



RUTGERS

Business School
Newark and New Brunswick

Team 5 Market & Portfolio Update

2/14/2022 – 2/22/2022

Finance Honors Seminar
Spring 2022

Sumantra Chattopadhyay, [REDACTED]

Table of Contents



News,
Economic
Indicators &
Markets



Portfolio
Allocation &
Investment
Thesis



Trade Log



Risk Report



Forward
Guidance



Appendix

NEWS, ECONOMIC INDICATORS & MARKETS

Bearish forces continue in markets, but present opportunities for specific sectors

- Russia orders troops into Donetsk and Luhansk after recognizing them as independent; Russia claims peacekeeping, US accuses pretext for invasion
 - Threat of invasion could enable US oil and gas industry to increase supply to Europe, amidst threat of Russian supply termination
 - Surging oil prices can bolster demand for domestic drilling, despite ESG pressure
- Canadian officials focus on tougher measures to choke off financial support for COVID-19 protesters
 - Auto industry reconsiders “just-in-time” production model after border protests, other world events continue threatening its supply chain
- Moderna (NASDAQ: MRNA) stock plummets last week after insiders sell millions of dollars in shares
 - Big Pharma stocks follow behind but with lower magnitude of falling prices

Economic Indicators

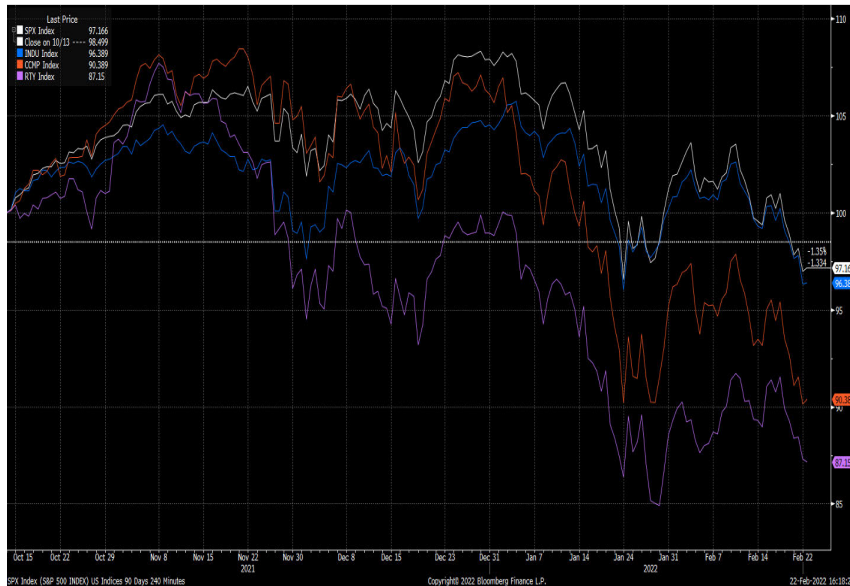
Indicator	Previous	Survey	Actual	Surprise	Meaning
PPI Final Demand YoY	9.7%	9.1%	9.7%	60 bps	Change in price of goods Producer's input costs remain high, people still underestimating it
PPI Final Demand MoM	0.2%	0.5%	1.0%	50 bps	Change in price of goods
Retail Sales Advance MoM	-1.9%	2.0%	3.8%	180 bps	Resale of new or used goods Retailers doing better than expected
Industrial Prod.	-0.1%	0.5%	1.4%	90 bps	Output in mining, quarrying, manufacturing, public utilities Potential resolution of supply chain issues; production picking up
Capacity Utilization	76.5%	76.8%	77.6%	80 bps	Percent of capacity being used for production

Economic Indicators

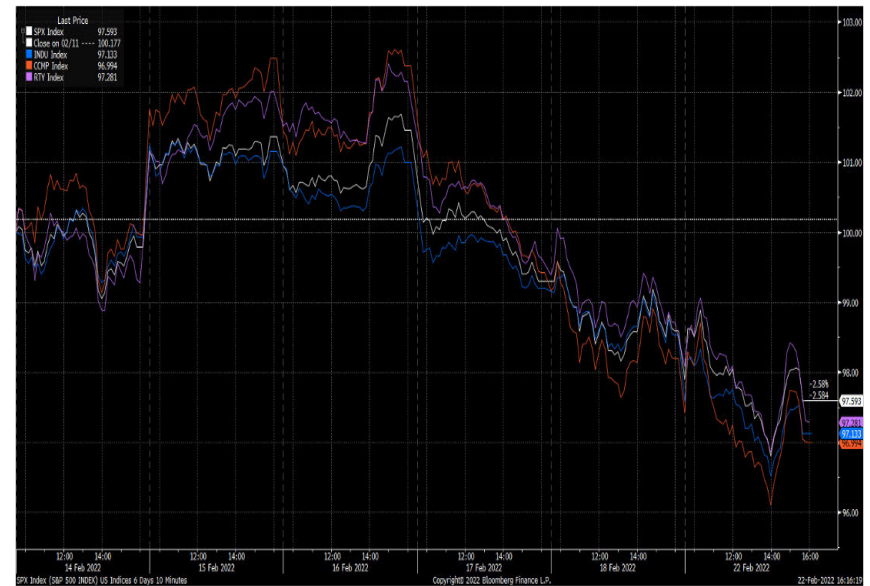
Indicator	Previous	Survey	Actual	Surprise	Meaning
Business Inventories	1.3%	2.1%	2.1%	0 bps	Tracks inventories in the manufacturing industry Resolution of supply chain issues
Housing Starts	1702k	1695k	1638k	(57k)	Number of housing units/buildings started in period (Jan) Residential RE cooling off?
Housing Starts MoM	1.4%	-0.4%	-4.1%	(370 bps)	Number of housing units/buildings started in period (Jan)
Initial Jobless Claims	223k	218k	248k	30k	Number of people who filed claims for first time Indicates higher frictional unemployment / job switching?
Continuing Claims	1621k	1605k	1593k	(12k)	Total number of people who filed claims

US equity markets continue decline; small-cap continues to struggle, along with NASDAQ Composite

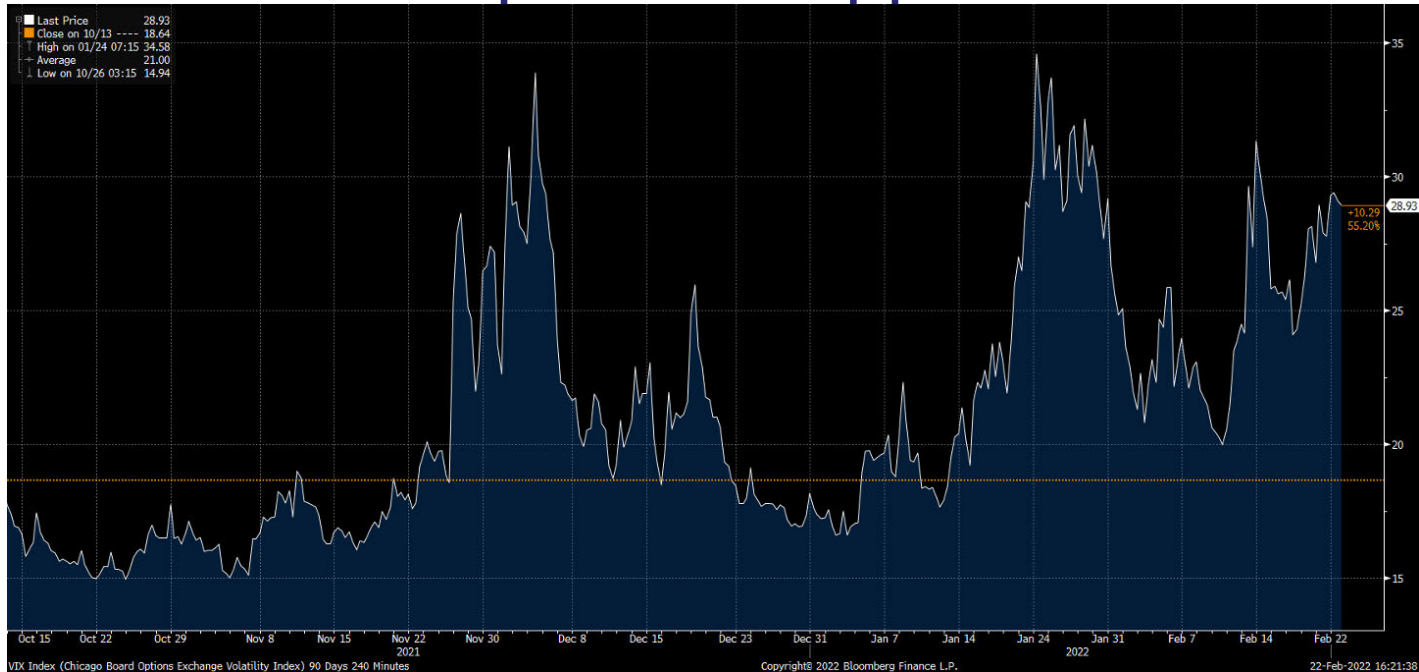
Last 90 Days (10/15/2021–2/22/2022)



Last Week (2/14–2/22/2022)



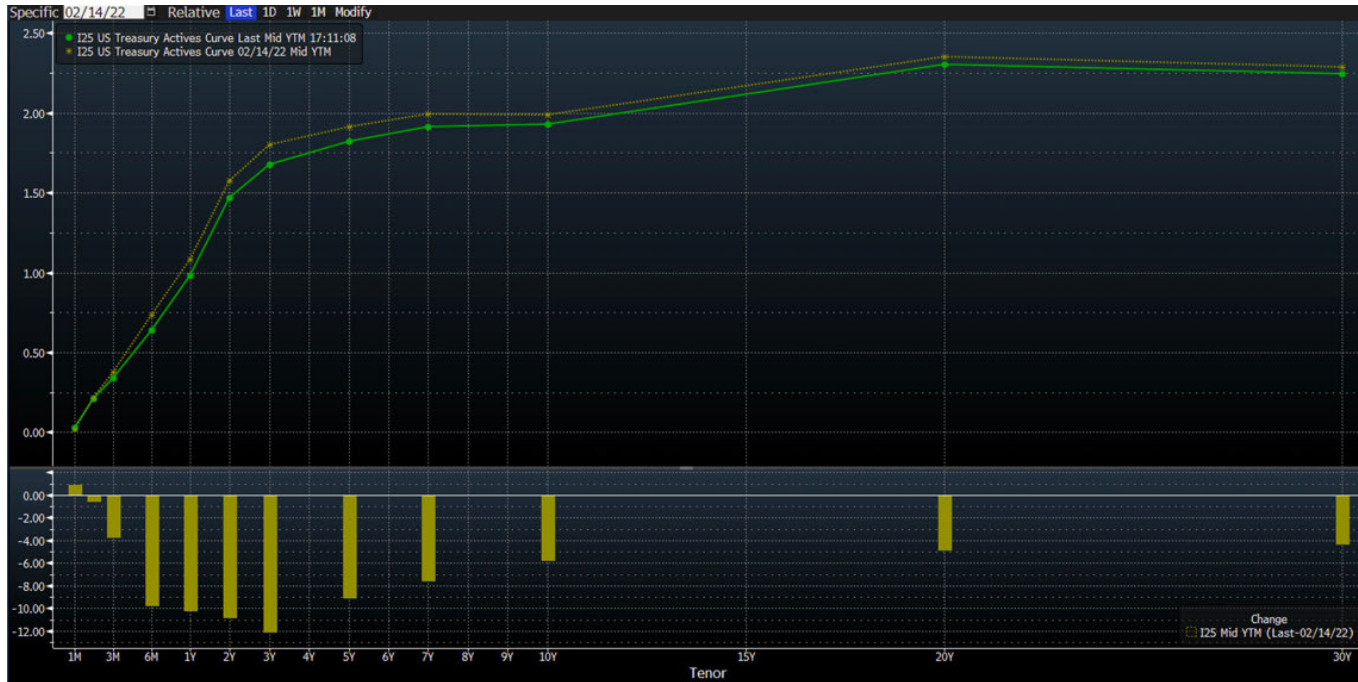
Volatility remains elevated, contributing to risk-off sentiment but also presents opportunities



Risk-off sentiment exacerbated since the New Year with 10-year yields eclipsing S&P 500 dividend yield



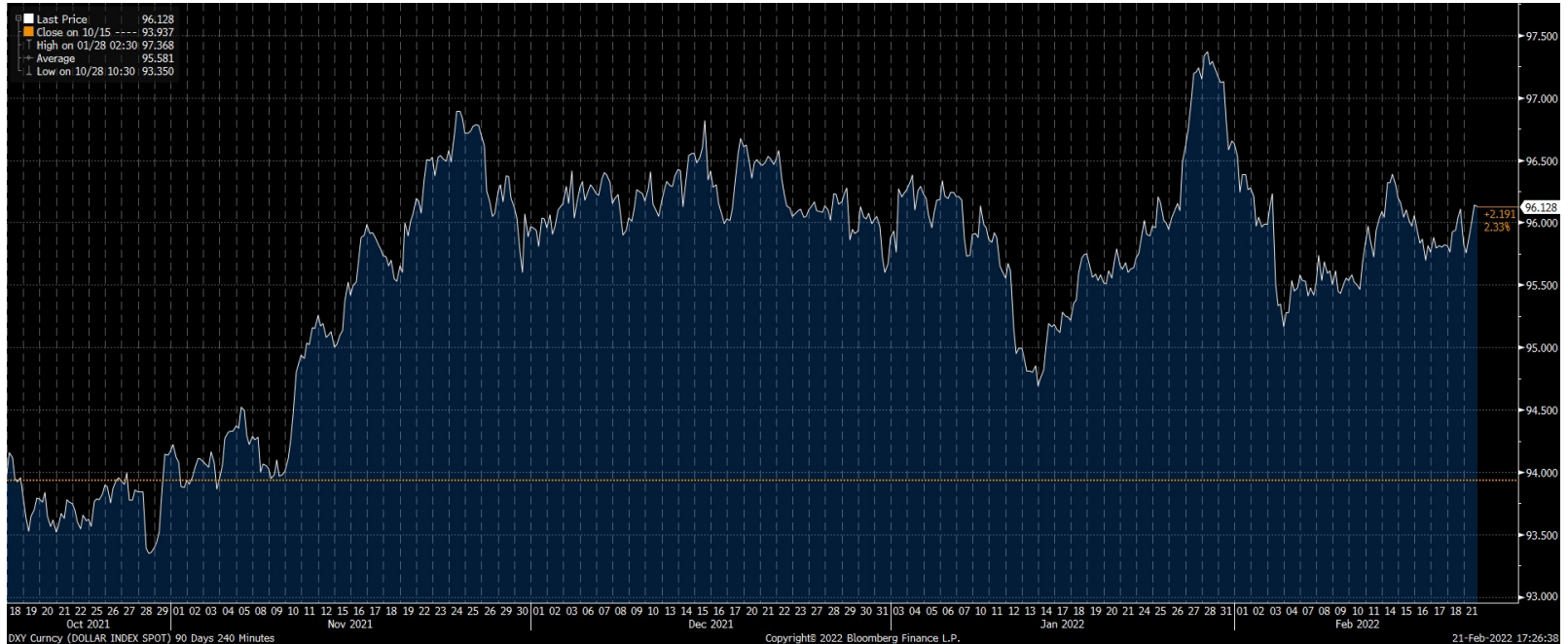
Treasury yields have slightly fallen relative to 2/14/2022, holding steady after FOMC minutes release



CDS indices indicate increasing risk with investment grade credit; other sectors remain steady



