



NATIONAL BANK
OF GREECE

GREECE Macro Flash

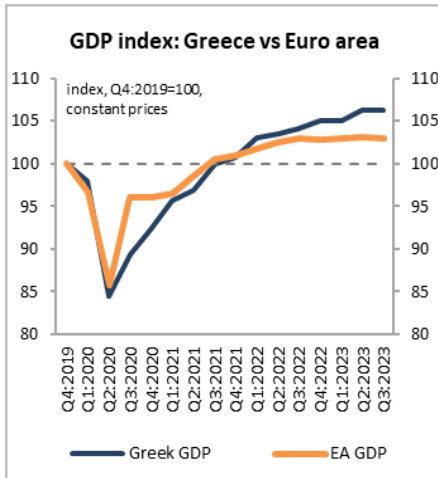
GDP Q3:2023

December 2023

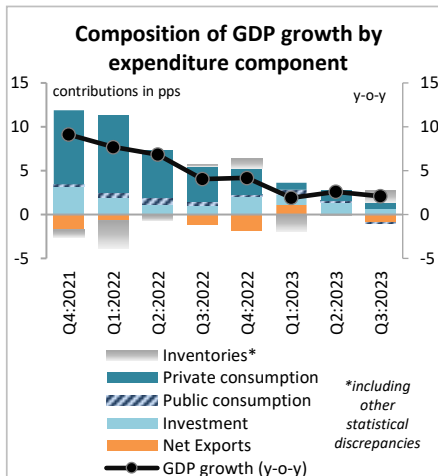
Greek GDP growth experienced a temporary pause yet continued to outpace the euro area average despite the drag from deferred government expenditure and weaker external demand

- GDP growth slowed to 2.1% y-o-y in Q3:2023, from 2.6% in Q2, but outpaced the euro area average (0.0% in Q3) by a wide margin, and for a 9th consecutive quarter.
- The Q3 outcome was weaker than our initial projection of Q3 GDP growth (c. +3.0% y-o-y, revised to 2.6% in November) due to the following factors:
 - i. lower government expenditure (both consumption and PIB) resulting in a fiscal drag of c. ½ pp,
 - ii. a smaller-than-initially expected export contribution (+0.4 pps to Q3 growth from 1.1 pps in H1:2023), especially from goods, reflecting a sharper-than-previously anticipated slowdown in Europe,
 - iii. a smaller carryover effect of +2.1% y-o-y due to a downward revision in H1:2023 GDP.
- Private consumption growth slowed to +0.9% y-o-y in Q3, as the extraordinary impulse from: (i) deferred consumption, (ii) supply chain-related delivery delays and (iii) generous government support, subsidy, bringing consumption in line with real disposable income and resulting in a welcome increase in the household saving rate.
- The deceleration in GFCF to 4.9% y-o-y, from 8.7% in H1:2023, reflects stagnant non-residential construction (+0.6% y-o-y, a 3-year low), mainly, due to delays in PIB spending.
- Inventory stockpiling by the business sector had a significant, but deceptive, 1.4-pp contribution to Q3 GDP growth, pointing to healthy business activity, but the net impulse had an offsetting counterpart from higher goods imports (a 1.1-pp drag on Q3 GDP growth).
- The income-side decomposition of GDP, in current price terms, suggests that labor income and business profits, both increased by 3.8% y-o-y, albeit decelerating from 6.4% and 7.5%, y-o-y, respectively in H1:2023. The slowdown mainly reflects lower employment growth in Q3 (0.9% y-o-y from 1.6% in H1:2023), as well as decelerating hourly wages due to the larger contribution of basic services in this tourism intensive quarter. Negative base effects from previously active employment support programs in Q2:2022 and increased informal employment due to employment shortages, contributed to this slowing.
- The slowdown in gross operating surplus and mixed income growth reflects a compression in profit margins from very high levels – with firms reporting a drop in their pricing power especially in industry and retail trade – combined with negative base effects from extraordinary profits in the energy sector in 2022.
- The negative impact on production from the catastrophic flood in central Greece was rather limited (-0.1% of total GVA), with an impact of c. -0.3 pps of GDP expected in Q4, but it will be more than fully offset by already approved government support programs.
- Looking forward, GDP is expected to accelerate to 0.7% in s.a. q-o-q terms in Q4 – implying FY:2023 GDP growth of 2.1%, due to: i) increased government expenditure and capital spending deferred from Q3, and ii) accelerating employment growth to 3.5% y-o-y in October from 0.9% in Q2, in part due to an extended tourism season and a pick-up in hiring in other services and trade. In fact, key conjunctural and leading indicators picked-up in October-November, including a surge in manufacturing production by 9.7% y-o-y in October and resilient sentiment in retail, construction, and services sectors in October-November.
- The acceleration in RRF-financed capital spending, the pick-up in euro area growth to 1.2% y-o-y in 2024 and the positive impact of the upgrade to investment grade on risk appetite and financial conditions, bode well for stronger growth in FY:2024, estimated at 2.7% y-o-y.

