



Global Markets Outlook & Strategy: Macroeconomic Backdrop

2021 global real GDP is expected to accelerate towards 6% from -3.5% in 2020, as vaccine rollouts will help economies start returning to a pre pandemic normalcy in Q2. Emerging Market economies account for the bulk of the increase (70%). The strength of the recovery may differ across major Advanced Economies due to i) the stringency of mobility restrictions, ii) the structure of the economy (services vs manufacturing) and iii) the size of fiscal support.

The inflation outlook is clearer as pent-up demand is supporting prices, inflation expectations are increasing, and the annual rate of change of commodity prices is going to turn positive from Q1 onwards. Nevertheless, output gaps are expected to remain negative alleviating price pressures.

Fiscal policy will be supportive of growth for a 2nd consecutive year, albeit with significant regional divergence. With the US Senate under Democratic control, the expected US package (\$1.9 trillion) will lift growth substantially even if there is a lot of uncertainty about the final amount. The NGEU should start disbursing funds in H2:2021.

Monetary policy remains accommodative, with central banks' balance sheets expanding significantly. However, central bank liquidity has likely reached its peak. Nevertheless, as Chair Powell has stated, now, it is not the time to talk about exit from the path of asset purchases. The US economy is far from Fed's goals of maximum employment and average inflation of 2%.

The BoJ will continue with yield-curve targeting and the Bank of England may reconsider negative policy rates. The ECB will remain ultra-supportive via PEPP and TLTROs at least until March 2022, despite confusing communication early in 2021.

Risks are still skewed to the downside, in our view. Logistic bottlenecks and virus mutations may delay the desired herd-immunity thresholds and the anticipated recovery. The US fiscal package may be smaller than expected. Adverse political risks (German elections, Italy, Recovery Fund disbursement delays), if materialized, could derail the European economic recovery.

Emerging market risks include high private sector debt levels and increased capital outflows, assuming that DM central banks will surprise negatively regarding the timing of asset purchases' tapering. Trade tensions will subside under the new US Administration, though they will not eclipse. A tough stance is likely to continue.

Economic Projections Pool GDB Growth (%)

Real GDP Glowth	(70)			
	2019	2020f	2021f	
US	2,2	-3,6	4,9	
Euro Area	1,3	-6,9	4,6	
UK	1,4	-10,0	4,5	
Japan	0,3	-5,1	3,1	
China	6,0	2,3	8,1	

Inflation (%)

	2019	2020	2021f
US	1,8	1,2	2,5
Euro Area	1,2	0,3	1,3
UK	1,8	0,9	1,5
Japan	0,5	0,0	0,0
China	2,9	2,5	1,6

Policy Rates (%)

	2019	2020	2021f
US	1,75	0,25	0,25
Euro Area	-0.50	-0.50	-0.50
UK	0,75	0,10	0,10
Japan	-0,10	-0,10	-0,10
China	3,25	2,95	2,75

Source: NBG Research for US & Euro area, IMF, Inflation & Policy Rates are end of Period Forecasts









Global Markets Outlook & Strategy: Portfolio Allocation

Multi-asset portfolios face two type of risks as we move forward in 2021. On the one hand, there is widespread optimism among policymakers, analysts, and investors that uninterrupted vaccine rollouts will support a robust global economic and profitability recovery in H2:2021. New variants and renewed waves of the virus could challenge this path. Valuations are expensive across asset classes (S&P500 P/E at 21x) and there is the risk that volatility will increase during the year.

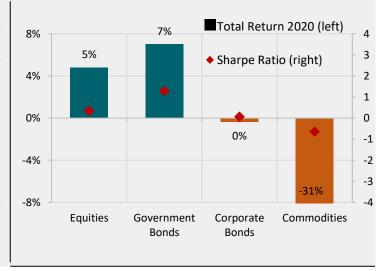
On the other side of the ledger, if vaccine distribution timelines and high vaccine efficacy validate these great expectations, a new equilibrium of massive central bank liquidity and loose fiscal policy will be established, setting the stage for higher long-term interest rates. Considering medium-term pressures arising from (de)globalization and rewiring of global supply chains, inflation risks look underappreciated. We tilt towards the second type of risk, and consequently, our baseline asset allocation reflects the increasing probability of a shifting regime towards higher growth and higher rates, albeit with less certainty compared to three months ago.

Thus, we are broadly Market-weight Equities, Under-weight Government Bonds and Over-weight Cash. We have reduced our outlook on Corporate Credit as spreads have tightened significantly and the reflation trade, if materializes, favors equity relative to credit. We are positive on Gold as a small hedge. We are not eager to add risk at this Reddit-inspired volatility with some market segments undergoing "bubble" characteristics. We foresee mid-single absolute positive equity returns from current levels in 2021, with EPS growth required, but still higher returns relative to Government and Corporate bonds. Equities will benefit from the revival of corporate profitability and negative real yields in the investment grade fixed income universe. Risk premia have narrowed significantly from their pandemic highs leaving less room for significant gains unless EPS prospects improve materially (see our Dividend Discount Model sensitivity analysis). Regionally, as the global economy improves, investors will continue to rotate into value markets and cyclical sectors as interest rates move higher and the USD remains weak. As a result, we favor euro area equities which are global cycle plays with positive correlation to bond yields. Nevertheless, execution risks for the ambitious Next Generation EU agenda are high and political developments in Europe (Italy, German elections) could hurt investor sentiment, while the region appears to lag vis-à-vis population vaccination.

We fund this position via a US underweight, considering also a soft path for the USD going forward, as FAAMG and TESLA concentration has reached extremes (25% of S&P500). The likelihood of stringent regulation (in Technology, Energy, Financials) and higher corporate taxes under the new US Administration is underestimated, in our view. We are less optimistic than consensus in EM equities (broadly MW vs consensus strong OW) as the P/E valuation discount relative to DM equities has been eroded and investor positioning remains heavy. Banks and cyclical stocks are a more clear-cut situation in taking more risk, if warranted by higher volatility aversion levels. Steeper curves will translate into larger NIMs on their loan books. Valuations are supportive, albeit structural profitability challenges, remain unresolved.

Government bond values are expected to continue to decline due to better growth and expansionary fiscal policies, albeit central banks will be patient regarding slowing down their accommodation limiting (nominal) yield upside. Assuming higher inflation potential, investors should favor inflation-protected securities (TIPS). The likelihood of weaker-than-expected US growth, fiscal policy disappointment and bouts of volatility suggest that Treasuries will continue acting as a portfolio diversifier. In a world where \$17 trillion is priced at negative yields, euro area periphery bond spreads will remain well-bid due to, *inter alia*, supportive monetary policy. We do not expect major credit spread moves in our baseline scenario. As a result, intra-class, we turn underweight US IG credit vs EUR IG as duration losses could hurt on a total return basis (12-month horizon). After the material rally post-pandemic, we are broadly neutral in High Yield.

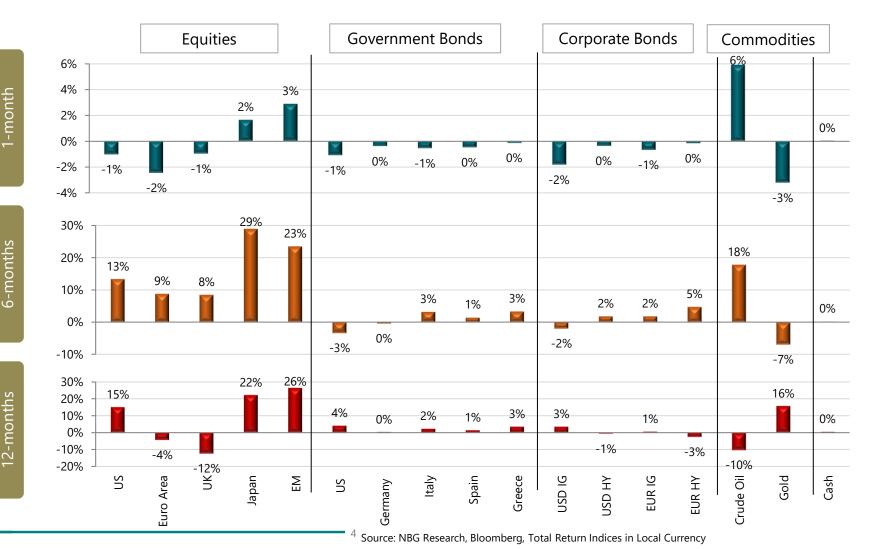
Global Model Portfolio Returns (in EUR terms)



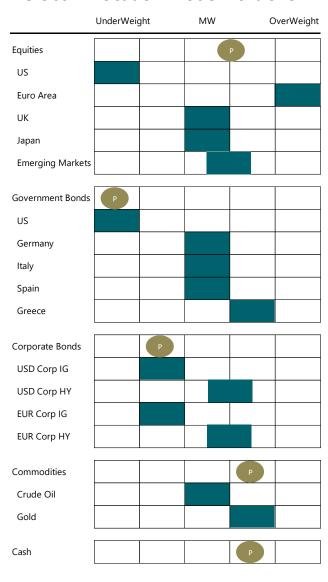
3

Global Markets Outlook & Strategy: Portfolio Returns & Allocation

□ In this section we provide historical total returns of our Global Model Portfolio constituents over 1-month, 6-month and 12-month horizons. We compose our portfolio mainly through Exchange-Traded Funds. These total returns are plotted against our 12-month horizon preferences.



