

OF GREECE

## GREECE Macro Flash

GDP Q3:2020

December 2020

Q3 GDP likely stronger than headline figure – an estimated drop of 8.1% y-o-y compared with the EL.STAT. first estimate of -11.7% – with the difference due to apparent excessive seasonality correction

NBG | Economic Analysis Department
Greece Macro Analysis Team

86 Eolou Str., 105 59 Athens, Greece

Nikos S. Magginas, PhD Chief Economist, (+30210) 334 1516 e-mail: nimaqi@nbq.qr

## 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@nba.ar expected, due to the economy's high dependence on tourism, the drag from the external sector far exceeded expectations (negative contribution of net exports to GDP growth in Q3 of 15.6 pps y-o-y).

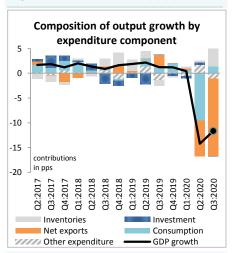
o-q, s.a. and -4.3% y-o-y in the same period.

In the first estimate of Greece's GDP, it increased by only 2.3% q-o-q, s.a. in Q3:2020 (-11.7% y-o-y) compared with a euro area average of +12.5% q-

Although an underperformance vis-à-vis other euro area countries was

- Services exports (mostly tourism) declined by an unprecedented 80.0% y-o-y (-39.2% q-o-q, s.a.) compared with -62.0% y-o-y in Q2:2020 (in constant price terms), subtracting 18.6 pps from annual GDP growth in Q3.
- A closer look at GDP data suggests that the gap between seasonally and non-seasonally adjusted series of services exports was surprisingly large in both quarterly and annual terms.
- The steady rise in the contribution of tourism to GDP over the past 10 years has led to an increasing adjustment for seasonality especially on third quarter data in order to smooth out the quarterly GDP variation. However, this pattern appears to have led to a downward bias in Q3 GDP estimate, due to the severe drop in tourism activity, following the Covid-19 shock, which should have necessitated a smaller adjustment.
- NBG Economic Analysis estimates that the GDP drop in Q3 would have been significantly less (-8.1% y-o-y and +6.4% q-o-q, s.a. in Q3), had the adjustment been based on a 20-year average value of the seasonal adjustment factor for Q3, instead of the respective factor derived from more recent data; a result also in line with NBG's High-Frequency Indicator.
- On a positive note, private consumption rebounded strongly (+15.3% q-o-q, s.a. and +1.0% y-o-y) adding 0.7 pps to GDP growth, supported by a generous fiscal stimulus with a social safety net focus which continued to stabilise labor compensation (-0.4% y-o-y in Q3 and -0.8% y-o-y in 9M:2020), resulting in only a mild increase of the unemployment rate to 16.9% in July-August from 15.9% in Q1:2020.
- The replenishment of business inventories added 3.7 pps in Q3 GDP growth, while gross fixed capital formation recorded a marginal contraction (-0.4% q-o-q, s.a. and -0.3% y-o-y), despite the positive contributions of spending on ICT and other machinery equipment (+15.3% and +6.8% y-o-y, respectively, in Q3) and increased construction activity (+4.1% y-o-y).
- For the remainder of the year assuming that the epidemic curve flattens in mid-December, permitting a partial lifting of restrictions GDP is expected to decline by 2.1% (q-o-q, s.a.) in Q4 (-13.9% y-o-y, s.a., also in line with NBG's High-Frequency Indicator), leading to an annual GDP contraction of -9.8% in FY:2020. Adjusting for the seasonal overcorrection of Q3 GDP, as may occur in the GDP's second/third estimate, FY:2020 GDP would decline by c. 8.5% in FY:2020.

