

# Tracking Greek GDP in high frequency

September 24 2020

GREECE

### GDP increases at a strong monthly pace of 5.5% in July-August, although the flattening of high frequency indicators points to a slowing recovery in September

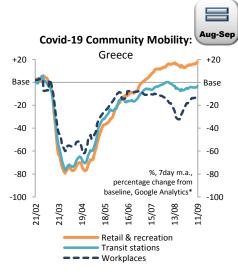
NBG's high frequency forecast of Greek GDP growth for Q3:2020 has been updated to include the most recent data that became available in August and September.

- According to the latest estimates, the economic recovery continued with monthly (s.a.) GDP growth of 6.0% in July and 4.7% in August following a 14.0% q-o-q (s.a.) decline in Q2:2020 (-15.2% y-o-y), which was very much in line with the forecast derived from NBG's high-frequency indicators model.
- On a yearly basis for July, the GDP decline is now estimated at -6.8% y-o-y against a preliminary estimate of -4.4% y-o-y (+10.8% s.a. m-o-m), as the latest releases of conjunctural indicators point to a slower-than-previously-expected increase in activity than that from the high frequency data (the previous estimate for July had been based on a limited information set comprising, mainly, mobility and electricity demand data).
- Looking at individual indicators, business turnover contracted by 17.5% y-o-y in July 2020 compared with -25.0% y-o-y in Q2, up by 6.6% on a monthly basis (against an increase of 18.3% m-o-m in June, following the lifting of the lockdown). A delayed opening of the tourism season weighed on the performance of several sectors and especially on manufacturing turnover (-13.3% y-o-y in July, -0.4% m-o-m). On the positive side, the pickup in tourism in August is expected to support demand and business activity.
- Similarly, retail trade turnover recovered further on a monthly basis in July (+10.2% m-o-m) but remained 6.1% below its level in July 2019.
- The decline in the non-oil trade deficit of 19.3% y-o-y in July (current prices) due to a rebound in non-oil exports of +9.2% y-o-y (+13.1% m-o-m) partly compensated for the drag from lower domestic demand.
- August-September high frequency indicators are mixed. On the one hand, mobility trends (including non-residents) and international arrivals showed a further improvement in August (especially in the first half of this month). Encouragingly, the decline in international arrivals at Athens International Airport (AIA) slowed to 66.2% y-o-y in August from -76.1% y-o-y in July and -96.7% in Q2:2020.
- On the other hand, economic sentiment stabilized to 90.7 in August (90.8 in July and 87.6 in June) but remains c. 9% below its 6-year average. The improvement in services confidence has been offset by a small deterioration in all other sectoral indicators of the survey in this month. Manufacturing PMI picked up slightly to 49.4 in August (same as in June 2020, with domestic and export orders losing steam m-o-m).
- Overall, NBG's high frequency estimates point to a significant quarterly increase in GDP of c. 8.0% q-o-q, on a seasonally-adjusted basis, in Q3 (-8.4% y-o-y), which implies an average recession in 9M:2020 of c. 8.0%. This outcome would be in line with our baseline estimate for a GDP drop of 7.5% in FY:2020, although deteriorating epidemic trends increase downside risks for the rest of the year.

#### **NBG: GDP growth estimates** based on high frequency data 6 4 2 O -2 -4 -6 -8 -10 -14 -12 -18 -16 -22 -20 -26 -24 2017Q1 2017Q2 2017Q3 2017Q4 2018Q1 2018Q2 2018Q3 2019Q1 2019Q2 2019Q3 2019Q3 2019Q3 2019Q4 2019Q4 q-o-q/m-o-m change (PCA) left axis - - HF estimate Bridge/PCA (July 2020) GDP growth (actual data) MIDAS-quarterly estimate

HF estimate Bridge/PCA (September 2020)





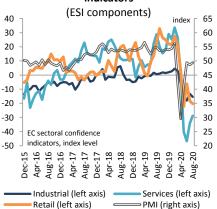
Sources: Google COVID-19 Community Mobility Reports, EL.STAT. & NBG Francomic Analysis Division estimates

### Key drivers of GDP estimates in high frequency (as of September 23, 2020)



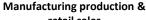
**Economic sentiment remained flat in August** with a tourism-related pick up in the services confidence offset by a small weakening in other sectors

#### PMI & main sectoral confidence indicators





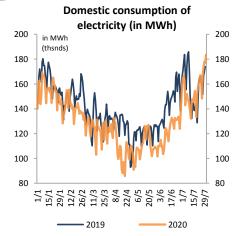
Manufacturing output and retail sales recorded significant monthly expansions for a third consecutive month







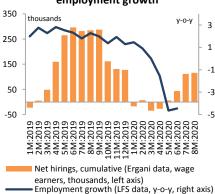
Electricity consumption rebounded strongly in the second half of July, presaging a strengthening in production and tourism





The opening of tourism and State measures reduced the cumulative hiring gap against 8M 2019 to below 170K jobs in August but the underlying impact is reflected on LFS data

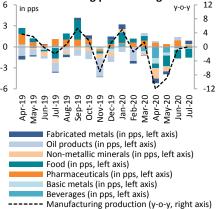
#### Cumulative net hirings and employment growth



July

**Greek manufacturing production** stabilized on an annual basis in July 2020 (-7.2% y-o-y in Q2) despite a cooling off in key sectors (food, pharmaceuticals)

