	2,3	1,2	0,8	0,8	0,9	1,1	1,4	0,9	1,4	1,6	2,8	3,3	4,5	5,5	
Deposits of domestic private sector (y-o-y)	6,3	7,7	8,8	8,6	9,4	8,4	9,5	9,0	10,3	11,6	14,0	14,4	15,3	14,9	13,8	14,8	13,7	14,5	13,2	13,9	13,3	11,5	10,4	9,9	9,3	8,7	7,0	5,8	6,3	6,9	6,1	
Interest rate on new time deposits (households, CPI deflated)	-0,5	0,1	0,3	1,7	1,4	1,8	2,1	2,2	2,2	2,0	2,3	2,5	2,2	1,5	1,8	0,4	0,0	-0,9	-1,2	-1,7	-2,1	-3,3	-4,7	-5,0	-6,1	-7,1	-8,7	-10,0	-11,2	-12,0	-11,5	
Economic sentiment index (EU Commission, Greece)	110	113	107	97	84	86	90	90	90	93	92	95	94	96	100	99	108	109	112	113	110	113	114	111	114	114	112	104	107	104	101	102
Economic sentiment index (EU Commission, Euro area)	105	105	95	61	65	76	84	91	95	95	92	97	96	98	103	106	110	116	118	117	117	118	116	114	113	114	106	105	105	104	99	98
Exports (excl. oil & shipping, y-o-y, 6m mov.avg)	5,6	6,3	4,2	1,3	-1,9	-3,8	-6,0	-8,7	-8,0	-6,2	-2,8	-1,5	-1,2	1,5	7,1	14,0	18,6	22,9	27,9	32,0	32,2	29,7	32,1	31,3	30,5	30,1	27,8	26,3	26,7	27,6		
Imports (excl. oil & shipping, y-o-y, 6m mov.avg)	0,5	1,4	-1,7	-4,4	-9,2	-9,9	-12,0	-12,8	-10,9	-9,1	-4,5	-3,8	-3,7	-3,4	2,8	11,3	18,1	23,7	29,3	35,6	34,0	31,3	31,7	32,1	35,3	36,1	34,1	33,2	34,2	32,4		
BoG - Tourist arrivals (y-o-y)	19,7	24,6	-46,8	-96	-98	-93,8	-85,4	-73,3	-73,9	-65,6	-81,1	-86,0	-87,9	-87,8	-75,9	186	414	317	240	125	124	125	219	294	257	315	319	884	673	241		
AIA - International passenger traffic development (y-o-y)	10,2	6,4	-62,0	-99,2	-98,4	-93,4	-76,1	-66,2	-72,3	-72,2	-86,0	-87,7	-88,2	-89,8	-72,2	1292	1083	435	139	91	122	139	389	388	297	436	556	616	355	157	63	42
Estimation of total electricity demand in the network (y-o-y)	-3,2	-1,5	0,3	-6,9	-4,5	-13,1	-0,8	-7,9	1,2	-0,6	4,4	-4,9	-10,6	-6,8	2,7	6,2	3,6	11,7	14,9	15,2	-3,8	3,1	3,2	9,1	8,8	3,4	10,4	-6,3	1,6	0,0	-12,2	
VAT on other goods & services (y-o-y)	-0,8	1,1	-23,7	9,1	-51,1	-17,1	-15,4	-10,0	-10,8	-15,1	-12,8	-7,5	-10,0	-8,6	28,6	-1,4	72,3	29,2	14,9	14,4	18,2	21,2	29,9	29,9	-4,2	58,9	27,7	20,9	25,6	15,0	22,4	
Business Turnover (y-o-y, double-entry bookkeeping)	9,8	-2,6	-10,5	-31,7	-26,7	-15,6	-16,6	-19,8	-11,1	-7,3	-7,2	-6,4	-16,0	-9,2	13,2	42,3	24,1	22,4	24,4	32,6	30,0	28,6	39,9	33,7	36,4	45,1	47,8	37,1	51,8	45,1	44,4	