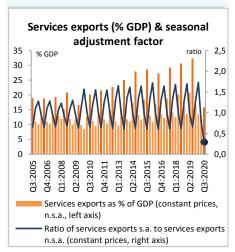
## A weak q-o-q increase in Greece's Q3 GDP, due to a collapse in services exports



An 80% y-o-y drop in services exports subtracted 18.6 pps from Q3 y-o-y GDP growth, amplified by the seasonal adjustment. The decline was milder in the n.s.a. data



Seasonally adjusted figures on services exports are downwardly biased, due to the severity of the Covid-19 hit on tourism



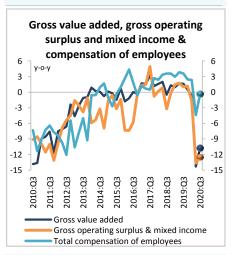
## A fiscal stimulus-led rebound in consumption buffers the huge drag from tourism

According to the first estimate of Greece's Q3 GDP, it increased by a mere 2.3% q-o-q, on a seasonally adjusted ("s.a.") basis, in Q3:2020, still declining at a rapid pace of 11.7% y-o-y, following a drop of 14.1% q-o-q, s.a. in Q2 (-14.2% y-o-y). This outcome unsurprisingly, is significantly weaker than the euro area average (+12.5% q-o-q, s.a. and -4.3% y-o-y in Q3), due to the strongly negative impact on GDP growth from the dramatic drop in services exports (-80.0% y-o-y and -39.2% q-o-q, s.a. in Q3:2020), which subtracted 18.6 pps from annual GDP growth this quarter. This drag overshadowed the positive contributions of private consumption (+0.7 pps or +1.0% y-o-y), replenishment of business inventories (+3.7 pps) and increased goods exports (+0.6 pps or 3.5% y-o-y).

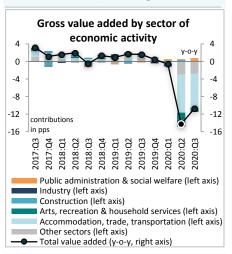
A closer look at the GDP data suggests that the quarterly contraction in services exports (-39.2% in s.a., constant price terms) compared with Q2 is surprising, as accommodation activities had been fully suspended in Q2, while all international transport connections were closed (a gradual opening started in mid-June and was completed in mid-July 2020). This conclusion is also supported by nominal, non-seasonally adjusted ("n.s.a.") current account data on export services, which increased by 57.6% q-o-q, in Q3, reflecting the strong seasonal patterns of tourism.

The steady rise in the contribution of tourism to GDP over the past 10 years has resulted in an increasing statistical adjustment for seasonality - applying negative adjustment factors on the third guarter of each year – in order to smooth out the guarterly GDP variation and make q-o-q, s.a. data comparable among quarters. Specifically, the share of services exports in quarterly GDP (n.s.a. data) increased to an all-time high of 32.3% in Q3:2019 from 18.4%, on average, in the 3<sup>rd</sup> quarter of the years 2002-2009 and an annual average of 16.9% of GDP in 2010-2019, leading to an increased downward adjustment of Q3 GDP figures to offset the positive seasonality (see graph). However, this pattern appears to have led to a downward bias in GDP estimate in Q3:2020, due to the severe drop in tourism activity following the Covid-19 shock (EL.STAT. comments, in the relevant press release, on the sensitivity of seasonal adjustment to sharp changes in the underlying data, which will be taken into consideration in the updated estimates of Q3 GDP https://www.statistics.gr). The application of a negative adjustment for seasonality similar to the recent past on Q3:2020 data of services exports, has led to a large discrepancy between seasonally and non-seasonally adjusted figures: an increase in services exports of 58.0% q-o-q (-55.7% y-o-y) according to the unadjusted data vis-à-vis a decline of -39.2% q-o-q (-80.0% y-o-y) according to the seasonally adjusted data.

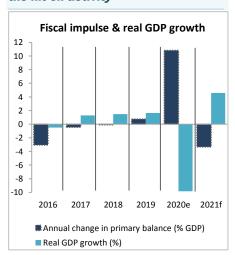
Government support stabilized labor income, but production and business profits continued to contract rapidly



GVA declined by 10.7% y-o-y in Q3, with only construction and public sector activities showing resilience



A generous fiscal stimulus buffers the hit on activity



In this respect, the Q3 GDP outcome in reality may have been stronger than the official numbers suggest, had the negative seasonal adjustment effect on services exports been milder and closer to its 20-year average. According to NBG Economic Analysis estimates, this extraordinary distortion in the seasonal adjustment of services exports reduced GDP in Q3:2020 by around €1.6 bn (-3.5% y-o-y), in constant price terms. Indeed, if the seasonal adjustment factor on Q3 data was equal to its 20-year average, the decline in GDP would be reduced to -8.1% y-o-y in Q3 (+6.4% q-o-q, s.a.) instead of -11.7% y-o-y (2.3% q-o-q, s.a.).

