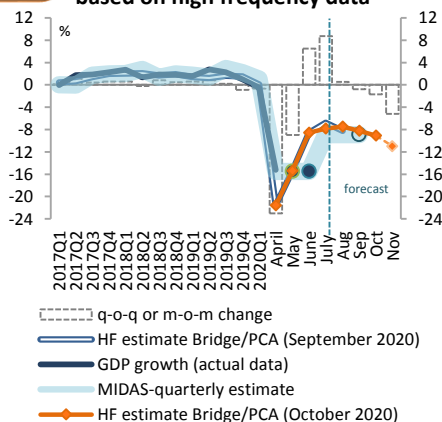




NBG: GDP growth estimates based on high frequency data



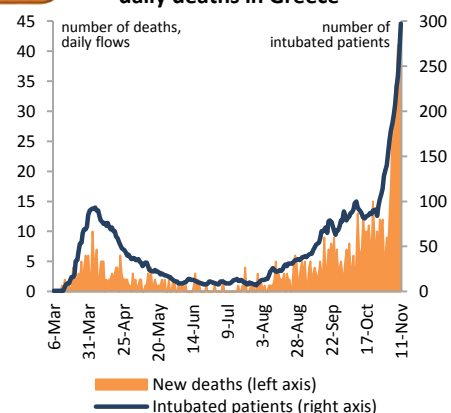
Worsening epidemic conditions and new containment measures presage a contraction in Q4 GDP of 5.1% (q-o-q, s.a.), following the strong rebound in economic activity in Q3:2020 (estimated at 7.7% q-o-q, s.a.)

NBG's high frequency forecast of Greek GDP growth for Q3:2020 has been updated to include the most recent data for Q3 and early Q4:2020.

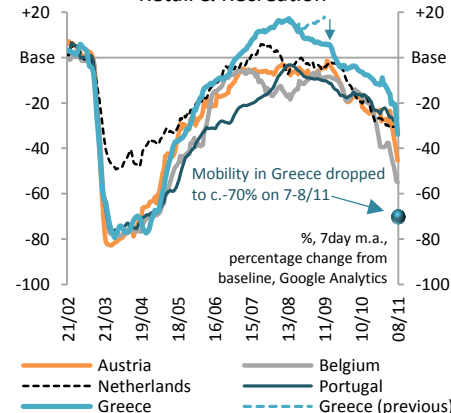
- According to the latest estimates, the recovery in economic activity stalled in August on a seasonally adjusted basis and decreased by 0.8% in September (m-o-m, s.a.) – following increases of 6.5% and 8.8% in June and July, respectively. A preliminary estimate for October (based on a limited information set comprising, mainly, mobility and economic survey data) suggests that GDP contracted further by 1.7% (m-o-m, s.a).
- Specifically, when epidemic trends started to deteriorate (i) indicators of domestic demand showed signs of weakness, following a solid rebound in June-July, while (ii) the pick-up in tourism activity in late-July and August (increase in arrivals of 38% m-o-m, s.a.) faded rapidly in August-September.
- Moreover, business turnover contracted by 4.7% in August (m-o-m, s.a., for firms with a double-entry bookkeeping system), following monthly increases of 6.2% in June and 3.5% in July. On an annual basis, turnover decreased by 20.1% in August (-17.5% y-o-y in July), despite the small improvement in accommodation and food services (-55.4% y-o-y in August from -71.4% y-o-y in July). A key factor was the negative second-round effects from weak tourism on other sectors. Specifically, a tourism-related drag led to a decline in the turnover of retail-wholesale trade of 11.1% y-o-y in August (-6.9% y-o-y in July) and manufacturing (-11.9% y-o-y in August against -13.3% y-o-y in July).
- Nonetheless, Q3 GDP is estimated to have recorded a sizeable 7.7% expansion, on a s.a. quarterly basis (-8.9% y-o-y in Q3 from -15.2% y-o-y in Q2) against a preliminary estimate of +8.0% q-o-q, s.a. (-8.4% y-o-y), which was, mainly, based on forward-looking indicators. Activity was supported by the lifting of protective restrictions, a shift of spending from Q2, and the activation of about €12.0 bn of fiscal and liquidity support measures.