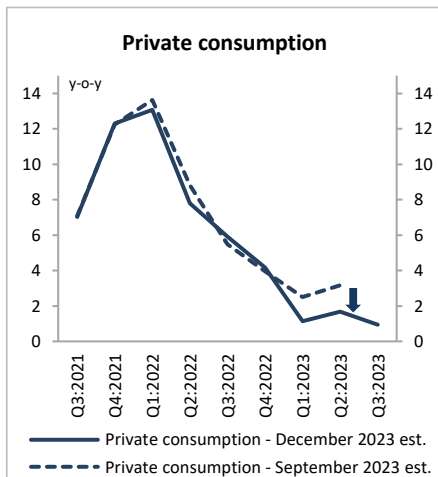
The Greek economy continued to outperform the euro area for a 9th consecutive quarter...



...despite a 1-pp drag from net exports, as well as government spending deferrals and a moderation in private consumption



Private consumption for H1:2023 was downwardly revised and weakened further in Q3



Greek GDP growth experienced a temporary pause yet continued to outpace the euro area average despite the drag from deferred government expenditure and weaker external demand

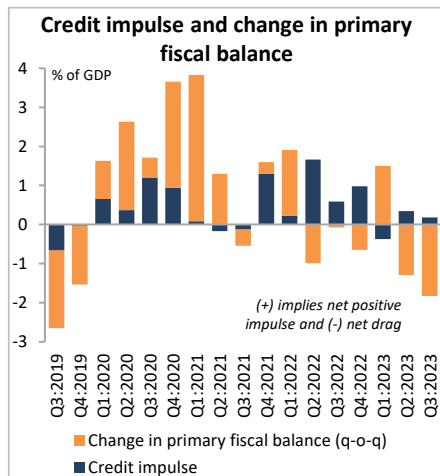
Economic activity in Greece showed signs of moderation in Q3:2023 with GDP growth slowing to 2.1% y-o-y from 2.6% in Q2 – remaining constant in s.a. q-o-q terms – but continued to exceed the euro area average (0% y-o-y and -0.1% q-o-q, s.a.) by a wide margin, and for a 9th consecutive quarter.

The Q3 outcome was weaker than our initial projection for Q3 GDP growth (c. +3.0% y-o-y and +0.7% q-o-q, s.a.) due to the following factors:

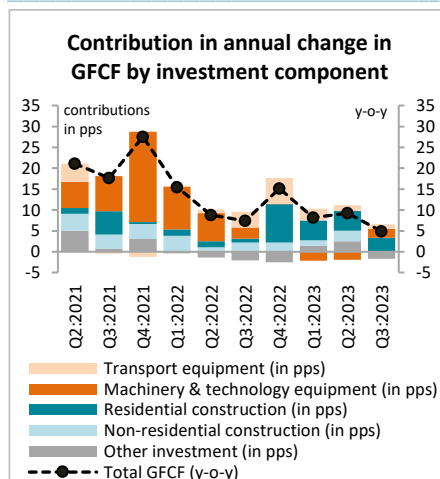
- i. Lower government consumption which subtracted -0.14 pps from annual GDP growth with another -0.35-pp drag related to lower public investment,
- ii. A smaller-than-initially expected contribution of total exports (+0.4 pps to Q3 growth from 1.1 pps in H1:2023 and 2.4 pps, on average in FY:2023), despite the overperformance of tourism due to the stronger-than-expected slowdown in Europe (+0.0% vs +0.3%),
- iii. A weaker carryover effect of 2.1% y-o-y on Q3 growth (from 2.5% estimated previously), due to a downward revision in Q2:2023 GDP growth (+1.1% q-o-q s.a. from +1.3% q-o-q in the national accounts release for 6M:2023), mainly arising from private consumption growth revised down in Q2:2023 by about 1.5 pps (with an average y-o-y change of 1.4% in H1:2023, compared with 2.8% in the previous national accounts release for 6M:2023).