US Dollar strength holding steady amidst inflationary pressures



Oil leads all commodities increasing in inflationary environment; precious metals and softs lag behind



PORTFOLIO ALLOCATION & INVESTMENT THESIS

Portfolio Performance & Characteristics

	Return, 2/14-2/21	Excess Return	Return, Since Inception	Sharpe Ratio, Since Inception
Benchmark	(0.53)	—	(2.02)	
Portfolio	(1.16)	(0.63)	(5.14)	(2.82)

Past 3 months:

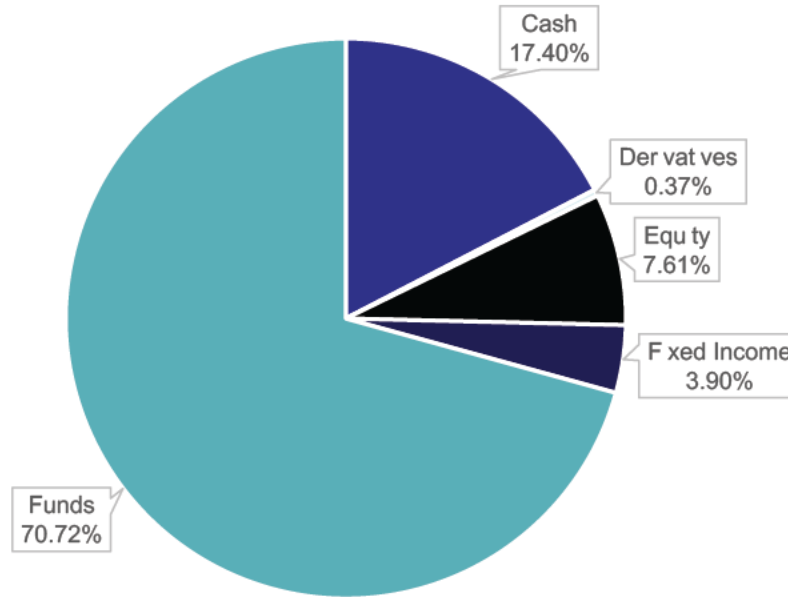
Beta (ex-post): 0.84

Correlation: 0.88

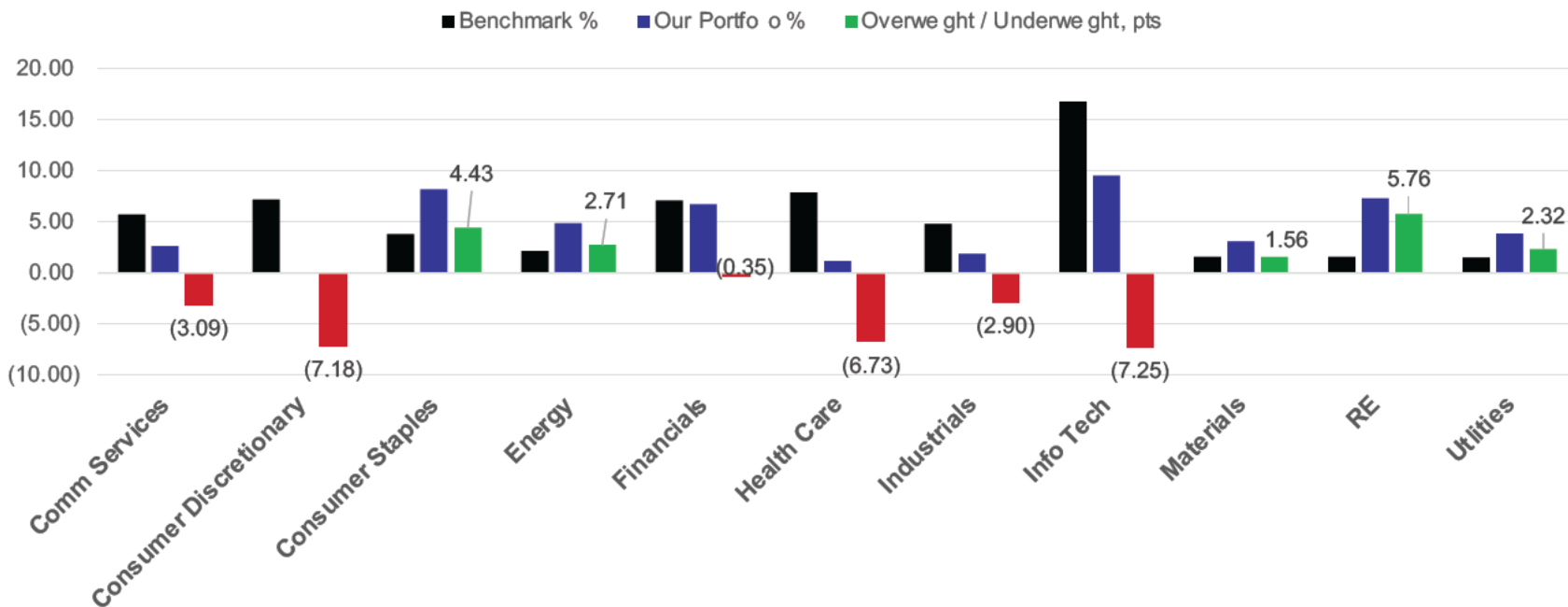
Performance Attribution Analysis

TEAM 5 LIVE PORTFOLIO vs Default (CAPST) by Asset type in USD														
Version MAC Edit Model Attribution Model Returns-Based Local Alloc Local Return Allocation FX Alloc None Time Custor 02/14/22 - 02/18/22														
Name	Avg % Wgt			Tot Rtn			CTR			Alloc	Selec	Curr	Tot Attr	
	Port	Bmrk	+/-	Port	Bmrk	+/-	Port	Bmrk	+/-					
TEAM 5 LIVE PORTFOLIO	100.00	100.00	0.00	-1.16	-0.53	-0.63	-1.16	-0.53	-0.63	-0.23	-0.40	0.00	-0.63	
▶ Equity	0.95		0.95	-5.30		-5.30	-0.05		-0.05	-0.05	0.00	0.00	-0.05	
▶ Cash	19.48	10.00	9.48	0.00	0.00	0.00	0.00	0.00	0.00	-0.03	0.00	0.00	-0.03	
▶ Derivatives	0.44		0.44	-29.70		-29.70	-0.19		-0.19	-0.19	0.00	0.00	-0.19	
▶ Fixed Income	1.46		1.46	0.51		0.51	0.01		0.01	0.04	0.00	0.00	0.04	
▶ Funds	77.66	90.00	-12.34	-1.09	-0.59	-0.49	-0.93	-0.53	-0.40	0.00	-0.40	0.00	-0.40	

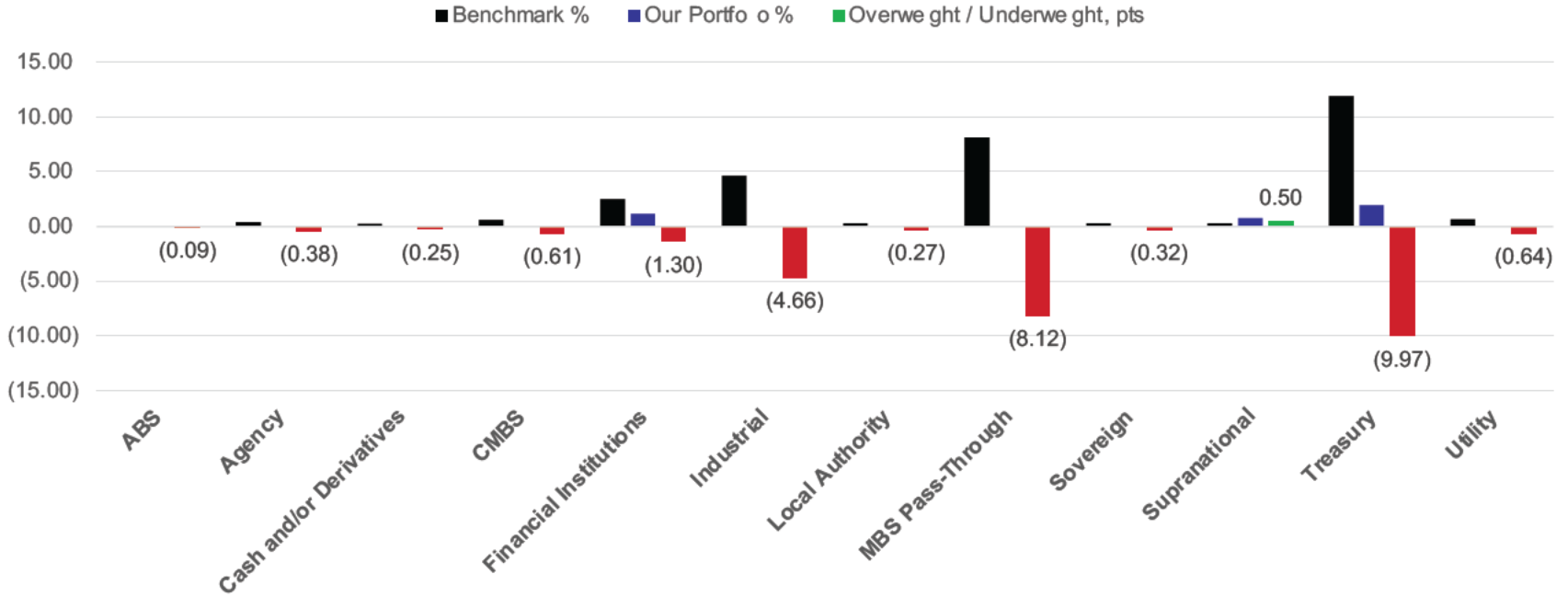
Portfolio Allocation, Asset Classes



Portfolio Allocation vs Benchmark, S&P



Portfolio Allocation vs Benchmark, Fixed Income



TRADE LOG: 2/14/2022 – 2/22/2022

Freeing up cash to fund new theses

Asset	Sector	Allocation	Weighting vs Benchmark	Rationale
AGG	Fixed Income	Prev (2/15): 10.02% New (2/22): 0.96%	(29.08) pts	Divesting from broad FI benchmark to focus on specific sectors
SPY	Equities	Prev (2/15): 29.09% New (2/22): 20.65%	(39.28) pts	Divesting from broad equity benchmark to focus on specific sectors

Equity Trades: Focusing on value stocks

Asset	Allocation	Sector	Total Sector Weighting vs Benchmark	Rationale
LUV Southwest Airlines	0.79%	Industrials	(2.90) pts	Looser COVID restrictions and warmer weather can spur domestic travel Discount airline with excellent financial management
DD DuPont	1.06%	Materials	1.56 pts	Existing agriculture trades performing well Strong demand for crops require more inputs to grow
TSN Tyson Foods	1.56%	Consumer Staples	4.43 pts	Price inelastic demand for meat Able to withstand inflationary pressures
SJM J M Smucker	1.57%	Consumer Staples	4.43 pts	Somewhat inelastic demand for “extras” Able to withstand inflationary pressures
PLD Prologis	1.57%	Real Estate	5.76 pts	Relieving supply chain pressures require increased logistics development; Prologis is a leader in the space
SPG Simon Property Group	1.05%	Real Estate	5.76 pts	Looser COVID restrictions and wage growth may push people to malls; retail sales recovery; cheap P / FFO

ETF Trades: Reducing tracking error to SPY

Asset	Sector	Allocation	Weighting vs Benchmark	Rationale
VGT	Info Tech	6.09%	(7.25) pts	Growth stocks do poorly with higher rates Moderately increase beta
XLF	Financials	6.71%	(0.35) pts	Aim: match weighting in benchmark Higher rates increase profitability for financials
XLE	Energy	3.65%	2.71 pts	Can withstand inflationary pressures Geopolitical risk increases oil prices
VNQ	Real Estate	1.91%	5.76 pts	Can withstand inflationary pressures Tenant / homebuyer demand faces headwinds
XLU	Utilities	3.83%	2.32 pts	Can withstand inflationary pressures Faces relatively price inelastic demand

Fixed Income Trades: Responding to inflation

Asset	Sector	Allocation	Weighting vs Benchmark	Rationale
TII 0 ½ 04/15/24 TII 0 ⅝ 01/15/26 TII 0 ⅛ 01/15/30 TII 0 ⅛ 04/15/25 TII 0 ⅛ 01/15/31	Treasury	1.95%	(9.97) pts	Protected from inflation Preparing for rates raising
IBRD Float 01/13/23 IBRD Float 09/18/25	Supranational	0.78%	0.50 pts	Aim: seeking international FI exposure AAA rating Floating rate coupon to keep up with inflation
JPM Float 10/24/23 MS Float 10/24/23 HSBC Float 05/18/24	Financials	1.17%	(1.30) pts	Interested in financial sector in general to prepare for bearish market; floating to keep up with inflation

Options Trades: Exploring volatility theses

Exited our initial FB position

Asset	Size of Trade	Rationale
FB	Sold 419 shares	Liquidate long position & replace it with call options to lower risk of downside loss and free up capital
FB 2/18/22 P190 (1) FB 2/18/22 P205 (2) FB 2/18/22 P220 (1)	Sold 4 contracts	Contracts expired on 2/18

Entered new FB volatility trade with longer horizon (Strangle)

Asset	Size of Trade	Allocation	Rationale	Target Price
FB US 04/14/22 P190	Bought 5 contracts	0.03%	Liquidate long position & replace it with call options to lower risk of downside loss and free up capital Contracts expired on 2/18	X < \$180 or X > \$250
FB US 04/14/22 C240	Bought 5 contracts	0.01%		

Options Trades: Exploring volatility theses

Entered new options trade in biotech sector (Straddle)

 **iShares Biotechnology ETF**

Asset	Size of Trade	Allocation	Rationale	Target Price
IBB	Sold 3,311 shares	—	Liquidate long position after consistent underperformance	—
IBB US 03/18/22 P127	Bought 10 contracts	0.05%	Biotech is a volatile industry. Prices swing dramatically when news breaks about product development and regulatory pathways. In the past 6 months, IBB's price has declined by ~26%, reaching April 2020 price levels.	X < \$117.5 or X > \$136.5
IBB US 03/18/22 C127	Bought 10 contracts	0.03%		

Sold portion of SPX puts as markets declined

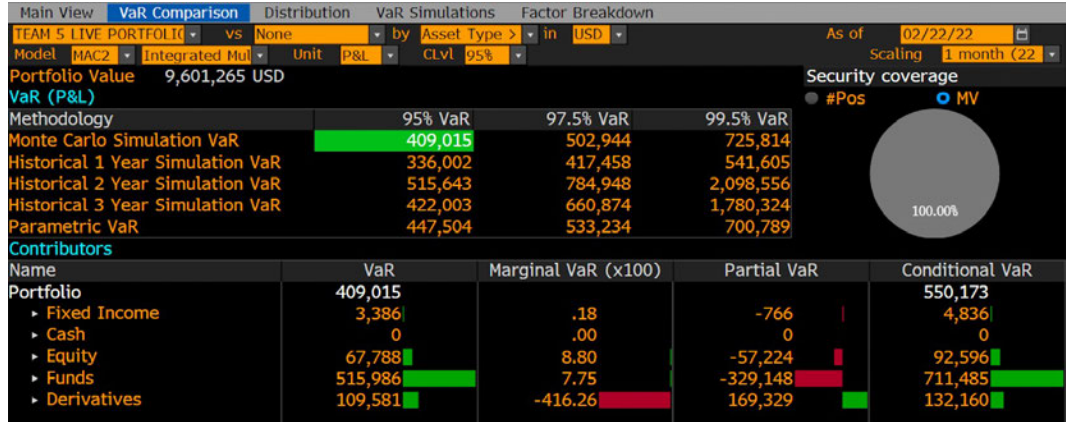
S&P 500 Index
.SPX:INDEX

Asset	Size of Trade	Rationale
SPXW 2/28/22 P4200	Sold 7 contracts	Consistent with our new strategy to increase portfolio beta and decrease our broad put positions on SPX