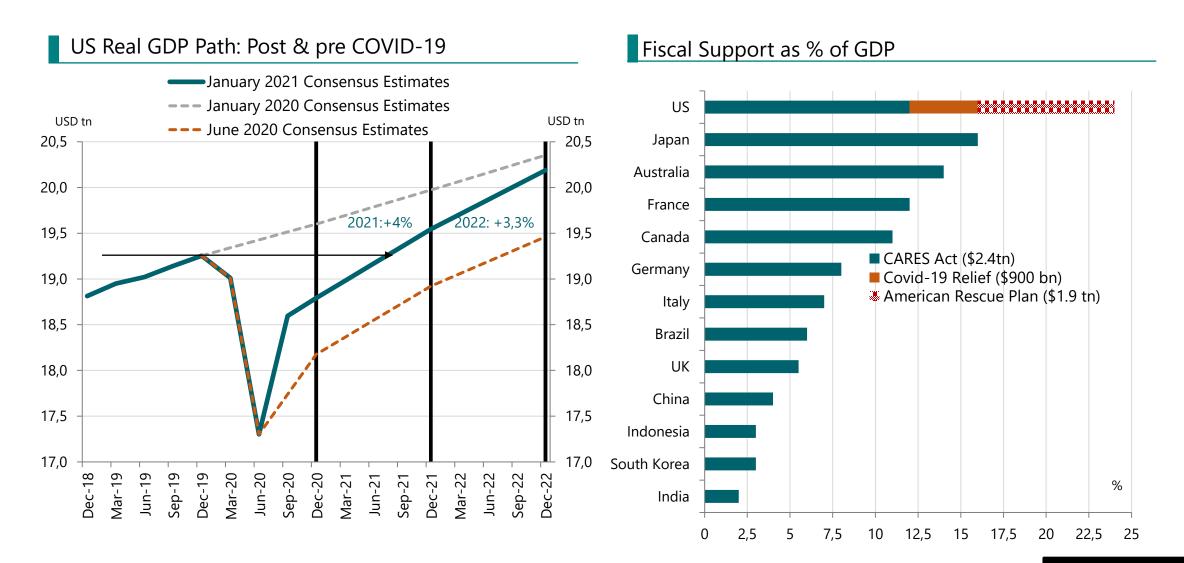
Global Allocation Model Portfolio



PUBLIC USE

US Economy: The (expected) spending increases should be a large fiscal impetus to aggregate spending boosting real GDP growth and probably leaving the level of GDP at the end of 2022 above the pre-pandemic path as the vaccines go out and the virus is get under control





Euro area Economy: The pandemic is having a big impact on economic activity, mainly via the services channel. Real GDP contracted by 9.4% in H1:2020 before advancing by 5.2% in semi-annual terms in H2. Overall, we expect a partial recovery in 2021 assuming mobility restrictions gradually fade



Euro area Real GDP Path (ECB Survey of Professional Forecasters)

October '20 → January '21 +3% The shaded areas indicate GDP paths based on growth rates that are one standard deviation above/below the average ECB Survey of Professional Forecasters forecast

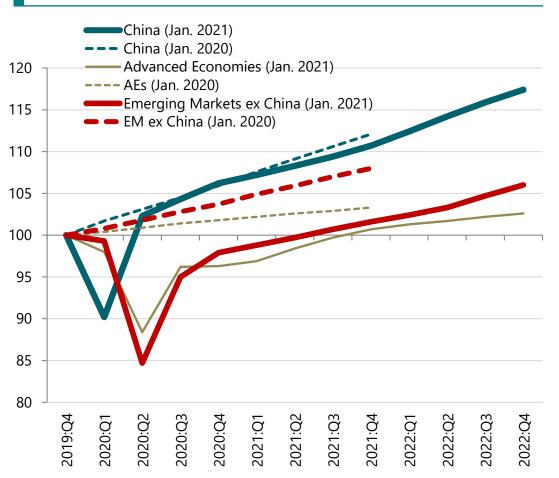
Global PMI Leading Indicators (quarterly average)



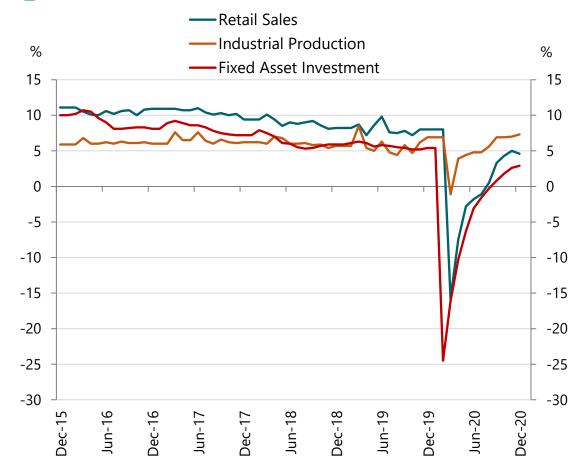
Chinese Economy: Solid economic growth is expected in 2021 (+8%) as consumption accelerates and industrial production regains its pre Covid-19 path. Central bank measures and effective containment methods early in the pandemic have assisted a strong recovery



China and EM-ex China Real GDP Path (Source: IMF)



China Activity Momentum (Year-over-Year change)

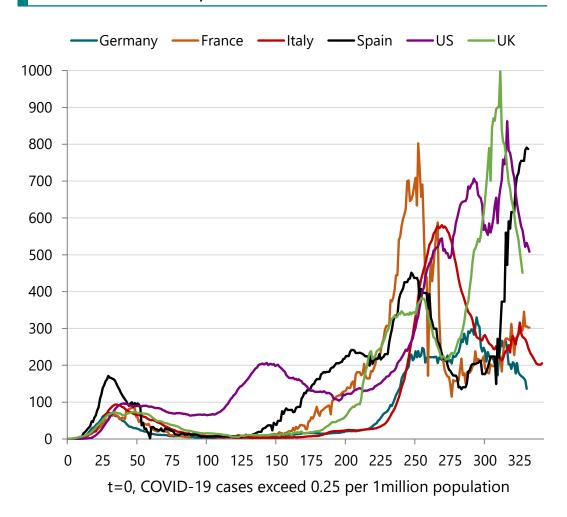




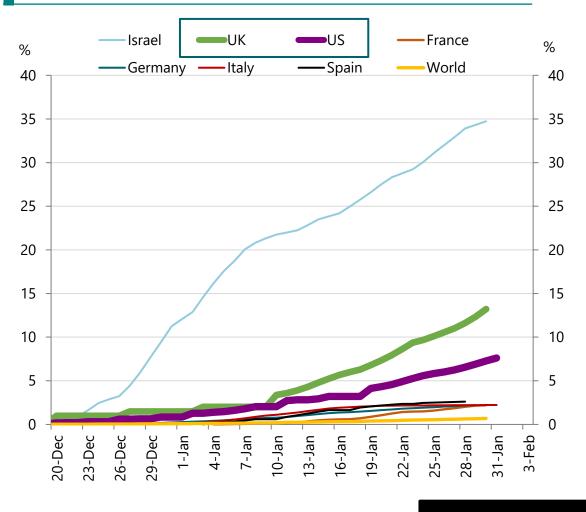
Covid-19: Summer herd-immunity (60% to 70% of population being vaccinated) appears less likely in Europe due to logistic bottlenecks, albeit "light" lockdowns are having less impact on economic activity



COVID-19 Cases per million

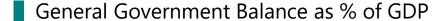


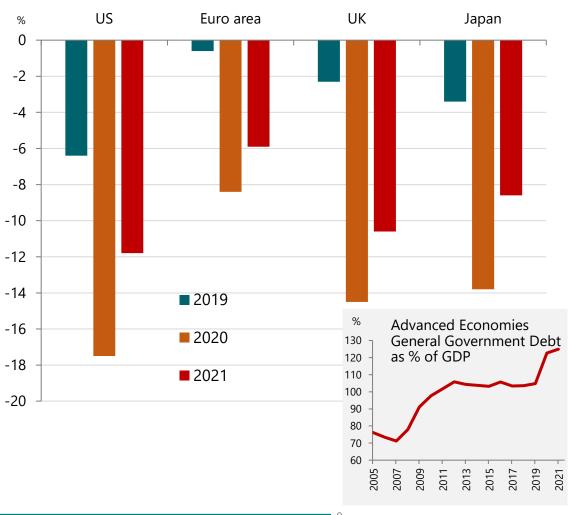
Share of people who received at least one dose of COVID-19 vaccine



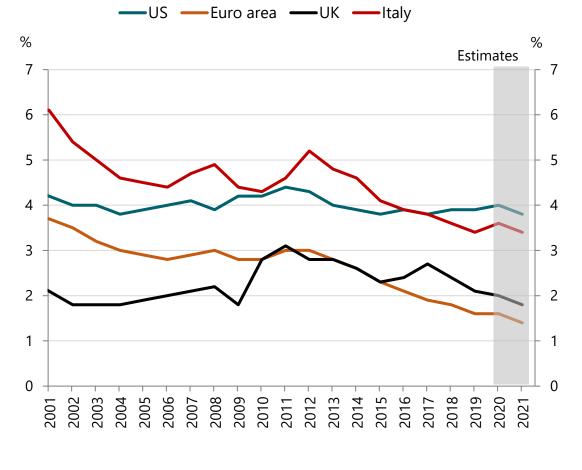
Government Debt: Fiscal stance eased sharply in 2020 in order to stem the fallout from the pandemic. As a result, D/GDP ratios have increased sharply across the globe. At the same time, ultra low interest rates have resulted in favorable rollover funding conditions with interest expenses on a declining trend







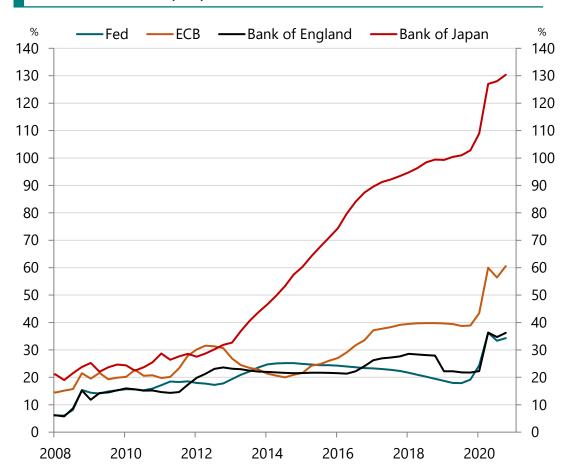
Interest Expenses as % of GDP



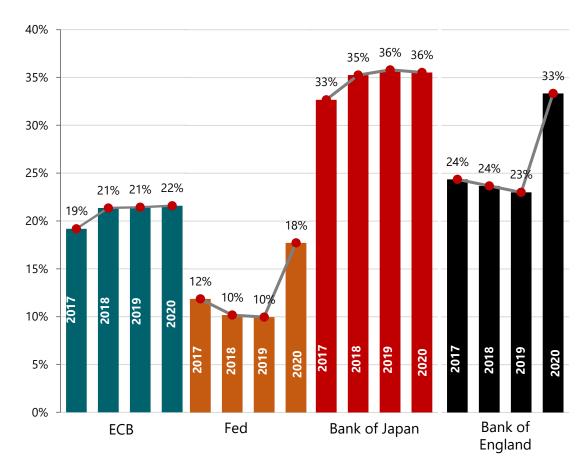
Monetary Policy: Central banks will delay the liftoff from the Effective Lower Bound until their thresholds for inflation have been reached on a sustained basis. At the same time, will continue to purchase assets at a strong pace



