

## Euro area inflation accelerated to an all-time high of +8.1% year-over-year in May

- US equity markets advanced by +6.6% in the past week, interrupting seven consecutive weeks of decline and trimming their year-to-date losses to -13%. The price decline has been solely driven by multiple contraction, from 21.7x to 17.6x on May 27<sup>th</sup> (see graph page 3). On the other hand, 12-month forward earnings' estimates have been increased by +7% year-to-date to \$236.
- Investors' sentiment was very negative. The American Association of Individual Investors (AAII) survey -- a contrarian indicator -- has revealed early in the past week, that optimism about the direction of the equity market six-months ahead was 19.8% (versus a long-term average of 38%), remaining below 20% for the fourth time in seven weeks.
- Thus, slightly encouraging economic news were adequate to turn sentiment rapidly. US consumption entered Q2 on a strong footing, with real spending increasing by +0.7% mom in April, albeit with consumers drawing down extra savings. On the inflation front, the core PCE index increased by 0.3% mom in April, with the annual rate moderating to 4.9% yoy, from 5.2% yoy in March.
- We expect increased volatility to continue, as central banks' guidance points to significantly higher policy interest rates from current levels, in order to combat inflation. The European Central Bank is expected to exit negative interest rates by the end of the third quarter, with the flash euro area inflation estimate suggesting that price pressures remain acute.
- Specifically, the headline index accelerated to +8.1% yoy in May from +7.4% in April (consensus:+7.7%). More importantly, the core index increased by +3.8% yoy in May from +3.5% in April, versus expectations for a stable outcome, with both metrics at record highs (since 1997). Energy increased on a monthly basis (+2%, nsa), with the annual rate up by +39.2% from +37.5%.
- On Monday, oil prices surpassed the \$120/barrel threshold, for the first time since March 25<sup>th</sup>, as European leaders reached an agreement, in principle, on a 6<sup>th</sup> package of sanctions against Russia that includes, *inter alia*, a partial ban on Russian oil imports. The ban will regard only oil imported by ships, which currently represents more than 2/3 of oil imports from Russia, but will temporarily exclude oil delivered via pipelines, as landlocked Hungary (c. 65% of its oil imports from Russia through the Druzhba pipeline) continued to oppose a complete oil embargo.
- Germany and Poland, which could benefit from the above exemption, have volunteered to stop their oil imports through pipelines by the end of 2022, extending the ban at almost 90% of Russian oil imports.
- Note that Russia was the largest supplier of oil to the EU, accounting for 25% of EU's oil imports in 2021 (26% in 2020), in terms of trade value, well above the second largest supplier (Norway: 9% in 2021). As far as the natural gas imports are concerned, Russia was also the largest EU supplier, responsible for 39% of EU's natural gas imports (42% in 2020), in terms of trade value. However, in April 2022, the natural gas supply from Russia via pipelines declined to 26% of EU gas consumption from 40% in April 2021, as monthly LNG deliveries to Europe reached a new record of 12.6 bcm.

Ilias Tsirigotakis<sup>AC</sup>  
Head of Global  
Markets Research  
210-3341517  
tsirigotakis.ilias@nbg.gr

Panagiotis Bakalis  
210-3341545  
mpakalis.pan@nbg.gr

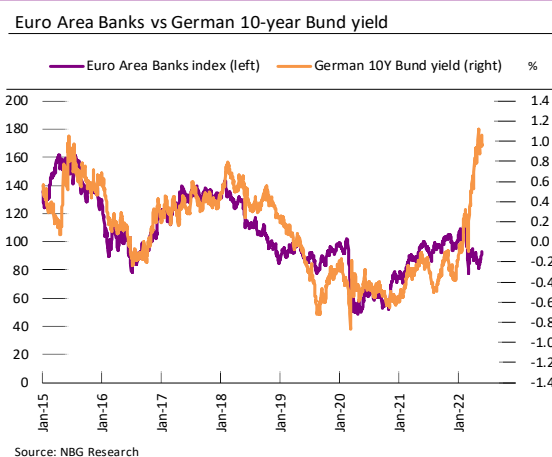
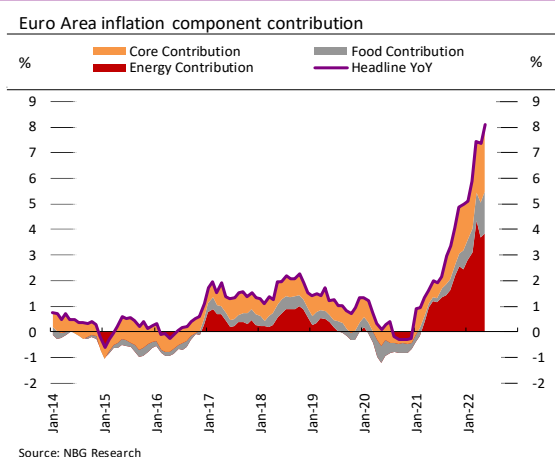
Vasiliki Karagianni  
210-3341548  
karagianni.vasiliki@nbg.gr

Leonidas Patsios  
210-3341553  
Patsios.Leonidas@nbg.gr

### [Table of Contents](#)

Overview\_p1  
Economics & Markets\_p2,3  
Forecasts & Outlook\_p4  
Event Calendar\_p5  
Markets Monitor\_p6  
ChartRoom\_p7,8  
Market Valuation\_p9,10

Charts of the week



## US GDP in Q1:22 was insignificantly revised in the 2<sup>nd</sup> estimate

- **The 2<sup>nd</sup> estimate for real GDP growth in Q1:22 came out at -1.5% qoq saar (+3.5% yoy), from -1.4% qoq saar (+3.6% yoy) in the previous estimate and +6.9% qoq saar in Q3:21, largely as expected.** Regarding the expenditure components, some (mutually offsetting) meaningful revisions took place, albeit the key takeaways were roughly unchanged. These include a resilient private consumption (+3.1% qoq saar) and strong growth for business investment (+9.2% qoq saar) with sharp readings for spending on equipment (+13.2%) and investment in intellectual property products (+11.6%), more than offsetting softness in structures investment (-3.6% qoq saar). At the same time, imports surged by +18.3% qoq saar and was the main drag on overall growth, the deceleration of which though, was mainly due to inventories (drag of 1.1 pp following a sharp positive contribution of 5.3 pps in Q4:21).
- Regarding Q2:22, private consumption (70% of US GDP) entered on a strong note. In the event, in April, personal spending (in constant price terms) rose by 0.7% mom, from +0.5% mom in March. The new motor vehicles component led the increase, up by 4.9% mom, likely supported by pent-up demand (as the supply has been constrained for c. a year now, in view of supply chain shortages, especially regarding semiconductors).

## US overall corporate profits declined on a quarterly basis in Q1:22 according to the national accounts, remaining though strong

- **Corporate profits (including inventory valuation and capital consumption adjustments) of public and private companies (National Income and Product Accounts - NIPA) fell by 8.7% on a seasonally adjusted annualized quarterly basis in Q1:21.** Looking past the quarterly growth which often demonstrates high volatility (even outside the context of the pandemic environment), the (usually more informative) annual profit growth came out at +12.5% compared with +21.0% yoy in Q4:21. Profits from domestic non-financial activities were up by 14.8% on an annual basis, profits from domestic financial activities posted a rise of 7.6% yoy, while the annual pace of growth of profits from abroad stood at +9.6%.

## Euro area PMIs in May maintained an outlook of strong growth in services in view of pent-up demand and of manufacturing output struggling to grow

- **The composite PMI decreased by 0.9 pts to 54.9 in May, slightly below consensus estimates for 55.0.** The services PMI declined by 1.4 pts, albeit to a still solid 56.3, as activity in tourism & recreation continued to expand robustly on the back of pent-up demand following the easing of the public health crisis. At the same time, the manufacturing PMI fell by 1.1 pt to 54.4, with the output component (which is incorporated in the calculation of the headline composite index) though, continuing to struggle to remain above the expansion/contraction threshold of 50.0 (+0.5 pts to 51.2), as production is restrained by supply chain hindrances (fresh disruptions related to the war in Ukraine and to lockdowns in China, exacerbated the already existing challenges). According to S&P Global, industry-wise, a partial recovery of automobiles output (albeit from low levels as the sector had been a major

laggard in previous months) offset a decline in many other manufacturing segments. Notably, demand appeared to ease in the manufacturing survey (the new orders component fell below the expansion/contraction threshold for the first time since June 2020) on account of, *inter alia*, soaring prices, increased risk aversion and a shift of spending to services activities. On prices, both the components of input costs and average prices charged for goods and services, cooled somewhat, remaining though at particularly high levels.

- **Recall that demand challenges stemming from the rising cost of living are also evident in consumer surveys.** In the event, DG ECFIN's consumer confidence indicator stood at a particularly low -21.1 in May (from -22.0 in April), versus an average of -11.4 since 2001.

