NATIONAL BANK OF GREECE

GREECE
Special Focus Report
GDP growth prospects following the catastrophic flood

October 2023

Limited impact on Q4:2023 GDP from the catastrophic flood, whereas reconstruction projects will boost growth in 2024-25

- The extreme rainfall from the storm "Daniel" – classified as a 1-in-200+ years weather event for Greece – led to a catastrophic flooding in Thessaly (Central Greece) in early-September.
- The extent of the damage raises legitimate concerns about its impact on regional and country-wide economic activity, given that the region plays an important role in primary production and manufacturing.
- Thessaly accounts for 5% of Greece's gross domestic product, 6.7% of total employment, 14% of farmland and 7% of gross value added (GVA) generated in the manufacturing sector, with even higher contributions in arable crop production, as well as in the production of vegetables, meat and dairy products.
- According to estimates by experts and specialized bodies, the flooded area corresponds to c. 18% of the total cultivated area of Thessaly, while serious damage has also been caused to livestock, as well as to public infrastructure.
- NBG Research attempts to provide a preliminary assessment of the impact on economic activity, on the basis of currently available information. A distinction is made between the direct short-term impact and the medium term (2024-25).
- The near-term drag on activity will come from the destruction of agricultural output and other supply-side frictions, which are also affecting manufacturing production and services activities. NBG estimates conservatively assume complete loss of 25% of Thessaly's primary sector output for the remainder of the year and the first months of 2024, a 15% drop in manufacturing GVA and an 80% fall in tourism revenue in the region until early 2024. This impact will be largely cushioned by government measures with immediate effect.
- Increased inflation at an economy-wide level combined with flood-related production losses leading to a slowing in GDP growth to 1.6% y-o-y in Q4:2023 (versus a pre-Daniel estimate of 2.3%), following robust GDP growth in Q2 of 2.7% y-o-y and estimate of 3.4% in Q3, underpinned by buoyant tourism, resilient private consumption, and solid fixed capital investment spending.
- The above trends suggest FY:2023 growth of at least 2.4% y-o-y and slightly higher than the latest official forecasts for Greece (estimates at c. 2.2-2.3% y-o-y), once the production drag from the flood and higher inflation are included into Q4 growth estimates.
- A net boost to GDP growth of 0.3 pp, on average, is expected in 2024-25 from higher public and private investment in restoration, water management and anti-flood projects, as well as spending for the replacement of capital equipment and consumer durables, leading GDP growth to 2.7% and 2.3% respectively in 2024 and 2025.
- The major part of the reconstruction bill will be covered by the public sector, with the support of EU funding as well as by insurance recoveries and private sector donations. EU support to Greece is expected to exceed €2.5 bn while insurance recoveries are estimated to be in the range of €0.5-0.7 bn, implying that the net fiscal cost of reconstruction will be limited in the medium term.

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The catastrophic flood in Thessaly is expected to have a limited impact on FY:2023 GDP, despite the significant damage to regional primary production, whereas reconstruction projects will boost growth in 2024-25

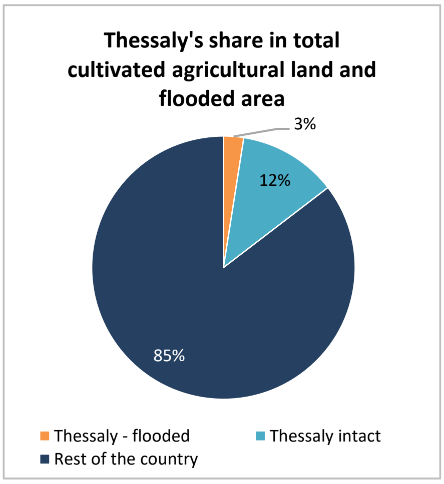
The extreme rainfall from the storm "Daniel" – classified as a 1-in-200+ years weather event for Greece according to the "World Weather Attribution" – led to a catastrophic flooding in Central Greece in early-September. A smaller storm hit the same area three weeks later causing a lesser damage. The flood waters are gradually receding, but in its wake the storm has not only inflicted human losses but also caused significant damage to infrastructure and farmlands.

The extent of the damage in Thessaly (Central Greece) raises legitimate concerns about its impact on regional and country-wide economic activity, given that the affected region plays an important role in the domestic primary production and also accounts for a not insignificant proportion of the country's manufacturing output.

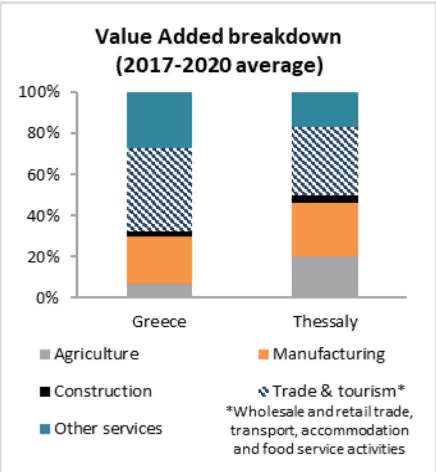
NBG Research attempts to provide a preliminary assessment of the impact on economic activity, on the basis of currently available information. A distinction is made between:

- The near-term drag on activity from the destruction of agricultural output and other supply-side frictions, due to damages in farmlands, infrastructure and public networks, which also affect manufacturing production and services activities. This impact will be largely cushioned by government measures with immediate effect.
- A net boost to GDP growth in 2024-25 from higher public and private investment in restoration, water management and anti-flood projects, as well as spending for the replacement of capital equipment and consumer durables. The additional expenditure is expected to more than offset the remaining part of production losses which will take more time to resolve. In the longer term, production capacity is expected to be fully restored, with the region becoming more resilient against climate risks.