RISK REPORT

VaR Analysis

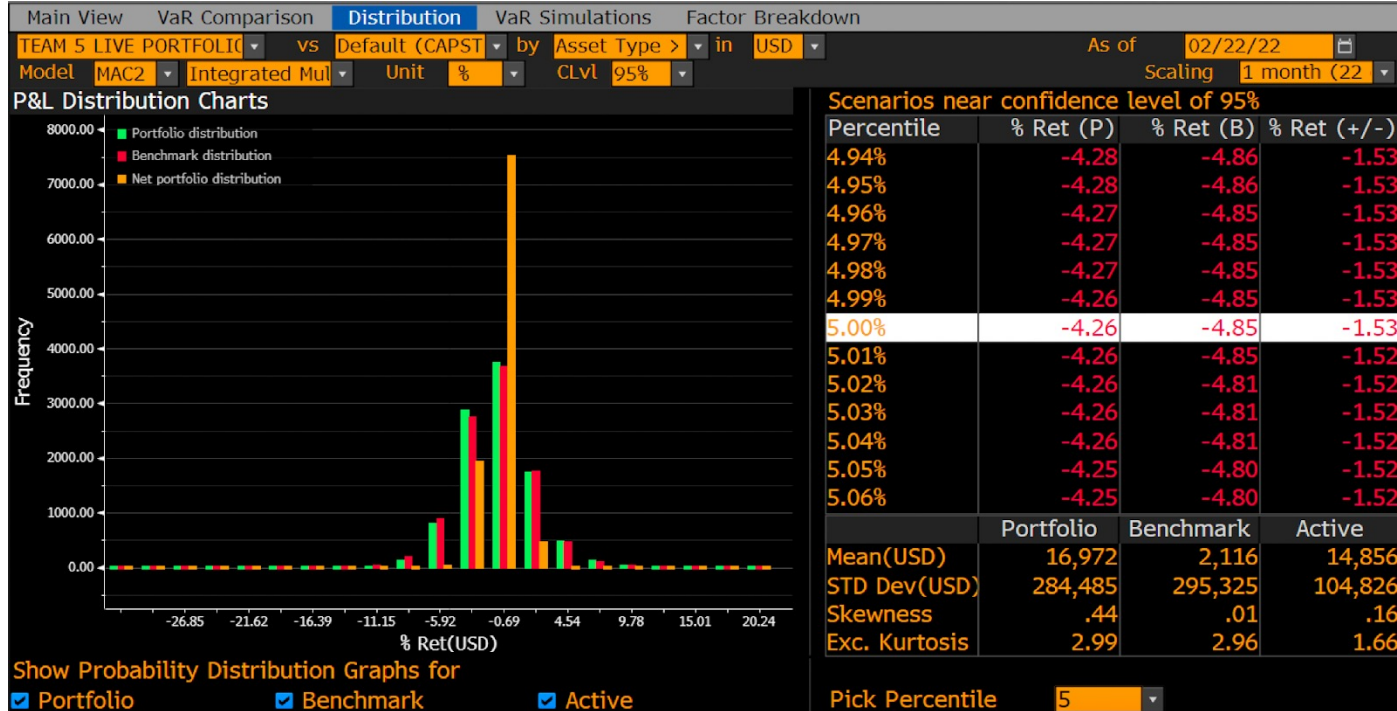
Portfolio VaR (1 month)



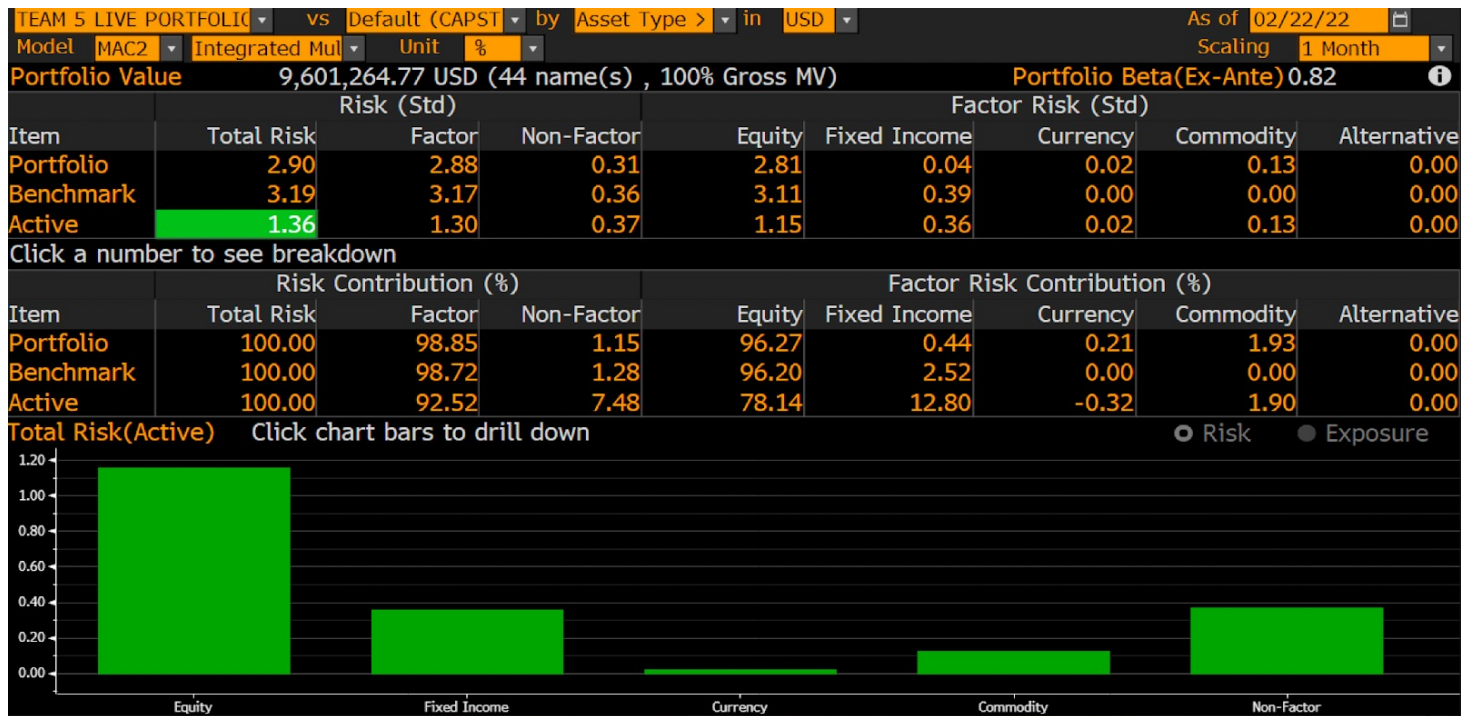
Benchmark VaR (1 month)



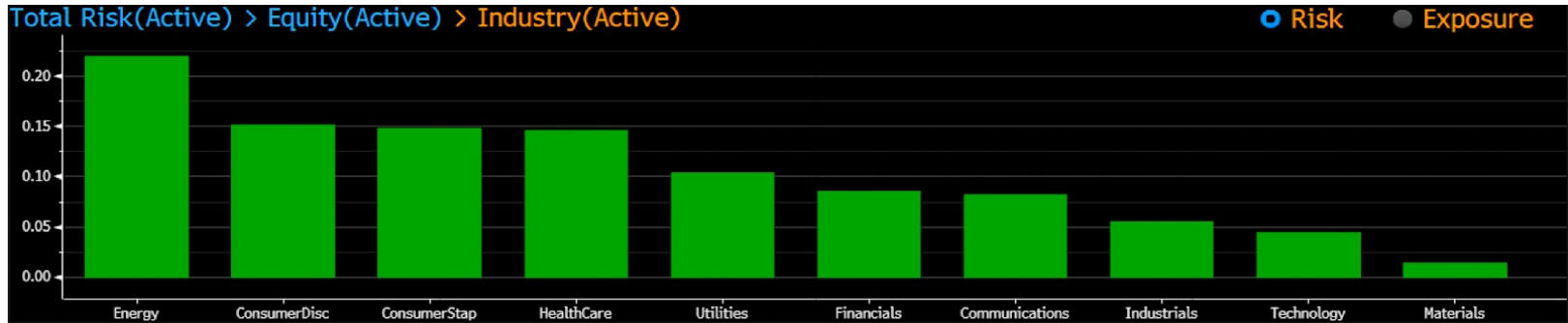
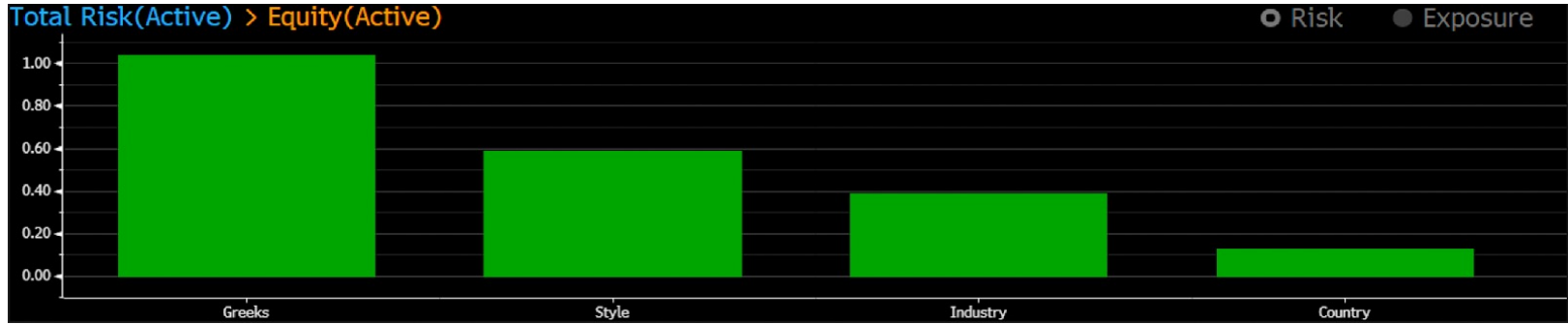
VaR Distribution vs Benchmark (1 month)



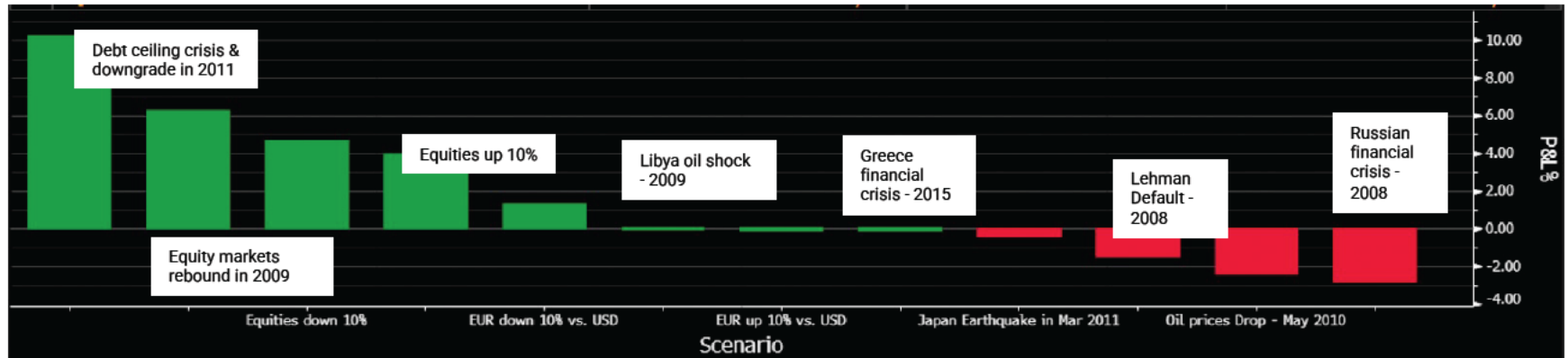
Tracking Error Decomposition



Tracking Error Decomposition



Scenario Analysis



FORWARD GUIDANCE

Reducing put position on S&P

- Has hurt portfolio on up market days
- Find balance with our options' effects on portfolio on up or down market days
- Don't want a low beta

Pursuing single stock and sector ETF option plays

- Specifically with stocks we feel will be affected by upcoming rate hikes
- Consumer goods, auto, etc.
- Vol speculation

Monitoring funds positions

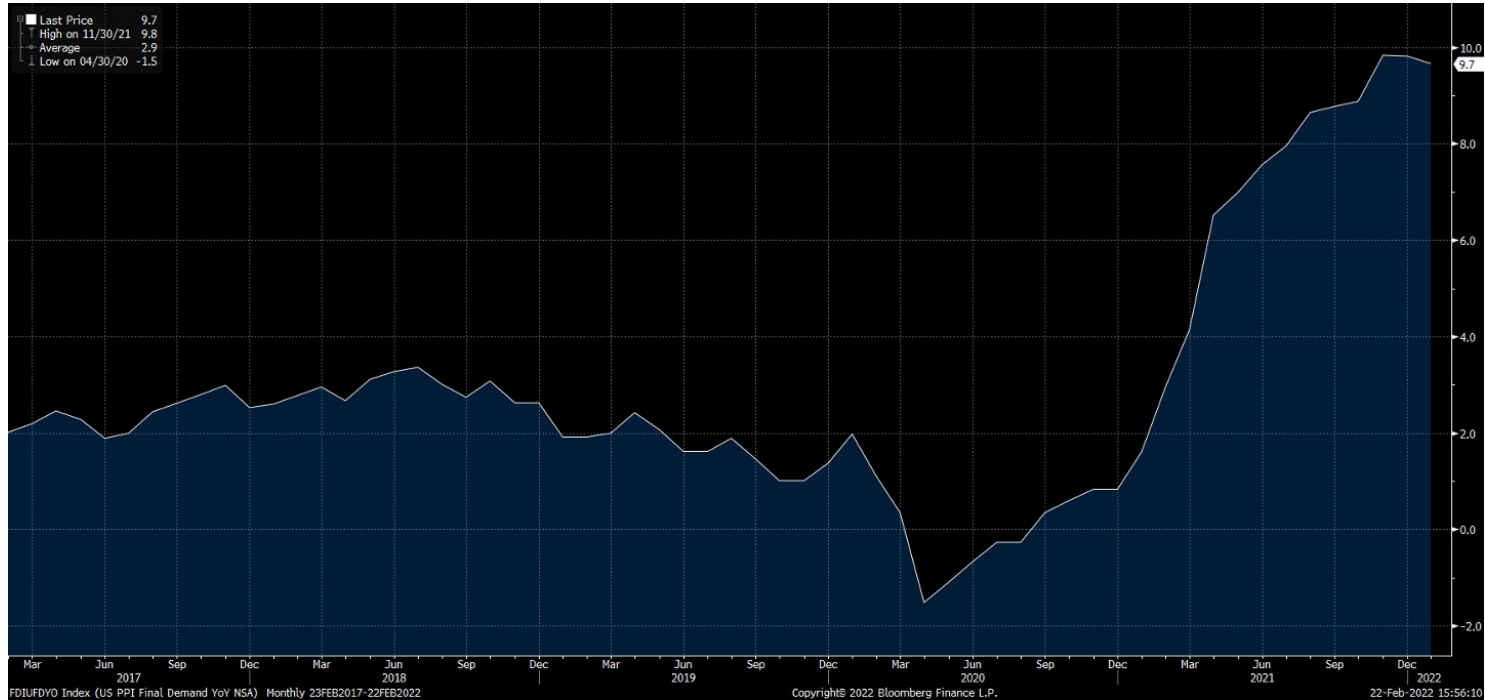
- More organized and concise industry theses moving forward
- Bearish market
- Be willing to cut “losers” quicker
- Monitoring energy position due to geopolitical risk