Covid-19: Intubated patients & daily deaths in Greece



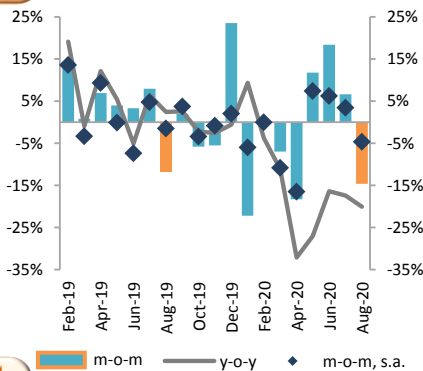
Covid-19 Community Mobility: Retail & Recreation



- Subsequently, mobility data and other high frequency indicators showed a relatively high correlation with the worsened epidemic trends, that led to a gradual reinstatement of targeted restrictions on specific regions and activities in October and to the enforcement of a nationwide lockdown in early-November. The enforcement of the nationwide lockdown is expected to weigh further on economic conditions, with consumer confidence already declining to a 2-year low of -45.5 in October.
- In fact, a downward revision in mobility data by Google since mid-August showed that the positive momentum was lost earlier-than-initially-expected, with mobility related to retail & recreation trending downwards in September and October to 5% and 10% below its pre-Covid baseline level. In the first week of November, mobility dropped further (c. 70% below its baseline level on November 8).



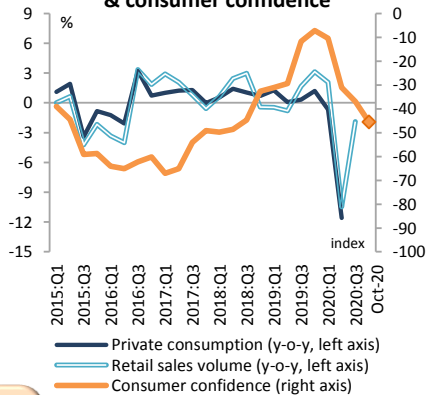
Turnover of Greek enterprises (with double-entry bookkeeping)



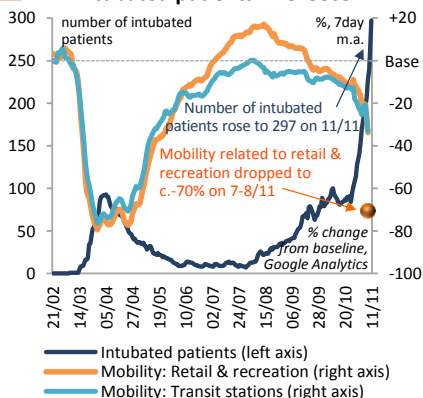
Sectoral contribution in business turnover growth



Private consumption, retail sales & consumer confidence



Covid-19: Community mobility & intubated patients in Greece

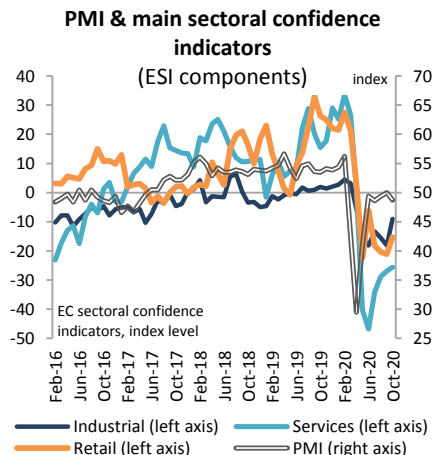


Heading to a new drop in GDP in Q4:2020, which, however, should be milder than in Q2:2020, assuming an effective control of the pandemic in November