## Euro area bank lending remained robust in April

- **The annual pace of growth of overall private sector borrowing from commercial banks, accelerated by 0.7 pps in April, to +5.3% yoy, a c. 2-year high.** Regarding the two major private sector components, they performed as follows: i) loan growth to households (adjusted for sales and securitizations) was broadly stable at +4.5% yoy, the highest since October 2008, due to a strong momentum regarding lending for house purchases (+5.3% yoy in non-adjusted for sales and securitizations terms | +3.0% yoy for consumer credit). That development is closely linked to the strong impetus for the housing market. Recall that house prices in the euro area rose by 9.4% yoy in Q4:21 (Eurostat's House Price Index), a record (since 2005) high, with an increase of 15.5% from pre-pandemic (Q4:19) levels; ii) the annual growth of loans to non-financial corporations (NFCs) accelerated sharply (also boosted by favorable base effects apart from a robust net monthly flow), by 1.1 pp to +5.2%. Recall that country-wise, the annual growth rate of loans to non-financial corporations stood at +8.0% in Germany, +7.0% in France, +2.0% in Italy and +1.2% in Spain.

## UK PMIs eased substantially in May

- **PMIs in May suggested a sharp slowdown for overall business activity growth.** Specifically, the PMI in the dominant services sector (c. 80% of UK GDP) fell by 7.1 pts to 51.8, undershooting by a wide margin consensus estimates for 56.8, with still strong growth in travel, leisure & events (on the back of pent-up demand), contrasting with a sharp slowdown in other services sectors. At the same time, the manufacturing PMI fell by 1.2 pts to 54.6 (consensus: 55.0), with the output component at 51.8 from 54.3 in April, weighed, *inter alia*, by the supply chain jitters. Notably, the new export orders component fell in contractionary territory, at its lowest since June 2020, with manufacturers highlighting Brexit-related trade frictions as the main weighing factor. Overall, the composite index fell by 6.4 pts to 51.8, with the negative effects on consumer demand from the rising cost of living and geopolitical uncertainties, being a key theme. Notably, the weakening of demand rendered UK corporations more cautious in passing higher input costs (the average cost burdens component rose sharply, to a new record – since 1996 – high) to clients (the prices charged component remained particularly high, but declined slightly on a monthly basis), suggesting a squeeze in business margins.

## Equities

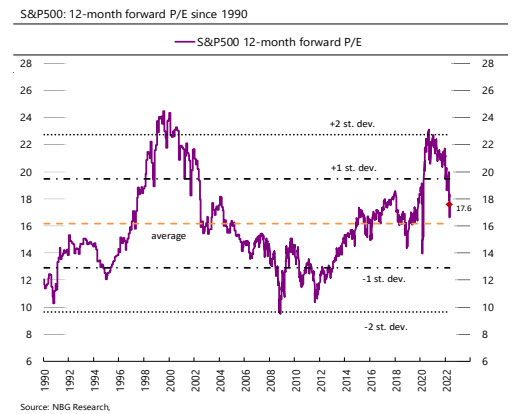
- Global equity markets recorded significant gains in the past week.** Specifically, the MSCI ACWI rose by 5% (-14% ytd), with Developed Markets overperforming (+5.5% | -13% ytd) their Emerging Markets peers (+0.8% | -15% ytd) by a wide margin. In the US, the S&P500 end the week up by +6.6% wov, posting its largest weekly increase since November 2020, its first positive week following 7 consecutive weeks with losses, its longest negative streak since 2001. The S&P500 rebounded from nearly oversold conditions, after Relative Strength Index (RSI), an index that is used to identify overbought (above 70) and oversold conditions (below 30), fell to 35 on May 20<sup>th</sup>, when the S&P500 entered briefly into bear market territory during intraday trading, having declined by 20% from its early-January peak (4797). The better-than-expected earnings results of several retailers, including Dollar Tree Inc. (+29% wov), Dollar General Corp. (+21.8% wov), Macy's Inc. (+29.1% wov) and Williams-Sonoma Inc. (+21% wov), combined with the positive US personal spending data (+3.1% qoq saar in Q1:2022 and +0.9% mom in April, in nominal terms), offered reassurance regarding the resilience of consumer demand, easing investors' concerns for the Retail sector's outlook. Furthermore, the Broadcom's announcement of a \$61 bn deal to acquire the cloud-computing company VMware, which will represent one of the largest mergers in the technology sector, supported sentiment. On the other side of the Atlantic, the Eurostoxx rose by 3.6% in the past week and by further +0.8% on Monday, with the Retail sector overperforming (+7.5% wov | +1.7% on Monday).

## Fixed Income

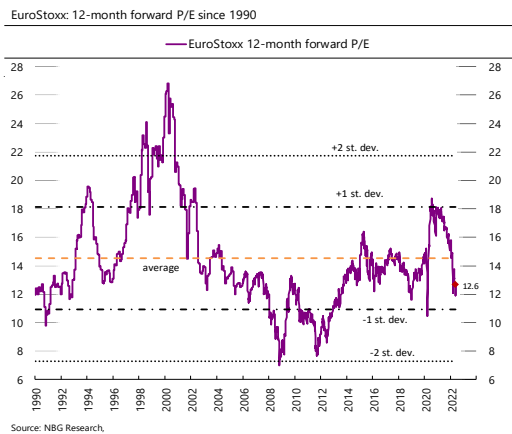
- Government bond yields were mixed in the past week.** Specifically, in the US, the 10-year yield fell by 5 bps to 2.74%, with investors' estimates regarding how far and fast the Fed will proceed with interest rate hikes after the next two meetings (for each of which, expectations for 50 bps hikes are cemented), posting some signs of plateauing. In Germany, the 10-Year Bund yield remained broadly stable at 0.95% in the past week, while euro area periphery government bond yields fell in view of the partial recovery in risk appetite (Italy's 10-year BTP yield: -12 bps wov to 2.87% | Greece 10-year yield: -23 bps to 3.48%, with a successful reopening of a benchmark bond also playing a role). Yields rose though on Monday (May 30<sup>th</sup>), by 11 bps to 1.06% for the 10-year Bund, with CPI inflation surprising to the upside in Germany (headline: 8.7% yoy in May, from 7.8% yoy in April, versus consensus estimates for 8.1%). **Corporate bond yield spreads narrowed in the past week, especially in the speculative grade spectrum, in view of improved risk appetite.** Specifically, US HY spreads declined by 72 bps to 419 bps and their EUR peers by 9 bps wov to 491 bps. Finally, some narrowing also occurred in the investment grade spectrum (US: -14 bps wov to 141 bps | EUR: -1 bp wov to 164 bps).

## FX and Commodities

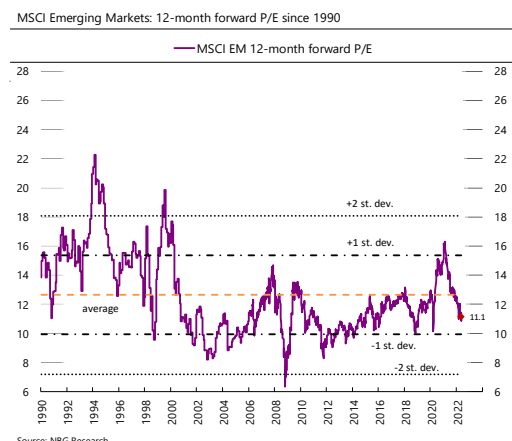
- In foreign exchange markets, the Russian ruble's appreciation to multi-year highs ended on Thursday (-9%), following the Central Bank of Russia's decision to lower its key policy interest rate to +11% from +14%.** This was the 3<sup>rd</sup> consecutive decline (by 300 bps each) since early-April, with the rate now closing in on its level prior to the Ukrainian war (+9.5%), when the Bank decided to raise it to +20% along with measures to support the currency (capital controls and obligation by export-focused companies to convert their foreign currency revenues to rubles). Overall, the Ruble fell by 11.5% against the euro (EUR/RUB: 72.4) and by 9.9% against the USD (USD/RUB: 67.6), declining from 5-year and 4-year highs, respectively. Finally, **in commodities, oil prices rose in the past week, while also entering current week on a positive note, supported by the EU decision for a ban on almost 90% of Russian oil imports by the end of the year.** Furthermore, the China reopening theme (some relaxation of Covid restrictions in Beijing and Shanghai) contributed also to the upside. Overall, the Brent ended the week up by 6.1% to \$119.4/barrel, while the WTI rose by 1.6% to \$115.1/barrel.



Graph 1.



Graph 2.



Graph 3.