Capture excess return without taking lots of risk

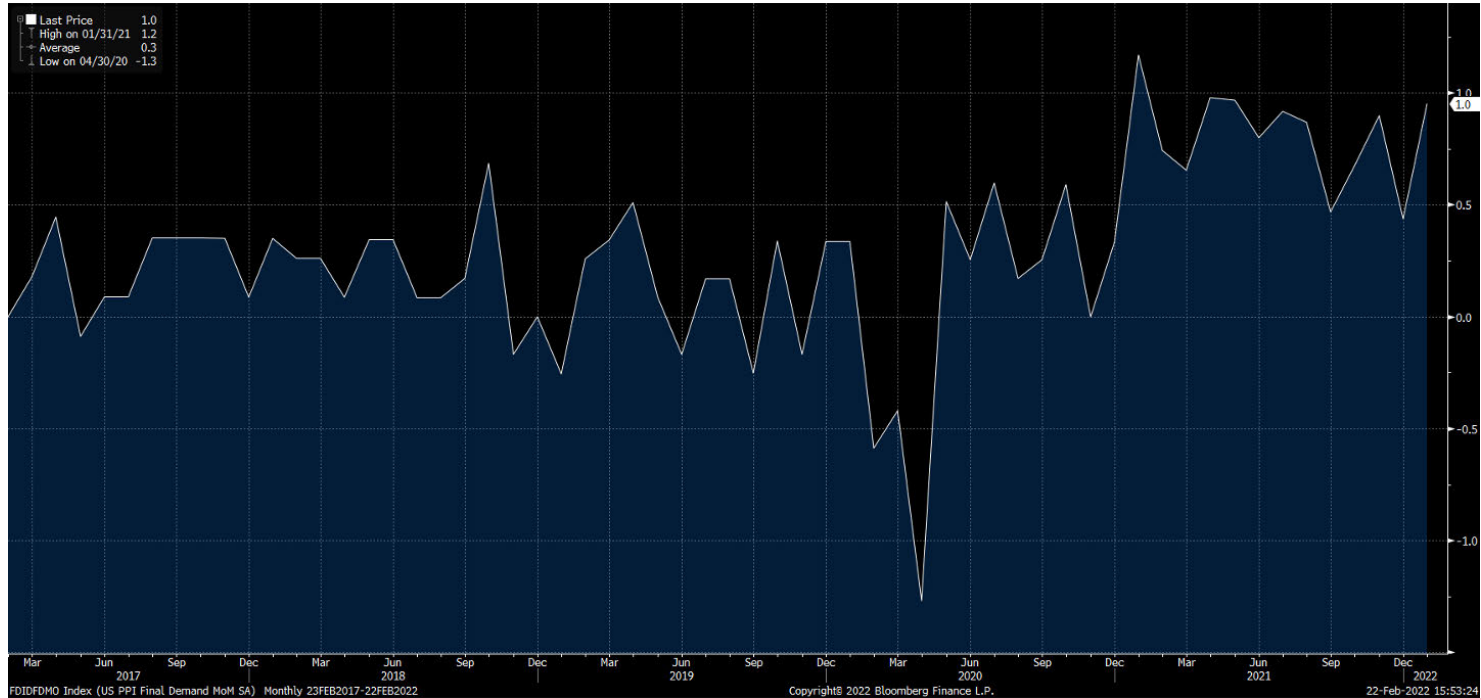
- Attempted previously with Info tech, with subpar results
- More options trades to manage risk-reward tradeoff