Central Banks (CB) Assets as % of GDP



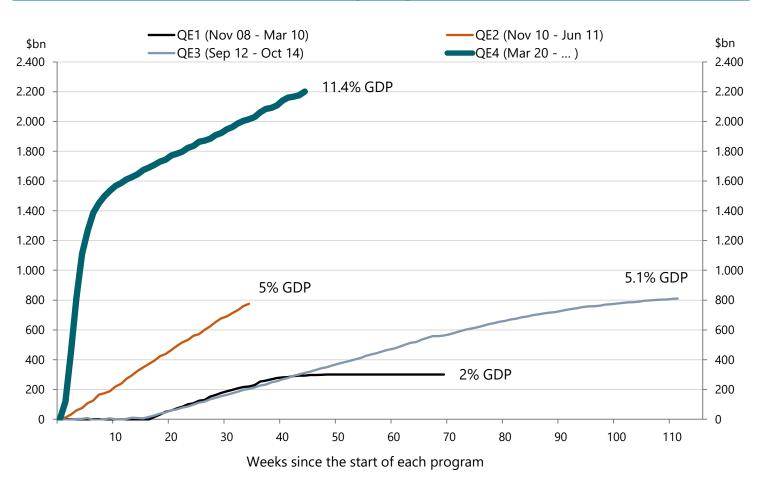
CB Government Bond Holdings as % of Total Debt



Federal Reserve: Market expectations for the start of tapering appear to have shifted forward following successive rounds of fiscal stimulus. According to the Fed, however, now is not the time to talk about exit from the path of asset purchases



Federal Reserve: Quantitative Easing Programs



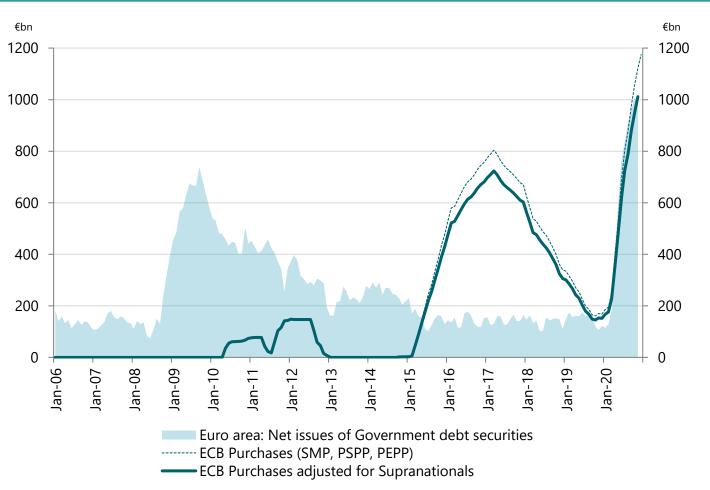
- The Fed will continue to increase its holdings of Treasury securities by at least \$80bn/month and of agency MBSs by at least \$40bn/month until substantial further progress has been made toward its maximumemployment and price-stability goals
- The Fed will maintain the federal funds rate at 0 to 0.25% until inflation is on track to moderately exceed 2% for some time



European Central Bank: The ultra-accommodative monetary policy by the ECB will remain in place via near zero rates, QE and favorable funding for commercial banks



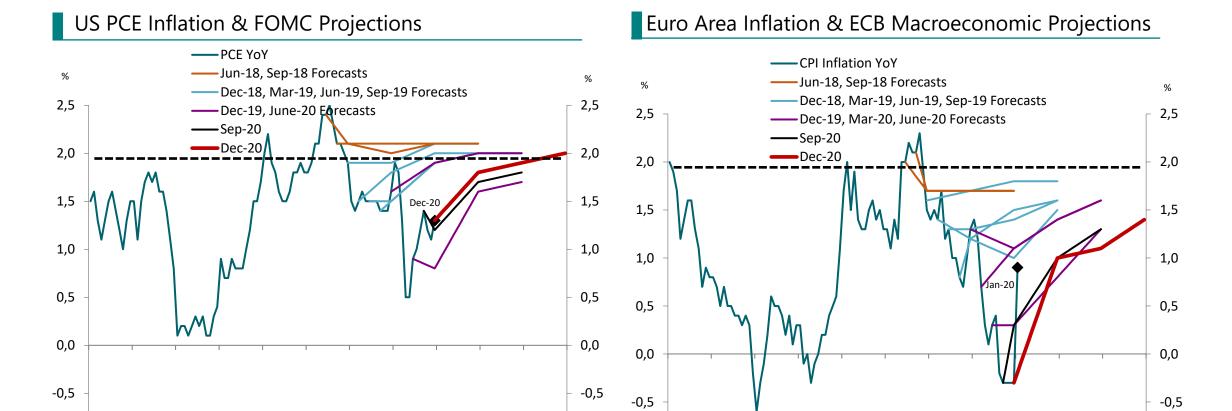
Net Government Debt Issuance & ECB Purchases (12-month rolling sum)



- The ECB expanded the Pandemic Emergency Purchase Programme (PEPP) by €500bn to a total envelope of €1.85tn combined with an extension of its duration by nine months to at least up to March 2022
- The ECB's balance sheet amounts to €7tn from pre-pandemic levels of €4.7tn
- Policy rates are expected to remain close to or below zero at least until 2022

Inflation: The spread of Covid-19 has put downward pressure on inflation with mixed effects on prices for different types of goods and services. We expect a Q1/Q2 spike due to favorable base effects and higher energy prices. Central banks though will focus on the medium-term trajectory that remains subdued, particularly in the euro area





-1,0

-1,0

Jan-16

Jan-17

Jan-20

Jan-19

Jan-22

Jan-23

-1,0

Jan-19

-1,0

ΕΘΝΙΚΗ ΤΡΑΠΕΖΑ ΤΗΣ ΕΛΛΑΔΟΣ

Asset Scoreboard: Performance &

Valuations

				Price Returns (i	n Local Currency)			Yield	Valu	ations	15Y Correlation	1Y Beta with
	Assets	1-month	3-month	6-months	12-months	Year-to-Date	2020	(DY for Equities)	Price/ Earnings	15-Year Average	with MSCI ACWI	MSCI ACWI
	MSCI ACWI (\$)	-0,4%	16,7%	16,5%	13,1%	-0,5%	14,3%	2,0	19,5	14,2	-	-
	US	-0,5%	13,6%	13,5%	12,6%	-1,1%	16,3%	1,6	21,6	15,1	95%	1,0
	EA	-1,9%	17,6%	12,4%	-3,4%	-1,4%	-1,6%	2,9	18,0	13,0	89%	1,0
Equities	Japan	0,8%	20,4%	27,4%	19,8%	0,8%	16,0%	1,5	21,8	17,7	75%	0,9
Equities	UK	-2,3%	14,9%	8,6%	-13,9%	-0,8%	-14,3%	3,9	14,2	12,4	88%	0,8
	MSCI EM (\$)	3,1%	20,5%	23,2%	22,5%	3,0%	15,8%	2,3	17,5	13,1	87%	0,8
	Greece	-7,4%	31,6%	21,3%	-18,2%	-7,4%	-11,7%	3,1	10,8	11,1	57%	0,9
	Greek Banks	-14,6%	87,7%	46,4%	-47,0%	-14,6%	-41,4%	-	-	-	41%	1,8
								Bonds Yield	Coupon (%)	Duration (Yrs)		
	US	-0,9%	-0,8%	-2,7%	4,9%	-1,0%	8,0%	1,1	0,9	9,3	-33%	0,0
	US TIPs	0,6%	2,6%	2,7%	9,8%	0,3%	11,0%	-1,0	0,1	5,0	7%	0,1
Government	Germany	-0,5%	-1,0%	-0,3%	0,8%	-0,5%	3,0%	-0,5	0,0	10,1	-33%	0,0
Bonds	UK	-1,4%	-0,6%	-2,8%	3,6%	-1,7%	8,9%	0,3	0,4	8,3	-26%	0,0
	Japan	-0,2%	-0,1%	-0,5%	-1,4%	-0,2%	-0,8%	0,1	0,1	9,8	-15%	0,0
	Greece	-0,4%	1,9%	3,4%	7,1%	-0,4%	10,0%	0,7	0,8	9,9	23%	0,2
								Bonds Yield	OAS (bps)	15Y Avg (bps)		
	USD IG	-1,1%	1,9%	0,0%	6,4%	-1,3%	9,9%	1,9	97	158	18%	0,3
	USD HY	0,4%	6,3%	6,7%	7,2%	0,3%	7,1%	4,3	362	522	71%	0,5
Corporate Bonds	EUR IG	-0,1%	1,1%	2,3%	1,6%	-0,1%	2,8%	0,3	93	143	21%	0,1
Bonds	EUR HY	0,5%	5,4%	6,5%	2,4%	0,4%	2,3%	3,2	343	507	66%	0,4
	Greece	0,9%	4,2%	5,8%	1,7%	0,9%	1,5%	1,8			33%	0,2
	MITI O'I	7,9%	45,9%	29,6%	5,2%	7,6%	-14,5%	_			40%	1,0
Commodities	WTI Oil	-2,5%	-1,7%	-6,5%	19,0%	-2,7%	21,8%	-			15%	0,3
	Gold	2,370	171 70	0,370	15,070	<u> </u>	21,070				1370	0,5
Cash	Euro	-0,1%	-0,1%	-0,2%	-0,4%	0,0%	-0,4%	-0,5			-6%	0,0
Cusii	Dollar	0,0%	0,1%	0,2%	1,1%	0,0%	1,3%	0,2			2%	0,0

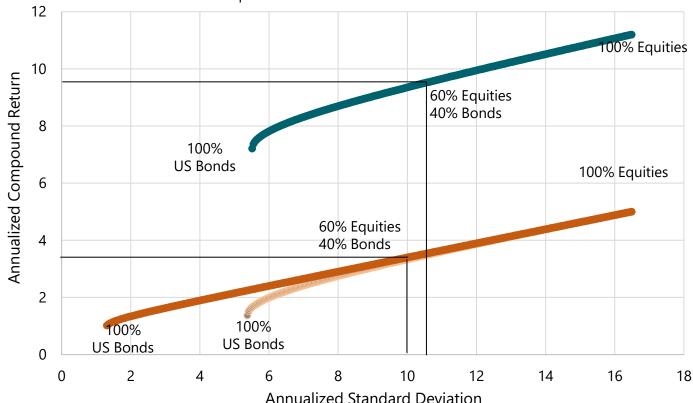
■ 14 Source: NBG Research, Data as of January 29th 2021



