

Economic Analysis Division

Southeastern Europe & Mediterranean Emerging Market Economies





NBG - Economic Analysis Division

Emerging Markets Analysis

Head:

Konstantinos Romanos-Louizos

≅: +30 210 33 41 225⊠: romanos.louizos.k@nbg.gr

Louiza Troupi

≅: +30 210 33 41 696 ⊠: troupi.louiza@nbg.gr

Georgios Ntinenis

Bi-Weekly Report 23 August – 5 September 2022

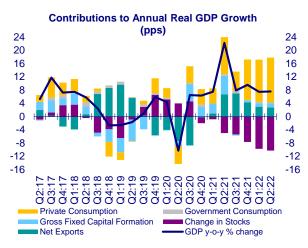
Countries in Focus in this Issue: Türkiye, Bulgaria & Egypt

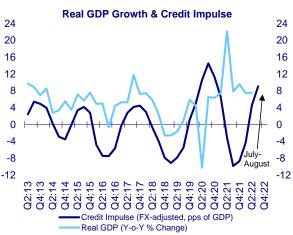
TÜRKIYE1
GDP growth remained resilient in Q2:22 (up 7.6% y-o-y), thanks to strong monetary policy support
The outlook for the remainder of the year appears bleak, reflecting the implications of weakening TRY and skyrocketing inflation
BULGARIA
Higher global energy prices have kept the current account deficit under pressure since the beginning of the year
Tourism activity has rebounded so far in 2022, yet remaining below its pre-COVID-19 level
EGYPT3
A sizeable FX financing gap points to further depreciation of the EGP
APPENDIX:
DETAILED MACROECONOMIC DATA
REGIONAL SNAPSHOT: MACROECONOMIC INDICATORS 7
FINANCIAL MARKETS 8

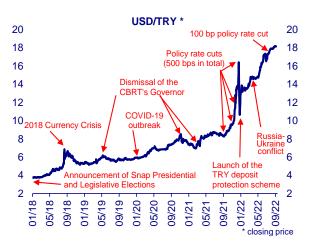


Türkiye

B+ / B2 / B+ (S&P/ Moody's / Fitch)







	5 Sep.	3-M	F	6-	M F	12-M F
1-m TRIBOR (%)	14.6	14.6 14.5		14.5		14.0
TRY/USD	18.2	18.8	18.80		9.50	20.50
Sov. Spread (2025, bps)	617	62	620		520	550
	5 Sep	1-W	%	Υ٦	ΓD %	2-Y %
ISE 100	3,358	6.1	6.1		8.08	209.2
	2019	2020	20	21	2022F	2023F
Real GDP Growth (%)	0.9	1.8	11	.0	5.2	3.0
Inflation (eop, %)	11.8	14.6	36	.1	63.0	30.0
Cur. Acct. Bal. (% GDP)	0.7	-4.9	-1.	.7	-4.8	-3.4

Sources: Reuters, CBRT, BDDK, Turkstat & NBG estimates

-2.9

Fiscal Bal. (% GDP)

GDP growth remained resilient in Q2:22 (up 7.6% y-o-y), thanks to strong monetary policy support. Recall that in an (unexpected) move in late-2021, the CBRT proceeded with a massive policy easing, involving a whopping 500 bp cut in its key rate (to 14.0%). Against this backdrop, credit expansion progressively gained steam, eventually providing a strong impulse to economic growth in Q2:22 (see chart). Worryingly, however, the monetary policy boost exacerbated further Türkiye's vulnerabilities, including stubbornly high inflation and a weak external position (with net FX reserves having long turned negative), bringing about a sharp depreciation of the TRY (down c. 50.0% against the USD between October '21 and June '22), while fueling inflation, at the same time (to c. 80.0% y-o-y in June '22 from 20.0% in October '21).

That said, economic momentum remained strong in Q2:22, with GDP growing by a solid 2.1% q-o-q s.a. following a rise of 0.7% in Q1:22. On an annual basis, GDP growth remained broadly flat at 7.6% y-o-y. A look at the breakdown suggests that private consumption remained the main growth driver (see chart), as deeply negative real rates discouraged savings, while rapidly rising inflation expectations prompted a frontloading in spending. Amid heightened uncertainty, fixed investment expanded further in Q2:22, yet at a lackluster pace. At the same time, net exports continued to add to overall growth, benefitting from strong global pent-up demand, including for tourism services. Unsurprisingly, against the backdrop of strong domestic demand and robust exports, stock depletion continued at a fast pace in Q2:22.