Sources: NBG, BoG, ELSTAT, Ministry of Finance, EU Commission, IHS Markit, IOBE, AIA, ADMIE



Nikos S. Magginas, PhD | Chief Economist, Head of NBG Economic Analysis Division
e-mail: nimaqi@nbg.gr

NBG GREECE MACRO ANALYSIS TEAM

Effrosyni Alevizopoulou, PhD
(+30210) 334 1620
e-mail: alevizopoulou.e@nbg.gr

Katerina Gouveli, MSc
(+30210) 334 2359
e-mail: gouveli.aikaterini@nbg.gr

Eleni Balikou, MSc
(+30210) 334 1198
e-mail: balikou.eleni@nbg.gr

Eleftherios Athanasiou, MSc
(+30210) 334 1453
e-mail: athanasiou.eleftherios@nbg.gr

Sofia Tsaroucha, MSc
(+30210) 334 1626
e-mail: tsaroucha.sofia@nbg.gr

This report has been produced by the Economic Research Division of National Bank of Greece S.A., which is regulated by the Bank of Greece and the Hellenic Capital Market Commission, and is provided solely as a sheer reference for the information of experienced and sophisticated investors who are expected and considered to be fully able to make their own investment decisions without reliance on its contents, i.e. only after effecting their own independent enquiry from sources of the investors' sole choice. This report does not constitute investment research or a research recommendation, and as such, it has not been prepared under legal requirements designed to promote investment research independence. The information contained in this report does not constitute the provision of investment advice and under no circumstances is it to be used or considered as an offer or an invitation to buy or sell or a solicitation of an offer or invitation to buy or sell or enter into any agreement with respect to any security, product, service or investment. No information or opinion contained in this report is sufficient to support an investment decision – and should constitute any representation or warranty as to future performance of any financial instrument, credit, currency rate or other market or economic measure. Past performance is not necessarily a reliable guide to future performance. It is duly stated that investments products include investment risks, among which the risk of losing part of or the entire capital invested. National Bank of Greece S.A. and/or its affiliates shall not be liable in any matter whatsoever for any consequences (including but not limited to any direct, indirect or consequential losses, loss of profits and damages) of any reliance on or usage of this report and accepts no legal responsibility to any investor who directly or indirectly receives this report. The final investment decision must be made by the investor and the responsibility for the investment must be taken by the investor. Any data provided in this report has been obtained from sources believed to be reliable but has not been independently verified. Because of the possibility of error on the part of such sources, National Bank of Greece S.A. does not guarantee the accuracy, timeliness or usefulness of any information. Information and opinions contained in this report are subject to change without notice and there is no obligation to update the information and opinions contained in this report. The National Bank of Greece S.A. and its affiliate companies, its representatives, its managers and/or its personnel or other persons related to it, accept no responsibility, or liability as to the accuracy, or completeness of the information contained in this report, or for any loss in general arising from any use of this report including investment decisions based on this report. This report does not purport to contain all the information that a prospective investor may require. Recipients of this report should independently evaluate particular information and opinions and seek the advice of their own professional and financial advisers in relation to any investment, financial, legal, business, tax, accounting or regulatory issues before making any investment or entering into any transaction in relation to information and opinions discussed herein. National Bank of Greece S.A. has prepared and published this report wholly independently of any of its affiliates and thus any commitments, views, outlook, ratings or target prices expressed in these reports may differ substantially from any similar reports issued by affiliates which may be based upon different sources and methodologies. This report is not directed to, or intended for distribution to use or use by, any person or entity that is a citizen or resident of or located in any locality, state, country or other jurisdiction where such distribution, publication, availability or use would be contrary to any law, regulation or rule. This report is protected under intellectual property laws and may not be altered, reproduced or redistributed, or passed on directly or indirectly, to any other party, in whole or in part, without the prior written consent of National Bank of Greece. All the views expressed in this report accurately reflect author's personal views solely, about any and all of the subject issues. Further, it is certified that no part of any of the report author's compensation was, is, or will be directly or indirectly related to the specific or views expressed in this report.