The catastrophic storm led to the flooding of 17% of the region's rural land or 3% of total cultivated area at a country level

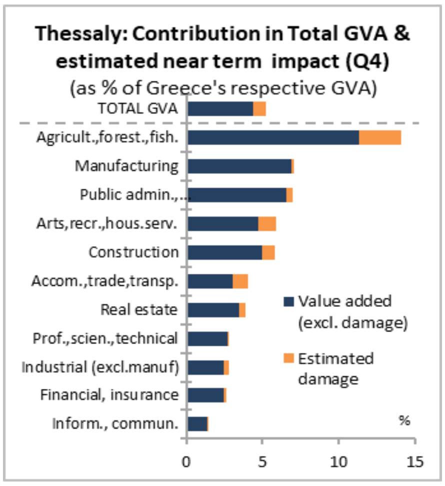


Thessaly accounts for a significant share of Greece's primary and manufacturing production, but the affected area corresponds to a small part of the whole region...

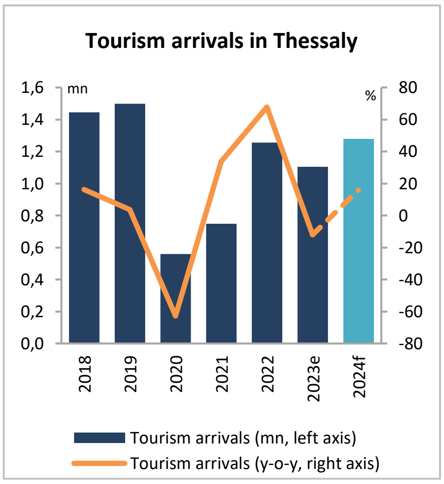


***Source**: ELSTAT, Eurostat, SETE*

...causing a limited drag on country-wide economic activity in Q4:2023



Regional tourism activity suffers a major setback in 2023



***Sources**: ELSTAT, Bank of Greece, SETE, NBG Economic Analysis estimates*

The short-term drag on GDP growth will be largely cushioned by fiscal support and emergency spending by firms and households.

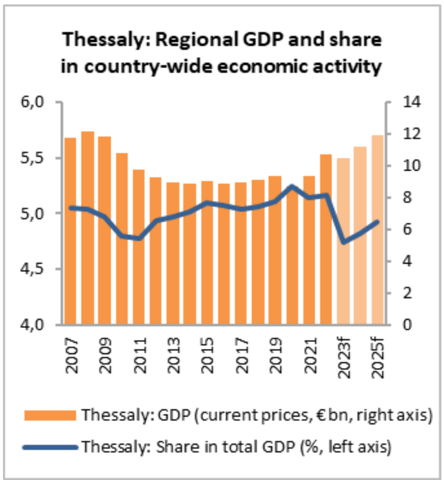
Thessaly accounts for 5% of Greece's gross domestic product, 6.7% of total employment, 14% of farmland and 7% of gross value added (GVA) generated in the manufacturing sector, with even higher contributions in arable crop production (such as wheat, cotton and corn), as well as in the production of fruits, vegetables, meat and dairy products and food manufacturing. Moreover, the region accounts for 4.3% (€8.2 bn) of the private sector's bank deposits and 3.4% (€2.0 bn) of the outstanding credit balances of non-financial corporations in the domestic banking system.

Given that the most significant near-term impact will come from the decline in regional production, especially in agriculture (crops and livestock), the measurement of the most affected area is an important input to our analysis. According to estimates by experts and specialized bodies, the flooded area corresponds to c. 18% of the total cultivated area of Thessaly, while serious damage has also been caused to livestock, as well as to public infrastructure and networks (including roads, railway, electricity and water networks) and hundreds of homes and enterprises. In fact, c. 100K animals and poultry (c.1% of the country's inventories) have drowned, putting at risk a considerable share of the region's output of dairy and meat products and related manufacturing activities. Furthermore, unharvested crops (mostly cotton and some grain categories), fruit and vegetables, along with stored production were also damaged, to some extent, even in neighboring non-flooded fields, due to the extreme rainfall.

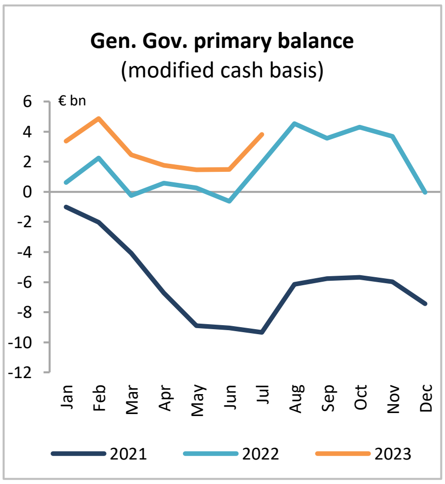
The footprint of the production damage and near-term impact on Thessaly

Conservatively assuming a complete loss of 25% of Thessaly's primary sector output for the remainder of the year and the first months of 2024 – as the major part of the flooded land will not be able to be cultivated for several months whereas long-term damages could have been inflicted in some areas – the estimated decline in regional production should reach €0.15bn until the year end (c.7% of this region's GVA in Q4 or 1.7% of Thessaly's full year GDP) or 6% of the economy-wide agricultural output in this period. This estimate includes very conservative adjustments, as regards: i) a relatively larger damage on seasonal crops and trees in flooded areas, which will also weigh on next year's production, ii) a slow replacement rate of livestock

Public and private fixed-capital investment spending will play a key role in reversing the significant output losses in the region



Fiscal support will cushion the short-term impact and will be financed by the Budget's contingency reserve, the sustained fiscal overperformance and EU resources



inventories, and iii) additional damages incurred on production outside the flooded perimeter.