The outlook for the remainder of the year appears bleak, reflecting the implications of weakening TRY and skyrocketing inflation. As a result of the CBRT's unconventional monetary policy (with the latter proceeding with a further 100 bp rate cut in August), Türkiye appears to have been caught in a vicious cycle of weakening TRY and high inflation. To make things worse, the jump in global commodity prices, in the aftermath of the Russia-Ukraine conflict, has been translated into much higher FX needs for Türkiye, putting an extra burden on the currency. Against this backdrop, the continuing depreciation of the TRY (down by another 8.5% against the USD since June) comes as no surprise.

Looking ahead, we expect the impact of the accumulated depreciation of the TRY and concomitant skyrocketing inflation to soon prevail on that of loose financing conditions, eventually suppressing GDP growth.

Indeed, private consumption should continue to expand during the remainder of the year, but at a drastically slower pace than that observed in H1:22, reflecting the sharp drop in real disposable income. Weakening consumer confidence is also expected to take a toll. Similarly, despite the high capacity utilisation in the manufacturing sector and negative real rates, we expect fixed investment to stagnate, as corporate balance sheets have come under stress, due to the weaker TRY (note that the NFCs' open FX position stands at 15% of GDP).

At the same time, net exports' contribution to overall growth should decrease after the end of the tourism season (yet remain positive) in line with slowing economic growth in Türkiye's trade partners. Interestingly, and in contrast to previous episodes, surging inflation has not allowed Türkiye's external competitiveness to benefit from the weaker TRY, with the REER having embarked on an upward trend since early-2022.

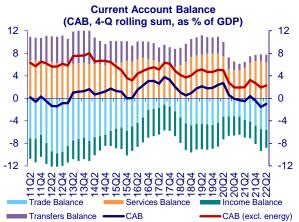
All said, we see FY:22 GDP growth at a solid 5.2%. Despite a more favourable global backdrop next year (especially in H2), we see FY:23 GDP growth moderating to 3.0%, due to a much smaller carry-over effect. Risks to our forecast are tilted to the downside, as, in the absence of a bold policy adjustment, market volatility is unlikely to ease. Worryingly, with the political backdrop becoming less conducive ahead of the next year's elections, such an adjustment is hard to be foreseen.

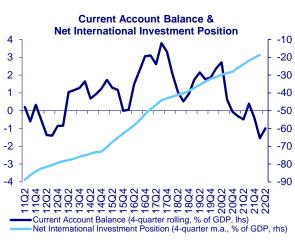
-3.5

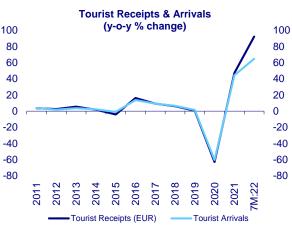


Bulgaria

BBB / Baa2 / BBB (S&P / Moody's / Fitch)







	5 Sep.	3-M F	7	6-1	1 F	1	2-M F	
Base Interest Rate (%)	0.0	0.3		0.	.6	0.9		
BGN/EUR	1.96	1.96		1.9	96	1.96		
Sov. Spread (2022, bps)	124	130	0 13		30	120		
	5 Sep.	1-W %	6	YTI	O %		2-Y %	
SOFIX	610	0.4		-4	.1		40.1	
	2019	2020	2	021	202	2F	2023F	
Real GDP Growth (%)	4.0	-4.4		4.2	3.9	9	2.2	
Inflation (eop, %)	3.8	0.1		7.8	13.2	2	5.6	
Cur. Acct. Bal. (% GDP)	1.9	-0.1	-	0.4	4 -2.0		-1.0	
Fiscal Bal. (% GDP)	-1.0	-2.9	-	2.9	-3.0	0	-3.0	
Sources: Reuters, NSI, BNB & NBG estimates								

Higher global energy prices have kept the current account deficit (CAD) under pressure since the beginning of the year. In H1:22, the current account balance deteriorated by 0.7 pps y-o-y to a deficit of 0.4% of GDP, driven by the trade deficit (up 1.3 pps y-o-y). Indeed, with higher global energy prices, in the aftermath of the Russia-Ukraine conflict, feeding into global inflation, and domestic demand remaining strong, at the same time, imports of goods surged in H1:22 (up 11.0 pps of GDP y-o-y, with energy imports accounting for 25% of the rise). Stronger tourism inflows (see below) and higher transfers (mainly remittances) partly compensated for the deterioration in the trade deficit.