Efficient Portfolio Frontier: Past performance is no guarantee of future results

Efficient Frontier: US Equities & US Aggregate IG Bond Index

- Historical data 1983-2019
- 10-Year Expected Returns [+ Lower US AGG Bond index Volatility]
- → 10-Year Expected Returns & 1-Year Historical Vol

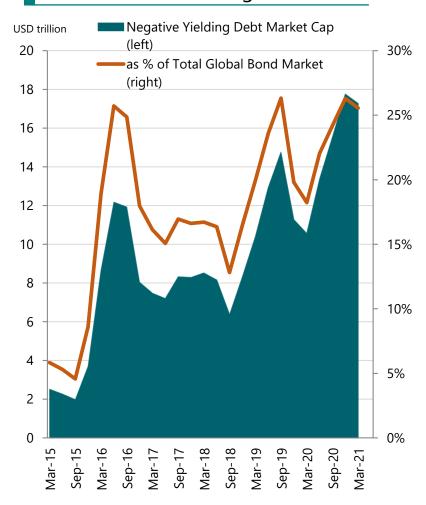


- Global bond yields continue to push towards zero (or further into negative territory) amid declining bond volatility
- Lower absolute bond yields suggest a diminishing source of income
- Past 10-Years Portfolio returns have been enhanced by the secular decline in rates

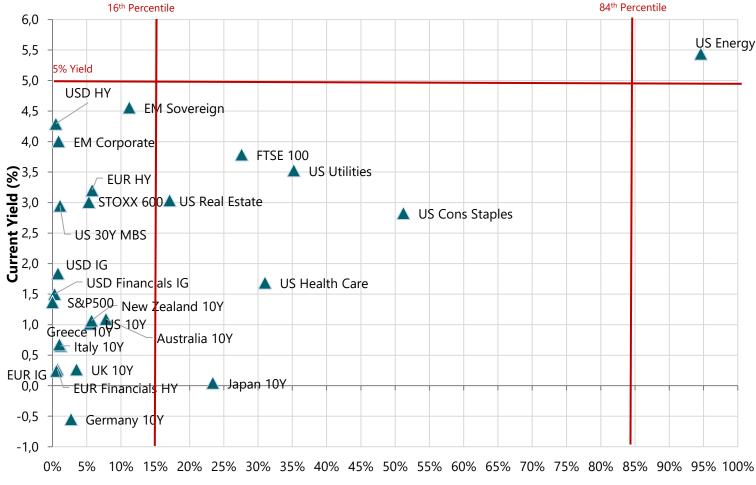




Fixed Income with Negative Yield



Fixed Income & Dividend Yields: Latest data (y-axis) vs 15Y Historical Data (x-axis)



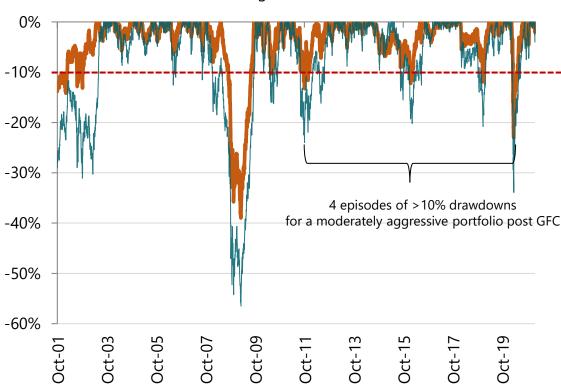
Percentiles based on 15-Year Historical Observations (2006-2021)



12-month rolling Drawdowns

—Multi-asset Portfolio, rolling 12M drawdown

-MSCI ACWI, rolling 12M drawdown



Returns & Volatility of a 50%-25%-20%-5% Portfolio



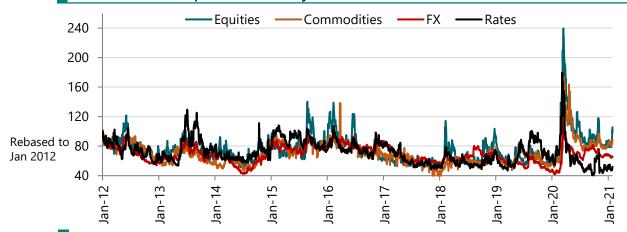
— 1-Year Volatility (annualized, right)



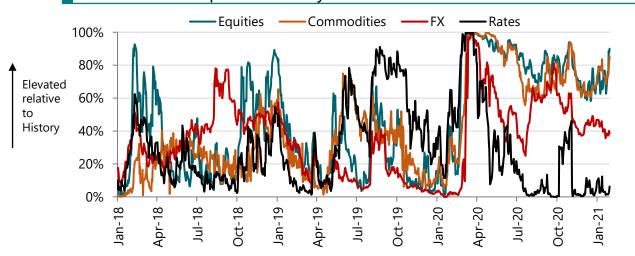
A moderately aggressive portfolio comprising 50% MSCI ACWI, 25% Government Bonds, 20% Corporate Bonds, 5% Commodities



Cross-Asset Implied Volatility



Cross-Asset Implied Volatility: Historical Percentiles (2011-2020)

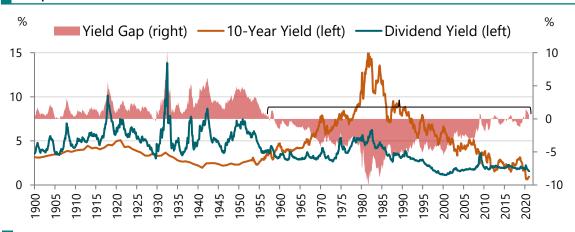


- For 2020 the VIX averaged at around 25%, well above its long-term average of 19%. In 2021, consensus expect equity market implied volatility to average in mid to high teens
- Lower volatility in 2021 might support an increase in risky asset allocation from procyclical investors
- A pick-up in Bond volatility (MOVE index) next year alongside the move to higher yields?

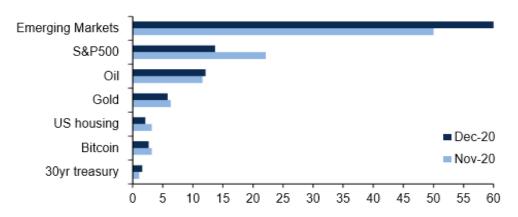




Equities vs Fixed Income



What asset class do you think will outperform in 2021?



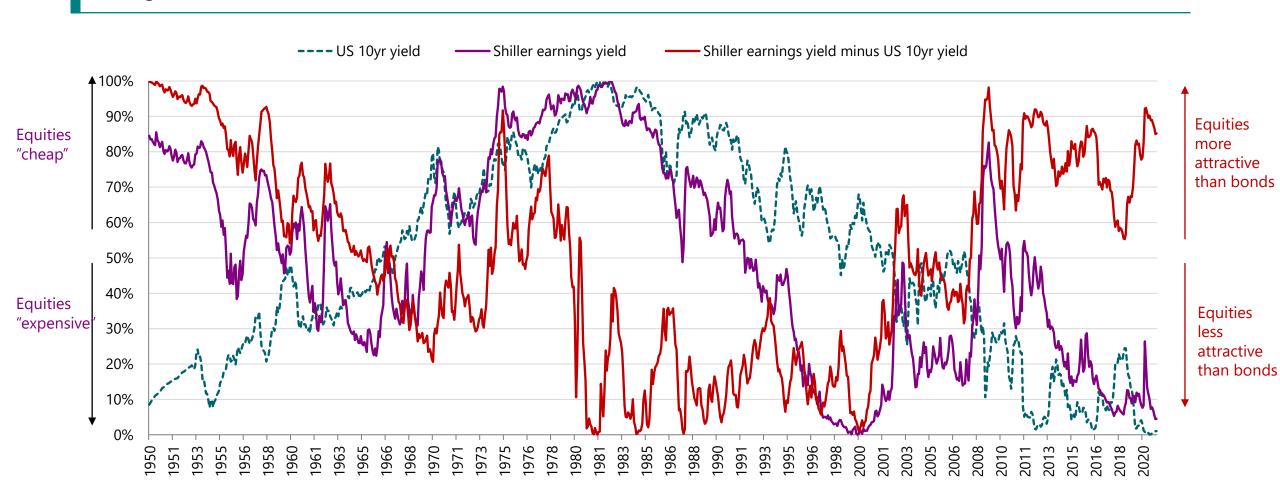
- Cash and bonds yield significantly less than early 2020 and significantly less than equities
- Government bonds are more vulnerable to 2021 reflation impulse as well as a potential shift in investors' asset allocations towards higher yielding asset classes
- Investors continue to think (by a big margin of net +60%) Emerging Markets will outperform in 2021

Source: BofA Global Fund Manager Survey

Relative Valuations: Equities look attractive versus government bonds (red line), but absolute valuations are expensive and nearing dot-com bubble levels



Earnings Yield (1/S&P500 PE) & US 10-Yr Yield: Percentiles of Historical Distribution since 1950