Regarding the other components of GDP, private consumption has shown a remarkable buoyancy increasing by 15.3% q-o-q, s.a. (1.0% y-o-y), supported by the €12.0 bn of fiscal stimulus measures activated in Q2 and Q3:2020, with a social safety net focus, which were combined with the reversal of spending deferrals from Q2. Indeed, government measures were successful in offsetting the hit to the labor market, resulting to an increase in labor compensation of 4.2% q-o-q, s.a. (-0.4% y-o-y), and only a mild increase in the unemployment rate to 16.9% in July-August from 15.9% in Q1:2020.

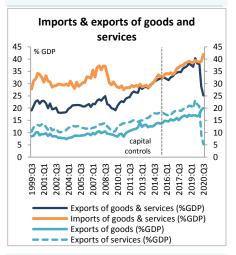
In fact, State subsidies of labor income and social security contributions, in conjunction with a gradual lifting of restrictions in the services sector, resulted in a slightly positive growth in labor compensation in the accommodation, food services, wholesale and retail trade sectors (+0.4% y-o-y on average, and 13.4% q-o-q, s.a.). This development possibly indicates that the average monthly allowance paid through the labor market support schemes, exceeded the average compensation for a considerable share of low-paid, part-time employees in specific sectors and/or that part of the respective labor income had not been recorded in official statistics in the previous years.

On the other hand, entrepreneurial profits (approximated by the sum of gross operating surplus and mixed income in the economy) bore the brunt of the adjustment (-12.5% y-o-y and -0.6% q-o-q, s.a.) declining to €59.3 bn in 9M:2020 from €65.4 bn in 9M:2019.

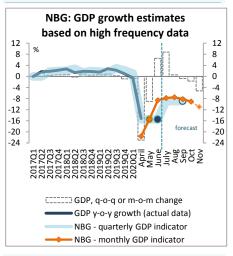
GDP data from the production side point to a broad-based contraction in gross value added, with positive annual growth recorded only in the construction and public administration sectors (increases of 12.3% y-o-y and 3.0% y-o-y, respectively, in Q3:2020).

Gross fixed capital formation recorded a marginal contraction (-0.4% q-o-q, s.a. and -0.3% y-o-y), with strong sectoral differences, buoyed by Covid-related business investment on ICT equipment, machinery and intellectual property rights. Both residential and non-residential construction remained surprisingly buoyant, rising by 6.6% y-o-y and 3.3% y-o-y, respectively (slower than in H1:2020). A key loser was investment on transportation equipment (-53.1% y-o-y). Public

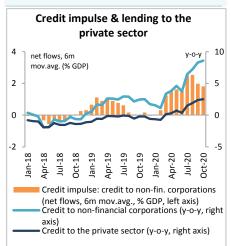
Higher spending on capital and consumer goods and stock replenishment slowed the import adjustment, amplifying the drag from net exports



A challenging epidemic situation poses significant downside risks to Q4 GDP



The resulting headwinds are partly offset by fiscal & monetary stimulus and increased credit impulse



investment activity, mainly in the form of public works and new purchases of medical and military equipment, supported the investment outcomes. A sharp increase in inventories (+319% y-o-y), on the back of strongly positive base effects, added about 3.7 pps to annual GDP growth in Q3.

The above-described rebound in private consumption, in conjunction with the stock replenishment and increased spending on ICT equipment and other machinery, largely, explain the relatively mild decline in import spending (decline in goods imports by 2.7% y-o-y and in total imports by 6.4% y-o-y), since most of the above spending categories have a high import content. Indeed, the decline in total imports added only 2.5 pps to Q3 GDP growth, compared with 5.0 pps in Q2, corresponding to a small fraction of the export-related drag. This development increased the share of total imports in GDP to a 26-year high (comparable data available since 1995) of 41.9% in Q3:2020, whereas the share of exports in GDP dropped to 25.2%, the lowest point since Q3:2011. Inevitably, net exports slashed almost 16.0 pps from annual GDP growth in Q3.