Looking ahead, pressures on the CAD should gradually ease in H2:22, in line with slowing domestic demand. Still, we see the CAD widening to a 13-year high of 2.0% of GDP in FY:22 from 0.4% in FY:21. Assuming some improvement in terms-of-trade next year, the CAD should narrow to 1.0% of GDP (below the level implied by economic fundamentals and desirable policy settings -- c. 13/4% of GDP, IMF June '22), helping to cement further Bulgaria's strong external position (see chart).

Importantly, although tightening global liquidity conditions and elevated risk aversion, cloud the external financing outlook, the continuous flow of EU funds should help close the external financing gap. Indeed, after temporarily falling this year, Bulgaria's FX reserves should return to their end-2021 level by end-2023, ensuring the stability of the currency board. The latter, together with the BGN's inclusion into the ERM-II (a precursor to EUR adoption), provide solid policy anchors, alleviating concerns over the ongoing political crisis (note that, in early-October, Bulgaria will hold its 4th parliamentary vote in less than 2 years).

Tourism activity has rebounded so far in 2022, yet remaining below its pre-COVID-19 level. Arrivals from abroad picked-up strongly in 7M:22 (up 61.9% y-o-y), in line with the easing of COVID-19 social distancing and travel restrictions and the concomitant improvement in tourist confidence, on the one hand, and strong pent-up demand, on the other hand. Note that the figure excludes arrivals from Ukraine, which surged in 7M:22 (up 101.3% y-o-y), due to the massive inflow of refugees following the outbreak of the Russia-Ukraine conflict.

In terms of source countries, the recovery is largely driven by bordering Greece, Romania and Turkey (together adding 26.4 pps to overall growth) as well as the UK (adding another 5.7 pps). Interestingly, despite the EU-wide ban on Russian flights, the number of Russian tourists arriving to Bulgaria (accounting for c. 2.0% of total arrivals in FY:21) increased markedly in 7M:22 (up 34.6% y-o-y), with the bulk of them reportedly traveling via Serbia, Turkey and Armenia.

Still, the y-t-d performance is below pre-COVID-19 standards, accounting for 78% of tourist arrivals in 7M:19, with Bulgaria underperforming compared with its regional competitors, namely Greece and Turkey (where arrivals currently account for 85% and 93% of their pre-COVID-19 levels, respectively), despite a better starting point.

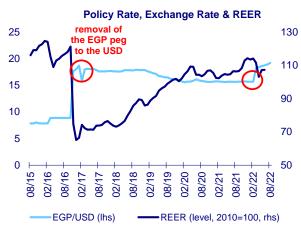
Note that tourism receipts have been growing at a much faster pace than that of arrivals (up 92.3% y-o-y in H1:22), implying much higher spending per tourist compared with pre-pandemic times, largely due to rapidly rising inflation.

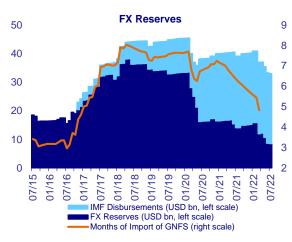
All said, we see tourism arrivals growing by c. 40% in FY:22 to c. 80% of their pre-pandemic level, placing the sector among the leaders in terms of contribution to economic growth. Note that the tourism sector's weight in GDP reached 5.0% in FY:21, still down from a significant 10% in FY:19. Full recovery is unlikely to be seen earlier than in 2024, with next year's growth rate projected to slow down markedly compared with FY:22, reflecting not only the fading out of the reopening effect but also slowing economic growth in Bulgaria's main source countries.