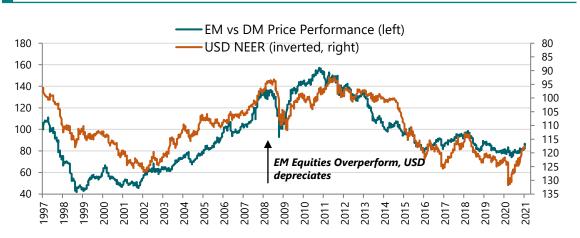
ΕΘΝΙΚΗ ΤΡΑΠΕΖΑ

ΤΗΣ ΕΛΛΑΔΟΣ

Equities: Emerging vs Developed Markets

EM vs DM Performance in \$





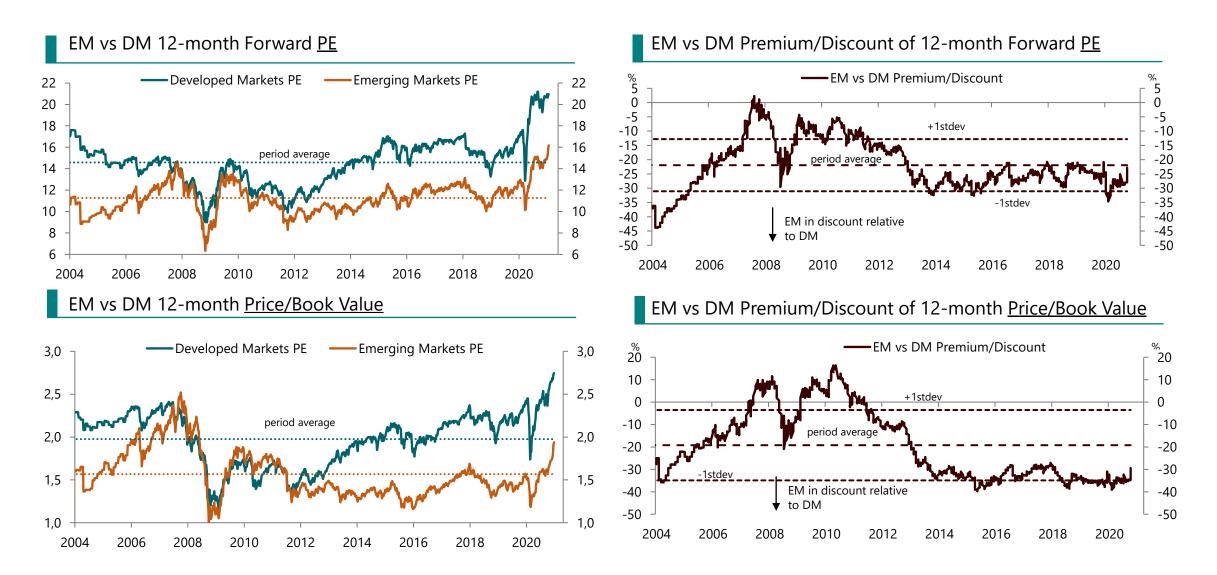
- Emerging Markets: Main beneficiaries of a vaccine-led trade and global economic upturn in 2021. A more predictable trade policy under a Biden administration
- A weaker (stronger) US dollar (EM FX) bodes well with EM equity market overperformance

	US	Japan	UK	France	Canada	Other
Developed	66%	8%	4%	3%	3%	15%
	China	South Korea	Taiwan	India	Brazil	Other
Emerging	39%	13%	13%	9%	5%	20%

Index Weights



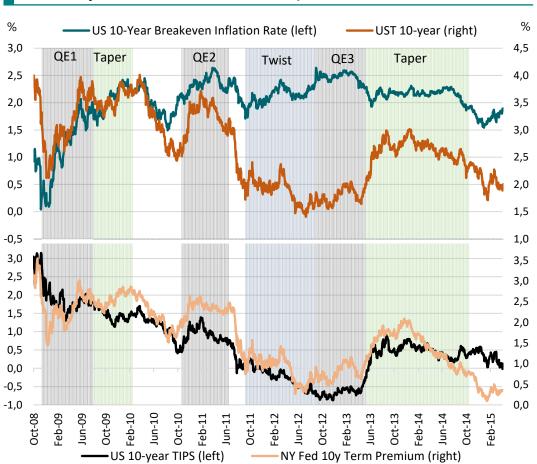




What if? According to Fed's December meeting minutes, tapering in 2012-13 (QE3) was mentioned as a "template". May 2013 – February 2014: A "knee-jerk" reaction of circa 150bps for nominal yields before resuming their downward trend, with US Equities overperforming their EM peers as EM FX depreciated sharply



US 10-year Yields and Fed Taper



Equity Markets and Fed Taper

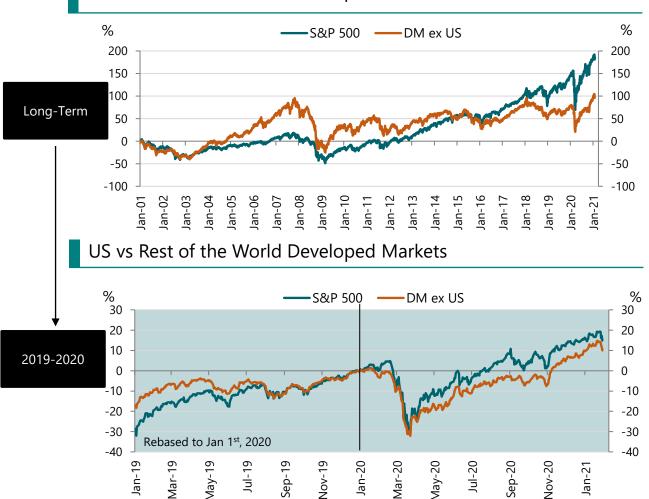


ΕΘΝΙΚΗ ΤΡΑΠΕΖΑ

ΤΗΣ ΕΛΛΑΔΟΣ

Equities: US vs Rest of the World Developed Markets

US vs Rest of the World Developed Markets



Euro area & Japan are global cycle plays with positive correlation to bond yields and to PMI direction. US highly concentrated in **Tech Stocks**

Industry Composition by Region

			Regio	n		
	US	Europe	UK	Japan	EM	China
Cyclicals	36%	48%	42%	55%	53%	28%
Defensives	28%	38%	40%	30%	17%	17%
Other	36%	14%	18%	15%	30%	55%

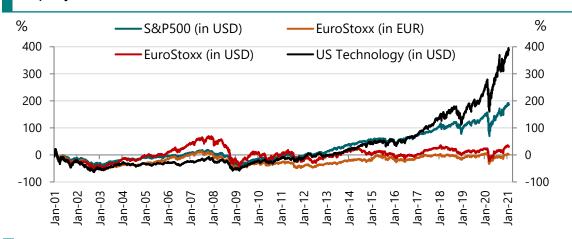
Cyclicals: Autos, Banks, Capital Goods, Consumer Durables, Diversified Financials, Energy, Materials, Media, Semiconductors, Transportation

Defensives: Utilities, Telecom services, Food & Staples Retailing, Food/Beverage/Tobacco, Household Products, Pharma & Biotech, Healthcare Equipment & Services

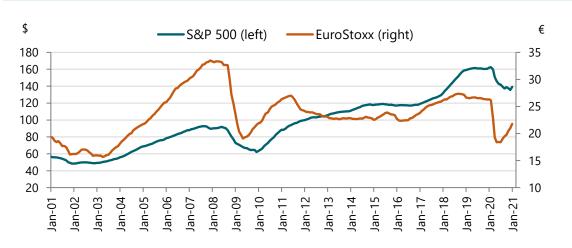


Equities: US vs Rest of the World Developed Markets

Equity Markets Performance



Corporate Profitability: US vs Euro Area 12-month Trailing EPS



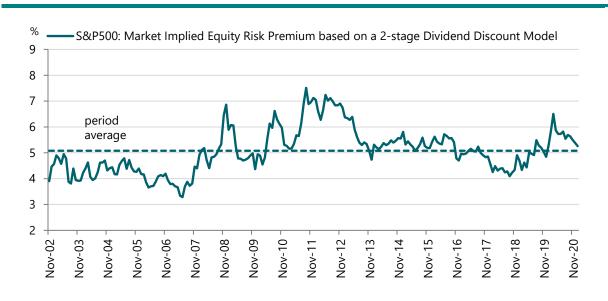
 US is highly concentrated in Tech Stocks with FAAMGs & TESLA accounting for circa 25% of market cap

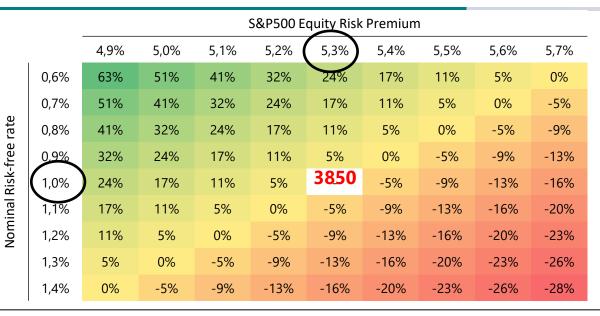
FAAMG, TESLA & S&P500

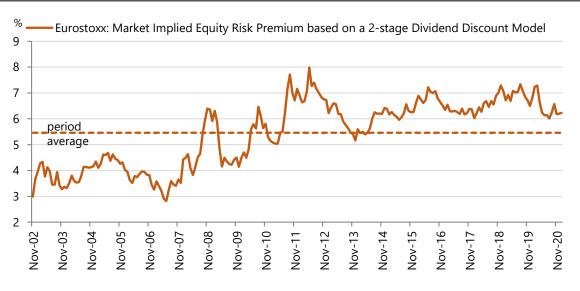
	Price Perfo	ormance	Market C	ap (\$bn)	24mth	Fwd P/E	EP:	S Grow	/th
	YtD	2020	Current	as % of S&P500	Current	10Y avg	2020	2021	2022
Facebook	-3%	33%	637	2%	19,4	24,9	57%	10%	21%
Apple	3%	81%	2306	7%	29,2	13,2	10%	33%	5%
Amazon	-1%	76%	1624	5%	48,6	63,8	52%	29%	43%
Microsoft	7%	41%	1802	5%	27,5	16,2	21%	27%	10%
Google	6%	31%	1172	4%	24,9	17,8	6%	19%	19%
Tesla	18%	743%	792	2%	140,7	66,7	n/a	74%	50%
S&P500	1%	16%	33450		19,0	14,8	-15%	24%	16%

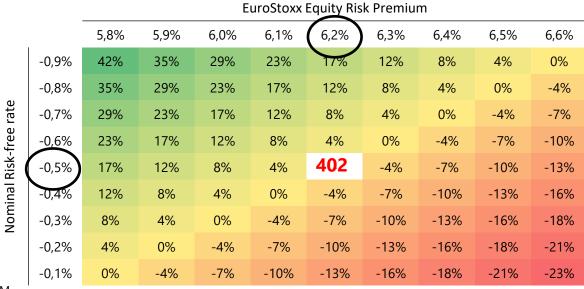
ΕΘΝΙΚΗ ΤΡΑΠΕΖΑ ΤΗΣ ΕΛΛΑΔΟΣ

Dividend Discount Model: Market implied equity risk premia have broadly returned to pre pandemic levels, albeit remaining structurally higher for European markets