As regards economic activity in Q4:2020, the activation of new containment measures in November - that remain in place in early December, due to the still challenging epidemic situation pose significant downside risks to Q4 GDP. The resulting headwinds are partly offset by a new €3.5 bn stimulus package and increasing liquidity support, reflected in the cumulative increase of net credit flows to non-financial corporations of €5.1 bn y-t-d. Moreover, high-frequency indicators for November suggest that the fall in activity should be relatively milder in Q4:2020 than in Q2, possibly, due to: i) higher preparedness of an increasing number of enterprises to use electronic sales channels, ii) increased awareness and familiarity of households and firms with the restrictions, iii) limited drag from tourism in this period compared to Q2 and Q3:2020, and iv) potential support in confidence from positive news on the Covid-19 vaccine front. Indeed our estimates based on high frequency data point to a 10.7% y-o-y decline in GDP for the period October-November.

For Q4 — assuming that the epidemic curve flattens in mid-December, permitting a partial lifting of restrictions on retail trade and "low risk" services — the NBG's High-Frequency Indicator points to a GDP to decline of 2.1% (q-o-q, s.a.) in Q4 (-13.9% on an annual basis). This result would lead to an annual GDP contraction of 9.8% in FY:2020, compared to a previous estimate of -9.4% in November (taking into account the small upward revision in H1 data, when GDP contracted by 6.9% y-o-y according to the latest release by EL.STAT. compared with previous estimate of -7.9%). Adjusting for the seasonal overcorrection of Q3 GDP, as may occur in the GDP's second/third estimate, FY:2020 GDP would decline by c. 8.5%.