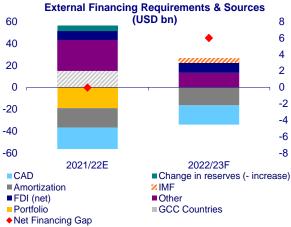


Egypt

B / B2 / B+ (S&P / Moody's / Fitch)







O/N Interbank Rate (%)	11.3	12.	3	12.8	12.8
EGP/USD	19.2	19.	7	20.0	20.6
Sov. Spread (2025, bps)	814	780	0	700	600
	5 Sep.	1-W	% Y	TD %	2-Y %
HERMES 100	1,143	1.2	2	-10.7	3.2
	19/20	20/21	21/22	22/23F	23/24F
Real GDP Growth (%)	19/20 3.6	20/21	21/22 6.2	22/23F 3.6	23/24F 5.8
Real GDP Growth (%) Inflation (eop. %)					
. ,	3.6	3.3	6.2	3.6	5.8

3-M F

6-M F 12-M F

Sources: Reuters, CBE & NBG estimates

A sizeable FX financing gap points to further depreciation of the EGP. Despite a significant 15.0% devaluation of the EGP against the USD in March (that eventually broke the currency's 2-year *de-facto* peg to the USD) and the CBE's subsequent policy tightening (including policy rate hikes of 300 bps), the EGP remains still under excess pressure. Indeed, Egypt's currency has lost another 18.5% of its value since March, currently trading at 19.2 against the USD, a level last seen in 2016. In our view, this trend comes on the back of the abrupt worsening of Egypt's external imbalances this year, driven by:

i) a bulging current account deficit (CAD), in the aftermath of the Russia-Ukraine crisis, reflecting not only Egypt's reliance on imports to cover its basic food needs (note that the country is the largest global wheat importer, with the price of the latter having increased by c. 50% y-o-y in 7M:22) but also the significance of arrivals from Russia and Ukraine (combined accounting for a sizeable 30% of total arrivals) for the domestic tourism sector (accounting for 18% of GNFS exports). The deterioration in the economy's terms of trade (with the REER having appreciated by a sizeable 50% over the last 5 years, losing the competitiveness gains derived from the 2016 devaluation) has also taken a toll. Note that the CBE has imposed some import restrictions since March (by mandating importers to use letters of credit for their imports), to rein in import growth, with limited success. Importantly, the CAD would have been much larger, had Egypt -- in its capacity as a net gas exporter -- not benefited from the hike in global energy prices.

ii) massive portfolio outflows in the domestic market, after a sudden pull-out in March, with the latter being part of a broader sell-off in emerging markets, reflecting the abrupt deterioration in global risk appetite, in the wake of the Russia-Ukraine conflict and Fed's tightening. Amid heavy withdrawals, FX reserves plunged to a 5-year low of USD 33.1bn in July (equivalent to a mere USD 8.5bn adjusted for IMF disbursements). The drawdown in FX reserves would have been larger had Gulf Cooperation Council (GCC) countries not provided significant non-market financing (see also below).

To make things worse, large FX debt redemptions are looming ahead (projected at USD 16.5bn in FY:22/23). Overall, total external financing needs to cover debt repayments and the CAD are projected at a sizeable USD 34bn through June 2023, slightly exceeding FX reserves' current level.

Worryingly, available financing sources remain limited. Indeed, amid heightened uncertainty and tightening global financing conditions, private FX financing flows are unlikely to revive soon. At the same time, the prospect of *ad-hoc* bilateral support remains uncertain. Note that c. 80% of pledged commitments from GCC countries (worth a total of USD 22bn) have been already disbursed.

All said, according to our baseline scenario, Egypt would need to secure at least USD 10.0 bn in FY:22/23 to keep FX reserves steady. The IMF is likely to cover just a small portion of this gap (with latest reports pointing to a loan facility worth up to USD 4.0bn), given Egypt's large outstanding obligations, exceeding (both the cumulative and annual) access limits.

Against this backdrop, we expect the authorities to allow the EGP to weaken further to help close the FX financing gap. Note that FX flexibility is also considered a *sine qua non* condition for the new agreement with the IMF. All in all, we project the EGP weakening by a further 8.5% against the USD by end-2023 (implying a c. 10% depreciation in REER terms).