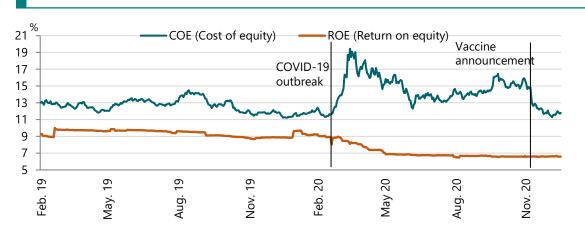








European Banks Cost of Equity & ROE



Eurostoxx Sectors

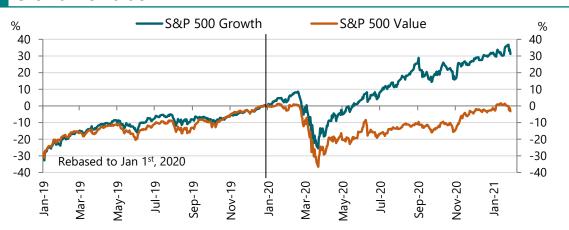


- The recovery in activity and ongoing improvement in corporate profits should be supportive for a rebound in cyclically sensitive assets which have meaningfully lagged Big Tech
- A continued catch-up in some <u>cyclical parts</u>
 of the <u>market</u> which have lagged their
 typical relationship with activity indicators is
 expected
- Sectors such as Financials and Energy could do well as the economy reopens and unemployment declines throughout 2021

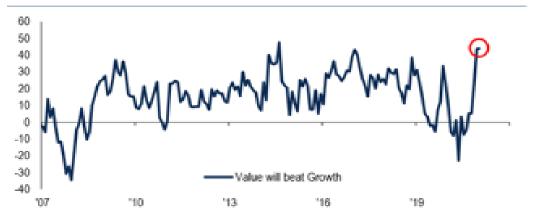


Equities: Styles | Value vs Growth (1/2)

Growth vs Value



Net % of Investors Think Value will Outperform Growth



Source: BofA Global Fund Manager Survey

- The economic recovery at the back of vaccines being rolled out will lead to a lengthy rotation from growth and momentum equities to value and cyclical equities
- Rotation towards Value stocks may continue as 10Yr UST yields head towards 1.25% -1.50%
- However: > Value could benefit from an accelerated pick up in economic activity, but many of the cheapest companies face structural challenges that have been exacerbated by the pandemic



Equities: Styles | Value vs Growth (2/2)

MSCI World Value vs Growth



Value vs Growth and US 10-Year Yield



Rotation towards Value stocks may continue as 10Yr UST yields head towards 1.25% -1.50%

	En	Mat	Fin	Real Estate	Ind	Cons. Discret	IT	Cons Stapl	НС	Comm	Ut
Growth	0%	2%	3%	1%	6%	17%	42%	4%	12%	14%	1%
Value	5%	4%	19%	4%	12%	8%	12%	10%	15%	7%	5%

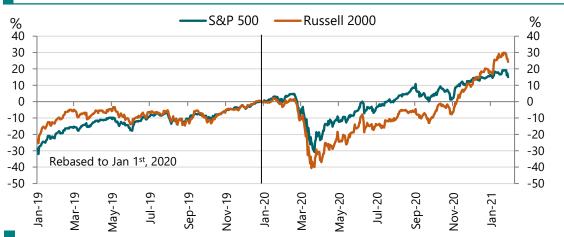
Index Weights

Source: NBG Research, Factset The Value (Growth) Index measures the performance of the large cap value (growth) segment of the US equity universe and 29 it includes those companies with lower (higher) price-to-book ratios and lower (higher) expected growth values

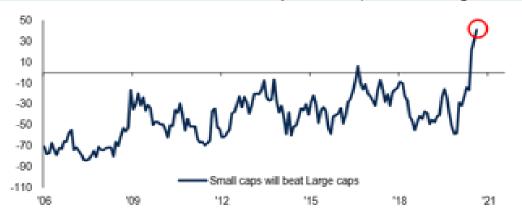


Equities: Styles | Small Cap vs Large Cap

Small Cap vs Large Cap



Net % of Investors Think Small Cap will Outperform Large

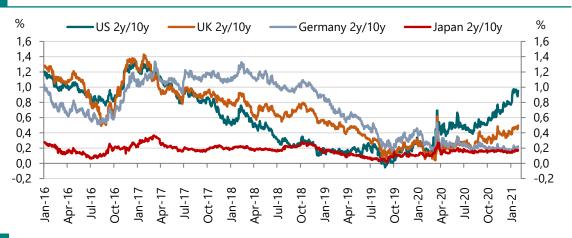


Source: BofA Global Fund Manager Survey

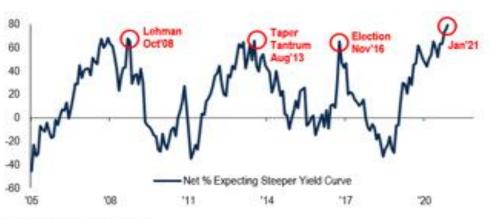
- Small-and mid-cap U.S. companies a key place where exposure to cyclicality is likely to be rewarded amid a vaccine-led recovery
- Higher inflation will run through greater economic activity
- A good inflation "hedge" is one that also benefits from higher growth > Equities and especially small-cap value



Yield Curves Term Slope



Yield Curve Expectations by Investors



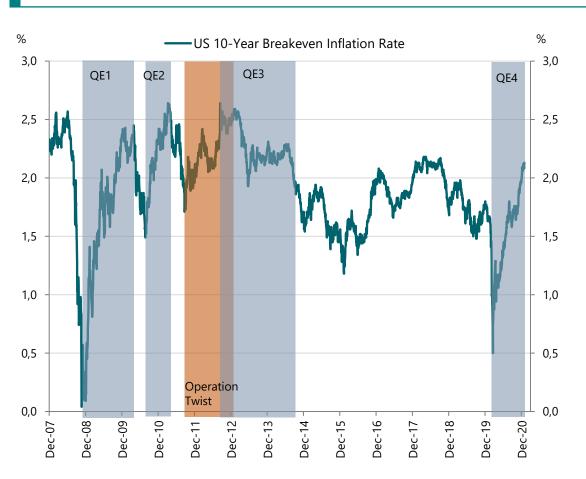
Source: BofA Global Fund Manager Survey

- Upward pressure on US 10y yields on the back of stimulus hopes post-election and continued vaccine progress
- Steepening pressures pushed further out the curve as Fed expectations anchor the belly
- The 2/10 UST term spread at its highest level since 2017



Government Bonds: Higher Inflation Break-Evens

Inflation Rate



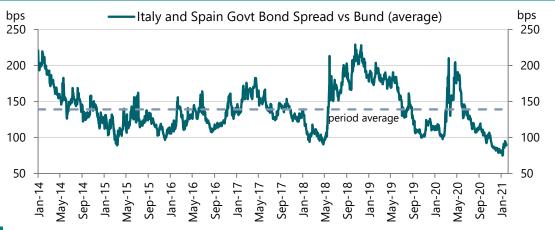
- The Federal Reserve has spent more than a decade holding nominal interest rates at low levels
- A Federal Reserve that has refused to set explicit limits and guideposts for settings policy (flexible average inflation targeting) around tapering and inflation may fuel inflation expectations
- Commodity prices to accelerate due to base effects

Source: NBG Research, The Breakeven Inflation Rate represents a measure of expected inflation derived from 10-Year Treasury Constant Maturity Securities and 10-Year Treasury Inflation-Indexed Constant Maturity Securities. The latest value implies what market participants expect inflation to be in the next 10 years, on average.

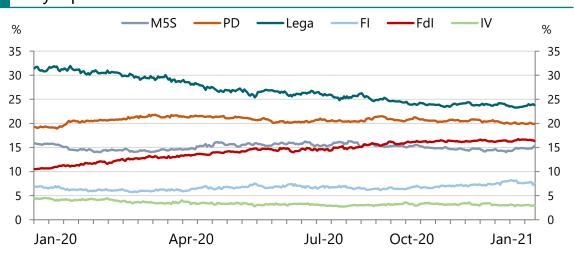




Italy-Spain Bond Spread



Italy Opinion Polls

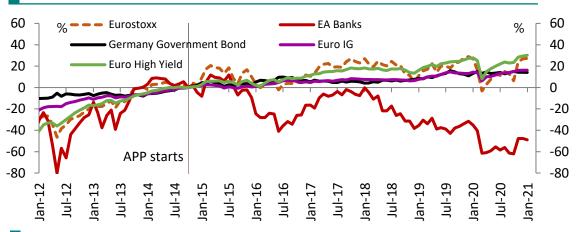


- Euro area peripheral government bonds overperformed in 2020 due to stepped-up quantitative easing by the ECB and other policy actions (Next Generation EU)
- QE pandemic-related programs implicitly cap both Periphery spreads and Bund yields in tandem, despite confusing communication lately

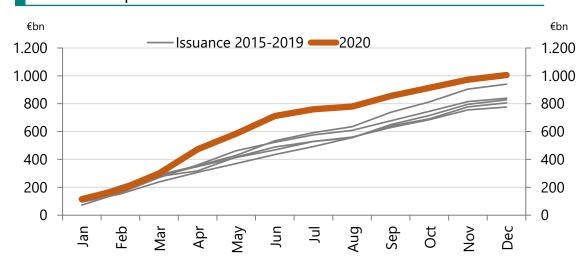
Corporate Bonds: The accommodative monetary policy has provided support mainly to fixed income assets. At the same time, the low-for-longer environment will continue to embolden investors to shift into riskier assets with corporate credit quality deteriorating constantly



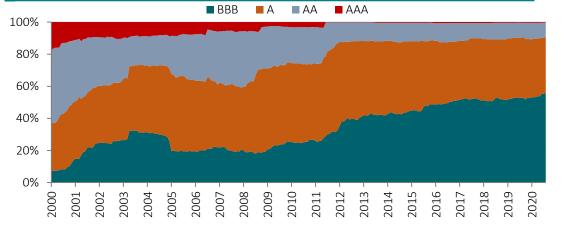




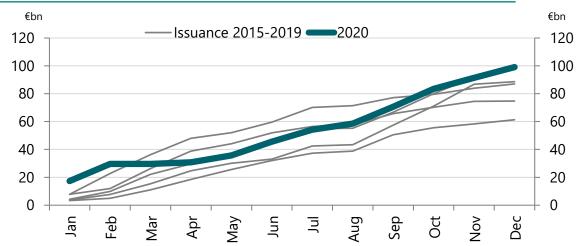
EUR IG Corporate Bond Issuance



Share of Market Value in BBG/Barclays EUR IG Corporate Bond Index



EUR HY Corporate Bond Issuance





High Yield vs Investment Grade Spread Ratio



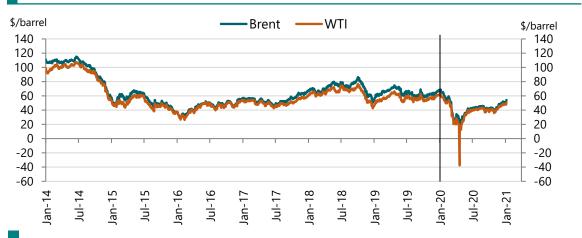
Percentiles 1999-2021

	Yield	Percentile	Credit Spread (bps)	Percentile	DY - credit spread (bps)	Percentile
S&P500	1,6	10%				
USD IG	1,9	1%	97	17%	62	43%
USD BBB	2,1	1%	121	9%	37	52%
USD HY	4,3	0%	362	21%	-203	66%
USD HY BB	3,3	0%	265	33%	-107	55%
USD HY CCC	6,9	2%	621	19%	-463	71%
EuroStoxx	2,7	14%				
EUR IG	0,3	1%	93	38%	181	22%
EUR HY	3,2	5%	343	24%	-69	56%
EM	2,3	2%				
EMBI	3,3	5%	324	34%	-91	38%