**Quote of the week:** "Increases of 25 basis points in the July and September meetings are a benchmark pace. Any discussion about other moves would have to make the case for moving more strongly than this sequence of hikes in July and September. The discussion will be had, but our current assessment of the situation...calls for a gradual approach to normalization", **Member of the Executive Board (and Chief Economist) of the ECB, Philip R.Lane, May 30<sup>th</sup> 2022.**

### Interest Rates & Foreign Exchange Forecasts

10-Yr Gov. Bond Yield (%)	May 27th	3-month	6-month	12-month	Official Rate (%)	May 27th	3-month	6-month	12-month
<b>Germany</b>	0,95	1,00	1,10	1,30	<b>Euro area</b>	-0,50	-0,25	0,25	0,75
<b>US</b>	2,74	3,00	3,10	3,20	<b>US</b>	1,00	1,50	2,00	3,00
<b>UK</b>	1,89	1,90	1,92	1,91	<b>UK</b>	1,00	1,25	1,50	1,75
<b>Japan</b>	0,23	0,23	0,23	0,27	<b>Japan</b>	-0,10	-0,10	-0,10	-0,10

Currency	May 27th	3-month	6-month	12-month	May 27th	3-month	6-month	12-month	
<b>EUR/USD</b>	1,07	1,06	1,08	1,10	<b>USD/JPY</b>	127	124	126	125
<b>EUR/GBP</b>	0,85	0,86	0,87	0,87	<b>GBP/USD</b>	1,26	1,24	1,25	1,26
<b>EUR/JPY</b>	136	132	136	138					

Forecasts at end of period

### Economic Forecasts

United States	2020a	Q1:21a	Q2:21a	Q3:21a	Q4:21a	2021a	Q1:22a	Q2:22f	Q3:22f	Q4:22f	2022f
<b>Real GDP Growth (YoY) (1)</b>	-3,4	0,5	12,2	4,9	5,5	5,7	3,6	2,6	2,8	1,7	2,7
<b>Real GDP Growth (QoQ saar) (2)</b>	-	6,3	6,7	2,3	6,9	-	-1,4	2,9	3,0	2,4	-
<b>Private Consumption</b>	-3,8	11,4	12,0	2,0	2,5	7,9	2,7	3,2	3,5	2,7	3,3
<b>Government Consumption</b>	2,5	4,2	-2,0	0,9	-2,6	0,5	-2,7	2,6	1,7	1,7	-0,4
<b>Investment</b>	-2,7	13,0	3,3	-0,9	2,7	7,8	7,3	4,9	4,1	3,7	4,1
<b>Residential</b>	6,8	13,3	-11,7	-7,7	2,2	9,2	2,1	2,6	2,7	2,2	0,1
<b>Non-residential</b>	-5,3	12,9	9,2	1,7	2,9	7,4	9,2	5,6	4,4	4,0	5,4
<b>Inventories Contribution</b>	-0,6	-3,7	-1,7	2,1	5,4	0,1	-0,7	-0,7	-0,7	-0,7	0,7
<b>Net Exports Contribution</b>	-0,2	-2,0	-0,4	-1,5	-0,7	-1,9	-3,8	0,0	0,2	0,2	-1,3
<b>Exports</b>	-13,6	-2,9	7,6	-5,3	22,4	4,5	-5,9	5,2	6,6	4,2	4,1
<b>Imports</b>	-8,9	9,3	7,1	4,7	17,9	14,0	17,7	3,0	2,8	1,3	9,5
<b>Inflation (3)</b>	1,2	1,9	4,9	5,4	6,7	4,7	8,0	7,6	7,2	6,7	7,3

Euro Area	2020a	Q1:21a	Q2:21a	Q3:21a	Q4:21a	2021a	Q1:22f	Q2:22f	Q3:22f	Q4:22f	2022f
<b>Real GDP Growth (YoY)</b>	-6,5	-0,9	14,6	4,0	4,6	5,4	4,8	3,0	1,8	2,1	2,9
<b>Real GDP Growth (QoQ saar)</b>	-	-0,5	9,1	9,3	1,0	-	0,1	2,0	4,2	2,0	-
<b>Private Consumption</b>	-8,0	-8,9	16,5	19,1	-2,3	3,5	0,4	2,1	3,9	2,8	3,9
<b>Government Consumption</b>	1,1	-2,1	9,4	1,1	1,9	3,8	-0,1	0,7	0,9	0,9	1,3
<b>Investment</b>	-7,3	0,6	5,2	-3,7	14,9	4,3	3,7	-6,7	6,5	5,7	3,2
<b>Inventories Contribution</b>	-0,5	4,3	-2,2	-0,5	1,5	0,4	-0,3	-0,5	-0,5	0,2	-0,1
<b>Net Exports Contribution</b>	-0,4	0,4	0,0	0,9	-2,6	1,4	-0,7	2,7	1,1	-1,0	0,0
<b>Exports</b>	-9,4	5,1	11,8	7,0	12,1	10,9	2,1	2,2	6,0	1,6	5,6
<b>Imports</b>	-9,2	4,8	13,0	5,8	19,8	8,6	3,8	-3,2	4,2	4,1	6,0
<b>Inflation</b>	0,3	1,0	1,8	2,9	4,7	2,6	6,1	8,5	7,6	6,5	7,2

a: Actual, f: Forecasts, 1. Seasonally adjusted YoY growth rate, 2. Seasonally adjusted annualized QoQ growth rate, 3. Year-to-year average % change

### 12-Month View & Key Factors for Global Markets

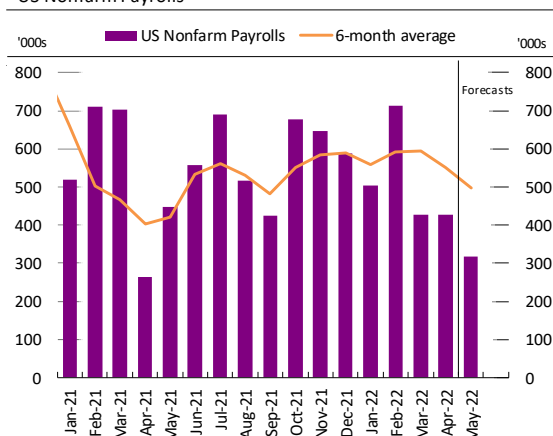
	US	Euro Area	Japan	UK
<b>Equity Markets</b>	<ul style="list-style-type: none"> <li>+ Households' balance sheets are healthy</li> <li>+ Service-oriented sectors are re-opening</li> <li>+ Sentiment (e.g. AAI) and positioning indicators are hitting extreme lows</li> <li>- Peaking profit margins</li> <li>- Recession risks are increasing</li> <li>- P/Es (Valuations) still remain above I-t means, despite the recent correction</li> </ul> <p>● Neutral/Negative</p>	<ul style="list-style-type: none"> <li>+ Still high equity risk premium relative to other regions</li> <li>+ Still loose fiscal policy in 2022 (plus RRF)</li> <li>- Geopolitical uncertainty (Ukraine-Russia, natural gas) could intensify</li> <li>- Logistic disruptions (vaccine) and renewed lockdowns in China delay the export-led recovery</li> </ul> <p>● Neutral</p>	<ul style="list-style-type: none"> <li>+ Still aggressive QE and "yield-curve" targeting by the BoJ</li> <li>+ JPY depreciation @ 20Y highs (¥130) support exporters</li> <li>- Signs of policy fatigue regarding structural reforms and fiscal discipline</li> <li>- Chinese growth deceleration</li> </ul> <p>● Neutral</p>	<ul style="list-style-type: none"> <li>+ Significant exposure to commodities</li> <li>+ Undemanding valuations in relative terms relative to other regions</li> <li>- Elevated domestic policy uncertainty</li> </ul> <p>● Neutral/Positive</p>
<b>Government Bonds</b>	<ul style="list-style-type: none"> <li>+ Valuations appear rich despite the 200bps increase, with term-premium @ 0% (1% for 2000-2015)</li> <li>+ Sizeable fiscal deficit</li> <li>+ Underlying inflation pressures under Average Inflation Targeting</li> <li>+ Fed: End of asset purchases</li> <li>- Global search for yield by non-US investors (e.g. Japan, repatriation from EM Economies) continues</li> <li>- Safe haven demand</li> </ul> <p>▲ Slightly higher yields expected</p>	<ul style="list-style-type: none"> <li>+ Valuations still appear excessive compared with long-term fundamentals</li> <li>+ ECB: End of APP purchases in June 2022, interest rate hikes in H2</li> <li>- Political Risks</li> <li>- Fragile growth outlook</li> <li>- ECB QE "stock" effect</li> </ul> <p>▲ Slightly higher yields expected</p>	<ul style="list-style-type: none"> <li>+ Sizeable fiscal deficits</li> <li>+ Restructuring efforts to be financed by fiscal policy measures</li> <li>- Safe haven demand</li> <li>- Extremely dovish central bank</li> <li>- Yield-targeting of 10-Year JGB at around 0%</li> </ul> <p>● Stable yields expected</p>	<ul style="list-style-type: none"> <li>+ Inflation expectations could drift higher due to supply disruptions (persistent post Brexit, temporary due to China)</li> <li>+ The BoE is expected to raise rates towards 2%</li> <li>- Slowing economic growth post-Brexit</li> </ul> <p>▲ Slightly higher yields expected</p>
<b>Foreign Exchange</b>	<ul style="list-style-type: none"> <li>+ Weak global growth / Safe-haven demand status</li> <li>+ USD interest rate differential vs peers remain significant</li> <li>+ Aggressive Fed tightening</li> <li>- Global political uncertainty to decline</li> </ul> <p>● Broadly Flat USD against G10 FX</p>	<ul style="list-style-type: none"> <li>+ Current account surplus</li> <li>- Still negative interest rates</li> <li>- Global growth risks remain to the downside</li> </ul> <p>● Broadly Flat/Stronger EUR against the USD</p>	<ul style="list-style-type: none"> <li>+ Safe haven demand</li> <li>+ More balanced economic growth recovery (long-term)</li> <li>+ Inflation is bottoming out</li> <li>- Additional Quantitative Easing by the Bank of Japan if inflation does not approach 2%</li> </ul> <p>▲ Slightly higher JPY</p>	<ul style="list-style-type: none"> <li>+ Valuations appear undemanding with REER below its 15-year average</li> <li>- Sizeable Current account deficit</li> </ul> <p>● Broadly stable GBP expected</p>