Tourism-related activities in the broader region have experienced a sudden halt that minimizes their revenue for the coming months, which typically account for c. 20% of the annual activity in this sector. Specifically, tourism-related GVA in the region is expected to drop by 70% y-o-y until December subtracting 1pp from regional Q4 GDP (c. €20 mn).

The impact on manufacturing, wholesale/retail trade, and other services sectors at a regional level is estimated to be also limited, at around €30 mn in terms of regional GVA reduction (-1.3 pps of Q4 GDP in the region), with some additional downside risks – mainly relating to supply-chain disruptions due to damaged transportation infrastructure – which are expected to be resolved in the coming months.

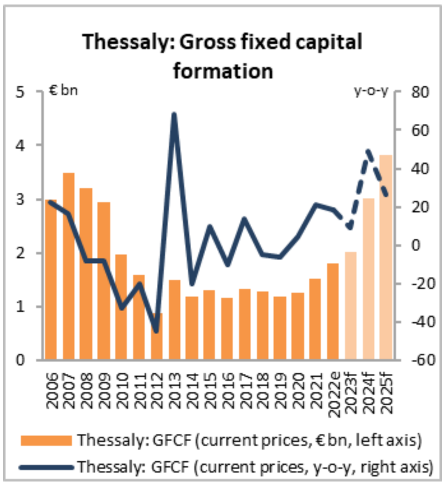
The above-described short-term production losses should be largely offset by the following factors:

- Stronger activity in non-agricultural sector in the region (such as non-tourism services to businesses and households, retail/wholesale trade, manufacturing), where emergency spending – supported by government transfers, insurance recoveries and private sector's donations – of the affected households and firms will be channeled, in order to cover their most pressing needs.
- Increased output of the public and construction sectors, related to reconstruction works and the provision of non-monetary support to the private sector (such as transfers in kind by the State and corporations).
- Reallocation of production and demand towards non-affected areas in the same region as well as in other regions of the country.

Indeed, as was the case in the Covid-19 and the ensuing energy-related shocks, fiscal support is expected to absorb the most part of the stress. The government tabled a €0.6 bn supplementary Budget for 2023 including the initial compensation payouts for the flood victims (€0.45 bn are allocated to the PIB and €0.15 bn to the ordinary budget, whereas another €35 mn concern the doubling of the "market pass" payout which aids households in the region affected by natural disasters). This support will be financed by the contingency reserve of the State Budget for natural disasters, the sustained fiscal overperformance in 8M:2023 and readily available emergency resources from the EU

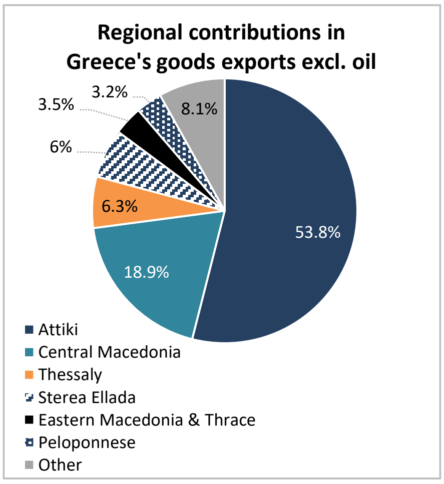
***Sources**: ELSTAT, Ministry of Finance, NBG Economic Analysis estimates*

A strong rebound in reconstruction-related investment…



…will underpin the strong regional recovery…

Goods exports are expected to decline as Thessaly has the 3rd largest share in Greece's exports among the country's regions



drawing on €0.25 bn of unused European funds from the 2014-2020 EU Partnership Agreement which could be disbursed by the end of the year along with another €0.15 bn from the NSRF 2021-27.

Despite the extraordinary assistance, the budgetary target for a primary general government surplus of 0.7% of GDP in 2023 remains in the Draft Budget 2024 estimates, with the Stability Program (2023-2026) target for a higher surplus of 1.1% of GDP still likely to be attained, or exceeded, in view of the fact that the State Budget recorded a primary surplus of 2.6% of GDP in 8M:2023, exceeding by €3.3 bn the respective budget target. On the same note, the primary General Government surplus on a modified cash basis reached 1.8% of GDP in 7M:2023 in comparison with a 0.8% of GDP surplus in the same period 2022 (+€2.0 bn y-o-y in 7M:2022).

The surge in gross fixed capital formation related to reconstruction projects should bolster regional economic activity in 2024-25 more than offsetting persistent production pressures

The lingering impact on regional GVA in 2024-25 should primarily reflect the enduring decline in agricultural production, whereas activity in manufacturing, tourism and other services is expected to recover close to its pre-Daniel level by end-2024. As regards production trends in 2024-25 according to some experts' views, the flood damage will continue to affect only a fraction of the currently flooded land (less than 1/4 of the current perimeter or c. 5% of Thessaly's arable land) whereas the replenishment of livestock will be slow at around 30% per year. Accordingly, the agricultural production in the region will remain approximately €25 mn lower than its pre-Daniel level in 2024 and €10 mn lower in 2025.