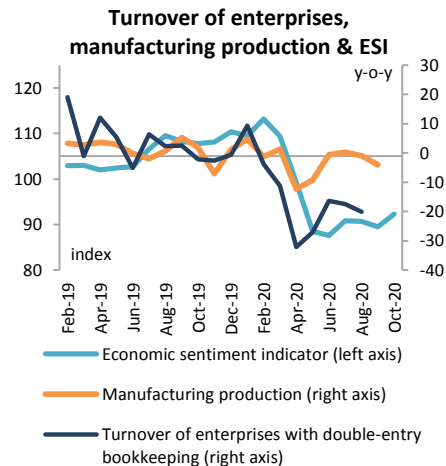
- The activation of new containment measures, increased uncertainty and the deterioration in labor market conditions in previous months pose significant downside risks to GDP growth for the rest of the year. In fact, the pressure on the health system, due to the sharp increase in hospitalizations since late-October, led to the re-introduction of strict containment measures at a national level for three weeks, starting from November 7, aiming at ensuring social distancing, mainly, by suspending a wide range of activities.
- The resulting headwinds will be partly offset by a new €3.8 bn stimulus package (including measures announced in late-October and early-November), which increases to €5.0 bn (3.1% of GDP), if the retroactive payment to pensioners is included. The measures, mainly, comprise increased economic support to all affected employees (with the monthly allowance for November increased to a maximum €800 from €534 for employees in suspension), extension of unemployment benefits, deferrals of tax and social security contribution payments and an additional round of “repayable-advance” scheme. This support is reinforced by the increasing flows of liquidity support through State guaranteed loans and the previous rounds of “repayable-advance” scheme, which jointly exceeded €8.0 bn in 10M:2020 (including new bank lending).
- Albeit November restrictions are broadly similar to those applied during the first lockdown – in late-March and April – the recessionary impact is expected to be ameliorated 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, fact that reduces potential disruptions in spending and enables planning, as indicated by an increase in retail sales in the days preceding the 2nd lockdown, as reported by market sources, 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.
- However, there are also some considerable downside risks, mainly, related to: i) the limited ability of the weakest economic entities (households and firms) to withstand a second round of lockdown, despite the fiscal support, ii) a part of extraordinary Covid-related spending in Q2 and Q3, especially on consumer durables, ICT and health equipment, and specialized services, is not recurring in Q4, iii) weaker external demand conditions, following a strengthening in the previous months, which led industrial confidence to a 6-month high in October due to higher export order-book levels.
- Indeed, mobility data for the first days of the new lockdown show that average mobility trends (in retail trade and transit stations) weakened sharply to c. 67% below the baseline, compared with -70% in April.
- For the rest of the year we assume that: (i) the epidemic curve flattens by early-December, permitting a partial lifting of restrictions on retail trade and “low risk” services, (ii) the estimated contraction in sectors where suspensions applied will be similar to that observed in April-May (especially in accommodation, food services and the oil-refining industry which jointly accounted for almost 60% of the drop in turnover in Q2), and (iii) the contraction is significantly milder in the rest of the economy (corresponding to c. 50% of the respective hit in Q2). If these assumptions hold, we expect GDP to decline by 5.1% (q-o-q, s.a.) in Q4 (-12.8% on a y-o-y basis), leading to an annual GDP contraction of 9.4% in 2020.



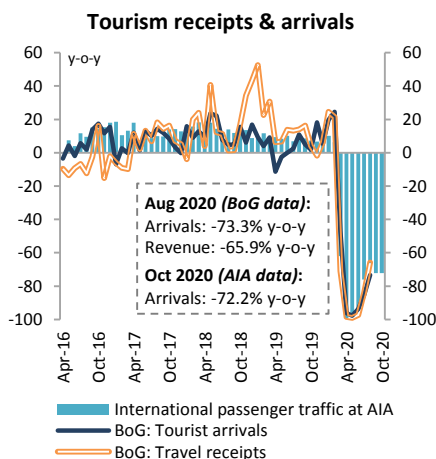
Economic sentiment picked-up slightly in October (92.3) – driven mainly by an increase in industrial confidence – but remains c. 7% below its 6-year average



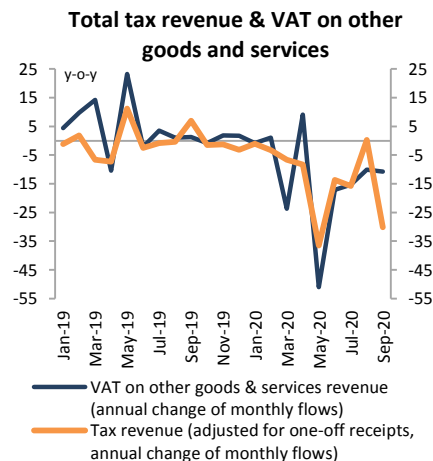
Negative second-round effects from weak tourism weighted on the performance of manufacturing and retail trade sectors