DETAILED MACROECONOMIC DATA

	TÜRKIYE				
	2019	2020	2021	2022f	2023f
	Real Secto	r			
Nominal GDP (USD million)	760,669	718,977	811,282	782,148	902,689
GDP per capita (EUR)	8,170	7,458	8,053	8,642	10,101
GDP growth (real, %)	0.9	1.8	11.0	5.2	3.0
Unemployment rate (%, aop)	13.7	13.2	12.0	11.5	11.3
	Prices and Bar	nking			
Inflation (%, eop)	11.8	14.6	36.1	63.0	30.0
Inflation (%, aop)	15.4	12.3	19.3	71.2	35.0
Loans to the Private Sector (% change, eop)	10.8	34.8	37.0		
Customer Deposits (% change, eop)	23.5	33.0	51.5		
Loans to the Private Sector (% of GDP)	61.4	70.9	68.0		
Retail Loans (% of GDP)	13.9	16.8	14.5		
Corporate Loans (% of GDP)	47.6	54.1	53.4		
Customer Deposits (% of GDP)	54.6	62.1	65.8		
Loans to Private Sector (% of Cust. Deposits)	112.6	114.1	103.2		
Foreign Currency Loans (% of Total Loans)	38.3	34.2	42.2		
	External Acco	unts			
Merchandise exports (USD million)	182,200	168,387	224,691	250,775	266,924
Merchandise imports (USD million)	198,981	206,250	253,978	313,368	329,781
Trade balance (USD million)	-16,781	-37,863	-29,287	-62,593	-62,856
Trade balance (% of GDP)	-2.2	-5.3	-3.6	-8.0	-7.0
Current account balance (USD million)	5,303	-35,537	-13,587	-37,909	-30,779
Current account balance (% of GDP)	0.7	-4.9	-1.7	-4.8	-3.4
Net FDI (USD million)	6,628	4,592	7,395	7,765	9,318
Net FDI (% of GDP)	0.9	0.6	0.9	1.0	1.0
International reserves (USD million)	105,696	93,277	111,181	100,000	105,000
International reserves (Months ^a)	5.6	4.9	4.7	3.1	3.6
	Public Finan	ce			
Primary balance (% of GDP)	-0.6	-0.8	-0.2	-0.8	-0.8
Fiscal balance (% of GDP)	-2.9	-3.4	-2.7	-3.5	-3.5
Gross public debt (% of GDP)	32.6	39.7	42.0	43.0	44.0
	External Debt	t			
Gross external debt (USD million)	415,983	432,848	441,064	460,000	485,000
Gross external debt (% of GDP)	54.7	60.2	54.4	58.8	53.7
External debt service (USD million)	84,967	70,931	74,311	80,000	85,000
External debt service (% of reserves)	80.4	76.0	66.8	80.0	81.0
External debt service (% of exports)	35.9	37.5	27.6	25.5	25.5
	inancial Mark	ets			
Policy rate (Effective funding rate, %, eop)	11.4	17.0	14.0	13.0	12.0
Policy rate (Effective funding rate, %, aop)	20.7	10.5	17.6	13.6	12.5
1-Y T-bill rate (%, eop)	11.3	15.1	22.2	17.0	15.0
Exchange rate: USD (eop)	5.95	7.43	13.32	19.00	21.00
Exchange rate: USD (aop)	5.68	7.02	8.89	16.60	20.00