APPENDIX

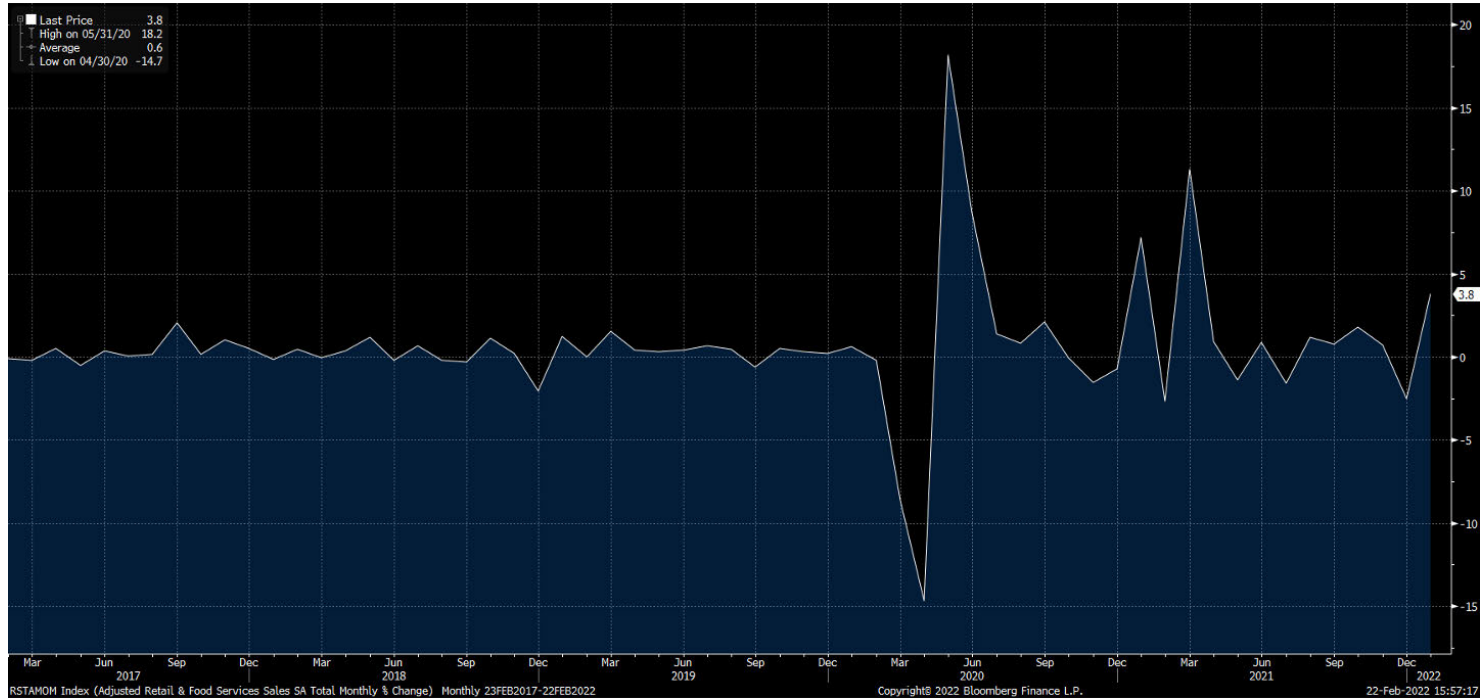
US PPI YoY



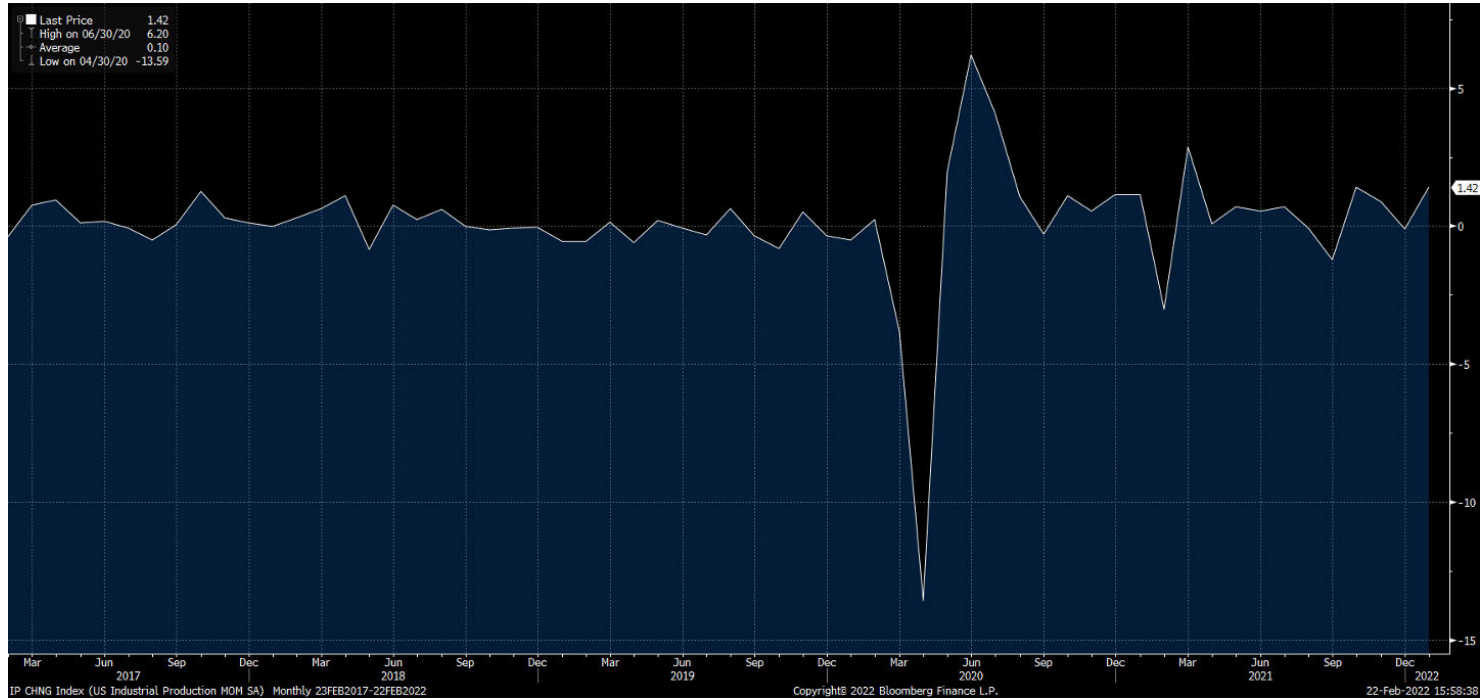
US PPI MoM



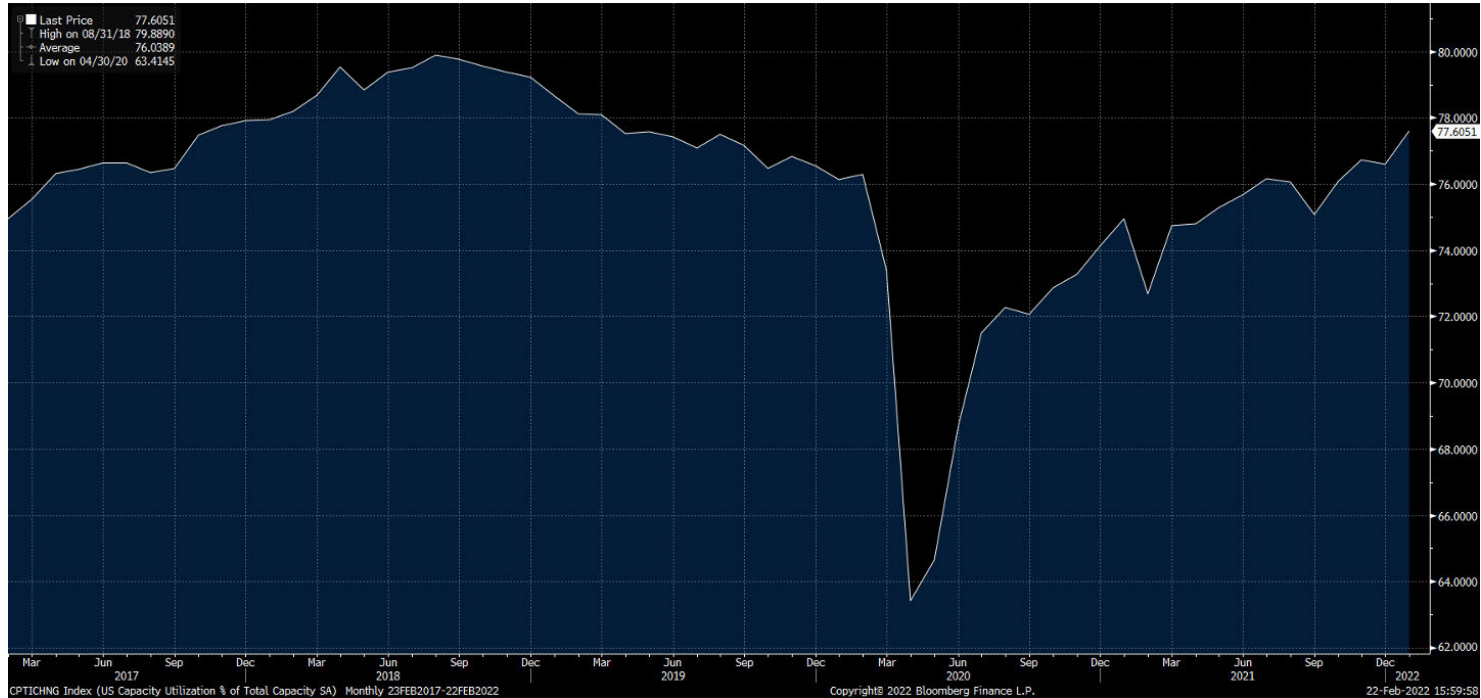
US Retail Sales MoM



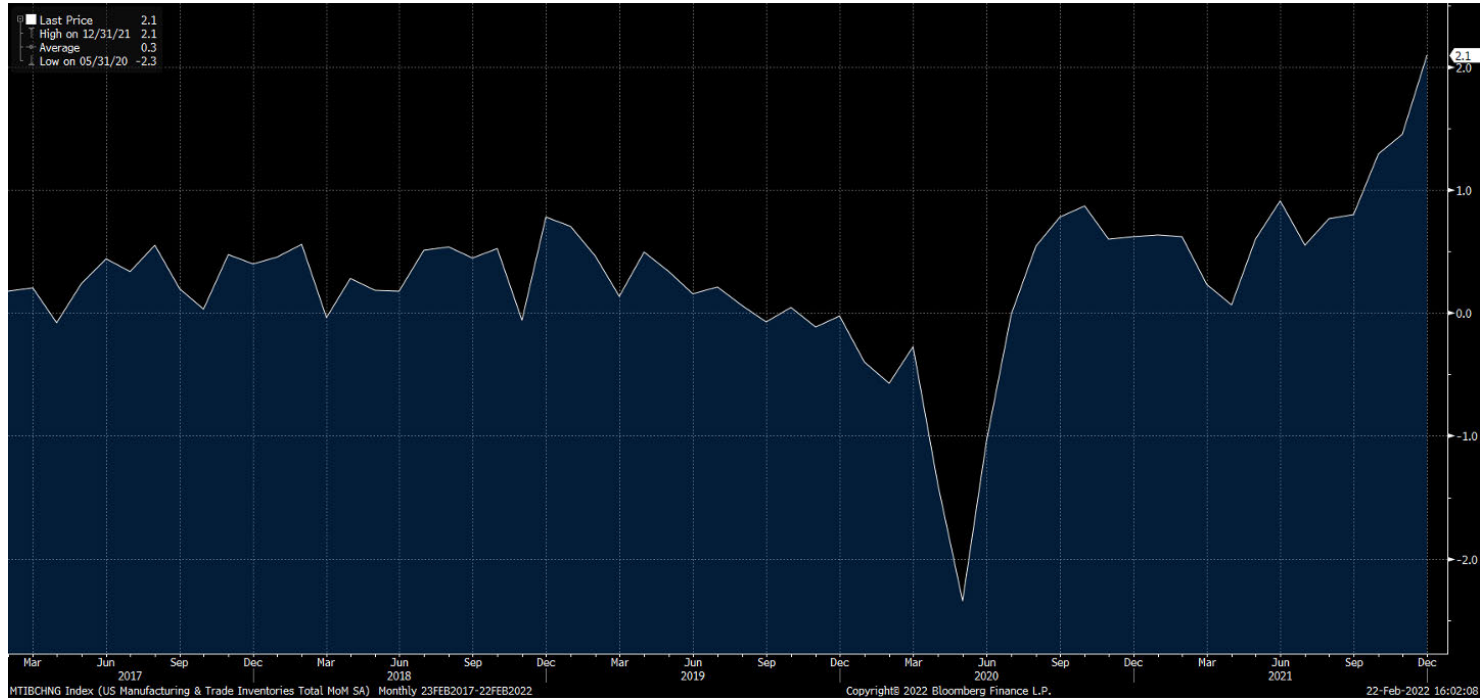
US Industrial Production MoM



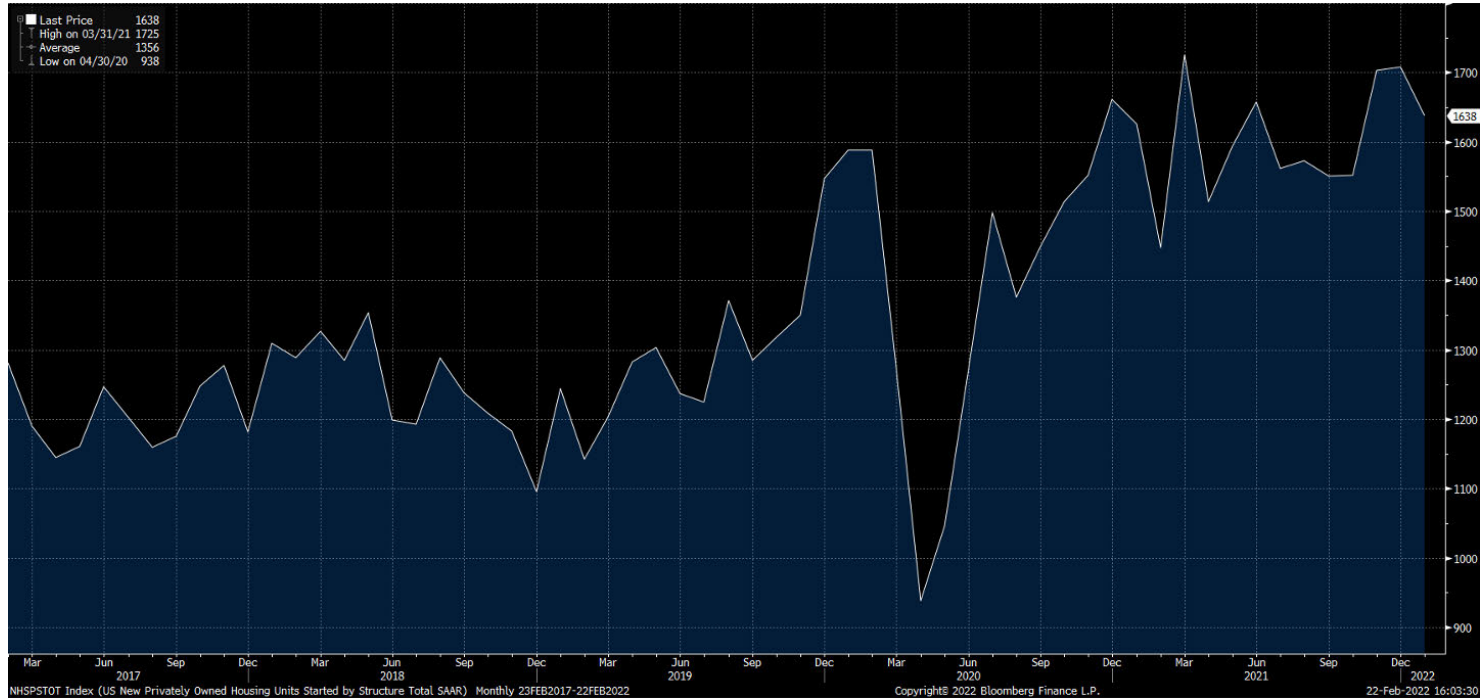
US Capacity Utilization



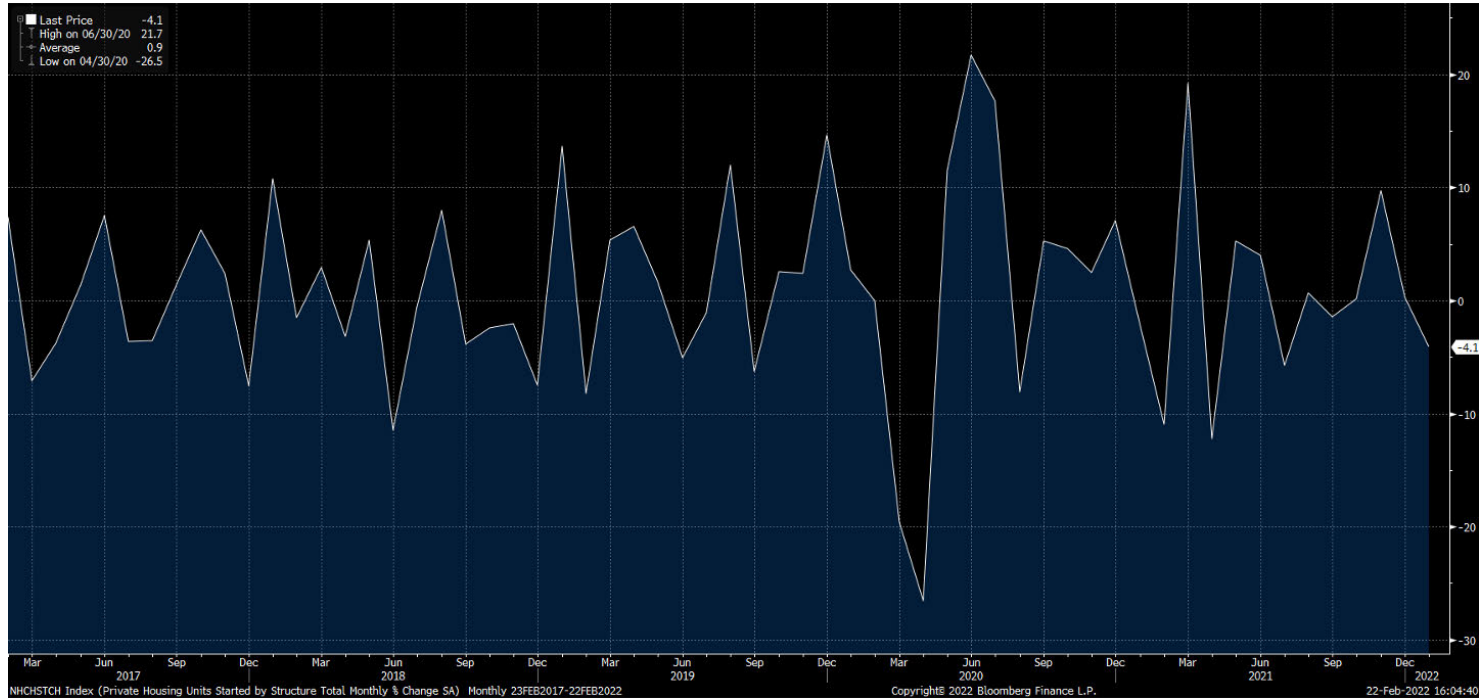
US Business Trade Inventories MoM



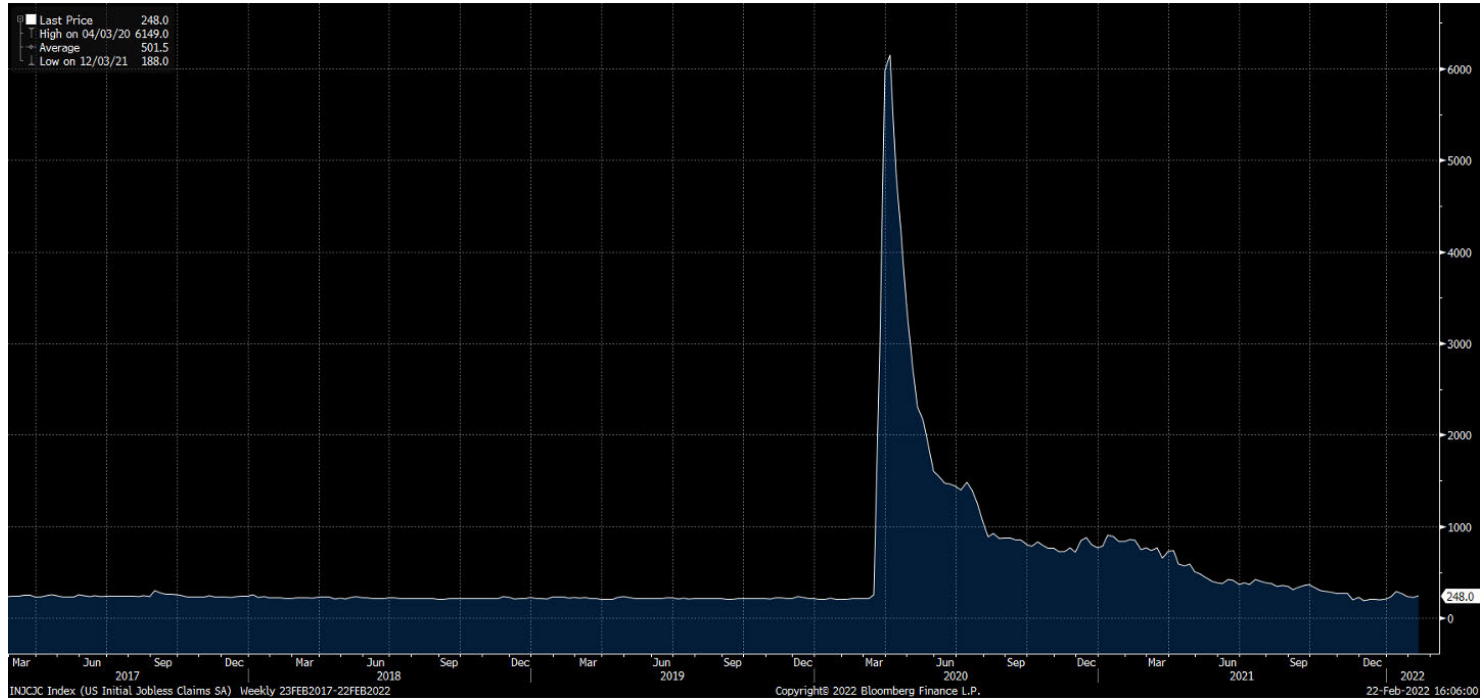
US New Housing Starts Monthly



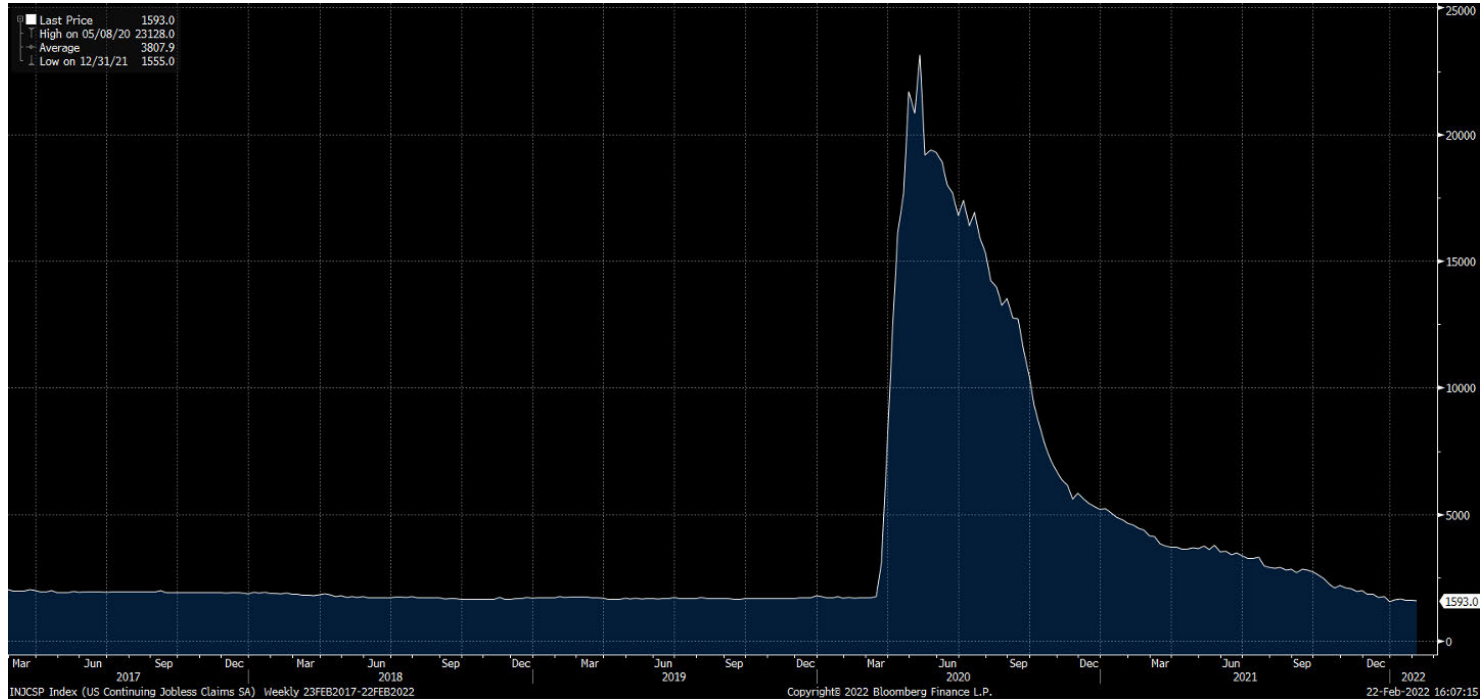
US New Housing Starts MoM



US Weekly Initial Jobless Claims



US Weekly Continuing Jobless Claims



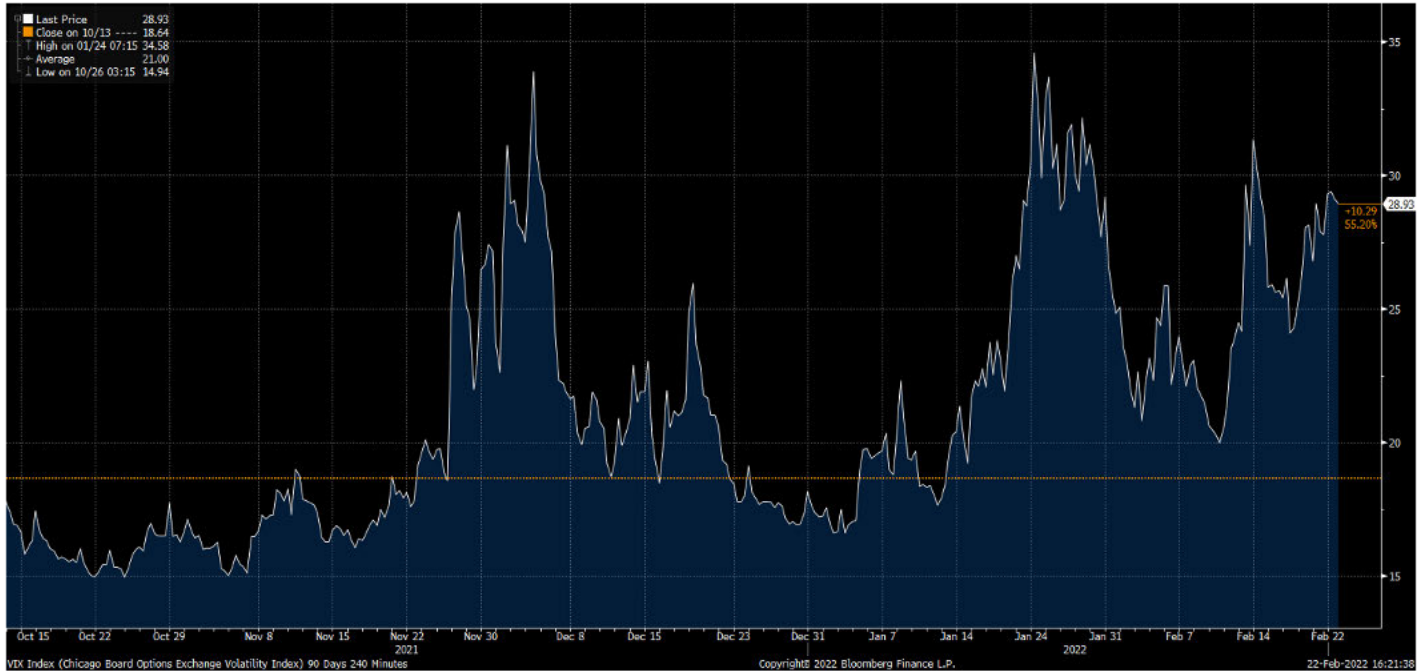
US Equity Indices, 10/15/2021 – 2/22/2022