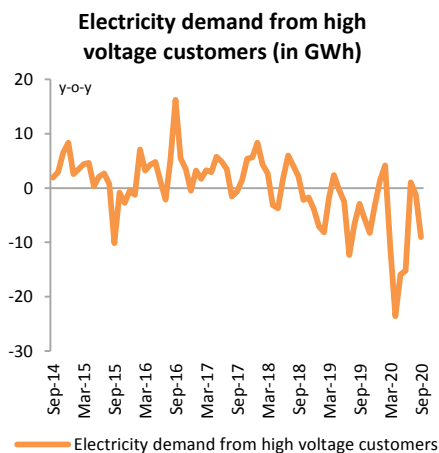
The pace of the decline in non-resident arrivals at Athens airport accelerated in Sep-Oct (-72.3% y-o-y, on avg., from -66.2% in Aug)



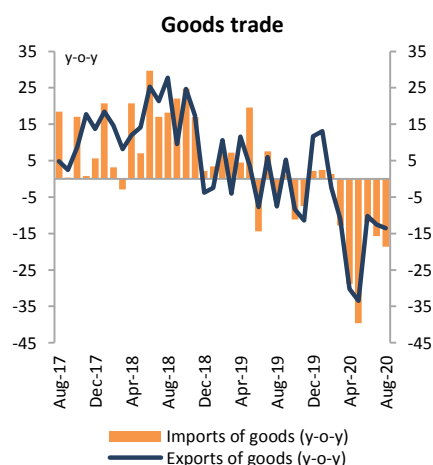
Tax revenue trends weakened in 9M:2020, partly due to deferrals of tax obligations and a 1-month delay in property tax payment



Electricity consumption by high voltage customers decreased by 9.0% y-o-y in September, after a stabilization in July 2020



Goods imports contracted by 18.6% y-o-y in August, offsetting the drag from lower exports (-13.5% y-o-y)