Overall, private consumption slowed further to +0.9% y-o-y in Q3:2023, as the extraordinary impulse from: i) deferred consumer spending, ii) supply chain-related delivery delays and iii) generous government support, subsidies, bringing consumption in line with real disposable income and resulting in a welcome increase in the household saving rate. In fact, household savings should have increased in Q3 as real disposable income growth is estimated by NBG at c. +2.0% y-o-y, according to the available national accounts and private consumption deflator data for this period, two times the growth rate of private consumption in constant price terms. A weakening in consumer confidence in comparison with Q2, and further increases in bank-deposit rates and fixed-income asset yields should have also encouraged savings.

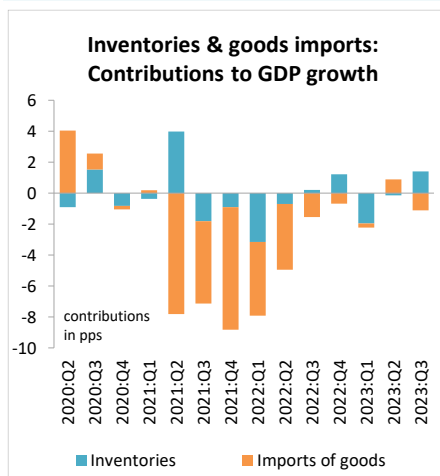
Tightened fiscal conditions weighed on private sector's spending decisions



Gross fixed capital formation (GFCF) slowed due to a PIB-related drag on non-residential construction



The inventory-related impulse to GDP growth had an offsetting counterpart from higher goods imports (a 1.1-pp drag on Q3 GDP growth).



Following a stronger-than-originally estimated expansion in H1, government consumption dropped in Q3 by 0.7% y-o-y for the first time since the Covid-19 outbreak in Q2:2020, subtracting 0.14 pps from Q3 GDP, in comparison with a positive contribution of 0.4 pps in H1:2023.

Public sector activity also largely explains the weakening in non-residential construction, which led to a slowing in GFCF growth. Specifically, total GFCF decelerated to 4.9% y-o-y from 8.7% in H1:2023 as non-residential construction remained broadly stable (+0.6% y-o-y, a 3-year low), having a negligible contribution to GFCF growth compared with a +2-pp impulse, on average, in H1:2023. This development reflects delays in PIB disbursements – c. €0.6 bn lower than in Q3:2022 or -24.3% y-o-y – which is estimated to have subtracted c. 0.35 pps from GDP growth in Q3. The combined contribution of public sector activity from the expenditure side (government consumption and investment) is estimated at -0.5 pp in Q3 in comparison with +0.3 pps in H1:2023.

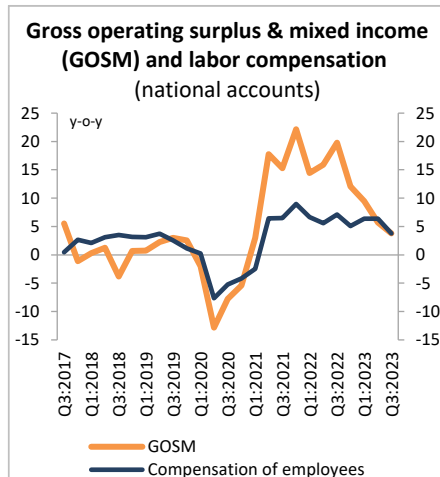
Finally, investment on Information Communication Technology (ICT), declined for a second consecutive quarter at a double-digit pace (-17.5% y-o-y in Q3:2023 from -15.5% in Q2) due to adverse base effects related to the surge in this investment category in 2021-2022, lowering GFCF growth by another 1.2 pps on an annual basis.