However, this production-related drag will be more than offset by new capital spending on restoration works in 2024-25. The reconstruction of seriously damaged buildings (c. 600 houses, commercial and public buildings) and infrastructure (road, railway, water and electricity networks) along with the replacement of business and agricultural capital stock as well as, other complementary projects required to protect the area from future flood risks, are expected to give rise to more than €2.0 bn of new gross fixed capital formation and nearly €3.5 bn of total final spending by the State and the Private sector (including non-investment expenses such as compensation of employees and

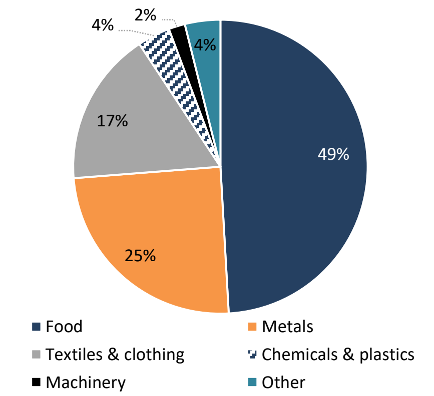
Source: *ELSTAT, Eurostat, SETE*

Available EU Funding (estimates)

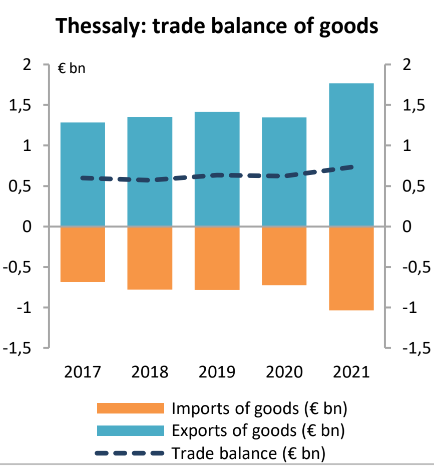
	Amount (€bn)	Year
Cohesion Funds (under NSRF 2014-2020)	0,25	2023
Cohesion Funds (under NSRF 2021-2027)	0,15	2023
European Solidarity Fund	0,40	2023-2024
Cohesion Funds (under NSRF 2021-2027)	1,5	2024
RRP reallocation (est.)	0,4	2024-25
Total EU funding	**2,7**	

***Sources** : Prime Minister's Office, Greek Ministry of Finance & NBG Economic Analysis estimates*

Thessaly's exports comprise mostly agricultural products (food), metals and textiles



Thessaly has been the only region in Greece with a trade surplus



supportive activities, purchases of intermediate goods, support payouts and other expenses).

As a result, the GFCF in the region will double in 2024-25 and, in conjunction with the estimated rebound in final consumption, are expected to boost regional GDP growth to above 7% y-o-y in both years, leading to a complete recovery of regional activity losses by end-2024.

The massive reconstruction effort in 2024-25 will be aided by more than €2.5 bn of funds from the EU Cohesion Framework (under NSRF 2021-2027) – with eligible projects amounting to nearly €1.5 bn, and a prospective review of the RRP expected to reallocate another €0.4 bn towards urgent infrastructure projects. In addition, the country may request additional funding from the EU Solidarity Fund amounting up to €0.4 bn, depending on the updated assessment of the final damage. The above funding is expected to minimize the net fiscal cost of the reconstruction effort. On the same note, the Greek government announced a doubling of its annual budget reserves for natural disasters to €0.6 bn per year. Finally, insurance recoveries are estimated to be in the range of €0.5-0.7 bn, implying that the net fiscal cost of reconstruction will be limited in the medium term.

External accounts will be negatively affected, both at a regional and an economy-wide level. Higher imports for the substitution of the, albeit rather limited, production shortages, along with increased demand for imported production inputs, capital goods and consumer durables for the replacement of fixed capital, are going to increase the trade deficit in both the near and the medium term. Indeed, Thessaly exhibits the highest trade surplus (estimated at €0.7 bn on an annual basis) among the country's regions – with most of them having a deficit – due to its strong agricultural and manufacturing production base and lower import dependency compared with the country average. An exact quantification of the implications for the external accounts is difficult. Assuming a percentage reduction in the value of goods exports equal to the decline in primary sector's GVA and import growth of about +20% y-o-y as part of reconstruction related imports, Thessaly's trade surplus is expected to contract by c. 70% in Q4:2023 and FY 2024 or by almost €0.5 bn cumulatively, leading to a similar increase in the economy-wide current account deficit. The negative impact on trade balance is expected to continue even beyond 2024, when the major part of reconstruction-related spending, with a

***Sources**: ELSTAT, Prime Minister's Office, Ministry of Finance, NBG Econ. Analysis estimates* significant import content, will occur. However higher inflows of EU funds will prevent a widening of the current account deficit.

Economy-wide GDP growth will slow temporarily in Q4:2023, following a solid performance in 9M – dragged down by production losses and accelerating inflation – but is set to regain momentum in 2024

The drop in regional production, higher imports, and a temporary acceleration in inflation in Q4 are expected to slow the solid upward trend in GDP growth in 9M:2023.

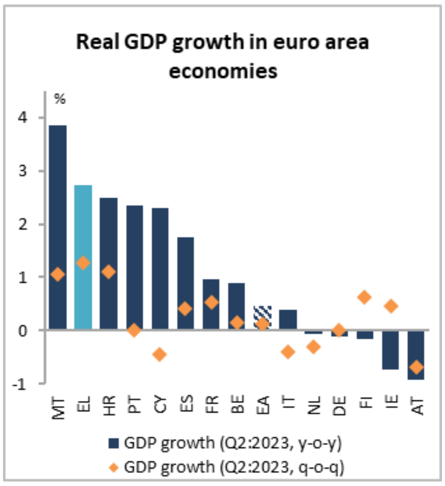
Specifically, Greece's GDP growth edged up to 2.7% y-o-y (+1.3% q-o-q s.a.) in Q2:2023 from 2.0% y-o-y (0.0% q-o-q s.a.) in Q1, outperforming the euro area average for a 9th consecutive quarter (+0.5% y-o-y and +0.1% q-o-q s.a. in Q2:2023).