High frequency indicators used in estimating GDP growth

	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20
PMI (index level)	53,9	53,6	53,1	54,0	53,8	53,7	54,2	54,7	56,6	54,2	52,4	54,6	54,9	53,6	53,5	54,1	53,9	54,4	56,2	42,5	29,5	41,1	49,4	48,6	49,4	50,0	48,7
Industrial confidence (index level)	6,3	0,3	-3,4	-3,2	-5,0	-4,6	-1,2	-2,3	-0,9	-0,2	-0,6	1,7	0,6	1,0	1,9	1,4	2,0	2,7	4,5	3,1	-5,6	-15,4	-18,1	-13,3	-15,5	-18,1	-9,0
Manufacturing production (y-o-y)	1,5	1,8	0,1	8,5	1,4	-0,9	3,3	2,7	3,7	3,0	-0,2	-2,0	0,7	5,2	1,9	-7,0	1,1	4,7	-1,3	1,4	-12,4	-9,2	-0,6	0,2	-1,0	-4,0	
Industrial production (y-o-y)	-0,3	3,3	0,0	5,2	2,3	4,1	1,9	-0,6	2,6	-0,4	-0,5	-2,0	0,0	1,9	-0,7	-9,6	-3,8	-0,6	-3,1	0,0	-10,8	-8,1	-4,6	-0,1	-4,0	-2,4	
Services confidence (index level)	11,9	10,5	10,7	11,1	11,4	-1,6	6,1	10,5	5,6	7,3	7,9	22,1	28,8	20,2	15,4	17,8	29,1	25,2	33,6	26,6	1,1	-40,3	-46,8	-34,2	-28,8	-26,9	-25,6
Consumer confidence (index level)	-45	-43	-34	-33	-31	-28	-33	-32	-31	-30	-28	-20	-8	-7	-8	-7	-6	-10	-5	-17	-33	-33	-28	-35	-35	-41	-46
Retail confidence (index level)	19,7	21,0	16,4	10,0	18,4	23,0	13,3	7,4	1,4	-0,7	9,2	13,7	22,6	32,9	26,3	25,0	22,0	21,5	27,5	21,3	3,2	-22,4	-6,2	-18,3	-20,3	-21,1	-15,3
Retail trade volume (y-o-y)	3,6	2,9	-4,1	3,0	-0,1	-3,2	-3,1	4,9	-2,5	-2,2	2,4	-2,2	2,2	5,0	7,2	3,7	-1,5	6,2	2,5	-2,4	-24,6	-3,0	-3,8	-2,8	-1,0		
Construction Permits (y-o-y)	13	33	38	51	18	-9	-25	-20	1	6	1	22	38	60	-10	7	47	44	70	54	-18	5	11	17			
House prices (y-o-y, quarterly series)	2,3	2,3	3,2	3,2	3,2	5,5	5,5	5,5	7,6	7,6	7,6	8,2	8,2	8,2	7,5	7,5	7,5	6,6	6,6	6,6	4,1	4,1	4,1				
Construction confidence (index level)	-45	-55	-51	-43	-53	-51	-61	-48	-50	-54	-56	-48	-52	-56	-50	-52	-24	-32	-31	-31	-76	-76	-56	-32	-41	-52	-47
Employment (y-o-y)	1,8	2,0	2,3	2,5	2,7	1,9	2,9	2,3	2,7	2,7	2,2	1,9	2,2	1,9	1,8	1,6	1,4	1,8	0,6	0,7	-1,3	-4,0	-2,6	-1,8	-2,5		
Interest rate on new private sector loans (CPI deflated)	3,7	3,7	3,2	3,6	4,1	4,5	3,9	3,6	3,9	4,4	4,8	4,5	4,9	4,7	5,0	4,1	3,6	3,5	4,1	4,1	5,5	5,4	5,6	5,9	6,0	5,9	
Credit to private sector (y-o-y)	-1,5	-1,2	-1,4	-1,4	-1,1	-1,1	-0,6	-0,6	-0,1	-0,2	-0,2	-0,1	-0,1	-0,5	-0,2	-0,2	-0,6	-0,6	-0,8	0,1	0,3	0,7	0,4	1,5	1,9	2,4	
Deposits of domestic private sector (y-o-y)	7,3	7,4	6,2	5,9	6,3	6,2	5,5	5,5	6,0	5,7	6,0	6,5	6,2	5,8	6,5	6,5	6,7	6,3	7,7	8,8	8,6	9,4	8,4	9,5	9,0	10,3	
Interest rate on new time deposits (households, CPI deflated)	-0,4	-0,5	-1,2	-0,4	0,0	0,2	0,0	-0,4	-0,4	0,3	0,8	0,5	0,7	0,5	1,1	0,1	-0,4	-0,5	0,1	0,3	1,7	1,4	1,8	2,1	2,2	2,2	
Economic sentiment index (EU Commission, Greece)	106	102	102	103	103	101	103	103	102	102	103	107	110	108	108	108	110	110	113	109	99	89	88	91	91	90	92
Economic sentiment index (EU Commission, Euro area)	111	111	110	110	108	106	106	105	104	105	103	102	103	101	100	101	101	103	103	94	65	68	76	82	88	91	91
Exports (excl. oil & shipping, y-o-y, 6m mov.avg)	11,7	11,3	11,4	11,9	9,6	7,9	7,4	6,3	6,0	5,6	4,7	5,2	3,9	5,5	4,2	2,4	4,7	5,6	6,3	4,2	1,3	-1,9	-3,8	-6,0	-8,7		
Imports (excl. oil & shipping, y-o-y, 6m mov.avg)	9,2	10,1	12,4	12,2	10,8	9,5	8,9	7,8	5,6	7,5	5,6	6,0	3,7	4,4	2,1	-0,5	0,7	0,5	1,4	-1,7	-4,4	-9,2	-9,9	-12,0	-12,7		
SETE - Arrivals at major Greek airports (y-o-y)	8,3	10,2	7,8	29,0	23,9	10,4	17,8	-0,2	18,7	-0,2	2,0	1,4	4,4	1,3	5,7	18,5	7,8	8,3	2,5	-43,7	-100	-100	-97,3	-71,1	-56,7	-64,4	
AIA - International passenger traffic development (y-o-y)	14,0	11,9	12,7	13,5	8,7	8,7	11,6	9,3	9,3	8,4	10,2	6,9	8,2	8,6	7,2	6,6	10,9	10,2	6,4	-62,0	-99,2	-98,4	-93,4	-76,1	-66,2	-72,3	-72,2
Egani net flows (s.a. series, in thousands)	10,5	10,6	8,4	11,8	12,2	9,6	14,3	9,8	15,5	10,0	10,3	9,4	17,1	9,0	8,8	11,0	7,8	11,7	9,2	-75,0	-89,6	-59,9	9,2	94,0	27,2	39,1	
Estimation of total electricity demand in the network (y-o-y)	-5,3	2,2	0,7	-1,5	6,0	10,2	6,7	1,3	8,1	-1,3	6,0	3,4	10,0	0,7	-0,1	-6,8	-6,2	-3,2	-1,5	0,3	-6,9	-4,5	-13,1	-0,8	-7,9	1,2	
VAT on other goods & services (y-o-y)	-7,4	67,8	-4,0	-4,0	-6,9	4,4	9,7	14,2	-10,5	23,2	-2,1	3,6	1,1	1,3	-0,8	1,8	1,7	-0,8	1,1	-23,7	9,1	-51,1	-17,1	-15,4	-10,0	-10,8	
Business Turnover (y-o-y, double-entry bookkeeping)	...	...	...	...	...	3,7	19,1	-1,0	12,1	5,4	-5,1	6,4	2,4	2,6	-2,2	-2,6	-0,6	9,3	-3,8	-11,2	-32,2	-27,1	-16,4	-17,5	-20,1		