## Economic Calendar

In the US, attention turns to the labor report for May on June 3<sup>rd</sup>. Consensus expects NFPs of +318k from +428k in April and an unemployment rate of 3.5% from 3.6%. Meanwhile, the ISM Manufacturing (latest: 55.4 | consensus of 54.5 @ 1/6) and Services (latest: 57.1 | consensus of 56.0 @ 3/6) surveys will provide an update on business confidence. On Thursday, the weekly initial and continuing jobless claims will provide a more updated view of labor market conditions.

In the Euro area, the unemployment rate for April is released and is expected stable at 6.8%. On Friday, attention turns to retail sales for April. The monthly figure is expected at +0.3% mom from -0.4% mom in the previous month.

US Nonfarm Payrolls



Source: NBG Research

**Economic News Calendar for the period: May 24 - June 6, 2022**

Tuesday 24					Wednesday 25					Thursday 26						
US	S	A	P		US	S	A	P		US	S	A	P			
S&P Global US Manufacturing PMI	May	57.9	-	57.5	59.2	FOMC Minutes	May 4			GDP (QoQ, annualized)	Q1:22	-1.3%	-	-1.5%		
New home sales (k)	April	750	-	591	709	Durable goods orders (MoM)	April	0.6%	-	0.4%	0.6%	Personal consumption (QoQ, annualized)	Q1:22	..	3.1%	
S&P Global / CIPS UK PMI	May	55.0	-	54.6	55.8	Durable goods orders ex transportation (MoM)	April	0.6%	-	0.3%	1.1%	Initial Jobless Claims (k)	May 21	209	-	210
Manufacturing SA	May	56.8	-	51.8	58.9	<b>GERMANY</b>					Continuing Claims (k)	May 14	1310	-	1346	
S&P Global / CIPS UK Services	May	56.8	-	51.8	58.9	GDP (QoQ)	Q1:22	0.2%	-	0.2%	0.2%	Pending home sales (MoM)	April	-1.7%	-	-3.9%
<b>JAPAN</b>						GDP (wda, YoY)	Q1:22	3.7%	+	3.8%	3.7%	World Economic Forum Annual Meeting	May 22-26			
PMI manufacturing	May	53.0	+	53.2	53.5	Private Consumption (QoQ)	Q1:22	0.2%	-	-0.1%	-1.3%					
<b>EURO AREA</b>						Government Spending QoQ	Q1:22	0.4%	-	0.1%	0.2%					
S&P Global Eurozone Manufacturing PMI	May	54.7	-	54.4	55.5											
S&P Global Eurozone Services	May	57.1	-	56.3	57.7											
S&P Global Eurozone Composite	May	55.0	-	54.9	55.8											
<b>Friday 27</b>					<b>Monday 30</b>											
US	S	A	P		EURO AREA	S	A	P								
Personal income (MoM)	April	0.6%	-	0.4%	0.5%	Business Climate Indicator	May	..	1.3	1.6						
Personal spending (MoM)	April	0.8%	+	0.9%	1.4%	Economic confidence indicator	May	104.9	+	105.0	104.9					
PCE Deflator (YoY)	April	6.3%		6.3%	6.6%											
PCE Core Deflator (YoY)	April	4.9%		4.9%	5.2%											
<b>EURO AREA</b>																
M3 money supply (YoY)	April	6.3%		6.0%	6.3%											
<b>Tuesday 31</b>					<b>Wednesday 1</b>					<b>Thursday 2</b>						
US	S	A	P		US	S	A	P		US	S	A	P			
S&P Case/Shiller house price index 20 (YoY)	March	..	..	20.2%	ISM Manufacturing	May	54.5	..	55.4	Initial Jobless Claims (k)	May 28	..	..	210		
Conference board consumer confidence	May	103.7	..	107.3	Construction spending (MoM)	April	0.4%	..	0.1%	Continuing Claims (k)	May 21	..	..	1346		
<b>JAPAN</b>					<b>UK</b>					ADP Employment Change (k)	May	301	..	247		
Unemployment rate	April	2.6%	..	2.6%	Nationwide House Px NSA YoY	May	..	..	12.1%	Factory Goods Orders (MoM)	April	0.9%	..	1.8%		
Retail sales (MoM)	April	..	..	1.7%	<b>EURO AREA</b>											
Retail sales (YoY)	April	2.0%	..	0.7%	Unemployment Rate	April	6.8%	..	6.8%							
Industrial Production (MoM)	April	0.1%	..	0.3%	<b>GERMANY</b>											
Industrial Production (YoY)	April	-3.2%	..	-1.7%	Retail sales (MoM)	April	..	..	-0.1%							
Construction Orders YoY	April	..	..	-21.2%	Retail sales (YoY)	April	..	..	-2.7%							
<b>EURO AREA</b>					<b>CHINA</b>											
CPI estimate (YoY)	May	7.7%	..	7.4%	Caixin PMI Manufacturing	May	47.0	..	46.0							
Core CPI (YoY)	May	3.5%	..	3.5%												
<b>CHINA</b>																
Manufacturing PMI	May	48.5	..	47.4												
<b>Friday 3</b>					<b>Monday 6</b>											
US	S	A	P			S	A	P								
Change in Nonfarm Payrolls (k)	May	318	..	428												
Change in Private Payrolls (k)	May	301	..	406												
Unemployment rate	May	3.5%	..	3.6%												
Average weekly hours (hrs)	May	34.6	..	34.6												
Average Hourly Earnings MoM	May	0.4%	..	0.3%												
Average Hourly Earnings YoY	May	5.2%	..	5.5%												
Labor Force Participation Rate	May	..	..	62.2%												
Underemployment Rate	May	..	..	7.0%												
ISM Services Index	May	56.0	..	57.1												
<b>EURO AREA</b>																
Retail sales (MoM)	April	0.3%	..	-0.4%												
Retail sales (YoY)	April	5.4%	..	0.8%												

Source: NBG Research  
S: Consensus Analysts Survey, A: Actual Outcome, P: Previous Outcome



**Equity Markets** (in local currency)

Developed Markets							Emerging Markets					
		Current Level	1-week change (%)	Year-to-Date change (%)	1-Year change (%)	2-year change (%)		Current Level	1-week change (%)	Year-to-Date change (%)	1-Year change (%)	2-year change (%)
US	<b>S&amp;P 500</b>	4158	6.6	-12.8	-1.0	37.0	MSCI Emerging Markets	61016	0.2	-12.9	-18.9	13.2
Japan	<b>NIKKEI 225</b>	26782	0.2	-7.0	-6.2	25.0	MSCI Asia	925	-0.1	-13.5	-21.0	12.5
UK	<b>FTSE 100</b>	7585	2.6	2.7	8.1	23.5	China	67	-0.5	-19.5	-37.9	-16.8
Canada	<b>S&amp;P/TSX</b>	20749	2.7	-2.2	4.9	35.9	Korea	799	-0.7	-12.3	-18.1	26.7
Hong Kong	<b>Hang Seng</b>	20697	-0.1	-11.5	-28.9	-11.2	MSCI Latin America	95933	2.3	3.9	-6.8	23.1
Euro area	<b>EuroStoxx</b>	425	3.6	-11.2	-5.1	26.3	Brazil	317968	1.4	3.7	-16.8	13.3
Germany	<b>DAX 40</b>	14462	3.4	-9.0	-6.1	24.1	Mexico	49211	2.0	-1.4	8.4	43.6
France	<b>CAC 40</b>	6516	3.7	-8.9	1.2	39.0	MSCI Europe	2398	-0.2	-65.4	-63.9	-54.8
Italy	<b>FTSE/MIB</b>	24636	2.2	-9.9	-1.7	37.6	Russia*	2408	1.4	-36.4	-35.6	-12.2
Spain	<b>IBEX-35</b>	8934	5.3	2.5	-2.7	24.5	Turkey	2672560	2.0	28.6	76.7	104.6