Production side data confirm the negative impact of the public sector on Q3 GDP, with a direct 0.2-pp drag in total GVA growth from lower production in State-related activities. The total drag on GVA is actually larger when including the indirect impact of lower public spending on other activities. The impact of the flood was rather limited corresponding to a 0.1% drop in total GVA in Q3. This drag is expected to increase to 0.3% in Q4 but should be offset by government support and construction activity in the affected areas which had been minimal in September.

Inventory stockpiling by the business sector had a significant, but deceptive, 1.4-pp contribution to Q3 GDP growth, pointing to healthy business activity in the period ahead, but the net impulse had an offsetting counterpart from higher goods imports (a 1.1-pp drag on Q3 GDP growth). Indeed, imports of goods increased by +3.4% y-o-y, in constant price terms, comprising mainly imported materials (especially crude oil), intermediate inputs and products for resale.

Exports of goods and services added only 0.4 pps to annual GDP growth in Q3 (in comparison with a positive 1.1-pp contribution in H1:2023), due to the drop in goods exports (-1.1% y-o-y), as

Gross operating surplus decelerated due to the unwinding of energy-related spikes in profits, whereas labor compensation growth slowed, in parallel with employment, mostly due to negative base effects and seasonal factors



GDP growth is expected to gain traction in q-o-q terms in Q4, supported by a buoyant labor market, the deferral of government expenditure from Q2 and the extension of the tourism season



well as in non-tourism services exports, amid faltering euro area growth.

Higher imports, combined with weaker goods exports (-1.1% y-o-y), amid a faltering euro area economy, are expected to more than offset the positive impact of increasing tourism-led services exports (+2.9% y-o-y). As a result, net exports of goods and services subtracted c. 1 pp from annual GDP growth in Q3 in comparison with a positive 0.6-pp contribution in H1:2023.

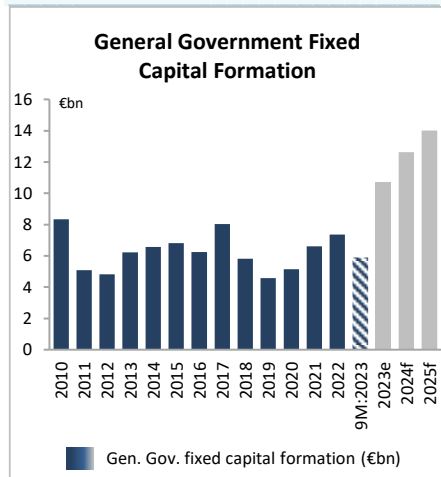
The income-side decomposition of GDP (in current price terms) suggests that labor income and business profits, both increased by 3.8% y-o-y, albeit decelerating from 6.4% and 7.5%, y-o-y, respectively in H1:2023. The slowdown in labor compensation reflects lower employment growth in Q3 (0.9% y-o-y from 1.6% in H1:2023), and a slowing in hourly wage growth (to c. 3% y-o-y from nearly 5% in H1) due to the seasonal increase in Q3 of the employment share of low paid basic services. This latter trend is likely to have been amplified by adverse base effects due to the combination of surging employment in tourism and still active Covid-19 related employment-support programs in Q3:2022. Moreover, the reported labor shortages in services activities in Q3:2023, possibly led to higher informal employment.

The slowdown in gross operating surplus and mixed income growth reflects a compression in profit margins from very high levels – with firms reporting a drop in their pricing power in Q3 especially in industry and retail trade – combined with negative base effects from extraordinary profits in the energy sector in 2022.