US Equity Indices, 2/14 – 2/21/2022



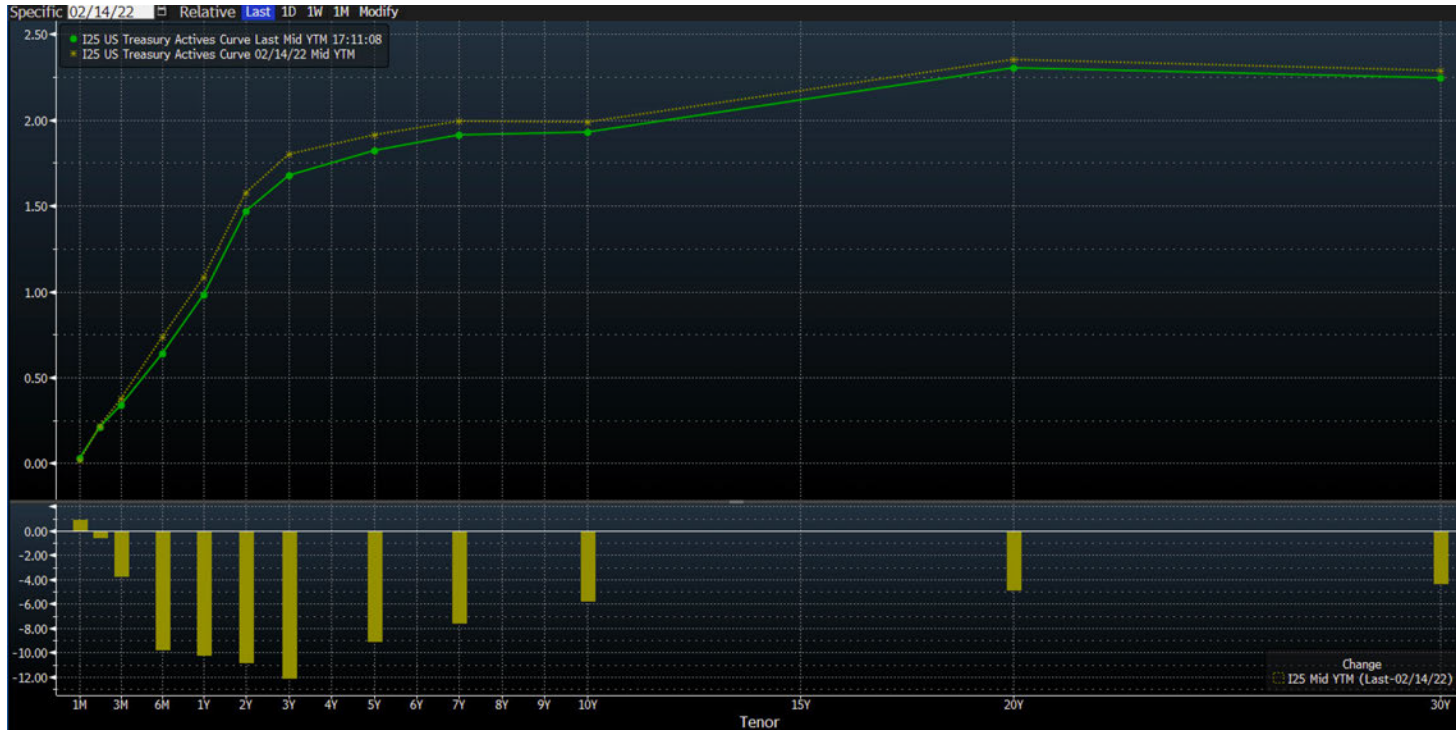
VIX



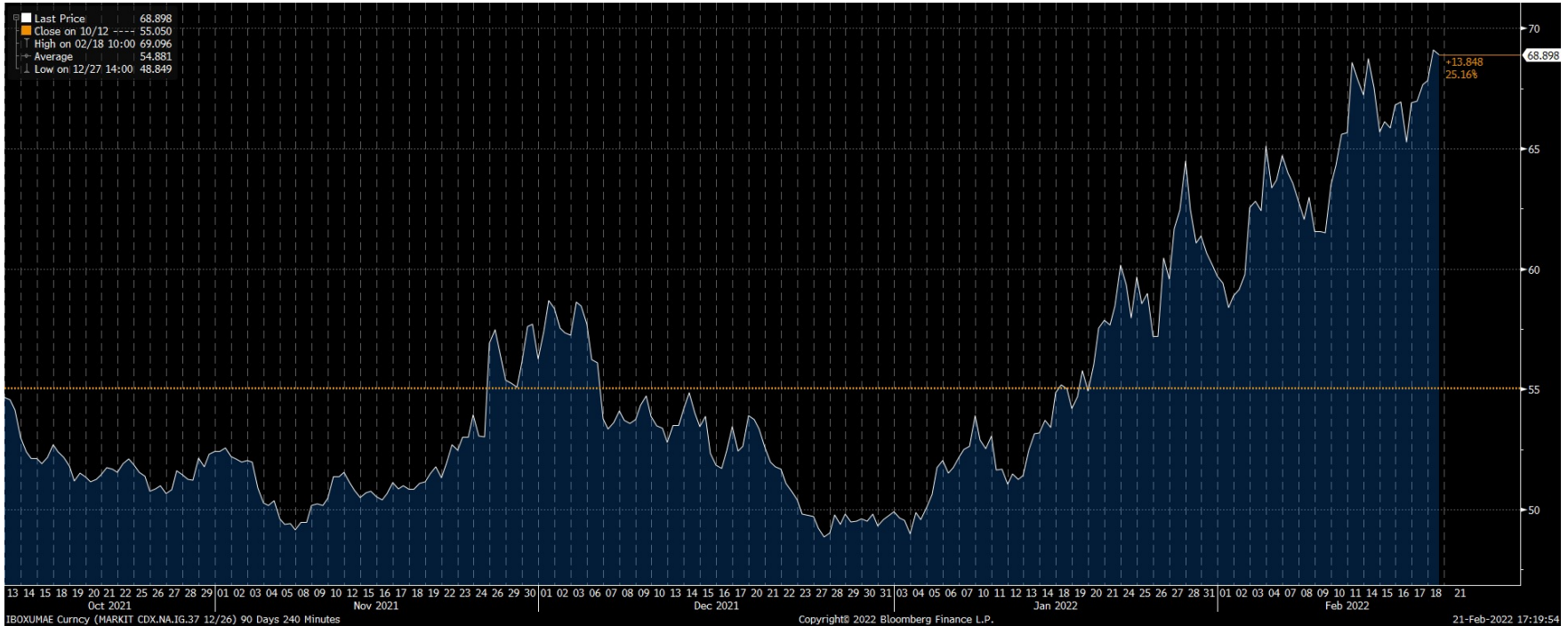
S&P 500 Dividend Yield minus US 10-Year Treasury Yield



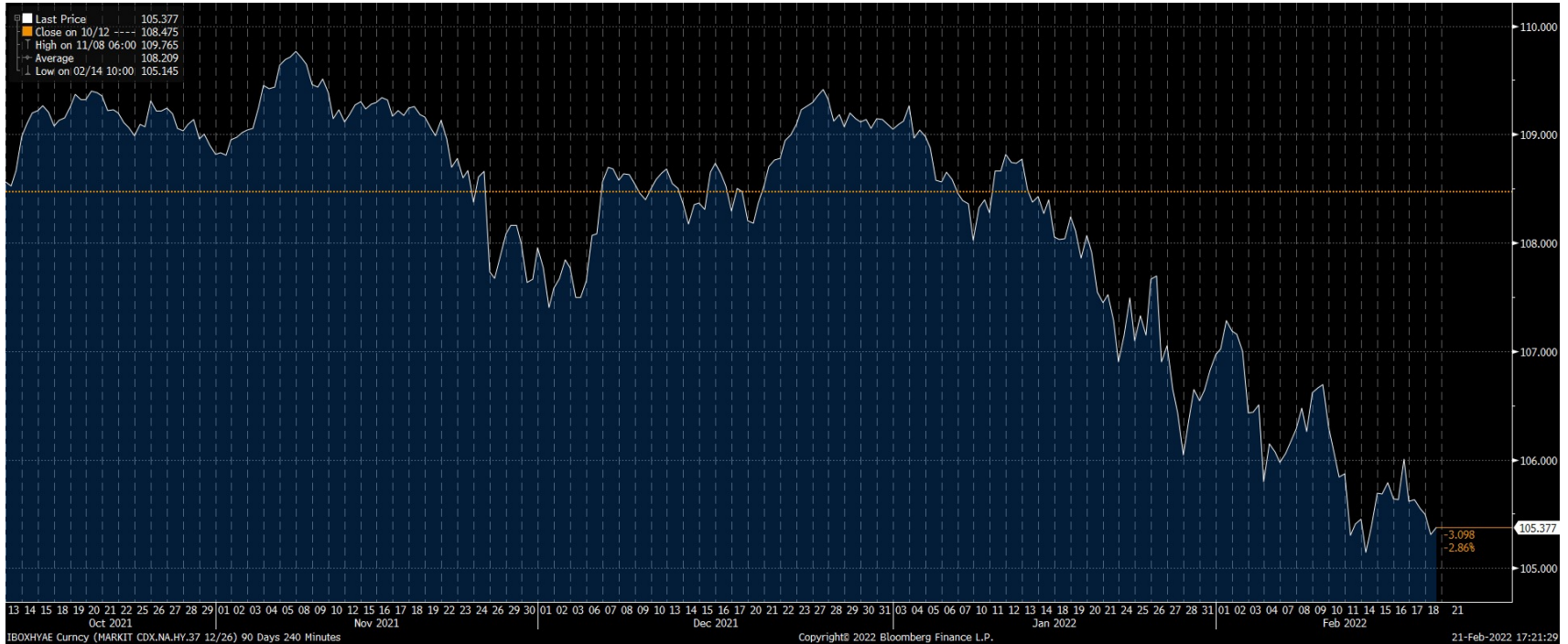
US Treasury Yields (2/14/2022 vs 2/21/2022)