Forward-looking indicators point to another strong quarter in Q3:2023 despite the end of quarter storms. Specifically:

- ✓ Despite a small weakening in economic sentiment indicators in September to 108, its average level in Q3 stood at 109.9, compared with 108.7 in Q2 and a euro area average of 93.8 in Q3, with services and retail trade remaining in healthy expansion territory bolstered by the dynamism of tourism which continues to surge to a new historical high.
- ✓ International arrivals in the Athens International Airport increase by 17.4% y-o-y, in July-August 2023, exceeding by 8.4% their previous all-time high in July-August 2019.
- ✓ VAT revenue (excl. VAT on fuels & tobacco) increased by 11.6% y-o-y in July-August, compared with +13.3% y-o-y in Q2.
- ✓ Employment growth accelerated to 2.6% y-o-y in July from 1.8% y-o-y in Q2:2023 and the unemployment rate dropped to a 14-year low of 10.9% in July-August from 11.3% in Q2.
- ✓ A slowing is observed in the manufacturing sector with industrial confidence and manufacturing PMI falling in September to 10-month lows of -1.3 and 50.3, respectively, on weakened output and order levels and some concerns that the damage caused by flooding is likely to impact supply chains and production capacity. However, the average level of both indicators remained in expansion territory in Q3 showing marginal decline on a q-o-q basis.

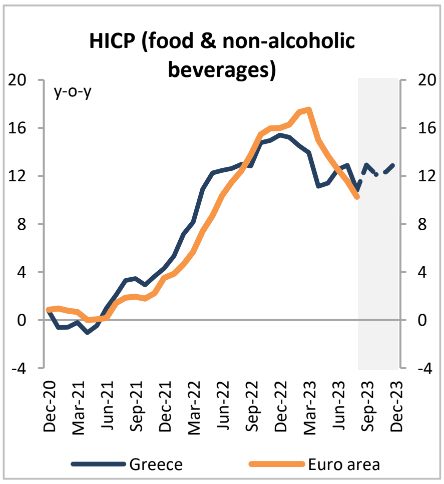
The resilience of tourism and retail trade sectors in conjunction with a redirection of activity from the flood-hit regions towards other areas are expected to minimize the respective sectoral production-side drag on GDP growth compared with the regional estimates presented above. Only the agricultural production loss

The Greek economy remained on a solid growth path outperforming the euro area for more than 2 years



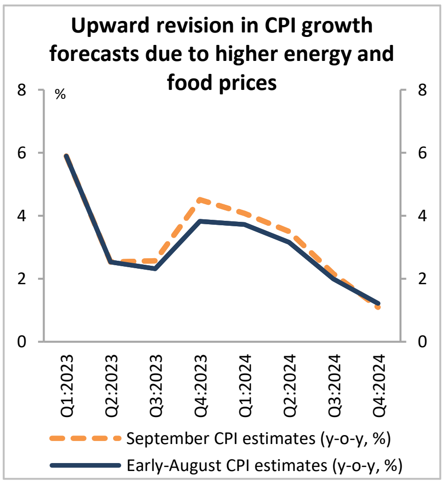
Economic sentiment and other leading indicators point to a further acceleration in GDP growth in Q3:2023

Food and energy prices are picking up...

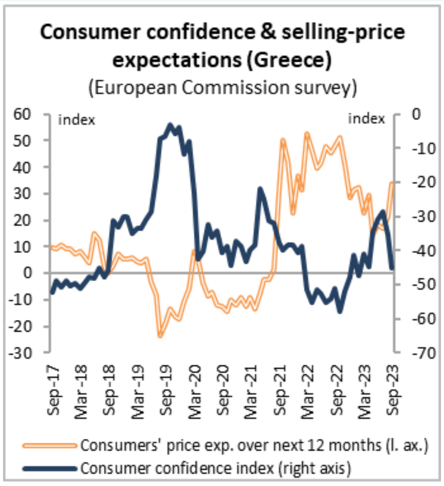


Sources: Eurostat, European Commission, NBG Economic Analysis estimates

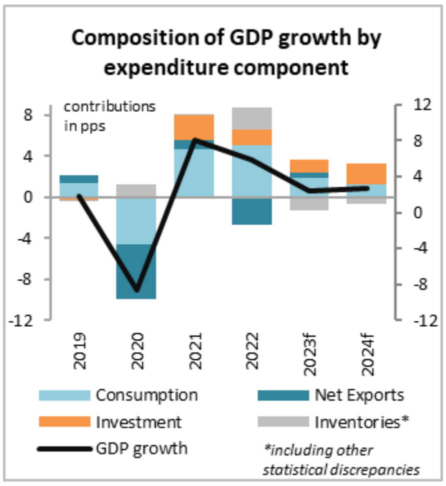
...leading to higher headline inflation, in Q4:2023 and possibly in Q1:2024



Renewed inflation fears started to weigh on consumer confidence



Increased investment on reconstruction projects and related spending by the public and private sector are expected to add c. 0.5 pps in GDP growth in 2024



will directly affect the country-wide GDP subtracting nearly 0.3 pps from Q4:2023 GDP and around 0.1 pps from FY:2024 GDP growth.

An additional drag on Q4 GDP will come from the estimated pick-up in CPI inflation. This acceleration will reflect new increases in food prices and higher energy costs, which rebounded from their lows for the year in Q2:2023, pointing to renewed pressure on household disposable income in Q4:2023. Indeed, food prices remain a major driver of inflation (+12.8% y-o-y in 8M and 10.7% y-o-y in August compared with 7.3% for the euro area in August) with signs of acceleration in September according to preliminary estimates. Moreover, brent crude oil prices climbed to 93 USD/brl in September, compared with an average of 80 USD/brl in 6M:2023, with upwardly revised market-based forecasts for Q4:2023 and H1:2024 at above 90 USD/brl.