Color map scale

Rapid contraction Moderate contraction Slow contraction Stabilization Slow expansion Moderate expansion Rapid expansion

Sources: NBG, BoG, ELSTAT, Ministry of Finance, Ministry of Labor & Social Affairs, EU Commission, IHS Markit, IOBE, SETE, AIA, ADMIE

Google mobility indicators for Greece

	February		March				April				May				June				July				August				September				October				November		
	Week 3	Week 4	Week 1	Week 2	Week 3	Week 4	Week 1	Week 2	Week 3	Week 4	Week 1	Week 2	Week 3	Week 4	Week 1	Week 2	Week 3	Week 4	Week 1	Week 2	Week 3	Week 4	Week 1	Week 2	Week 3	Week 4	Week 1	Week 2	Week 3	Week 4	Week 1	Week 2	Week 3	Week 4	Week 1	Nov. 7-8	
Retail and recreation (percentage change from baseline)	2	5	-1	-26	-64	-79	-75	-71	-76	-68	-58	-40	-36	-26	-15	-11	-9	-3	2	7	12	13	16	13	12	10	7	6	-3	-5	-5	-7	-12	-14	-33	-70	
Grocery and pharmacy (percentage change from baseline)	1	15	-4	11	-4	-33	-23	0	-17	-2	-5	12	12	16	17	8	10	13	15	15	18	17	21	14	23	12	12	13	11	14	12	9	9	6	9	-10	
Transit stations (percentage change from baseline)	-1	5	-3	-22	-58	-77	-73	-67	-69	-60	-51	-34	-27	-23	-15	-17	-17	-12	-6	-7	-4	-2	-1	-5	-4	-6	-5	-6	-10	-9	-8	-11	-12	-20	-31	-63	
Workplaces (percentage change from baseline)	2	3	-7	-15	-45	-60	-56	-52	-61	-47	-42	-29	-21	-12	-9	-13	-9	-7	-11	-11	-11	-14	-18	-28	-23	-18	-12	-11	-11	-10	-10	-9	-10	-18	-22	-37	
Residential (percentage change from baseline)	0	-1	1	7	18	26	24	22	24	19	16	10	7	5	3	2	2	0	-1	-2	-3	-3	-3	-1	-2	-1	-1	-2	1	1	-1	1	2	4	7	16	
Difference* from the baseline in per cent	1	4	-4	-21	-56	-72	-68	-63	-69	-58	-50	-34	-28	-20	-13	-14	-12	-7	-5	-3	-1	-1	-1	-1	-6	-5	-5	-4	-4	-8	-8	-7	-9	-11	-17	-28	-56

*Aggregate indicator corresponds to the average of 3 main categories: retail & recreation, transit stations, and workplaces.

Sources: Google COVID-19 Community Mobility Reports, NBG estimates



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