Looking forward, NBG Research expects a significant acceleration in GDP growth to 0.7% in s.a. q-o-q terms in Q4:2023 – implying annual growth of c. 2% – due to the following factors:

- Increased government expenditure and capital spending deferred from Q3, combined with regional support and reconstruction projects in the flood-affected Thessaly.
- Lower import spending in view of the significant increase in business inventories in Q3.
- Employment growth accelerated to 3.5% y-o-y in October 2023 from 0.9% in Q2 (monthly increase in the number of employees by 56K) and the unemployment rate fell to single digit level (9.6%) in October for the first time since 2009. This improvement is bolstered by the activation of new employment support programs, the extension of tourism season, as well as, by a seasonal shift of employment from more informal tourism-related services to other sectors.

Increasing public investment activity will support investment-led growth in 2024



Sources: ELSTAT, Greek MinFin & NBG Econ. Analysis estimates

- Additional activity related to the extension of the tourism period with international arrivals in the Athens international airport increasing by +20.9% y-o-y in Oct-Nov 2023, from +17.4% y-o-y in Q3:2023, and exceeding by 15.2% their level in Oct-Nov 2019.
- Positive signs from conjunctural and leading indicators including a surge in manufacturing production by 9.7% y-o-y in October and resilient sentiment in retail, construction, and services sectors in October-November.

FY:2023 GDP growth is estimated at 2.1%, compared to our previous estimate of 2.4%, with the projected trajectory entailing a positive carryover effect for 2024 GDP growth of 0.8 pps. However, lower agricultural production in Thessaly, higher inertia in import growth, potential additional delays in PIB disbursements and the usual lags between payments of social benefits and final spending, could weaken GDP recovery in Q4 pushing FY:2023 growth close but below 2%.

A normalization in PIB spending, in line with 2024 Budget estimates, is expected to boost activity in Q4:2023 and H1:2024. In fact, PIB payments in Q4 are expected to increase to €4.3 bn from €1.9 bn in Q3. The acceleration in RRF-financed capital spending, the projected pick-up in euro area growth to 1.2% y-o-y in 2024 (from estimated 0.5% in 2023) will be combined with the positive impact of the upgrade to investment grade on risk appetite and financial conditions, boding well for stronger growth in FY:2024 estimated at 2.7% y-o-y.

Greece: GDP decomposition (expenditure components)

Greece: GDP Growth Decomposition & Outlook												
	2021	2022	2023e	2024f	2022				2023			
					Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4f
GDP (real, % y-o-y, s.a.)	8,1	5,7	2,1	2,7	7,7	6,9	4,1	4,2	1,9	2,6	2,1	1,8
GDP (real, % q-o-q, s.a.)	...	...	...	...	2,3	0,4	0,5	0,9	0,1	1,1	0,0	0,7
Domestic Demand (y-o-y)	6,8	6,3	2,0	2,9	8,0	6,5	5,0	5,8	0,8	2,4	2,8	1,8
Final Consumption (y-o-y)	5,2	6,3	1,5	1,5	10,8	7,0	4,5	3,2	1,8	1,5	1,0	1,7
Private Consumption (y-o-y)	6,4	7,6	1,1	1,8	13,1	7,8	5,9	4,2	1,1	1,7	0,9	0,8
Gross Fixed Cap. Formation (y-o-y)	19,1	11,6	6,9	10,9	15,4	8,8	7,4	15,1	8,2	9,2	4,9	5,3
Inventories* (contribution to GDP)	0,2	-0,6	-0,3	0,1	-3,2	-0,7	0,2	1,2	-2,0	-0,1	1,4	-0,3
Net exports (contribution to GDP)	0,8	-1,0	0,0	-0,4	-0,7	0,0	-1,2	-1,9	1,1	0,1	-0,9	-0,2
Exports (y-o-y)	24,2	6,2	1,8	2,1	15,6	13,3	-1,2	-0,3	6,7	-0,5	1,0	0,3
Exports of goods (y-o-y)	14,1	3,6	2,4	0,9	6,2	4,7	2,9	0,8	10,9	-0,7	-1,1	0,7
Exports of services (y-o-y)	37,5	9,3	2,8	3,9	23,1	25,2	-1,5	-3,6	5,2	-0,2	2,9	3,6
Imports (y-o-y)	18,1	7,7	1,5	2,8	15,3	11,4	1,6	3,9	3,3	-0,6	2,9	0,6