f: NBG forecasts; a: months of imports of GNFS



	BULGARIA				
	2019	2020	2021f	2022f	2023f
	Real Sector				
Nominal GDP (EUR million)	61,557	61,330	67,871	80,602	87,895
GDP per capita (EUR)	8,856	8,867	9,872	11,794	12,939
GDP growth (real, %)	4.0	-4.4	4.2	3.9	2.2
Unemployment rate(ILO definition, %, aop)	5.3	6.1	5.3	4.6	4.6
P	Prices and Bank	ing			
Inflation (%, eop)	3.8	0.1	7.8	13.2	5.6
Inflation (%, aop)	3.1	1.7	3.3	14.3	6.7
Loans to the Private Sector (% change, eop)	7.4	4.5	8.3		
Customer Deposits (% change, eop)	10.7	10.2	9.0		
Loans to the Private Sector (% of GDP)	48.6	51.0	49.9		
Retail Loans (% of GDP)	19.4	20.9	21.5		
Corporate Loans (% of GDP)	29.2	30.0	28.4		
Customer Deposits (% of GDP)	66.4	73.5	72.3		
Loans to Private Sector (% of Deposits)	73.2	69.4	68.9		
Foreign Currency Loans (% of Total Loans)	32.4	31.1	27.7		
į	External Accou	nts			
Merchandise exports (EUR million)	29,119	27,272	34,278	40,017	41,093
Merchandise imports (EUR million)	32,028	29,213	37,573	45,082	46,007
Trade balance (EUR million)	-2,908	-1,941	-3,296	-5,065	-4,914
Trade balance (% of GDP)	-4.7	-3.2	-4.9	-6.3	-5.6
Current account balance (EUR million)	1,148	-0,041	-0,271	-1,604	-0,902
Current account balance (% of GDP)	1.9	-0.1	-0.4	-2.0	-1.0
Net FDI (EUR million)	1,238	2,785	1,139	1,651	1,899
Net FDI (% of GDP)	2.0	4.5	1.7	2.0	2.2
International reserves (EUR million)	24,836	30,848	34,597	33,895	34,891
International reserves (Months ^a)	8.0	11.1	9.8	8.1	8.1
	Public Finance	е			
Primary balance (% of GDP)	-0.4	-2.4	-2.5	-2.5	-2.5
Fiscal balance (% of GDP)	-1.0	-2.9	-2.9	-3.0	-3.0
Gross public debt ^b (% of GDP)	20.0	24.7	25.1	26.0	27.0
	External Debt				
Gross external debt (EUR million)	37,716	39,813	41,965	43,364	44,035
Gross external debt (% of GDP)	61.3	64.9	61.8	53.8	50.1
External debt service (EUR million)	6,957	7,041	7,000	8,200	7,100
External debt service (% of reserves)	28.0	22.8	20.2	24.2	20.3
External debt service (% of exports)	17.7	20.4	16.1	16.4	13.7
	inancial Market	s			
Base Interest Rate (%, eop)	0.0	0.0	0.0	0.3	1.0
Base Interest Rate (%, aop)	0.0	0.0	0.0	0.0	0.7
10-Y Bond Yield (%, eop)	0.4	0.4	0.7	2.6	2.8
Exchange rate: EUR (eop)	1.956	1.956	1.956	1.956	1.956
Exchange rate. Eart (cop)					