Against this backdrop, CPI inflation is projected to pick up slightly above 4.0% y-o-y in Q4:2023 and Q1:2024 (c. 0.7-1.0 higher than our previous forecasts, corresponding to a FY:2023 average of nearly 4.0% compared with previous estimate of 3.7%). Inflation is expected to revert to a downward trajectory from Q2:2024 onwards when the effect of adverse supply side factors will dissipate.

Flood-related production losses and increased inflation along with a potential further weakening in economic sentiment and the lifting of horizonal support fiscal measures against inflation and energy prices are expected to lead to a slowing in GDP growth to 1.6% y-o-y in Q4:2023 (versus a pre-Daniel estimate of 2.3%) from an estimated 3.4% y-o-y in Q3. The above trends suggest FY:2023 growth of, at least, 2.4% y-o-y, and slightly higher than the latest official forecasts for Greece (estimates at c. 2.2-2.3% y-o-y for FY:2023), once the production drag from the flood and higher inflation are included into Q4 growth estimates.

Regional reconstruction projects and a prioritization of investment in infrastructure and other capital spending, aiming at building resilience against climate risks, are expected to bolster GDP growth in 2024-25. Increased private and public investment and related spending are expected to more than offset the remaining agricultural production losses adding, on a net y-o-y basis, c. 0.5 pps in GDP growth in 2024 and 0.2 pps in 2025, consistent with annual growth rates of 2.7% and 2.3% respectively in constant price terms.

Sources: *ELSTAT, European Commission, NBG Economic Analysis estimates*

Greece: GDP Trends & Indicators of Economic Activity in high frequency

Greece: GDP Growth Decomposition & Outlook

	2019	2020	2021	2022	2023f	2024f	2022				2023			
							Q1	Q2	Q3	Q4	Q1	Q2	Q3f	Q4f
GDP (real, % y-o-y, s.a.)	1,8	-8,7	8,1	5,9	2,4	2,7	8,0	7,1	4,1	4,8	2,0	2,7	3,4	1,6
GDP (real, % q-o-q, s.a.)	…	…	…	…	…	…	2,7	0,5	0,3	1,2	0,0	1,3	0,9	-0,6
Domestic Demand (y-o-y)	1,1	-3,3	6,8	8,3	1,8	2,5	9,6	8,3	7,1	8,1	1,5	2,8	2,2	0,8
Final Consumption (y-o-y)	1,6	-5,2	5,1	5,6	2,2	1,5	10,2	6,6	3,5	2,6	2,2	2,0	2,6	1,9
Private Consumption (y-o-y)	*1,6*	*-7,5*	*6,1*	*7,8*	*2,7*	*1,4*	*13,6*	*8,8*	*5,5*	*4,0*	*2,5*	*3,2*	*3,1*	*2,1*
Gross Fixed Cap. Formation (y-o-y)	-2,3	1,0	19,8	11,6	9,0	13,8	13,3	10,2	8,3	14,8	8,2	7,9	9,7	10,0
Inventories* (contribution to GDP)	-0,1	1,2	0,2	2,1	-1,3	-0,6	-0,7	1,4	3,2	4,3	-1,5	0,1	-1,3	-2,3
Net exports (contribution to GDP)	0,7	-5,3	0,9	-2,8	0,5	0,0	-2,1	-1,6	-3,4	-3,9	0,4	-0,2	1,0	0,7
Exports (y-o-y)	4,9	-21,5	24,1	4,9	3,4	4,4	14,1	12,4	-2,7	-2,0	7,1	0,1	4,3	2,4
Exports of goods (y-o-y)	*2,1*	*4,2*	*13,8*	*0,5*	*3,1*	*3,1*	*3,2*	*1,4*	*0,3*	*-2,8*	*10,7*	*-1,8*	*1,8*	*2,0*
Exports of services (y-o-y)	*7,4*	*-42,6*	*37,7*	*9,9*	*5,2*	*6,5*	*23,9*	*27,7*	*-2,1*	*-3,4*	*6,2*	*1,3*	*7,7*	*6,0*
Imports (y-o-y)	2,9	-7,4	17,9	10,7	1,7	3,7	17,7	14,6	5,2	6,8	5,2	0,6	1,2	0,3

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

	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20
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
Industrial confidence (index level)	3,5	5,7	2,2	-8,0	-21,2	-19,5	-13,4	-14,9	-14,5	-7,8	-12,0	-7,4
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
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
Services confidence (index level)	22,7	30,5	24,5	-1,0	-50,0	-52,4	-36,4	-29,2	-26,4	-22,2	-22,0	-24,4
Consumer confidence (index level)	-12	-8	-24	-42	-40	-33	-36	-34	-41	-39	-45	-37
Retail confidence (index level)	24,1	24,4	16,2	1,5	-26,2	-7,4	-21,9	-20,4	-17,4	-11,6	-11,1	-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
Construction Permits (y-o-y)	44	71	54	-18	5	11	18	-11	-14	-13	-15	14
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
Construction confidence (index level)	-23	-29	-31	-89	-85	-57	-29	-43	-50	-46	-29	-37
Employment (y-o-y)	1,5	0,4	-4,6	-8,7	-13,8	-11,7	-3,9	-0,3	-0,9	-3,7	-6,1	-4,3
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
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
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
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
Economic sentiment index (EU Commission, Greece)	110	113	108	96	83	85	90	90	91	94	92	94
Economic sentiment index (EU Commission, Euro area)	105	105	94	60	64	75	84	91	95	96	92	97
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
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
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
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
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
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
Business Turnover (y-o-y, double-entry bookkeeping)	11,4	-2,0	-9,6	-29,1	-25,0	-13,4	-14,0	-18,9	-8,9	-3,9	-6,3	-5,3