*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	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	
PMI (Index level)	54.4	56.2	42.5	29.5	41.1	49.4	46.6	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	49.7	48.1	48.4	47.2	49.2	51.7	52.8	52.4	51.5	51.8	53.5	52.9	50.3	50.8	50.9	
Industrial confidence (Index level)	3.3	5.7	2.2	-8.0	-21.2	-29.5	-13.4	-14.9	-14.5	-7.8	-12.0	-7.4	-8.0	-6.6	-4.7	4.7	1.5	8.2	11.2	4.7	9.5	8.4	6.7	12.1	10.7	10.3	3.4	6.8	0.7	-1.5	-2.9	-3.4	-5.1	-3.9	-0.3	3.8	5.2	2.3	2.6	0.2	3.3	0.3	2.9	-1.7	-4.1	-4.1		
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	1.3	2.3	3.3	23.0	14.5	7.1	5.8	6.3	12.9	15.1	10.4	7.1	1.9	9.1	5.4	-0.6	6.3	8.8	6.4	5.8	1.6	2.0	2.4	5.8	9.0	7.2	8.7	3.4	3.9	-0.1	0.9	1.9	-0.7	9.7		
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	3.4	4.0	5.6	22.6	14.1	9.0	8.2	10.2	10.7	16.7	9.0	9.2	-0.7	5.8	8.8	-4.6	4.3	9.4	6.9	5.1	-1.2	-2.8	-1.0	-1.2	0.6	5.2	0.7	4.4	2.3	-3.0	-1.8	-0.1	1.9	10.5		
Services confidence (Index level)	22.1	30.5	24.5	-1.0	-49.9	-52.4	-36.4	-29.2	-26.4	-22.2	-22.0	-24.5	-24.3	-14.7	-10.3	-13.0	12.0	27.4	29.7	32.7	39.7	42.1	48.3	35.2	32.4	40.4	33.1	15.2	17.4	17.8	17.4	22.9	43.8	15.1	20.7	25.4	15.9	15.7	16.6	34.3	33.3	35.3	43.3	37.4	38.1	36.7	39.9	
Consumer confidence (Index level)	-1.2	-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	-51	-58	-52	-48	-41	-47	-41	-45	-35	-31	-29	-35	-45	-46		
Retail confidence (Index level)	24.2	24.5	16.2	1.4	-26.3	-7.5	-22.1	-20.6	-17.7	-11.3	-10.8	-19.3	-11.7	-3.9	1.4	6.7	2.5	2.3	8.5	9.6	3.8	21.6	13.3	22.9	13.9	10.4	3.8	-1.5	2.7	0.9	1.1	-7.1	-1.2	13.1	18.3	5.7	17.1	23.5	23.5	27.0	14.8	20.0	22.9	23.4	28.8	15.8	19.5	
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	2.1	5.2	1.2	-1.9	1.1	-1.1	0.0	1.1	-8.7	-5.0	0.2	-7.9	-2.9	-3.3	-3.3			
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	-19	-7	-17	-17	-24	1	47	37	-22	66	-5	5	27	19	17				
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	8.8	8.8	8.8	10.1	10.1	10.1	10.0	10.0	10.0	10.8	10.8	10.8	12.6	12.6	12.6	13.9	13.9	15.3	15.3	15.3	14.5	14.5	14.5	11.9	11.9					
Construction confidence (Index level)	-24	-30	-31	-88	-83	-56	-29	-42	-50	-47	-31	-37	-12	-11	-8	-5	-10	-10	4	-4	12	2	3	-6	9	-6	-2	-8	-26	-14	-34	-31	-27	-25	-26	-22	-24	7	18	3	11	-7	-7	-6	-15	4		
Employment (Y-o-Y)	1.5	0.4	-4.6	-8.7	-13.8	-11.8	-3.8	-0.3	-0.9	-3.7	-6.2	-4.3	-4.2	-3.1	-0.2	4.6	17.1	15.4	6.7	4.4	4.9	6.7	11.2	9.8	7.6	12.0	13.4	10.3	5.1	4.2	3.2	2.1	2.6	2.4	1.2	2.5	3.6	-0.5	1.2	2.0	1.3	2.0	1.8	0.0	0.9	3.5		
Interest rate on new private sector loans (GPI detrend)	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	-7.4	-7.4	-4.2	-3.6	-2.2	-1.6	-0.6	1.2	2.8	3.3	4.1	3.7	3.6	4.5	2.8		