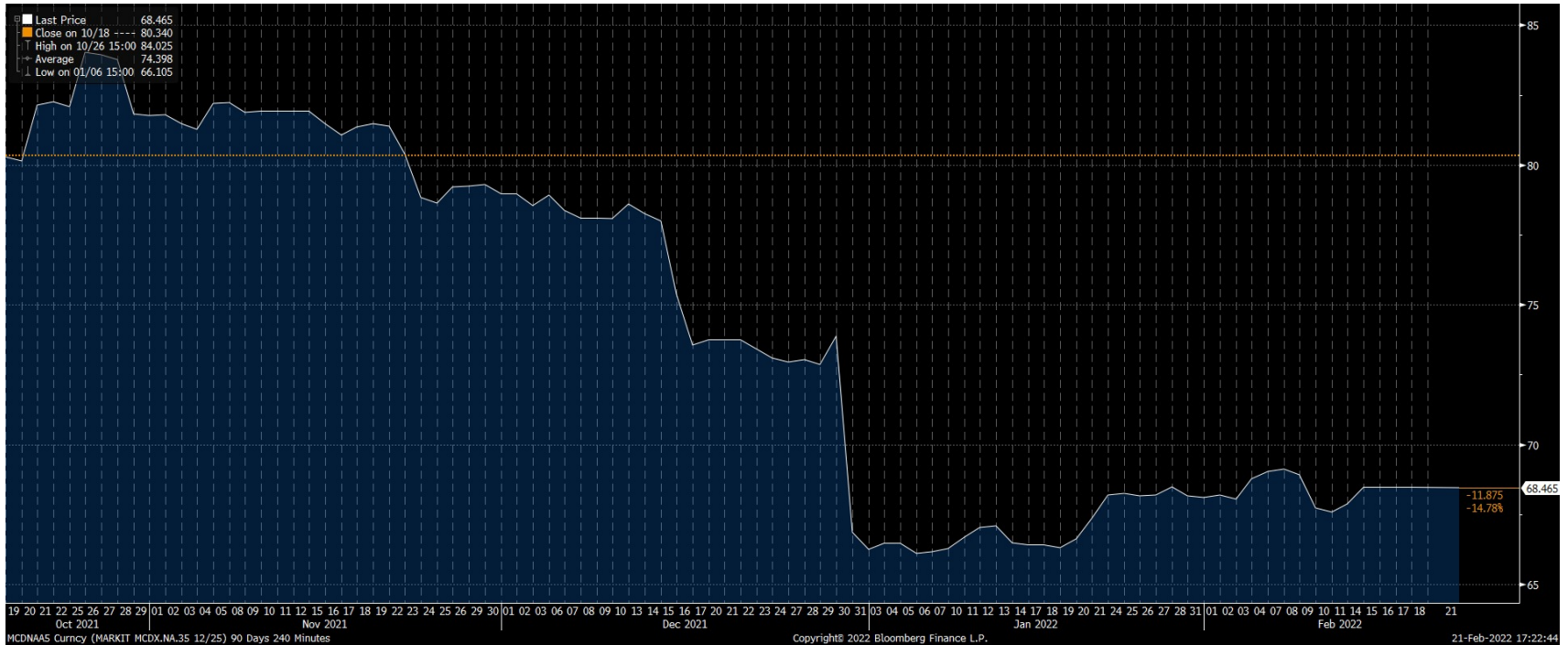
CDS Investment Grade Index



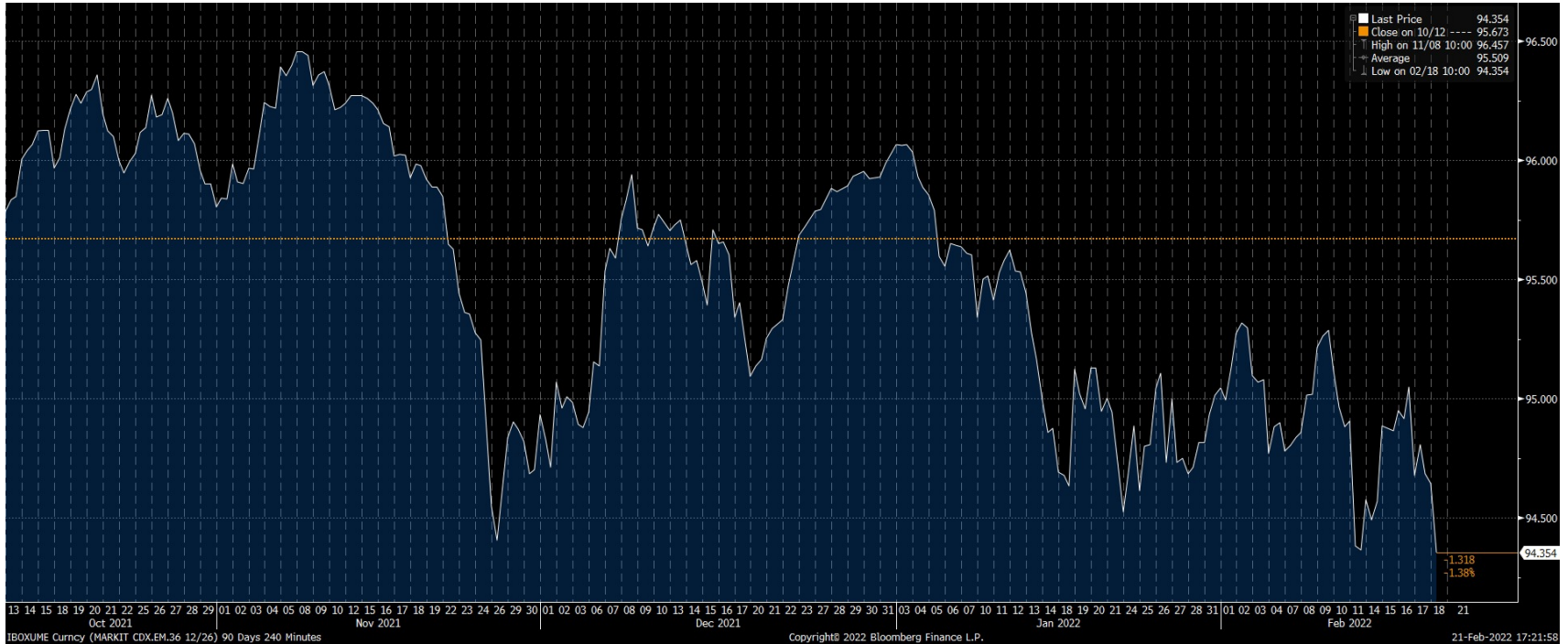
CDS High Yield Index



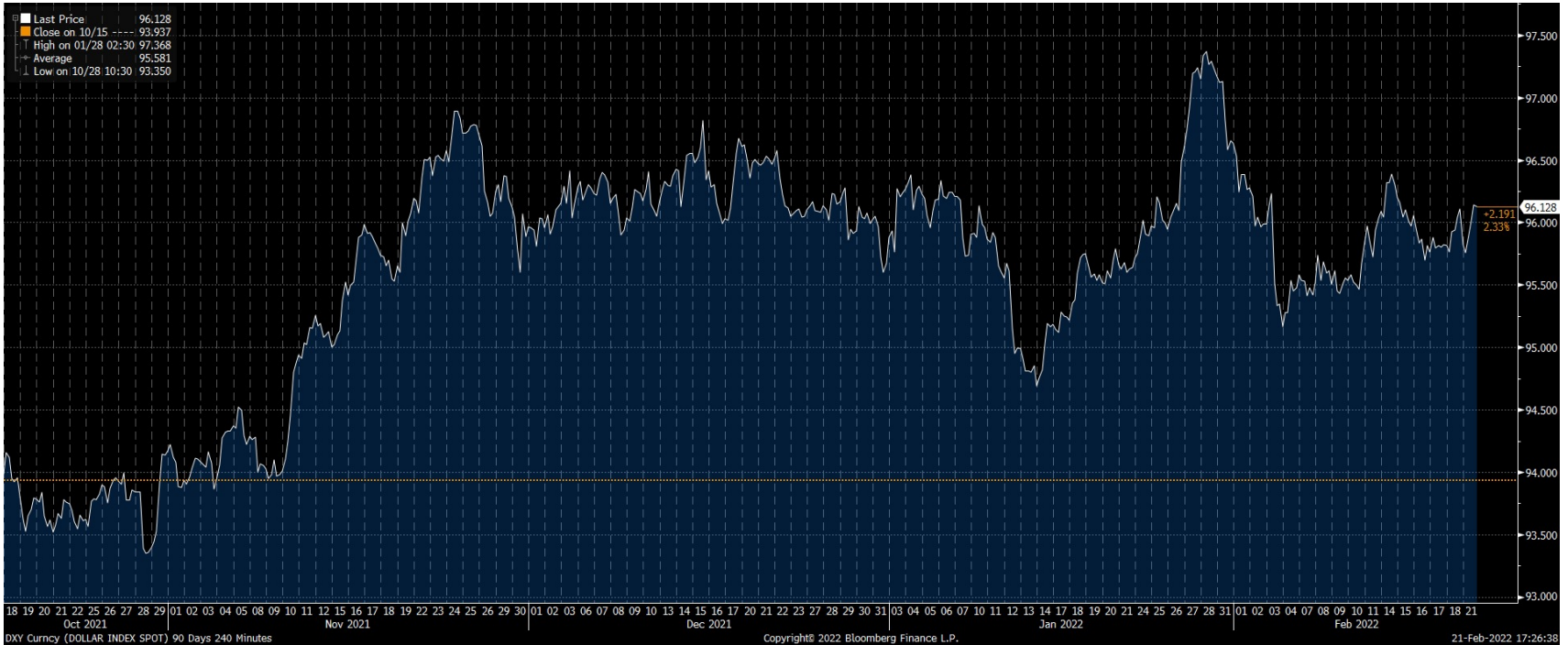
CDS Municipal Index



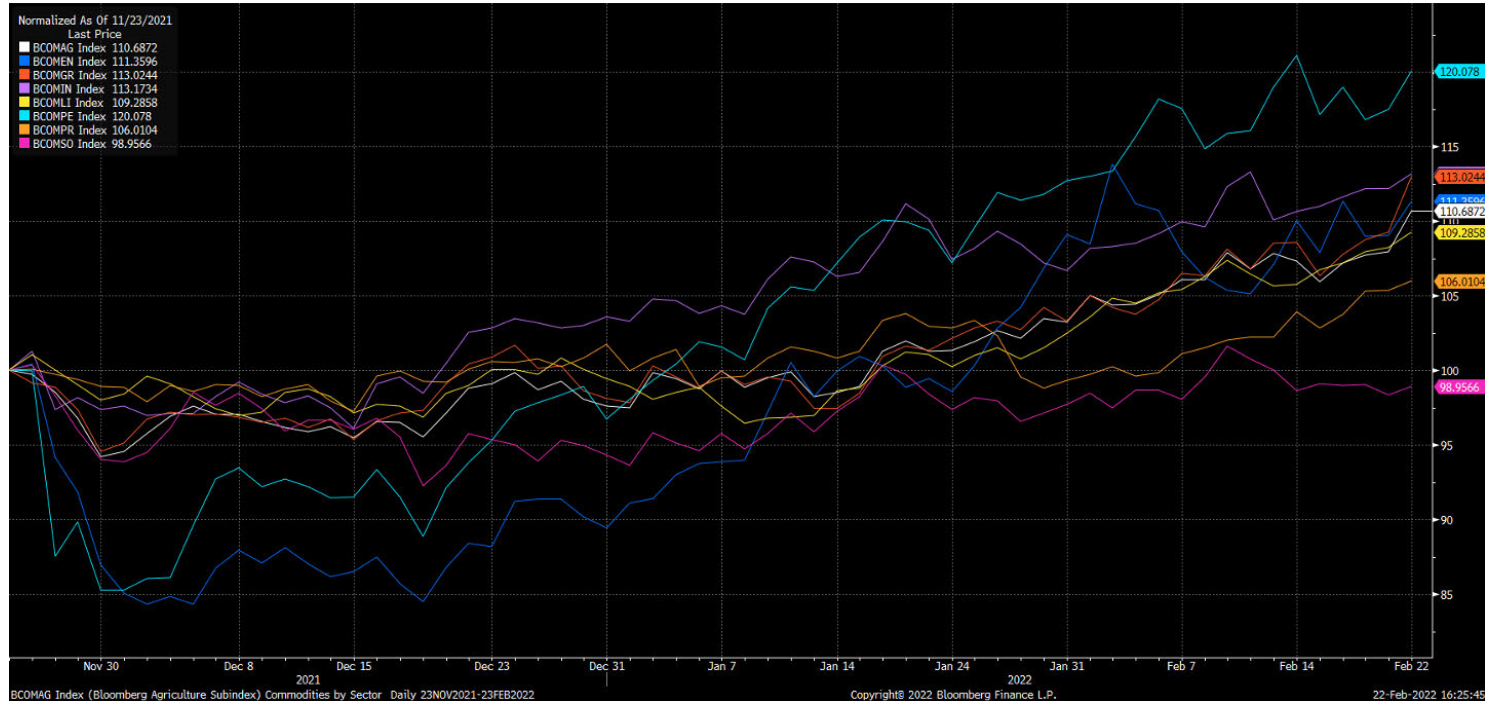
CDS Emerging Markets Index



DXY US Dollar Currency Index



Bloomberg Commodity Index Sectors



Performance Attribution Breakdown

Main View Summary

TEAM 5 LIVE PORTFOLIO vs Default (CAPST) by Asset Type in USD Time Custo 02/14/22 - 02/21/22

Version MAC Edit Model Attribution Model Returns-Based Local Alloc Local Return Allocation FX Alloc None

Name	Avg % Wgt			Tot Rtn			CTR			Alloc	Selec	Curr	Tot Attr
	Port	Bmrk	+/-	Port	Bmrk	+/-	Port	Bmrk	+/-				
TEAM 5 LIVE PORTFOLIO	100.00	100.00	0.00	-1.16	-0.53	-0.63	-1.16	-0.53	-0.63	-0.23	-0.40	0.00	-0.63
Equity	0.54		0.54	-5.30		-5.30	-0.05		-0.05	0.00	0.00	0.00	-0.05
Communication Services	0.54		0.54	-5.30		-5.30	-0.05		-0.05	0.00	0.00	0.00	0.00
META PLATFORMS INC-CLASS A	0.54		0.54	-5.30		-5.30	-0.05		-0.05	0.00	0.00	0.00	0.00
Cash	20.14	10.00	10.14	0.00	0.00	0.00	0.00	0.00	0.00	-0.03	0.00	0.00	-0.03
Derivatives	0.47		0.47	-29.70		-29.70	-0.19		-0.19	-0.19	0.00	0.00	-0.19
Options	0.47		0.47	-29.70		-29.70	-0.19		-0.19	0.00	0.00	0.00	0.00
FB US 02/18/22 P190	0.00		0.00	-97.37		-97.37	0.00		0.00	0.00	0.00	0.00	0.00
FB US 02/18/22 P205	0.00		0.00	-99.00		-99.00	0.00		0.00	0.00	0.00	0.00	0.00
FB US 02/18/22 P220	0.00		0.00	113.79		113.79	0.01		0.01	0.00	0.00	0.00	0.00
FB US 04/14/22 C240	0.01		0.01	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00
FB US 04/14/22 P190	0.02		0.02	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00
IBB US 03/18/22 C127	0.04		0.04	-46.86		-46.86	-0.03		-0.03	0.00	0.00	0.00	0.00
IBB US 03/18/22 P127	0.04		0.04	65.89		65.89	0.02		0.02	0.00	0.00	0.00	0.00
SPX US 02/18/22 P4100	0.01		0.01	-95.56		-95.56	-0.02		-0.02	0.00	0.00	0.00	0.00
SPX US 02/18/22 P4300							0.00		0.00	0.00	0.00	0.00	0.00
SPXW US 02/28/22 P4200	0.36		0.36	-19.72		-19.72	-0.16		-0.17	0.00	0.00	0.00	0.00
Fixed Income	1.69		1.69	0.55		0.55	0.01		0.01	0.04	0.00	0.00	0.04
Funds	77.15	90.00	-12.85	-1.09	-0.59	-0.49	-0.93	-0.53	-0.40	0.00	-0.40	0.00	-0.40

Holdings as of: 2/14/22 - 2/18/22 (!) 4 Notices Submitted at: 11:23:22 Zoom 100%

Performance Attribution Breakdown

Main View Summary													
TEAM 5 LIVE PORTFOLIO vs Default (CAPST) by Asset Type in USD													
Version MAC Edit Model Attribution Model Returns-Based Local Alloc Local Return Allocation FX Alloc None													
Name	Avg % Wgt			Tot Rtn			CTR			Alloc	Selec	Curr	Tot Attr
	Port	Bmrk	+/-	Port	Bmrk	+/-	Port	Bmrk	+/-				
TEAM 5 LIVE PORTFOLIO	100.00	100.00	0.00	-1.16	-0.53	-0.63	-1.16	-0.53	-0.63	-0.23	-0.40	0.00	-0.63
▶ Equity	0.54		0.54	-5.30		-5.30	-0.05		-0.05	-0.05	0.00	0.00	-0.05
▶ Cash	20.14	10.00	10.14	0.00	0.00	0.00	0.00	0.00	-0.03	0.00	0.00	0.00	-0.03
▶ Derivatives	0.47		0.47	-29.70		-29.70	-0.19		-0.19	-0.19	0.00	0.00	-0.19
▼ Fixed Income	1.69		1.69	0.55		0.55	0.01		0.01	0.04	0.00	0.00	0.04
▼ Government Debt	1.69		1.69	0.55		0.55	0.01		0.01	0.00	0.00	0.00	0.00
TII 0 ½ 04/15/24	0.34		0.34	0.38		0.38	0.00		0.00		0.00	0.00	0.00
TII 0 ¼ 01/15/30	0.34		0.34	0.67		0.67	0.00		0.00		0.00	0.00	0.00
TII 0 ¾ 01/15/31	0.33		0.33	0.78		0.78	0.00		0.00		0.00	0.00	0.00
TII 0 ¼ 04/15/25	0.34		0.34	0.44		0.44	0.00		0.00		0.00	0.00	0.00
TII 0 ¾ 01/15/26	0.34		0.34	0.48		0.48	0.00		0.00		0.00	0.00	0.00
▶ Funds	77.15	90.00	-12.85	-1.09	-0.59	-0.49	-0.93	-0.53	-0.40	0.00	-0.40	0.00	-0.40