	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21
PMI (index level)	50,0	49,4	51,8	54,4	58,0	58,6	57,4	59,3	58,4	58,9	58,8	59,0
Industrial confidence (index level)	-8,0	-6,6	-4,7	-4,7	4,7	1,5	8,2	11,2	4,7	9,4	8,4	6,7
Manufacturing production (y-o-y)	1,3	2,3	3,3	23,0	14,5	7,1	5,8	6,3	12,9	15,1	10,4	7,1
Industrial production (y-o-y)	3,4	4,0	5,6	22,6	14,1	9,0	8,2	10,2	10,7	16,7	9,0	9,2
Services confidence (index level)	-24,2	-14,7	-10,3	-13,0	11,9	27,4	29,7	32,6	39,6	42,1	48,4	35,2
Consumer confidence (index level)	-39	-43	-40	-38	-22	-25	-31	-32	-38	-40	-39	-38
Retail confidence (index level)	-11,9	-3,9	1,4	6,7	2,6	2,4	8,7	9,9	4,2	21,2	13,0	22,6
Retail trade volume (y-o-y)	-2,5	-2,8	-0,7	39,8	15,0	11,3	11,3	5,3	9,6	8,4	16,7	19,6
Construction Permits (y-o-y)	4	22	33	116	100	51	20	57	39	61	76	14
House prices (y-o-y, quarterly series)	4,5	4,5	4,5	6,9	6,9	6,9	8,8	8,8	8,8	10,1	10,1	10,1
Construction confidence (index level)	-12	-10	-7	-6	-12	-10	4	-5	12	3	-1	-6
Employment (y-o-y)	-4,2	-3,1	-0,2	4,6	17,1	15,4	6,7	4,4	4,9	6,8	11,2	9,8
Interest rate on new private sector loans (CPI deflated)	5,8	5,1	5,7	4,1	3,8	2,9	2,7	2,3	1,6	0,5	-1,1	-1,4
Credit to private sector (y-o-y)	3,7	3,7	2,9	2,4	2,2	2,3	1,2	0,8	0,8	0,9	1,1	1,4
Deposits of domestic private sector (y-o-y)	15,3	14,9	13,8	14,8	13,7	14,5	13,2	13,9	13,3	11,5	10,4	9,9
Interest rate on new time deposits (households, CPI deflated)	2,2	1,5	1,8	0,4	0,0	-0,9	-1,2	-1,7	-2,1	-3,3	-4,7	-5,0
Economic sentiment index (EU Commission, Greece)	93	95	99	98	107	108	112	114	111	113	113	110
Economic sentiment index (EU Commission, Euro area)	96	98	103	105	110	115	118	117	118	119	117	115
Exports (excl. oil & shipping, y-o-y, 6m mov.avg)	-1,1	1,8	7,5	14,5	19,2	23,6	28,7	32,7	33,1	30,4	32,9	32,3
Imports (excl. oil & shipping, y-o-y, 6m mov.avg)	-3,6	-3,2	3,1	11,7	18,5	24,1	30,4	36,9	35,5	33,6	34,9	38,3
BoG - Tourist arrivals (y-o-y)	-87,9	-87,8	-75,9	186	414	317	240	125	124	125	219	294
AIA - International passenger traffic development (y-o-y)	-88,2	-89,8	-72,2	1292	1083	435	139	91	122	139	389	388
Estimation of total electricity demand in the network (y-o-y)	-10,6	-6,8	2,7	6,2	3,6	11,7	14,9	15,2	-3,8	3,1	3,2	9,1
VAT on other goods & services (y-o-y)	-10,0	-8,6	28,6	-1,4	72,3	29,2	14,9	14,4	18,2	21,2	29,9	29,9
Business Turnover (y-o-y, double-entry bookkeeping)	-13,6	-8,5	13,3	39,4	24,4	22,4	23,4	32,2	28,0	23,9	38,1	30,5