**World Market Sectors** (MSCI Indices)

in US Dollar terms						in local currency					
	Current Level	1-week change (%)	Year-to-Date change (%)	1-Year change (%)	2-year change (%)		Current Level	1-week change (%)	Year-to-Date change (%)	1-Year change (%)	2-year change (%)
Energy	252.8	6.7	44.9	54.9	97.0	Energy	261.6	6.2	47.7	61.8	93.6
Materials	347.2	4.8	-3.6	-4.6	46.3	Materials	338.5	4.0	-0.8	1.3	45.5
Industrials	297.9	4.6	-15.0	-13.3	27.4	Industrials	304.0	4.1	-12.4	-8.3	30.2
Consumer Discretionary	329.7	7.7	-25.3	-18.5	23.1	Consumer Discretionary	325.4	7.3	-23.8	-15.4	25.1
Consumer Staples	271.7	4.8	-7.3	-1.8	18.3	Consumer Staples	276.8	4.3	-5.0	2.8	18.6
Healthcare	343.7	2.9	-7.0	4.2	24.1	Healthcare	343.6	2.5	-5.4	7.4	24.7
Financials	136.1	6.5	-8.9	-7.7	43.3	Financials	138.2	5.9	-7.0	-3.6	42.6
IT	448.4	7.5	-21.7	-3.9	38.0	IT	438.0	7.3	-21.1	-2.3	38.8
Telecoms	82.9	3.1	-22.4	-22.5	10.5	Telecoms	87.7	2.9	-21.4	-20.8	11.5
Utilities	165.7	3.3	0.9	6.3	24.0	Utilities	172.3	2.8	2.8	11.0	24.3

**Bond Markets (%)**

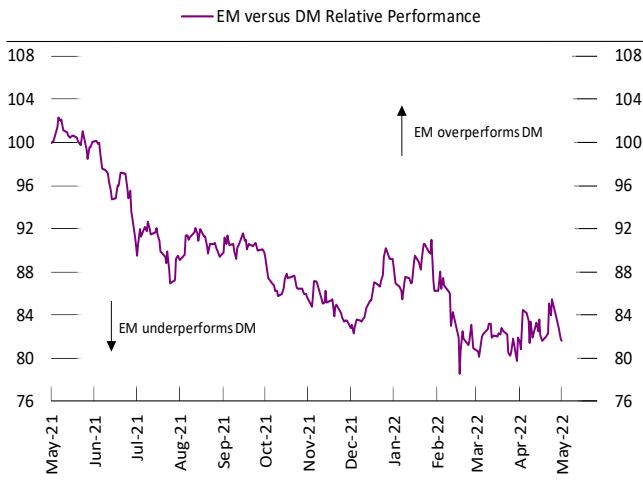
10-Year Government Bond Yields						Government Bond Yield Spreads (in bps)					
	Current	Last week	Year Start	One Year Back	10-year average		Current	Last week	Year Start	One Year Back	10-year average
US	2.74	2.79	1.51	1.61	2.04	US Treasuries 10Y/2Y	29	24	78	146	107
Germany	0.95	0.95	-0.18	-0.17	0.44	US Treasuries 10Y/5Y	3	-2	25	79	55
Japan	0.23	0.23	0.07	0.07	0.22	Bunds 10Y/2Y	61	60	46	49	85
UK	1.89	1.90	0.97	0.81	1.41	Bunds 10Y/5Y	29	29	28	38	58
Greece	3.48	3.71	1.32	0.87	6.41	<b>Corporate Bond Spreads (in bps)</b>					
Ireland	1.55	1.54	0.25	0.21	1.64						
Italy	2.87	2.99	1.17	0.93	2.29	EM Inv. Grade (IG)	181	188	139	150	193
Spain	2.01	2.08	0.57	0.48	1.90	EM High yield	693	726	618	498	624
Portugal	2.06	2.12	0.46	0.48	2.80	US IG	141	155	98	90	134
<b>US Mortgage Market (1. Fixed-rate Mortgage)</b>						<b>US High yield</b>					
30-Year FRM <sup>1</sup> (%)	5.46	5.49	3.31	3.18	4.01	<b>Euro area IG</b>					
vs 30Yr Treasury (bps)	245.9	247.3	138.9	88.0	129.9						
<b>Euro area High Yield</b>						<b>Euro area High Yield</b>					

**Foreign Exchange & Commodities**

Foreign Exchange						Commodities					
	Current	1-week change (%)	1-month change (%)	1-Year change (%)	Year-to-Date change (%)		Current	1-week change (%)	1-month change (%)	1-Year change (%)	Year-to-Date change (%)
<b>Euro-based cross rates</b>						Agricultural	582	-0.1	1.3	33.5	30.8
EUR/USD	1.07	1.4	1.8	-12.2	-5.8	Energy	405	5.5	10.3	81.5	60.6
EUR/CHF	1.02	-0.5	0.5	-6.4	-1.1	West Texas Oil (\$/bbl)	115	1.6	12.8	72.1	53.0
EUR/GBP	0.85	0.3	0.9	-1.3	1.1	Crude Brent Oil (\$/bbl)	119	6.1	13.4	71.9	53.5
EUR/JPY	136.15	0.7	0.9	1.7	4.0	HH Natural Gas (\$/mmbtu)	8.7	9.5	26.3	206.2	128.5
EUR/NOK	10.17	-1.2	3.2	0.0	1.4	TTF Natural Gas (EUR/mwh)	87	-1.2	-19.1	244.8	23.5
EUR/SEK	10.55	0.4	1.7	4.3	2.5	Industrial Metals	513	-0.5	-7.0	7.8	2.7
EUR/AUD	1.50	-0.3	1.2	-4.9	-4.2	Precious Metals	2413	0.6	-2.1	-4.3	0.9
EUR/CAD	1.37	0.9	1.1	-7.3	-4.9	Gold (\$)	1854	0.4	-1.7	-2.3	1.7
<b>USD-based cross rates</b>						Silver (\$)	22	1.7	-5.1	-20.8	-4.5
USD/CAD	1.28	-0.5	-0.7	5.6	1.0	Baltic Dry Index	2681	-19.8	10.6	-0.3	20.9
USD/AUD	1.40	-1.7	-0.6	8.4	1.7	Baltic Dirty Tanker Index	1128	1.5	-8.6	86.4	43.5
USD/JPY	127.13	-0.7	-0.9	15.9	10.4						

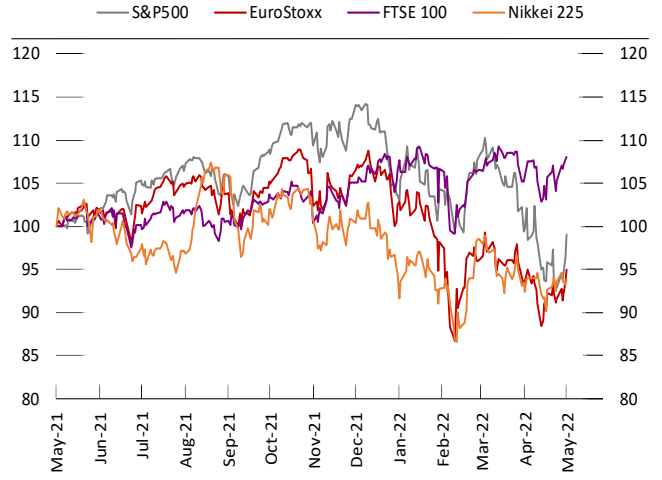
Source: NBG Research, Data as of May 27<sup>th</sup>, S&P/Goldman Sachs Indices for Agricultural, Energy, Industrial & Precious Metals, BofA/ML Indices for Corporate Bond Spreads, \*Stock trading on MOEX Index partially resumed on March 24<sup>th</sup> after being halted since February 25<sup>th</sup>

EM vs DM Performance in \$



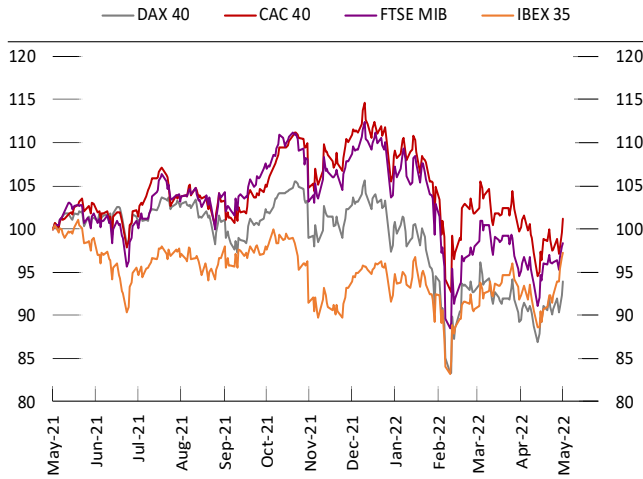
Data as of May 27<sup>th</sup> – Rebased @ 100