f: NBG forecasts; a: months of imports of GNFS; b: ESA 2010

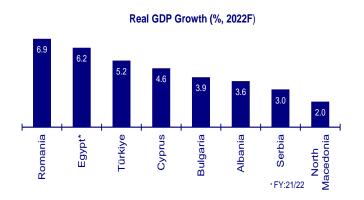


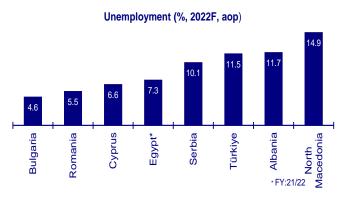
	EGYPT				
	2019/20*	2020/21*	2021/22e*	2022/23f*	2023/24f*
Nominal GDP (USD million)	364,957	403,994	443,897	440,218	480,341
GDP per capita (USD)	3.628	3.926	4.229	4.112	4.399
GDP growth (real, %)	3.6	3.3	6.2	3.6	5.8
Unemployment rate (%, aop)	8.3	7.3	7.3	7.2	7.1
	Prices and Ba	nking			
Inflation (%, eop)	5.6	4.9	13.2	11.7	7.5
Inflation (%, aop)	5.7	4.5	8.4	14.0	8.9
Loans to the Private Sector (% change, eop)	19.5	21.2			
Customer Deposits (% change, eop)	16.5	19.3			
Loans to the Private Sector (% of GDP)	24.8	27.8			
Retail Loans (% of GDP)	7.7	8.9			
Corporate Loans (% of GDP)	17.2	18.9			
Customer Deposits (% of GDP)	68.0	75.1			
Loans to Private Sector (% of Deposits)	36.5	37.0			
Foreign Currency Loans (% of Total Loans)	15.9	12.7			
	External Acc	ounts			
Merchandise exports (USD million)	26,376	28,677	35,557	41,275	48,153
Merchandise imports (USD million)	62,841	70,736	83,082	91,420	101,516
Trade balance (USD million)	-36,465	-42,060	-47,525	-50,145	-53,363
Trade balance (% of GDP)	-10.0	-10.4	-10.7	-11.4	-11.1
Current account balance (USD million)	-11,167	-18,436	-19,646	-17,631	-15,272
Current account balance (% of GDP)	-3.1	-4.6	-4.4	-4.0	-3.2
Net FDI (USD million)	7,102	4,835	8,181	9,408	10,820
Net FDI (% of GDP)	1.9	1.2	1.8	2.1	2.3
International reserves (USD million)	38,202	40,584	33,376	34,876	36,876
International reserves (Months ^a)	6.7	6.5	4.1	4.2	3.9
	Public Fina	nce			
Primary balance (% of GDP)	1.8	1.5	0.7	0.4	0.5
Fiscal balance (% of GDP)	-7.9	-7.4	-7.2	-6.8	-6.2
Gross public debt (% of GDP)	87.2	91.8	92.0	84.7	81.8
,	External De	bt			
Gross external debt (USD million)	123,491	137,860	142,500	152,000	165,000
Gross external debt (% of GDP)	33.8	34.1	32.1	34.5	34.4
External debt service ^b (USD million)	16,100	18,500	22,600	26,300	33,100
External debt service (% of reserves)	42.1	45.6	67.7	75.4	89.8
External debt service (% of exports ^c)	36.5	45.0	42.6	43.6	48.0
External debt dervise (% of experts)	Financial Mar			10.0	10.0
Policy rate (O/N deposit rate, %, eop)	9.3	8.3	11.3	12.8	10.3
Policy rate (O/N deposit rate, %, aop)	11.9	8.5	8.9	12.4	11.5
3-M T-bill rate (%, eop)	13.3	13.2	15.4	16.2	14.5
Exchange rate: USD (eop)	16.11	15.66	18.76	20.40	21,00
Exchange rate: USD (aop)	16.04	15.70	16.45	19.60	20,70
Latinarige rate. USD (aup)	10.04	15.70	10.43	19.00	20,70

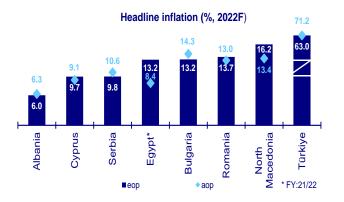
^{*:} fiscal year starting in July and ending in June; f: NBG forecasts; a: months of imports of GNFS