- Any compression in Investment Grade spreads will barely offset rises in Government yields
- High-Yield coupon returns more-than-offset any modest upward pressure on Government yields
- Positive vaccine news reduces downside growth risks from 2Q21 onward, and with it lower-than-expected default rates, may benefit High Yield
- RISK: a delayed reversion towards economic normalcy



Oil prices



Gold vs vs US 10-Year Real Yield



- A sharp tightening of oil fundamentals throughout 2021, driven by a recovery in global oil demand could lead oil prices higher
- Gold is viewed as a hedge against currency debasement and inflation risk (2021)

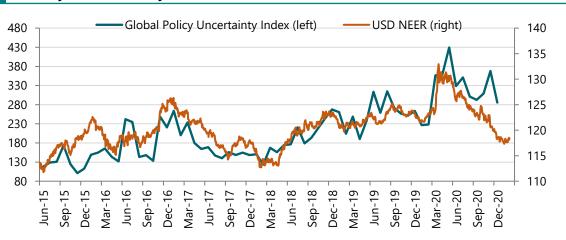




Real Trade Weighted US Dollar Index since 1973



Policy Uncertainty Index & USD



- Short-term, risk sentiment has been the main driver in G10 FX in 2020 and is expected to continue weighing on the USD at least until the market starts pricing Fed tapering and/or interest rate hikes
- A big cycle of weak USD could be in place (Graph 1), but EUR/USD moving to 1.20-1.25 range appears more likely in the course of 2021



Appendix: Global Equities Performance

										Earning	gs									Valuations					
	Weights	P	rice Return	15	Ве	eta		EPS (\$ / €) ¹		EPS Growth (%)	EPS G	rowth		Revisions fwd)		PE	(x)			rice/ Value (x)	Dividen	d Yield (%)		V/ TDA	Average Percentile
		3-month	YtD	2020	1 Year rolling	1 month rolling	2019	2020	2021	2021-2019	2020	2021	1-month	3-month	12m fwd	15 Years Percentile	24m fwd	15 Years Percentile	Current	15-Years Percentile	Current	15-Years Percentile	Current	15-Years Percentile	
Global Equities	100%	17.3%	0.1%	15.0%	1.0	1.0	11	9	12	8%	-18%	37%	2%	10%	19.5	96%	16.7	99%	2.3	98%	2.1	1%	12.1	99%	98%
Global Equities ex US	42%	17.4%	0.4%	11.4%	0.8	0.8	11	9	12	8%	-19%	39%	2%	11%	17.3	96%	14.8	99%	1.8	80%	2.6	1%	10.6	99%	95%
DM Equities	87%	18.1%	0.1%	15.0%	1.1	1.1	11	9	12	7%	-19%	37%	3%	10%	19.9	96%	17.0	99%	2.3	98%	2.0	1%	12.4	99%	98%
S&P 500	58%	13.6%	-1.1%	16.3%	1.3	1.2	160	137	170	6%	-12%	24%	4%	8%	21.6	96%	18.7	97%	3.8	99%	1.6	1%	14.4	97%	98%
EuroStoxx	7%	17.6%	-1.4%	-1.6%	1.1	0.8	24	15	21	-13%	-34%	40%	3%	15%	18.0	96%	15.1	98%	1.6	73%	2.7	1%	10.6	96%	92%
FTSE 100	3%	14.9%	-0.8%	-14.3%	1.0	0.9	666	424	612	-8%	-37%	44%	5%	15%	14.2	77%	12.4	73%	1.6	41%	3.9	26%	8.4	85%	70%
Nikkei 225	7%	20.4%	0.8%	16.0%	0.5	0.8	11	10	12	6%	4%	24%	1%	10%	21.8	91%	18.9	94%	2.0	97%	1.6	27%	11.9	99%	91%
China	4%	11.2%	1.3%	37.2%	0.5	0.6	14	14	17	25%	16%	24%	0%	2%	21.1	84%	18.1	87%	3.0	85%	1.6	19%	15.3	96%	86%
EM Equities	13%	16.2%	0.3%	17.3%	0.7	0.7	18	15	20	15%	-8%	38%	2%	10%	17.5	97%	15.3	100%	2.2	92%	2.3	3%	11.3	100%	97%
EM Asia Equities	11%	15.9%	2.2%	21.3%	0.6	0.8	18	16	21	21%	3%	29%	1%	7%	17.5	99%	14.8	98%	2.0	91%	2.0	1%	11.8	100%	98%
Eastern Europe	2%	30.4%	-1.1%	-14.0%	1.1	1.1	40	20	34	-17%	-43%	66%	8%	24%	7.8	62%	7.2	70%	0.9	57%	6.3	91%	5.4	75%	54%
LatAm Equities	1%	23.3%	-6.0%	-17.7%	1.4	1.2	17	7	16	-4%	-56%	146%	-2%	18%	14.9	92%	12.9	93%	1.9	54%	3.0	13%	7.9	84%	82%



Appendix: US Equities & Sectors Performance

							Earnings													Valuations					
	Weights	P	Price Returr	15	В	eta		EPS (\$)		EPS Growth (%)	EPS G	rowth		Revisions 1 fwd)		PE	(x)			rice/ Value (x)	Dividend	Yield (%)		:V/ ITDA	Average Percentile
		3-month	YtD	2020	1 Year rolling	1 month rolling	2019	2020	2021	2021-2019	2020	2021	1-month	3-month	12m fwd	15 Years Percentile	24m fwd	15 Years Percentile	Current	15-Years Percentile	Current	15-Years Percentile	Current	15-Years Percentile	
S&P500	100%	13.6%	-1.1%	16.3%	1.0	1.0	160	137	170	6%	-12%	24%	4%	8%	21.6	96%	18.7	97%	3.8	99%	1.6	1%	14.4	97%	98%
Energy	2%	36.8%	3.6%	-37.3%	1.3	1.0	21	-2	11	-45%	N/A	N/A	38%	97%	25.1	83%	15.2	72%	1.3	5%	5.5	95%	7.6	75%	48%
Materials	3%	12.1%	-2.4%	18.1%	1.0	1.0	19	17	22	20%	-9%	30%	5%	11%	19.8	95%	18.0	96%	2.8	72%	2.0	26%	11.1	96%	87%
Financials	10%	21.4%	-1.9%	-4.1%	1.2	1.0	37	30	36	-2%	-19%	22%	10%	15%	13.1	80%	11.6	86%	1.3	58%	2.3	58%	13.5	80%	69%
Industrials	8%	11.9%	-4.3%	9.0%	1.1	0.9	35	15	30	-14%	-57%	94%	-2%	6%	23.5	96%	17.7	97%	4.8	98%	1.7	1%	14.3	96%	97%
Consumer Discretionary	13%	11.6%	0.4%	32.1%	0.9	1.2	36	21	34	-6%	-32%	62%	3%	6%	37.6	95%	28.1	97%	10.0	99%	0.6	1%	18.9	96%	97%
IT	28%	16.4%	-1.0%	42.2%	1.1	1.1	68	74	87	27%	8%	17%	5%	9%	26.0	98%	23.5	97%	9.3	99%	1.0	21%	18.1	98%	94%
Consumer Staples	6%	3.1%	-5.3%	7.6%	0.7	0.6	30	31	33	9%	4%	6%	1%	3%	19.9	85%	18.6	85%	5.3	96%	2.8	33%	13.5	92%	85%
Health Care	14%	13.2%	1.3%	11.4%	0.8	0.8	67	73	81	21%	11%	11%	2%	5%	16.4	74%	15.2	88%	4.1	98%	1.7	3%	12.9	95%	90%
Communication Services	11%	11.2%	-1.5%	22.2%	0.9	1.3	9	8	9	9%	-2%	13%	3%	5%	22.8	97%	19.3	97%	3.5	92%	1.0	0%	11.4	99%	97%
Utilities	3%	-0.3%	-1.0%	-2.8%	0.9	0.7	16	16	17	6%	2%	5%	1%	1%	18.5	91%	17.5	90%	2.0	88%	3.4	12%	11.6	94%	90%
Real Estate	2%	8.3%	0.5%	-5.2%	1.0	0.7	11	11	11	-3%	-4%	4%	1%	2%	20.4	92%	18.9	92%	3.5	91%	3.1	32%	21.1	98%	88%