Equity Market Performance - G4



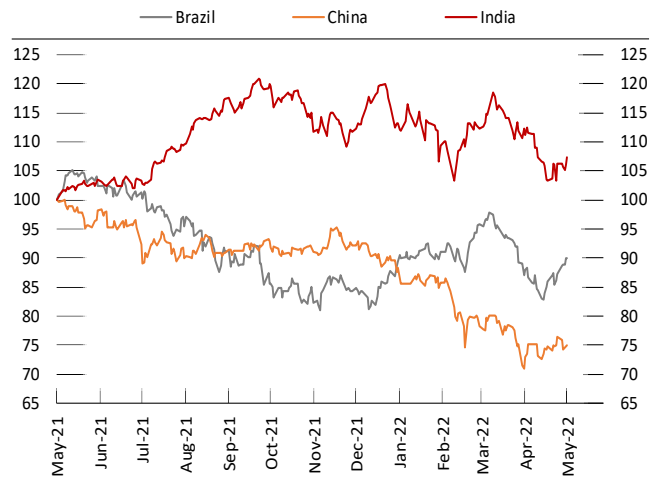
Data as of May 27<sup>th</sup> – Rebased @ 100

Equity Market Performance – Euro Area G4



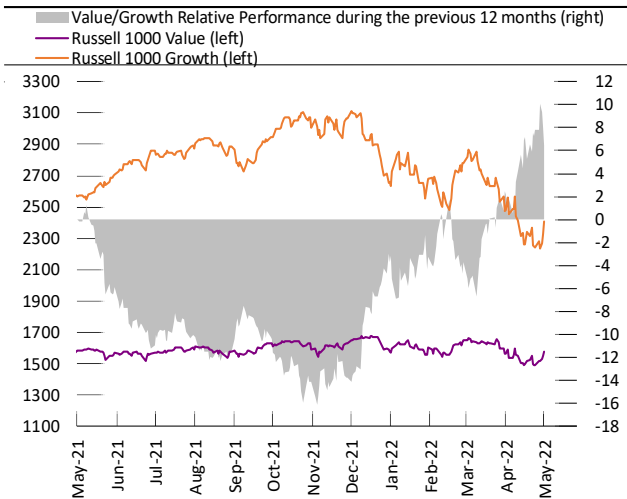
Data as of May 27<sup>th</sup> – Rebased @ 100

Equity Market Performance – Emerging Markets



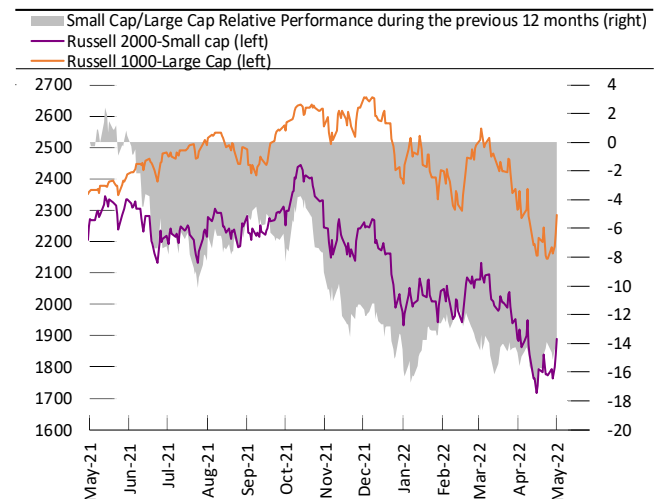
Data as of May 27<sup>th</sup> – Rebased @ 100

Russell 1000 Value & Growth Index



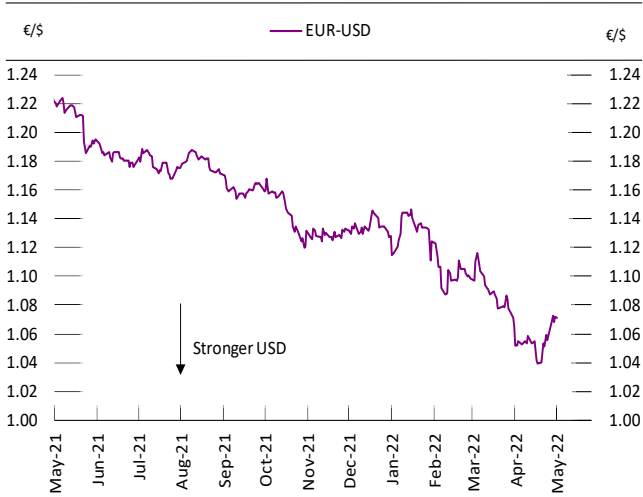
Data as of May 27<sup>th</sup>

Russell 2000 & Russell 1000 Index



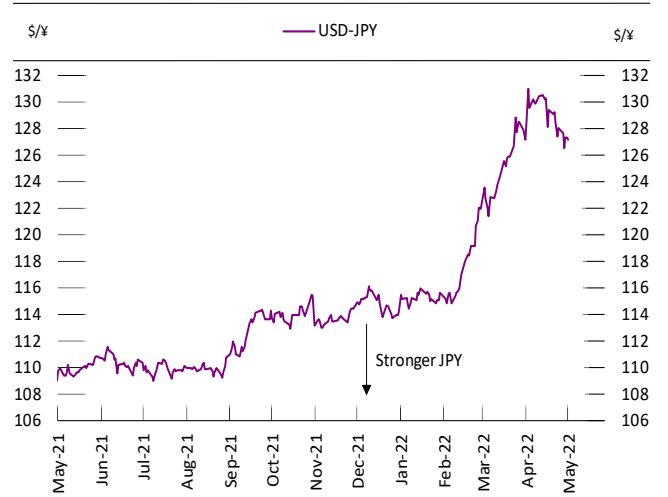
Data as of May 27<sup>th</sup>

EUR/USD



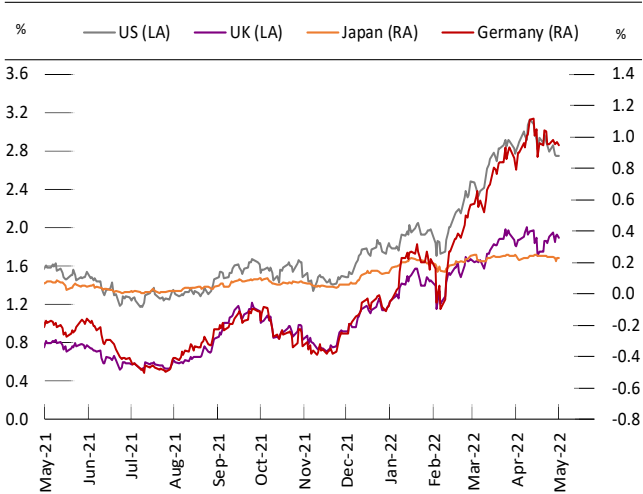
Data as of May 27<sup>th</sup>

JPY/USD



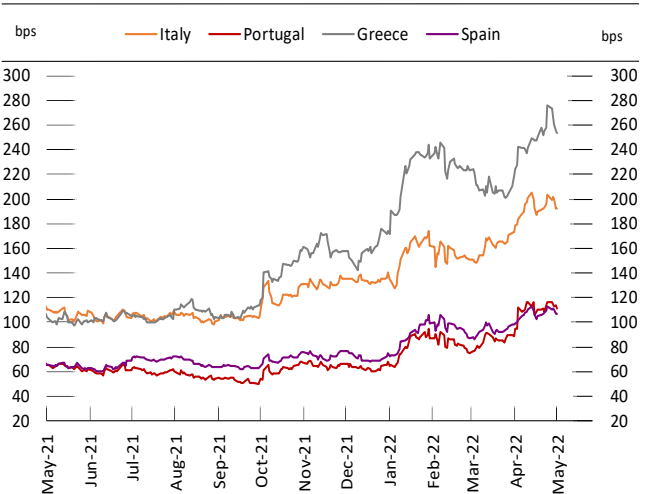
Data as of May 27<sup>th</sup>

10- Year Government Bond Yields



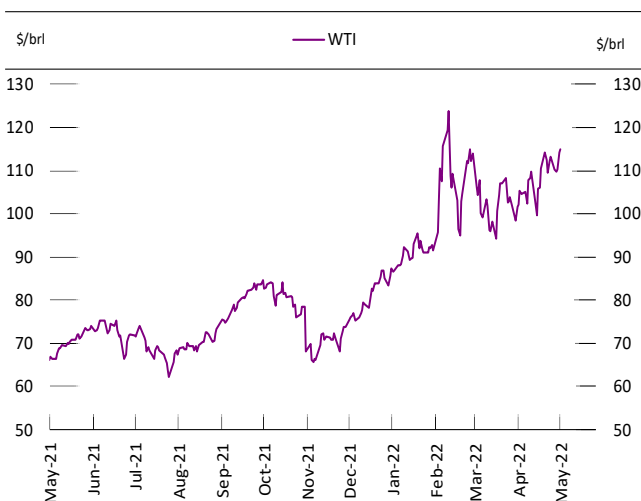
Data as of May 27<sup>th</sup>  
LA:Left Axis RA:Right Axis