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	2.2	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	5.8	6.0	5.3	5.0	6.3	7.6	4.8	5.2	3.9	3.1	2.8	1.2	0.9	2.1	2.1		
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	5.2	6.2	5.9	4.5	4.8	3.2	2.6	4.5	3.7	3.3	3.5	3.4	3.4	2.5			
Interest rate on new time deposits (Kouvenoths, CPI detrend)	4.0	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	-11.3	-11.9	-8.9	-8.3	-6.9	-6.5	-5.1	-3.4	-1.8	-1.5	-0.3	-1.0	-1.2	0.1	-1.6		
Economic sentiment index (EU Commission, Greece)	110	113	108	96	84	85	90	90	91	94	92	94	93	95	99	98	107	108	112	114	111	113	113	110	113	114	112	104	107	104	100	101	106	99	102	104	106	108	107	109	108	110	110	111	108	107	106	
Economic sentiment index (EU Commission, Euro area)	105	105	94	60	64	75	84	91	95	96	92	97	96	98	103	105	110	115	118	117	118	119	117	115	113	114	112	104	104	103	99	98	95	94	95	97	100	99	99	96	95	95	94	93	94	94		
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	-1.1	1.8	7.5	14.5	19.2	23.6	28.7	32.7	33.1	30.4	32.9	32.3	31.4	30.7	28.2	26.6	26.9	27.6	26.9	28.2	27.7	27.3	21.8	19.7	19.1	14.6	13.5	9.9	7.9	4.7	1.2	-1.3	-5.2			
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	-3.6	-3.2	3.1	11.7	18.5	24.1	30.4	36.9	35.5	33.6	34.9	38.3	41.0	42.0	40.0	38.1	38.2	33.8	29.8	27.0	25.9	24.5	18.4	14.2	11.7	7.9	4.9	1.6	-0.6	-1.6	-2.2	-1.5	-2.1			
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	87	44	52	29	45	52	86	81	61	30	14	18	16	10	13			
Air - 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	1230	1083	455	139	91	122	139	389	388	297	436	556	616	355	157	63	42	52	46	35	55	103	78	45	30	25	21	18	17	17	21		
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	-14.8	-13.2	-3.3	-8.3	-11.6	-15.0	-14.8	-7.3	-18.9	-6.7	-10.0	-10.6	11.1	6.1	-1.9	0.4		
VAT on other goods & services (Y-o-Y)	-5.9	3.8	-44.6	-3.5	-54.5	-27.1	-25.2	-12.6	-16.1	-16.0	-22.2	-18.0	-10.9	-10.0	30.9	-0.9	10.78	23.1	27.3	20.4	23.8	21.5	36.2	30.4	1.6	61.6	22.9	23.6	19.4	24.7	26.7	23.2	11.6	25.4	2.4	12.6	43.2	6.1	-27.2	15.7	10.6	5.9	6.1	5.9	17.6	0.1		
Business Turnover (Y-o-Y, double-entry bookkeeping)	11.4	-2.0	-9.6	-29.1	-25.0	-33.4	-14.0	-18.9	-8.9	-3.9	-6.3	-5.3	-13.6	-8.5	-13.3	39.4	24.4	27.4	23.4	32.2	28.0	23.9	38.1	30.5	28.9	43.1	44.4	37.1	49.2	44.8	38.4	50.0	47.5	32.3	21.1	33.5	24.3	1.1	2.6	-2.0	-1.0	-6.0	-7.2					
Color map scale																																																

Sources: NBG, BOG, ESTAT, Ministry of Finance, EU Commission, IHS Markit, IOG, AIA, ADME



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

NBG GREECE MACRO ANALYSIS TEAM

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

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

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

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

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