Greece: GDP Growth Decomposition & Outlook														
2019	2020f	2021f	f 2019				2020				2021			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4f	Q1f	Q2f	Q3f	Q4f
1,6	-9,8	4,6	1,9	2,2	1,2	1,2	0,4	-14,2	-11,7	-13,9	-9,9	10,9	8,3	11,4
			0,9	0,5	-0,7	0,5	0,1	-14,1	2,3	-2,1	4,8	5,6	-0,1	0,7
0,9	-2,1	3,9	1,7	2,1	-1,1	1,1	0,1	-6,9	4,0	-5,3	-3,2	9,3	2,3	7,8
1,4	-3,6	2,4	0,1	1,8	1,5	2,0	0,8	-10,8	1,6	-6,1	-5,5	9,2	0,3	6,6
1,5	-4,3	3,4	1,8	0,8	1,5	1,8	0,2	-12,0	1,0	-6,5	-6,0	10,3	2,1	8,5
1,2	0,3	-2,3	-0,7	7,7	-1,2	-0,8	1,4	-2,7	4,4	-1,8	-3,5	-1,1	-4,2	-0,2
-8,1	0,2	16,7	-7,5	-18,3	0,3	-5,1	-3,2	4,6	-0,3	-0,2	14,0	12,0	22,0	19,0
0,4	16,0	12,4	-0,7	5,2	-6,8	4,3	22,2	32,3	6,6	5,0	8,4	12,0	14,0	15,5
-8,7	-1,1	17,2	-8,0	-19,7	0,9	-5,9	-5,0	2,4	-0,8	-0,7	14,5	12,0	22,7	19,3
0,6	1,1	0,1	2,3	1,5	-1,2	-0,3	0,4	0,3	3,7	0,1	0,2	0,4	-0,2	0,0
0,7	-7,8	0,3	0,2	0,0	2,4	0,1	0,3	-7,2	-15,6	-8,6	-6,6	0,6	5,6	2,7
5,0	-28,9	9,3	6,1	2,9	9,9	1,2	1,6	-33,1	-44,9	-37,8	-30,8	22,1	32,7	38,5
2,0	0,1	1,8	2,7	2,7	5,6	-2,8	2,7	-3,2	3,5	-2,5	-5,0	4,8	2,6	5,2
8,0	-52,6	23,3	9,3	2,1	16,6	4,1	-0,2	-62,0	-80,0	-65,0	-52,0	69,0	145,0	110,0
3,0	-8,4	6,3	5,3	2,8	3,3	0,9	0,6	-12,9	-6,4	-15,0	-13,1	14,6	6,3	20,4
	1,6  0,9 1,4 1,5 1,2 -8,1 0,4 -8,7 0,6 0,7 5,0 2,0 8,0	2019 2020f  1,6 -9,8  0,9 -2,1 1,4 -3,6 1,5 -4,3 1,2 0,3 -8,1 0,2 0,4 16,0 -8,7 -1,1 0,6 1,1 0,7 -7,8 5,0 -28,9 2,0 0,1 8,0 -52,6	2019 2020f 2021f  1,6 -9,8 4,6  0,9 -2,1 3,9 1,4 -3,6 2,4 1,5 -4,3 3,4 1,2 0,3 -2,3 -8,1 0,2 16,7 0,4 16,0 12,4 -8,7 -1,1 17,2 0,6 1,1 0,1 0,7 -7,8 0,3 5,0 -28,9 9,3 2,0 0,1 1,8 8,0 -52,6 23,3	2019         2020f         2021f           1,6         -9,8         4,6         1,9             0,9         0,9           0,9         -2,1         3,9         1,7           1,4         -3,6         2,4         0,1           1,5         -4,3         3,4         1,8           1,2         0,3         -2,3         -0,7           -8,1         0,2         16,7         -7,5           0,4         16,0         12,4         -0,7           -8,7         -1,1         17,2         -8,0           0,6         1,1         0,1         2,3           0,7         -7,8         0,3         0,2           5,0         -28,9         9,3         6,1           2,0         0,1         1,8         2,7           8,0         -52,6         23,3         9,3	2019         2020f         2021f         20           1,6         -9,8         4,6         1,9         2,2             0,9         0,5           0,9         -2,1         3,9         1,7         2,1           1,4         -3,6         2,4         0,1         1,8           1,5         -4,3         3,4         1,8         0,8           1,2         0,3         -2,3         -0,7         7,7           -8,1         0,2         16,7         -7,5         -18,3           0,4         16,0         12,4         -0,7         5,2           -8,7         -1,1         17,2         -8,0         -19,7           0,6         1,1         0,1         2,3         1,5           0,7         -7,8         0,3         0,2         0,0           5,0         -28,9         9,3         6,1         2,9           2,0         0,1         1,8         2,7         2,7           8,0         -52,6         23,3         9,3         2,1	2019         2020f         2021f         2019           1,6         -9,8         4,6         1,9         2,2         1,2             0,9         0,5         -0,7           0,9         -2,1         3,9         1,7         2,1         -1,1           1,4         -3,6         2,4         0,1         1,8         1,5           1,5         -4,3         3,4         1,8         0,8         1,5           1,2         0,3         -2,3         -0,7         7,7         -1,2           -8,1         0,2         16,7         -7,5         -18,3         0,3           0,4         16,0         12,4         -0,7         5,2         -6,8           -8,7         -1,1         17,2         -8,0         -19,7         0,9           0,6         1,1         0,1         2,3         1,5         -1,2           0,7         -7,8         0,3         0,2         0,0         2,4           5,0         -28,9         9,3         6,1         2,9         9,9           2,0         0,1         1,8         2,7         2,7         5,6           8,0         -	2019         2020f         2021f         2019           1,6         -9,8         4,6         1,9         2,2         1,2         1,2             0,9         0,5         -0,7         0,5           0,9         -2,1         3,9         1,7         2,1         -1,1         1,1           1,4         -3,6         2,4         0,1         1,8         1,5         2,0           1,5         -4,3         3,4         1,8         0,8         1,5         1,8           1,2         0,3         -2,3         -0,7         7,7         -1,2         -0,8           -8,1         0,2         16,7         -7,5         -18,3         0,3         -5,1           0,4         16,0         12,4         -0,7         5,2         -6,8         4,3           -8,7         -1,1         17,2         -8,0         -19,7         0,9         -5,9           0,6         1,1         0,1         2,3         1,5         -1,2         -0,3           0,7         -7,8         0,3         0,2         0,0         2,4         0,1           5,0         -28,9         9,3         6,1	2019         2020f         2021f         2019           1,6         -9,8         4,6         1,9         2,2         1,2         1,2         0,4             0,9         0,5         -0,7         0,5         0,1           0,9         -2,1         3,9         1,7         2,1         -1,1         1,1         0,1           1,4         -3,6         2,4         0,1         1,8         1,5         2,0         0,8           1,5         -4,3         3,4         1,8         0,8         1,5         1,8         0,2           1,2         0,3         -2,3         -0,7         7,7         -1,2         -0,8         1,4           -8,1         0,2         16,7         -7,5         -18,3         0,3         -5,1         -3,2           0,4         16,0         12,4         -0,7         5,2         -6,8         4,3         22,2           -8,7         -1,1         17,2         -8,0         -19,7         0,9         -5,9         -5,0           0,6         1,1         0,1         2,3         1,5         -1,2         -0,3         0,4           0,7         -7,8	2019         2020f         2021f         2019         20           1,6         -9,8         4,6         1,9         2,2         1,2         1,2         0,4         -14,2             0,9         0,5         -0,7         0,5         0,1         -14,1           0,9         -2,1         3,9         1,7         2,1         -1,1         1,1         0,1         -6,9           1,4         -3,6         2,4         0,1         1,8         1,5         2,0         0,8         -10,8           1,5         -4,3         3,4         1,8         0,8         1,5         1,8         0,2         -12,0           1,2         0,3         -2,3         -0,7         7,7         -1,2         -0,8         1,4         -2,7           -8,1         0,2         16,7         -7,5         -18,3         0,3         -5,1         -3,2         4,6           0,4         16,0         12,4         -0,7         5,2         -6,8         4,3         22,2         32,3           -8,7         -1,1         17,2         -8,0         -19,7         0,9         -5,9         -5,0         2,4           0,	2019         2020f         2021f         2019         2020           1,6         -9,8         4,6         1,9         2,2         1,2         1,2         0,4         -14,2         -11,7             0,9         0,5         -0,7         0,5         0,1         -14,1         2,3           0,9         -2,1         3,9         1,7         2,1         -1,1         1,1         0,1         -6,9         4,0           1,4         -3,6         2,4         0,1         1,8         1,5         2,0         0,8         -10,8         1,6           1,5         -4,3         3,4         1,8         0,8         1,5         1,8         0,2         -12,0         1,0           1,2         0,3         -2,3         -0,7         7,7         -1,2         -0,8         1,4         -2,7         4,4           -8,1         0,2         16,7         -7,5         -18,3         0,3         -5,1         -3,2         4,6         -0,3           0,4         16,0         12,4         -0,7         5,2         -6,8         4,3         22,2         32,3         6,6           -8,7         -1,1         1	2019         2020f         2021f         2019         2020           1,6         -9,8         4,6         1,9         2,2         1,2         1,2         0,4         -14,2         -11,7         -13,9              0,9         0,5         -0,7         0,5         0,1         -14,2         -11,7         -13,9             0,9         0,5         -0,7         0,5         0,1         -14,1         2,3         -2,1           0,9         -2,1         3,9         1,7         2,1         -1,1         1,1         0,1         -6,9         4,0         -5,3           1,4         -3,6         2,4         0,1         1,8         1,5         2,0         0,8         -10,8         1,6         -6,1           1,5         -4,3         3,4         1,8         0,8         1,5         1,8         0,2         -12,0         1,0         -6,5           1,2         0,3         -2,3         -0,7         7,7         -1,2         -0,8         1,4         -2,7         4,4         -1,8           1,2         0,3         -2,3         -0,7         7,7         -1,2 <t< td=""><td>2019         2020f         2021f         2019         2020         2020         203         Q4         Q1         Q2         Q3         Q4f         Q1         Q2         Q3         Q4f         Q1         Q2         Q3         Q4f         Q1f         Q1         Q1         Q1         Q1         Q1         Q2         Q3         Q4f         Q1f         Q1         Q2         Q3         Q4f         