Appendix: Euro Area Equities & Sectors Performance

		ı	Price Retur	าร	Ве	eta	Earnings EPS EPS Growth Earnings Revisions EPS (€) Growth (%) (12m fwd)							PE	(x)			Valuations rice/ Value (x)	Dividen	d Yield (%)		EV/	Average		
	Weights	3-month	YtD	2020	1 Year rolling	1 month rolling	2019	2020	2021	2021-2019	2020	2021		3-month	12m fwd	15 Years Percentile	24m fwd	15 Years Percentile	Current	15-Years Percentile	Current	15-Years Percentile	Current	15-Years Percentile	Percentile
EuroStoxx	95%	17,6%	-1,4%	-1,6%	1,0	1,0	24	15	21	-11%	-34%	40%	3%	15%	18,0	96%	15,1	98%	1,6	73%	2,7	1%	10,6	23%	78%
Energy	5%	35,3%	-0,9%	-23,2%	1,3	1,2	24	5	14	-40%	-73%	185%	9%	25%	17,4	93%	13,0	90%	1,3	56%	4,8	34%	6,6	94%	80%
Materials	10%	13,5%	-1,4%	-11,7%	1,3	1,7	31	19	28	-9%	-37%	46%	0%	10%	15,0	66%	12,9	61%	1,6	56%	3,3	47%	8,1	59%	59%
Financials													1												
Banks	6%	31,8%	-4,6%	-23,7%	1,5	1,9	11	5	7	-36%	-49%	29%	3%	17%	9,9	50%	7,5	34%	0,5	9%	4,9	65%	N/A	N/A	32%
Insurance	4%	20,3%	-5,4%	-13,5%	1,3	1,2	28	21	28	2%	-25%	35%	-1%	10%	8,7	30%	8,0	32%	0,8	15%	6,2	88%	N/A	N/A	43%
Industrials	13%	18,4%	-1,8%	4,0%	1,1	1,1	47	36	40	-16%	-24%	10%	0%	11%	23,8	97%	19,2	99%	3,1	99%	1,9	1%	12,4	97%	81%
Consumer Discretionary								I			1		1												
Retail	3%	10,6%	-5,5%	10,4%	0,8	1,2	25	15	23	-6%	-44%	56%	1%	9%	26,9	94%	22,7	91%	5,1	92%	2,6	40%	13,3	70%	89%
Automobiles and parts	5%	26,6%	-0,6%	3,7%	1,4	1,0	46	10	56	23%	-76%	471%	12%	55%	8,8	53%	7,0	28%	0,9	25%	3,3	51%	7,4	53%	44%
Travel and Leisure	1%	13,5%	-6,2%	-0,4%	1,1	1,2	12	-16	-1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	21,3	98%	2,5	86%	0,6	2%	17,0	96%	82%
IT	12%	25,7%	3,6%	18,3%	1,0	1,0	23	21	25	10%	-3%	18%	1%	12%	29,7	99%	24,8	100%	4,7	100%	0,8	6%	23,2	100%	99%
Consumer Staples																									
Food&Beverage	5%	13,2%	-3,9%	-13,0%	0,8	0,6	29	18	23	-19%	-36%	31%	0%	7%	21,5	86%	19,0	83%	2,1	19%	2,0	25%	12,9	81%	73%
Household Goods	11%	10,1%	-5,4%	13,8%	0,8	1,0	34	23	33	-2%	-30%	47%	2%	13%	34,2	96%	30,1	98%	5,4	99%	1,3	2%	18,3	96%	93%
Health care	9%	8,6%	1,3%	-6,6%	0,7	0,6	44	39	44	0%	-4%	11%	-2%	5%	18,7	96%	16,9	96%	2,2	68%	2,1	7%	11,6	93%	90%
Communication Services	4%	10,9%	3,0%	-14,3%	0,8	0,4	18	17	17	-8%	-12%	1%	2%	9%	14,9	70%	12,8	58%	1,4	10%	4,4	25%	6,2	63%	59%
Utilities	7%	14,5%	-1,1%	9,8%	0,9	1,2	24	20	23	-6%	-16%	12%	1%	8%	16,3	92%	15,2	94%	1,6	75%	4,3	23%	8,0	94%	89%

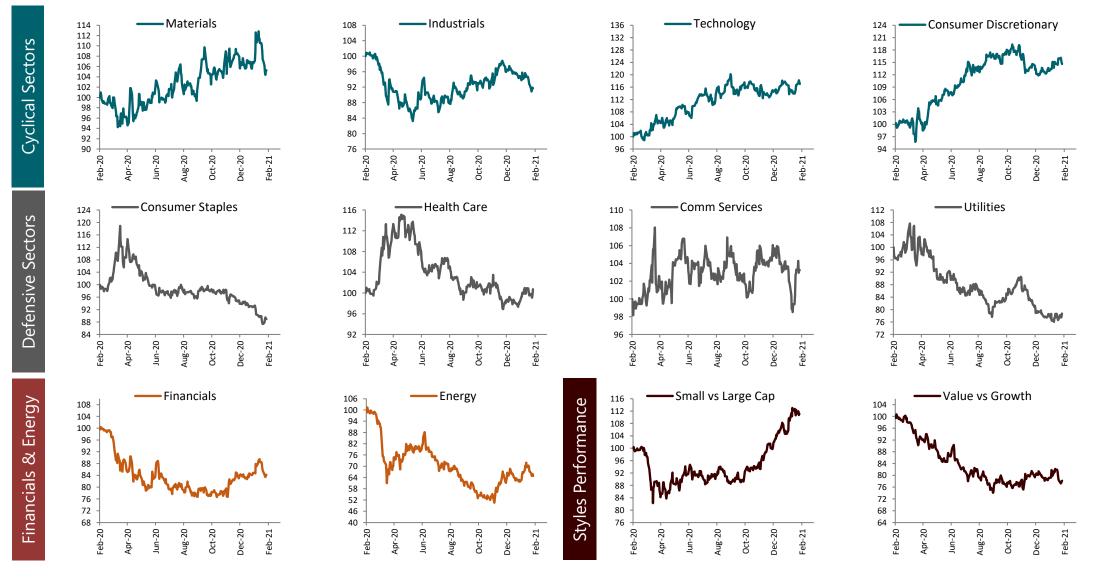


Appendix: Corporate Bond Spreads

	Spread Change (bps)			Spread Level (bps)			Yield			Total Return Change			Modified Duration	Market Value	Face Value
	3-month	Quarter-to-date	Year-to-date	Latest	15Y Average	Percentile	Latest	15Y Average	Percentile	3-month	Quarter-to-date Year-to-date		(years)	(LC, bn)	(LC, bn)
USD Investment Grade	-29	1	1	97	161	87%	1,9%	4,1%	99%	1,9%	-1,3%	-1,3%	8,6	6796	5911
AAA	-15	0	0	55	83	89%	1,7%	3,4%	96%	0,5%	-2,1%	-2,1%	12,4	111	96
AA	-15	3	3	61	105	83%	1,5%	3,3%	96%	0,9%	-1,6%	-1,6%	9,5	482	426
Α	-19	2	2	75	141	97%	1,6%	3,8%	98%	1,0%	-1,4%	-1,4%	8,4	2808	2448
BBB	-39	-1	-1	121	203	91%	2,1%	4,5%	99%	2,8%	-1,1%	-1,1%	8,5	3394	2940
USD High Yield	-147	2	2	362	531	77%	4,3%	7,7%	99%	6,3%	0,3%	0,3%	3,6	1595	1504
ВВ	-108	1	1	265	372	67%	3,3%	6,1%	100%	5,3%	0,1%	0,1%	4,3	855	789
В	-141	12	12	391	514	66%	4,6%	7,5%	99%	5,4%	0,2%	0,2%	2,7	521	496
CCC	-315	-37	-37	621	873	78%	6,9%	11,2%	98%	11,3%	1,5%	1,5%	2,5	210	206
EUR Investment Grade	-23	1	1	93	147	79%	0,3%	2,7%	99%	1,1%	-0,1%	-0,1%	5,3	2555	2384
AAA	2	5	5	51	73	76%	0,0%	2,1%	98%	-0,5%	-0,5%	-0,5%	8,1	8	7
AA	-9	1	1	56	97	81%	-0,1%	2,2%	98%	0,1%	-0,1%	-0,1%	4,8	228	214
Α	-17	3	3	78	136	80%	0,1%	2,6%	98%	0,6%	-0,2%	-0,2%	5,4	892	838
BBB	-32	0	0	109	193	83%	0,4%	3,2%	99%	1,6%	0,0%	0,0%	5,2	1427	1326
EUR High Yield	-128	-4	-4	343	515	72%	3,2%	7,1%	94%	5,4%	0,4%	0,4%	3,5	391	378
ВВ	-91	3	3	259	385	69%	2,2%	5,5%	91%	4,3%	0,3%	0,3%	3,8	263	250
В	-183	-9	-9	408	615	80%	4,3%	8,4%	99%	6,1%	0,3%	0,3%	3,0	91	89
CCC	-290	-17	-17	660	950	73%	6,8%	12,4%	98%	10,0%	1,0%	1,0%	2,9	35	35
CDX IG	-9	6	6	56	74	87%									
CDX HY	-99	29	29	323	449	83%									
iTraxx Europe 125	-13	4	4	52	80	87%									
iTraxx Crossover 75	-100	27	27	269	356	74%									

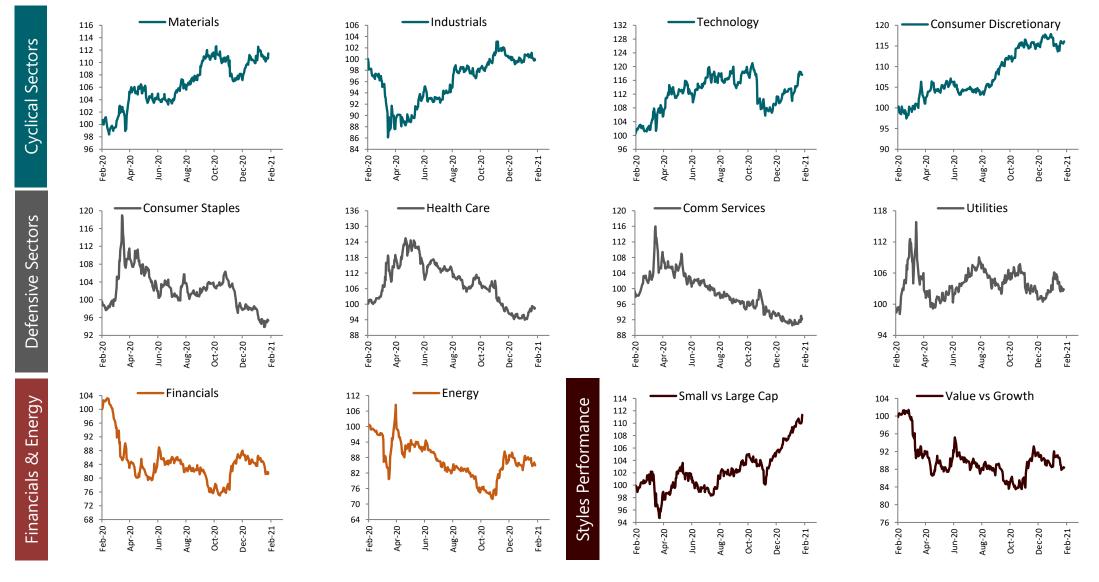
ΕΘΝΙΚΗ ΤΡΑΠΕΖΑ ΤΗΣ ΕΛΛΑΔΟΣ

Appendix: US Sectors Relative to S&P 500 performance



ΕΘΝΙΚΗ ΤΡΑΠΕΖΑ ΤΗΣ ΕΛΛΑΔΟΣ

Appendix: Euro Area Sectors Relative to Eurostoxx performance





Disclosures & Analyst Certification

> 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.