	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22
PMI (index level)	57,9	57,8	54,6	54,8	53,8	51,1	49,1	48,8	49,7	48,1	48,4	47,2
Industrial confidence (index level)	12,1	10,7	10,3	3,4	6,8	0,7	-1,5	-2,9	-3,3	-5,3	-4,0	-0,3
Manufacturing production (y-o-y)	1,8	9,1	5,4	-0,8	6,2	8,8	6,2	5,0	1,5	1,9	2,4	5,6
Industrial production (y-o-y)	-0,8	5,8	8,8	-4,7	4,2	9,3	6,8	4,6	-1,3	-2,8	-1,1	-1,4
Services confidence (index level)	32,4	40,4	33,2	15,2	17,4	17,7	17,3	22,8	43,7	15,0	21,1	25,7
Consumer confidence (index level)	-41	-39	-51	-55	-51	-53	-55	-54	-51	-58	-52	-48
Retail confidence (index level)	13,8	10,3	3,8	-1,5	2,8	1,1	1,3	-6,7	-0,6	12,3	17,8	5,4
Retail trade volume (y-o-y)	7,6	10,8	12,3	8,7	-4,6	1,2	2,1	5,2	1,2	-1,9	1,1	-1,1
Construction Permits (y-o-y)	24	32	-6	2	-15	-19	-7	-17	-17	-24	1	47
House prices (y-o-y, quarterly series)	10,0	10,0	10,0	10,8	10,8	10,8	12,6	12,6	12,6	13,8	13,8	13,8
Construction confidence (index level)	-8	-5	-2	-9	-28	-14	-34	-32	-28	-24	-24	-22
Employment (y-o-y)	7,6	12,1	13,4	10,3	5,1	4,2	3,1	2,0	2,6	2,4	1,2	2,5
Interest rate on new private sector loans (CPI deflated)	-2,3	-3,5	-5,0	-6,0	-7,5	-8,1	-7,9	-7,4	-7,4	-4,2	-3,6	-2,2
Credit to private sector (y-o-y)	0,9	1,4	1,6	2,8	3,3	4,5	5,5	5,8	6,0	5,3	5,0	6,3
Deposits of domestic private sector (y-o-y)	9,3	8,7	7,0	5,8	6,3	6,9	6,1	5,2	5,9	5,6	4,2	4,5
Interest rate on new time deposits (households, CPI deflated)	-6,1	-7,1	-8,7	-10,0	-11,2	-12,0	-11,5	-11,3	-11,9	-8,9	-8,3	-6,9
Economic sentiment index (EU Commission, Greece)	113	114	112	104	107	104	100	101	106	99	102	104
Economic sentiment index (EU Commission, Euro area)	113	114	106	104	104	103	99	98	95	94	95	97
Exports (excl. oil & shipping, y-o-y, 6m mov.avg)	31,4	30,7	28,2	26,6	26,9	27,6	26,9	28,2	27,7	27,3	21,8	19,7
Imports (excl. oil & shipping, y-o-y, 6m mov.avg)	41,0	42,0	40,0	38,1	38,2	33,8	29,8	27,0	25,9	24,5	18,4	14,2
BoG - Tourist arrivals (y-o-y)	257	315	319	884	673	241	87	44	52	29	45	52
AIA - International passenger traffic development (y-o-y)	297	436	556	616	355	157	63	42	52	46	35	55
Estimation of total electricity demand in the network (y-o-y)	8,8	3,4	10,4	-6,3	1,6	0,0	-11,8	-13,2	-3,3	-8,3	-11,6	-15,0
VAT on other goods & services (y-o-y)	-4,2	58,9	27,7	20,9	25,6	15,0	22,4	23,8	20,7	27,9	16,0	5,7
Business Turnover (y-o-y, double-entry bookkeeping)	28,9	43,1	44,4	37,1	49,2	44,8	38,4	50,0	47,5	32,3	21,1	33,5

	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23
PMI (index level)	49,2	51,7	52,8	52,4	51,5	51,8	53,5	52,9	50,3
Industrial confidence (index level)	3,8	5,2	2,4	2,7	0,4	3,6	0,8	3,4	-1,3
Manufacturing production (y-o-y)	8,9	6,8	8,2	3,2	3,3	-0,6	0,8		
Industrial production (y-o-y)	0,5	5,0	0,2	4,2	1,7	-3,4	-1,9		
Services confidence (index level)	16,1	15,8	16,6	34,2	33,0	34,8	42,6	36,4	36,8
Consumer confidence (index level)	-41	-47	-41	-45	-35	-31	-29	-35	-45
Retail confidence (index level)	16,9	23,6	23,7	27,4	15,5	20,9	24,1	24,9	29,6
Retail trade volume (y-o-y)	0,0	1,1	-8,7	-5,0	0,2	-7,6			
Construction Permits (y-o-y)	37	-22	66	-5	5				
House prices (y-o-y, quarterly series)	15,0	15,0	15,0	13,9	13,9	13,9			
Construction confidence (index level)	-24	8	18	2	9	-7	-7	-8	-15
Employment (y-o-y)	3,6	-0,5	1,2	2,0	1,3	2,0	2,6	0,7	
Interest rate on new private sector loans (CPI deflated)	-1,6	-0,6	1,2	2,8	3,3	4,1	3,7	0,0	
Credit to private sector (y-o-y)	5,7	4,8	5,2	3,9	3,1	2,8	1,2	0,9	
Deposits of domestic private sector (y-o-y)	3,2	2,6	4,5	3,7	3,3	3,5	3,1	3,2	
Interest rate on new time deposits (households, CPI deflated)	-6,5	-5,1	-3,4	-1,8	-1,5	-0,3	-1,0		
Economic sentiment index (EU Commission, Greece)	106	108	107	109	108	110	111	111	108
Economic sentiment index (EU Commission, Euro area)	100	99	99	99	96	95	95	94	93
Exports (excl. oil & shipping, y-o-y, 6m mov.avg)	19,1	14,6	13,5	9,9	7,9	4,7	1,2		
Imports (excl. oil & shipping, y-o-y, 6m mov.avg)	11,7	7,9	4,9	1,6	-0,6	-1,6	-2,2		
BoG - Tourist arrivals (y-o-y)	86	81	61	30	14	18	16		
AIA - International passenger traffic development (y-o-y)	103	78	45	30	25	21	18	17	17
Estimation of total electricity demand in the network (y-o-y)	-14,8	-2,5	-17,7	-6,7	-10,0	-17,5	4,3		
VAT on other goods & services (y-o-y)	58,4	-7,5	10,6	17,3	10,7	11,4	11,8	11,5	
Business Turnover (y-o-y, double-entry bookkeeping)	24,3	1,1	2,6	-2,0	-1,0	-6,0	-7,2		

Color map scale

Rapid contraction | *Moderate contraction* | *Slow contraction* | *Stabilization* | *Slow expansion* | *Moderate expansion* | *Rapid expansion*

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

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The analysis is based on data up to October 3, 2023, unless indicated otherwise