Q1         Q3         Q2         Q1         Q1         Q1         Q1         Q1         Q1         Q1         Q1         Q2         Q1         Q1         Q2         Q1         Q1         Q2         Q1         Q2         Q1         Q2         Q1         Q3         Q2         Q1         Q2         Q2         Q3         Q2</td></t<> <td>2019         2020f         2021f         2019         2020         20           1,6         -9,8         4,6         1,9         2,2         1,2         1,2         0,4         -14,2         -11,7         -13,9         -9,9         10,9              0,9         0,5         -0,7         0,5         0,1         -14,1         2,3         -2,1         4,8         5,6           0,9         -2,1         3,9         1,7         2,1         -1,1         1,1         0,1         -6,9         4,0         -5,3         -3,2         9,3           1,4         -3,6         2,4         0,1         1,8         1,5         2,0         0,8         -10,8         1,6         -6,1         -5,5         9,2           1,5         -4,3         3,4         1,8         0,8         1,5         1,8         0,2         -12,0         1,0         -6,5         -6,0         10,3           1,2         0,3         -2,3         -0,7         7,7         -1,2         -0,8         1,4         -2,7         4,4         -1,8         -3,5         -1,1           -8,1         0,2         16,7         -7,5</td> <td><math display="block"> \begin{array}{c ccccccccccccccccccccccccccccccccccc</math></td>	2019         2020f         2021f         2019         2020         2020         203         Q4         Q1         Q2         Q3         Q4f         Q1         Q2         Q3         Q4f         Q1         Q2         Q3         Q4f         Q1f         Q1         Q1         Q1         Q1         Q1         Q2         Q3         Q4f         Q1f         Q1         Q2         Q3         Q4f         Q1         Q3         Q2         Q1         Q1         Q1         Q1         Q1         Q1         Q1         Q1         Q2         Q1         Q1         Q2         Q1         Q1         Q2         Q1         Q2         Q1         Q2         Q1         Q3         Q2         Q1         Q2         Q2         Q3         Q2	2019         2020f         2021f         2019         2020         20           1,6         -9,8         4,6         1,9         2,2         1,2         1,2         0,4         -14,2         -11,7         -13,9         -9,9         10,9              0,9         0,5         -0,7         0,5         0,1         -14,1         2,3         -2,1         4,8         5,6           0,9         -2,1         3,9         1,7         2,1         -1,1         1,1         0,1         -6,9         4,0         -5,3         -3,2         9,3           1,4         -3,6         2,4         0,1         1,8         1,5         2,0         0,8         -10,8         1,6         -6,1         -5,5         9,2           1,5         -4,3         3,4         1,8         0,8         1,5         1,8         0,2         -12,0         1,0         -6,5         -6,0         10,3           1,2         0,3         -2,3         -0,7         7,7         -1,2         -0,8         1,4         -2,7         4,4         -1,8         -3,5         -1,1           -8,1         0,2         16,7         -7,5	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$



Main contributors (in alphabetical order): E. Alevizopoulou, E. Balikou, A. Gouveli, N. Magginas,, P. Nikolitsa, G. Theodoropoulou.

This report has been produced by the Economic Analysis Division of the National Bank of Greece, which is regulated by the Bank of Greece and is provided solely for the information of professional investors who are expected to make their own investment decisions without undue reliance on its contents, effecting their own independent enquiry from sources of the investors' sole choice. 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 financial asset, service or investment. Any data provided in this bulletin has been obtained from sources believed to be reliable but have not been independently verified. Because of the possibility of error on the part of such sources, National Bank of Greece and/or its affiliates does not guarantee the accuracy, timeliness or usefulness of any information. The National Bank of Greece and its affiliate companies accept no liability for any direct or consequential loss arising from any use of this report. The final investment decision must be made by the investor and the responsibility for the investment must be taken by the investor. This report is not directed to, nor 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. The report is protected under intellectual property laws and may not be altered, reproduced or redistributed, to any other party, in whole or in part, without the prior written consent of National Bank of Greece.

The analysis is based on data up to December 9, 2020, unless otherwise indicated