10- Year Government Bond Spreads



Data as of May 27<sup>th</sup>

West Texas Intermediate (\$/bbl)



Data as of May 27<sup>th</sup>

Gold (\$/ounce)



Data as of May 27<sup>th</sup>



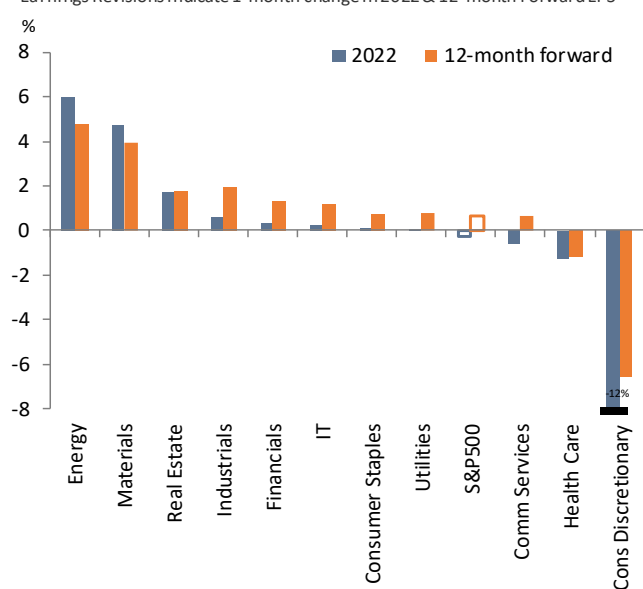
### US Sectors Valuation

	Price (\$)			EPS Growth (%)		Dividend Yield (%)		P/E Ratio				P/BV Ratio			
	27/5/22	% Weekly Change	%YTD	2022	2023	2022	2023	2022	2023	12m fwd	10Yr Avg	2022	2023	Current	10Yr Avg
<b>S&amp;P500</b>	4158	6.6	-12.8	10.3	10.0	1.5	1.6	18.3	16.6	17.6	17.1	3.9	3.5	3.7	3.0
<b>Energy</b>	669	8.1	58.3	105.8	-11.7	2.8	2.8	10.4	11.7	10.9	15.7	2.5	2.3	2.4	1.7
<b>Materials</b>	548	5.9	-3.8	19.1	-5.6	1.9	2.0	14.3	15.1	14.6	16.1	3.0	2.7	2.9	2.7
<b>Financials</b>															
Diversified Financials	981	7.0	-10.4	-7.9	11.9	1.6	1.7	15.4	13.8	14.8	14.9	1.8	1.7	1.8	1.6
Banks	361	10.0	-13.6	-15.3	16.1	2.9	3.2	11.0	9.5	10.4	11.5	1.2	1.1	1.1	1.1
Insurance	571	7.1	3.7	-0.1	14.8	2.0	2.2	14.3	12.4	13.5	11.7	1.8	1.6	1.7	1.2
Real Estate	280	5.8	-13.7	11.8	5.6	2.9	3.0	20.3	19.2	19.8	18.8	3.6	3.7	3.6	3.3
<b>Industrials</b>															
Capital Goods	811	6.6	-8.9	22.1	17.8	1.8	1.9	19.0	16.1	17.8	17.2	4.3	3.8	4.1	4.0
Transportation	987	6.1	-12.4	123.5	26.8	1.8	1.9	16.7	13.2	N/A	13.9	5.5	4.5	5.1	4.1
Commercial Services	485	5.0	-10.7	10.4	11.0	1.2	1.3	26.1	23.5	25.0	21.5	5.9	5.2	5.6	4.0
<b>Consumer Discretionary</b>															
Retailing	3119	8.8	-26.2	-24.5	40.7	0.8	0.8	33.2	23.6	29.3	27.1	10.2	8.3	9.5	9.0
Consumer Services	1262	6.9	-16.4	3146.4	100.4	1.2	1.3	40.4	20.1	N/A	28.8	25.1	17.4	22.0	10.3
Consumer Durables	385	7.2	-27.8	20.2	8.5	1.6	1.7	11.3	10.4	11.0	17.5	2.9	2.5	2.8	3.4
Automobiles and parts	141	13.4	-29.3	28.3	19.2	0.2	0.2	28.7	24.1	N/A	15.2	5.3	4.5	5.0	2.7
<b>IT</b>															
Technology	2834	8.3	-17.0	9.1	7.4	0.9	0.9	21.1	19.7	20.6	15.4	14.4	12.5	13.6	6.5
Software & Services	3155	7.6	-19.0	13.9	15.4	0.9	1.0	26.1	22.7	24.7	21.3	8.0	6.8	7.5	6.2
Semiconductors	2037	8.8	-22.5	14.0	10.6	1.4	1.5	17.1	15.4	16.4	15.5	4.9	4.3	4.7	3.8
Communication Services	201	3.6	-24.9	-1.1	16.2	0.8	0.9	16.9	14.5	15.9	19.1	3.0	2.7	2.9	3.2
Media	771	3.4	-28.8	1.8	18.1	0.3	0.4	18.4	15.6	17.3	22.5	3.7	3.2	3.5	3.7
<b>Consumer Staples</b>															
Food & Staples Retailing	622	10.1	-11.3	5.9	8.2	1.6	1.7	20.9	19.3	20.3	18.3	4.5	4.1	4.4	3.6
Food Beverage & Tobacco	861	5.2	5.4	3.3	6.5	3.1	3.2	20.1	18.9	19.6	18.4	5.6	5.7	5.6	5.1
Household Goods	859	4.9	-12.1	2.0	9.5	2.3	2.4	25.6	23.4	24.7	21.3	10.5	10.2	10.4	6.7
<b>Health Care</b>															
Pharmaceuticals	1265	3.2	-2.6	6.2	-5.1	1.9	2.0	14.8	15.6	15.1	15.3	5.3	4.7	5.0	4.3
Healthcare Equipment	1835	3.2	-8.4	3.0	9.9	1.1	1.2	19.7	18.0	19.0	16.8	3.8	3.4	3.7	3.0
<b>Utilities</b>	381	5.0	4.7	1.6	8.1	2.8	3.0	21.8	20.2	21.2	17.2	2.3	2.2	2.3	1.8

Blue box indicates a value more than +2standard deviation from average, light blue a value more than +1standard deviation from average. Orange box indicates a value less than -2standard deviation from average, light orange a value less than -1standard deviation from average