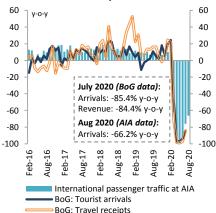
## Key sectoral contributions in manufacturing production growth





The pace of decline in international arrivals to Athens airport slowed to -66.2% y-o-y in August from -76.1% y-o-y in July

#### Tourism receipts & arrivals



Sources: EL.STAT., BoG, Ministry of Labor and Social Affairs, European Commission, AIA, Energy Ex. Group, IHS Markit & NBG Econ. Analysis Division estimates

## High frequency indicators used in estimating GDP growth

II (index level) ustrial confidence (index level) nufacturing production (y-o-y) ustrial production (y-o-y)	-1,6 1,5			53,6	52.1											Sep-19		Nov-1	Dec-1		Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20
nufacturing production (y-o-y)	1,5	5,4			23,1	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
			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
ustrial production (y-o-y)		7,2	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	4,9	-1,4	1,4	-12,0	-9,0	-0,6	0,0	
	1,3	3,5	-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	-0,4	-3,1	0,1	-10,5	-7,9	-4,6	-0,2	
vices confidence (index level)	21,0	15,9	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
nsumer confidence (index level)	-49	-47	-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
ail confidence (index level)	2,6	14,9	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
ail trade volume (y-o-y)	1,7	2,4	3,6	2,9	-4,1	3,0	-0,1	-3,2	-3,1	4,9	-2,5	-2,4	2,4	-2,2	2,2	5,0	7,2	3,7	-1,5	6,2	2,5	-2,4	-24,6	-4,9	-7,3		
nstruction Permits (y-o-y)	23	17	13	33	38	51	18	-9	-25	-20	1	6	1	22	38	60	-10	7	47	44	70	54	-18	5	11		
use prices (y-o-y, quarterly series)	1,3	2,3	2,3	2,3	3,2	3,2	3,2	5,5	5,5	5,5	7,6	7,6	7,6	8,3	8,3	8,3	7,6	7,6	7,6	6,9	6,9	6,9					
nstruction confidence (index level)	-48	-46	-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
ployment (y-o-y)	2,0	2,0	1,7	2,0	2,4	2,4	2,6	2,0	2,8	2,3	2,8	2,5	2,3	1,8	2,3	2,0	1,4	1,9	1,3	1,5	0,9	0,0	-1,5	-4,6	-4,4		
erest rate on new private sector loans (CPI deflated)	3,4	3,9	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	
dit to private sector (y-o-y)	-1,2	-1,5	-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	
posits of domestic private sector (y-o-y)	7,5	7,4	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	
erest rate on new time deposits (households, CPI deflated)	-0,4	-0,2	-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	
nomic sentiment index (EU Commision, Greece)	104	106	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
onomic sentiment index (EU Commision, Euro area)	112	112	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
oorts (excl. oil & shipping, y-o-y, 6m mov.avg)	12,2	11,3	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	
ports (excl. oil & shipping, y-o-y, 6m mov.avg)	7,7	7,9	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	
E - Arrivals at major Greek airports (y-o-y)	14,6	9,6	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						
A - International passenger traffic development (y-o-y)	14,4	12,4	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
ni net flows (s.a. series, in thousands)	11,6	10,7	10,1	10,3	9,1	11,5	12,0	10,4	13,7	11,0	15,0	9,6	9,8	9,8	14,2	10,8	9,6	10,7	9,1	11,6	9,8	-75,5	-85,2	-65,2	9,5	94,2	20,3
imation of total electricity demand in the network (y-o-y)	-0,1	-3,7	-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	
T on other goods & services (y-o-y)	0,2	7,1	-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	
siness 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	
or map scale																											

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

	Febr	uary		March			April				May				June				July				August				Sep.	
	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
Retail and recreation (percentage change from baseline)	2	5	-1	-26	-64	-79	-75	-71	-76	-68	-57	-39	-35	-27	-15	-12	-9	-4	2	7	12	13	16	13	14	16	14	22
Grocery and pharmacy (percentage change from baseline)	1	15	-4	11	-4	-33	-23	0	-17	-2	-3	12	13	13	17	8	11	12	15	15	18	17	21	14	26	19	21	17
Transit stations (percentage change from baseline)	-1	5	-3	-22	-58	-77	-73	-67	-69	-60	-49	-33	-27	-24	-15	-17	-16	-13	-6	-7	-4	-2	-1	-5	-4	-5	-5	-5
Workplaces (percentage change from baseline)	2	3	-7	-15	-45	-60	-56	-52	-61	-47	-42	-27	-22	-15	-9	-13	-8	-9	-11	-11	-11	-14	-18	-28	-24	-19	-13	-18
Residential (percentage change from baseline)	0	-1	1	7	18	26	24	22	24	19	16	10	7	6	3	2	1	0	-1	-2	-3	-3	-3	-1	-2	-1	-1	0
Difference* from the baseline in per cent $\rightarrow \rightarrow \rightarrow \rightarrow$	1	4	-4	-21	-56	-72	-68	-63	-69	-58	-49	-33	-28	-22	-13	-14	-11	-9	-5	-3	-1	-1	-1	-6	-5	-3	-1	0

Color map scale

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

\*Rapid Moderate Slow Stabilization Stabilization Contraction Contraction Contraction Contraction Contraction Stabilization growth trend

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



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