Holdings as of: 2/14/22 - 2/18/22 (!) 4 Notices Submitted at: 11:23:22 Zoom 100%

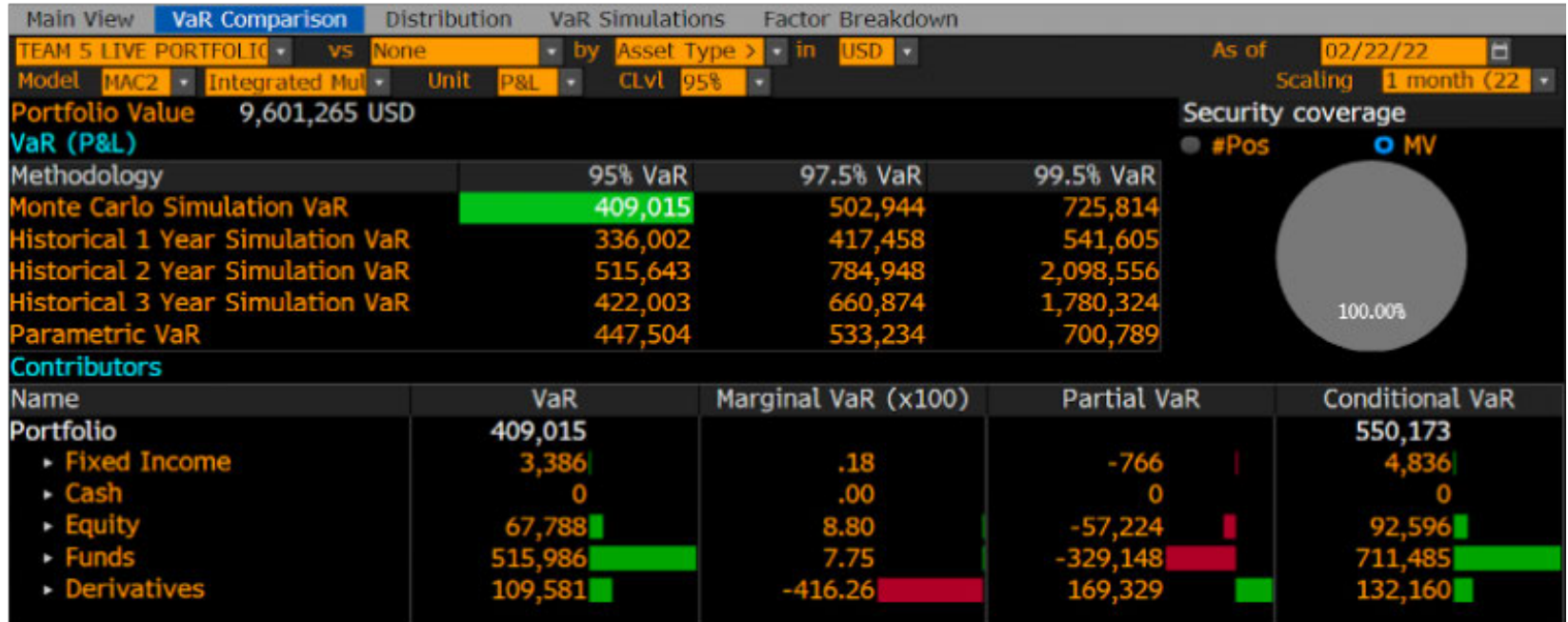
Performance Attribution Breakdown

Main View Summary															
TEAM 5 LIVE PORTFOLIO vs Default (CAPST) by Asset Type in USD Time Custo 02/14/22 - 02/21/22															
Version MAC Edit Model Attribution Model Returns-Based Local Alloc Local Return Allocation FX Alloc None															
Name	Avg % Wgt			Tot Rtn			CTR			Alloc			Curr		Tot Attr
	Port	Bmrk	+/-	Port	Bmrk	+/-	Port	Bmrk	+/-	Port	Bmrk	+/-	Port	Bmrk	
TEAM 5 LIVE PORTFOLIO	100.00	100.00	0.00	-1.16	-0.53	-0.63	-1.16	-0.53	-0.63	-0.23	-0.40	0.00	-0.63		
CONSUMER STAPLES SPDR	5.16		5.16	1.32		1.32	0.07		0.07		0.09	0.00	0.09		
DIREXION DAILY S&P OIL & GAS	0.33		0.33	4.79		4.79	0.02		0.02		0.02	0.00	0.02		
DIREXION DLY S&P 500 BULL 3X	3.76		3.76	-3.72		-3.72	-0.17		-0.17		-0.14	0.00	-0.14		
ENERGY SELECT SECTOR SPDR	3.18		3.18	0.03		0.03	0.00		0.00		0.06	0.00	0.06		
FINANCIAL SELECT SECTOR SPDR	6.03		6.03	-1.11		-1.11	-0.15		-0.15		-0.05	0.00	-0.05		
FIRST TRUST NASDAQ CYBERSECU	3.58		3.58	-2.91		-2.91	-0.10		-0.10		-0.08	0.00	-0.08		
GLOBAL X MILLENNIAL CONSUMER	0.25		0.25	-1.91		-1.91	0.00		0.00		0.00	0.00	0.00		
HEALTH CARE SELECT SECTOR	1.20		1.20	-1.09		-1.09	-0.01		-0.01		-0.01	0.00	-0.01		
INVESCO DB AGRICULTURE FUND	1.89		1.89	0.10		0.10	0.00		0.00		0.01	0.00	0.01		
INVESCO OPTIMUM YIELD DIVERS	1.14		1.14	-0.32		-0.32	0.00		0.00		0.00	0.00	0.00		
IPATH SERIES B S&P 500 VIX	1.44		1.44	0.60		0.60	0.01		0.01		0.01	0.00	0.01		
ISHARES BIOTECHNOLOGY ETF	4.45		4.45	-2.07		-2.07	-0.09		-0.09		-0.06	0.00	-0.06		
ISHARES CORE U.S. AGGREGATE	2.27	30.00	-27.73	0.37	0.37	0.00	-0.01	0.11	-0.12		-0.37	0.00	-0.37		
ISHARES FLOATING RATE BOND E	1.68		1.68	0.06		0.06	0.00		0.00		0.03	0.00	0.03		
ISHARES GLOBAL COMM SERVICES	2.74		2.74	-1.98		-1.98	-0.05		-0.05		-0.04	0.00	-0.04		
ISHARES MSCI GLOBAL AGRICULT	0.96		0.96	-0.56		-0.56	-0.01		-0.01		0.00	0.00	0.00		
ISHARES SEMICONDUCTOR ETF	2.09		2.09	0.45		0.45	0.01		0.01		0.02	0.00	0.02		
SPDR S&P 500 ETF TRUST	22.30	60.00	-37.70	-1.09	-1.09	0.00	-0.10	-0.65	0.53		0.22	0.00	0.22		
SPDR S&P OIL & GAS EXP & PR	1.22		1.22	-2.53		-2.53	-0.03		-0.03		-0.02	0.00	-0.02		
US GLOBAL JETS ETF	1.12		1.12	1.85		1.85	0.02		0.02		0.03	0.00	0.03		
UTILITIES SELECT SECTOR SPDR	3.33		3.33	0.11		0.11	0.00		0.00		0.07	0.00	0.07		
VANGUARD INFO TECH ETF	5.36		5.36	-4.67		-4.67	-0.30		-0.30		-0.20	0.00	-0.20		
VANGUARD REAL ESTATE ETF	1.67		1.67	-1.20		-1.20	-0.02		-0.02		0.01	0.00	0.01		

Holdings as of: 2/14/22 - 2/18/22 (!) 4 Notices

Submitted at: 11:23:22 Zoom 90%

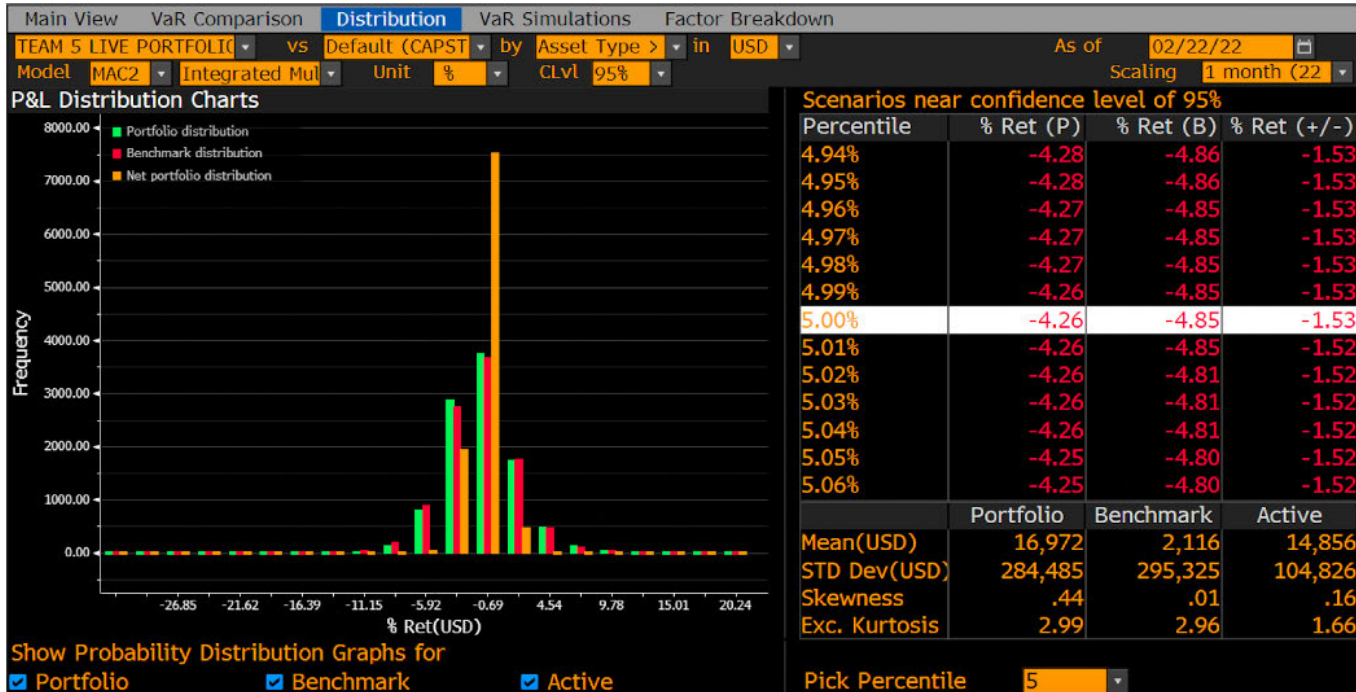
Portfolio VaR (1 month)



Benchmark VaR (1 month)



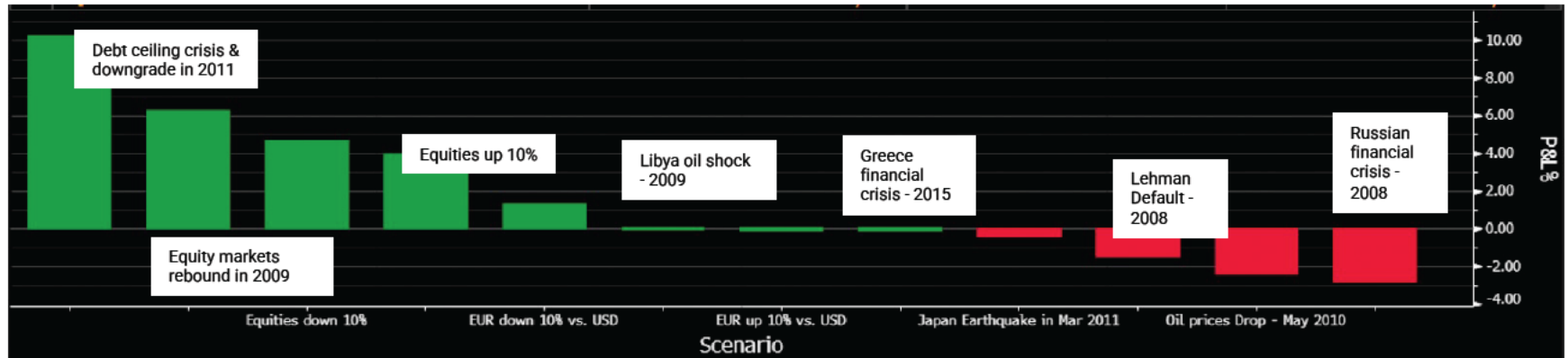
VaR Distribution vs Benchmark (1 month)



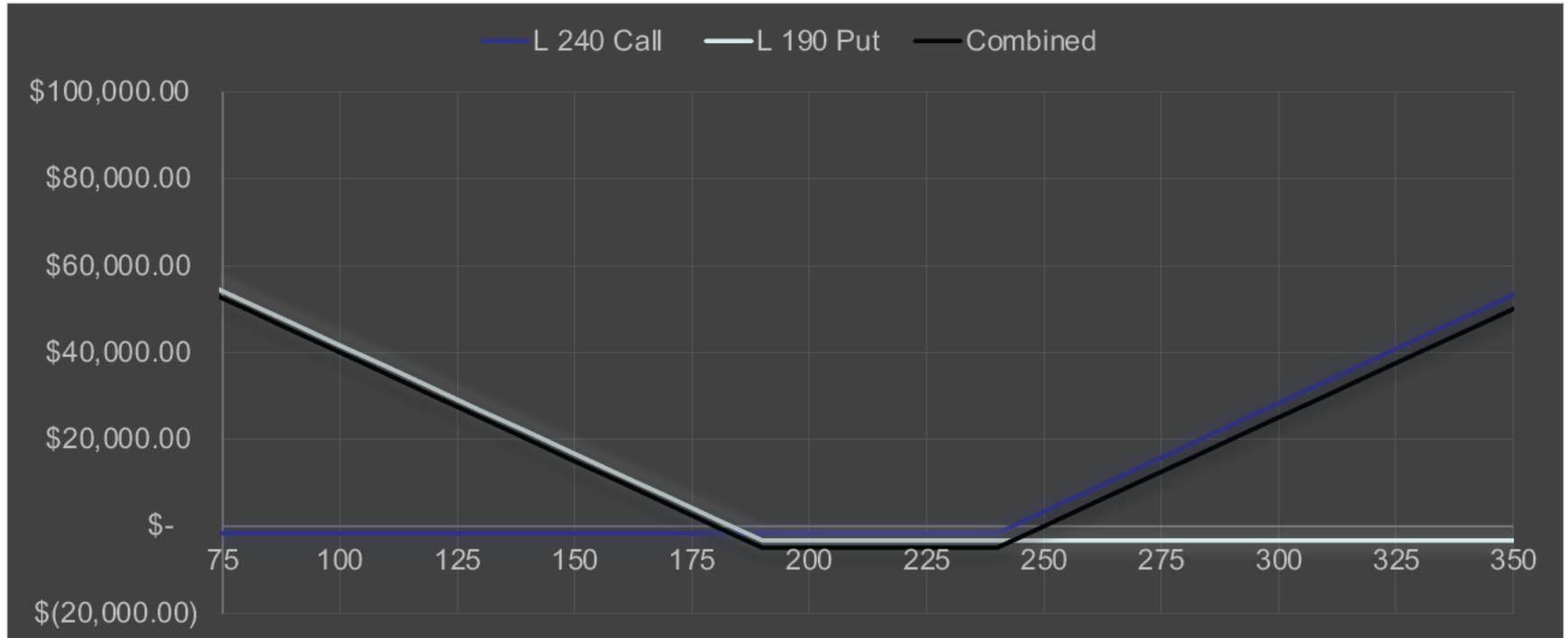
Tracking Error (1 month)



Scenario Analysis



FB Strangle Options Total Profitability



IBB Straddle Options Total Profitability