### 1-month revisions to 2022 & 12-month Forward EPS

Earnings Revisions indicate 1-month change in 2022 & 12-month Forward EPS

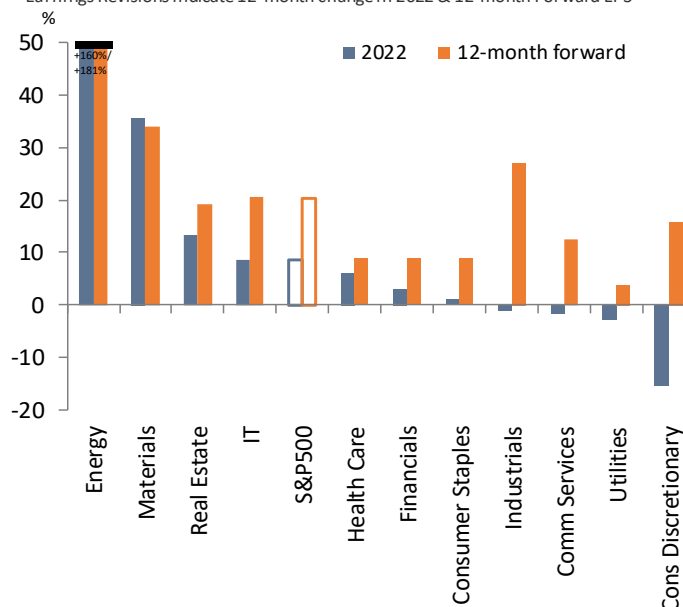


Data as of May 27<sup>th</sup>

12-month forward EPS are 59% of 2022 EPS and 41% of 2023 EPS

### 12-month revisions to 2022 & 12-month Forward EPS

Earnings Revisions indicate 12-month change in 2022 & 12-month Forward EPS



Data as of May 27<sup>th</sup>

12-month forward EPS are 59% of 2022 EPS and 41% of 2023 EPS

National Bank of Greece | Economic Research Division | Global Markets Analysis

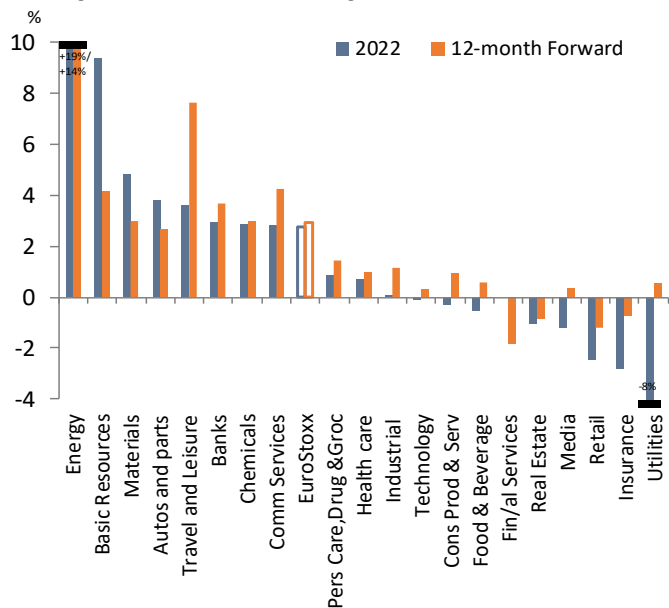
### Euro Area Sectors Valuation

	Price (€)			EPS Growth (%)		Dividend Yield (%)		P/E Ratio				P/BV Ratio			
	27/5/22	% Weekly Change	%YTD	2022	2023	2022	2023	2022	2023	12m fwd	10Yr Avg	2022	2023	Current	10Yr Avg
<b>EuroStoxx</b>	425	3.6	-11.2	10.8	8.8	3.1	3.4	13.6	12.5	13.2	14.5	1.6	1.5	1.6	1.5
<b>Energy</b>	342	5.2	18.4	87.6	-19.5	4.4	4.6	6.3	7.8	6.9	13.1	1.3	1.2	1.3	1.2
<b>Materials</b>	1004	3.7	-3.7	6.1	-12.3	2.6	2.7	12.0	13.7	12.7	15.7	1.8	1.7	1.7	1.7
<b>Basic Resources</b>	257	6.6	3.6	2.9	-37.7	2.7	2.9	4.6	7.3	5.7	10.0	0.8	0.7	0.7	0.8
<b>Chemicals</b>	1448	3.2	-4.7	8.9	3.2	2.6	2.7	16.6	16.1	16.4	16.7	2.3	2.2	2.3	2.3
<b>Financials</b>															
<b>Fin/Al Services</b>	521	0.9	-10.0	25.0	-9.7	3.0	3.1	11.4	12.7	11.9	14.6	1.3	1.3	1.3	1.2
<b>Banks</b>	92	5.8	-8.2	-2.9	10.7	5.9	6.9	8.0	7.3	7.7	9.9	0.6	0.6	0.6	0.7
<b>Insurance</b>	291	2.5	-5.0	-0.8	14.8	5.7	6.1	9.7	8.5	9.2	9.6	0.9	0.9	0.9	0.9
<b>Real Estate</b>	187	0.8	-16.3	6.8	6.8	4.7	5.6	14.4	13.5	14.0	17.1	0.7	0.7	0.7	1.0
<b>Industrial</b>	982	3.7	-16.2	19.5	15.7	2.3	2.7	17.7	15.3	16.7	17.3	2.6	2.4	2.5	2.6
<b>Consumer Discretionary</b>															
<b>Media</b>	251	-0.5	-12.0	10.6	15.5	2.5	2.8	20.2	17.5	19.1	17.4	2.7	2.5	2.6	2.2
<b>Retail</b>	487	7.5	-29.7	-4.2	11.6	4.3	4.7	20.4	18.2	19.5	26.2	3.8	3.7	3.8	5.7
<b>Automobiles and parts</b>	544	3.9	-13.8	0.6	5.5	5.9	5.8	5.8	5.5	5.7	8.6	0.8	0.7	0.8	1.0
<b>Travel and Leisure</b>	175	2.5	-9.4	N/A	81.8	1.1	1.8	28.0	15.4	N/A	N/A	2.2	2.1	2.1	2.2
<b>Technology</b>	746	4.6	-24.1	9.4	19.6	1.1	1.2	22.5	18.9	21.1	21.3	3.4	3.0	3.2	3.6
<b>Communication Services</b>	308	3.9	6.8	18.1	13.9	3.6	3.9	16.8	14.7	16.0	14.5	1.6	1.6	1.6	1.7
<b>Consumer Staples</b>															
<b>Food, Beverage &amp; Tobacco</b>	172	2.6	-10.2	13.6	12.8	1.8	2.1	19.5	17.3	18.6	20.0	2.1	2.0	2.1	2.6
<b>Personal Care, Drug &amp; Grocery</b>	174	1.5	-13.2	2.6	9.6	2.6	2.7	15.8	14.4	15.3	17.5	2.2	2.1	2.2	2.4
<b>Consumer Products &amp; Services</b>	398	5.9	-24.5	9.4	14.4	1.8	2.0	25.4	22.2	24.2	24.5	5.3	4.7	5.1	4.0
<b>Health care</b>	886	1.9	-5.1	9.5	8.2	2.2	2.3	17.2	15.9	16.7	16.6	2.2	2.1	2.1	2.3
<b>Utilities</b>	378	0.1	-4.2	-35.4	65.4	4.2	4.7	21.6	13.0	18.1	13.7	1.6	1.5	1.5	1.2

Blue box indicates a value more than +2standard deviation from average, light blue a value more than +1standard deviation from average. Orange box indicates a value less than -2standard deviation from average, light orange a value less than -1standard deviation from average

### 1-month revisions to 2022 & 12-month Forward EPS

Earnings Revisions indicate 1-month change in 2022 & 12-month Forward EPS

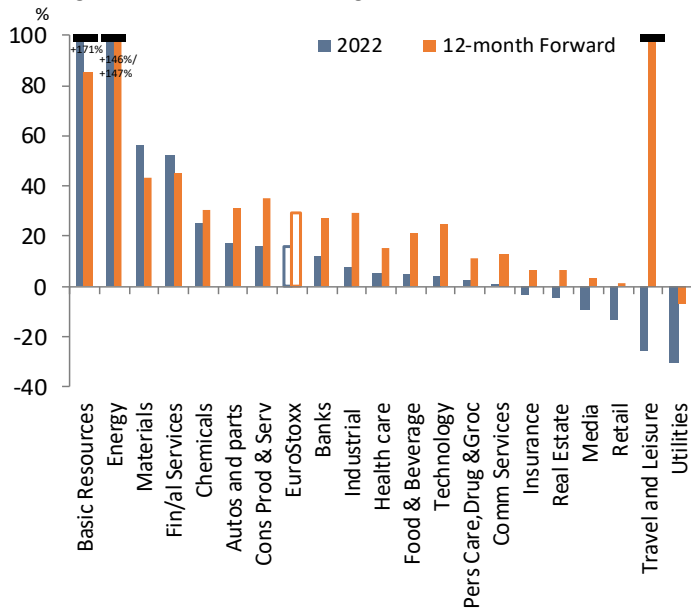


Data as of May 27<sup>th</sup>

12-month forward EPS are 59% of 2022 EPS and 41% of 2023 EPS

### 12-month revisions to 2022 & 12-month Forward EPS

Earnings Revisions indicate 12-month change in 2022 & 12-month Forward EPS



Data as of May 27<sup>th</sup>

12-month forward EPS are 59% of 2022 EPS and 41% of 2023 EPS

National Bank of Greece | Economic Research Division | Global Markets Analysis

**DISCLOSURES:**

This report has been produced by the Economic Research Division of the National Bank of Greece, which is regulated by the Bank of Greece, 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. 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 shall 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. National Bank of Greece 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 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 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 constitute investment research or a research recommendation and as such it has not been prepared in accordance with legal requirements designed to promote investment research independence. 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 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.

**ANALYST CERTIFICATION:**

The research analyst denoted by an "AC" on page 1 holds the certificate (type Δ) of the Hellenic Capital Market Commission/Bank of Greece which allows her/him to conduct market analysis and reporting and hereby certifies that all of the views expressed in this report accurately reflect his or her personal views solely, about any and all of the subject issues. Further, each of these individuals also certifies that no part of any of the report analyst's compensation was, is, or will be directly or indirectly related to the specific recommendations or views expressed in this report. Also, all opinions and estimates are subject to change without notice and there is no obligation for update.