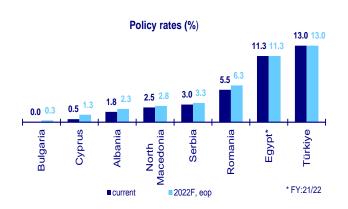


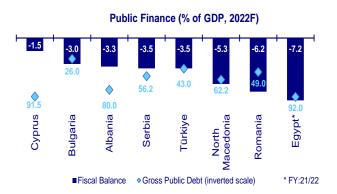
REGIONAL SNAPSHOT: MACROECONOMIC INDICATORS

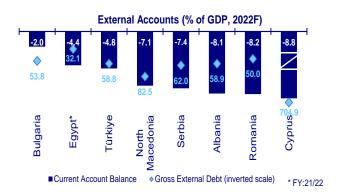








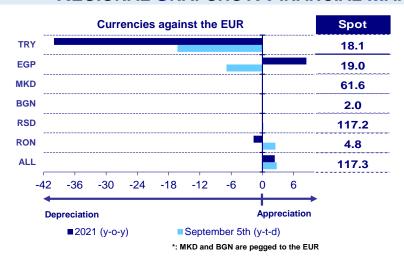


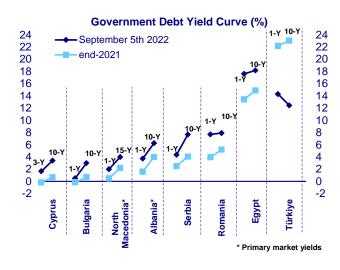




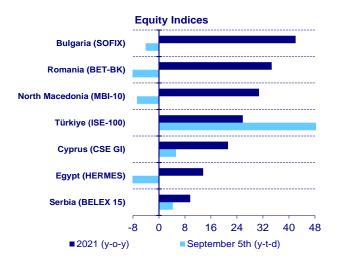


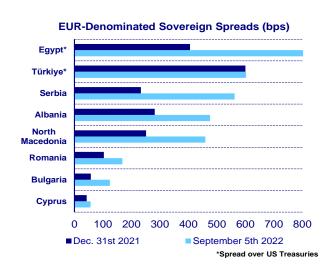
REGIONAL SNAPSHOT: FINANCIAL MARKETS











Sources: Reuters & NBG estimates



DISCLAIMER: This report has been produced by the Economic Research Division of National Bank of Greece S.A., which is regulated by the Bank of Greece and the Hellenic Capital Market Commission, and is provided solely as a sheer reference for the information of experienced and sophisticated investors who are expected and considered to be fully able to make their own investment decisions without reliance on its contents, i.e. only after effecting their own independent enquiry from sources of the investors' sole choice. This report does not constitute investment research or a research recommendation, and as such, it has not been prepared under legal requirements designed to promote investment research independence. The information contained in this report does not constitute the provision of investment advice and under no circumstances is it to be used or considered as an offer or an invitation to buy or sell or a solicitation of an offer or invitation to buy or sell or enter into any agreement with respect to any security, product, service or investment. No information or opinion contained in this report is sufficient to support an investment decision - and should constitute any representation or warranty as to future performance of any financial instrument, credit, currency rate or other market or economic measure. Past performance is not necessarily a reliable guide to future performance. It is duly stated that investments products include investment risks, among which the risk of losing part of or the entire capital invested. National Bank of Greece S.A. and/or its affiliates shall not be liable in any matter whatsoever for any consequences (including but not limited to any direct, indirect or consequential losses, loss of profits and damages) of any reliance on or usage of this report and accepts no legal responsibility to any investor who directly or indirectly receives this report. The final investment decision must be made by the investor and the responsibility for the investment must be taken by the investor.

Any data provided in this report has been obtained from sources believed to be reliable but has not been independently verified. Because of the possibility of error on the part of such sources, National Bank of Greece S.A. does not guarantee the accuracy, timeliness or usefulness of any information. Information and opinions contained in this report are subject to change without notice and there is no obligation to update the information and opinions contained in this report. The National Bank of Greece S.A. and its affiliate companies, its representatives, its managers and/or its personnel or other persons related to it, accept no responsibility, or liability as to the accuracy, or completeness of the information contained in this report, or for any loss in general arising from any use of this report including investment decisions based on this report. This report does not purport to contain all the information that a prospective investor may require. Recipients of this report should independently evaluate particular information and opinions and seek the advice of their own professional and financial advisers in relation to any investment, financial, legal, business, tax, accounting or regulatory issues before making any investment or entering into any transaction in relation to information and opinions discussed herein.

National Bank of Greece S.A. has prepared and published this report wholly independently of any of its affiliates and thus any commitments, views, outlook, ratings or target prices expressed in these reports may differ substantially from any similar reports issued by affiliates which may be based upon different sources and methodologies. This report is not directed to, or intended for distribution to use or use by, any person or entity that is a citizen or resident of or located in any locality, state, country or other jurisdiction where such distribution, publication, availability or use would be contrary to any law, regulation or rule. This report is protected under intellectual property laws and may not be altered, reproduced or redistributed, or passed on directly or indirectly, to any other party, in whole or in part, without the prior written consent of National Bank of Greece. All the views expressed in this report accurately reflect author's personal views solely, about any and all of the subject issues. Further, it is certified that no part of any of the report author's compensation was, is, or will be directly related to the specific or views expressed in this report. All the views expressed in this report. All the report author's compensation was, is, or will be directly or indirectly related to the specific or views expressed in this report.