



Astoria's Investment Committee Quarterly Review:

Increasing the Cyclicity of our Portfolios

# All of Astoria's Risk Based Cross Asset Portfolios have outperformed their Benchmarks Year to Date\*

- **Year to date performance (as of June 30, 2020)**

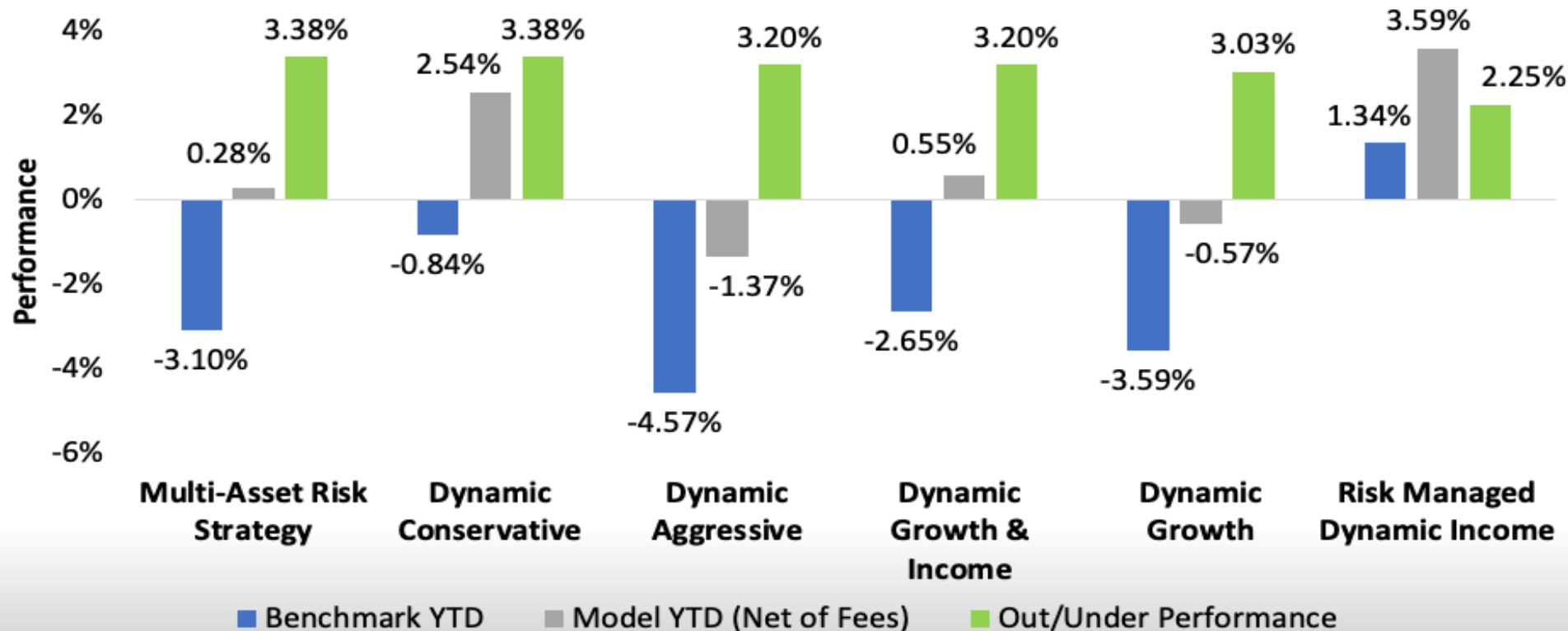
- Year to date, the range of performance of APA's model portfolios is **-1.37%** (Dynamic Aggressive) to **3.59%** (Risk Managed Dynamic Income).
- **All the model portfolios** have **outperformed** their benchmarks **YTD**. The outperformance ranges from a high of **338bps** (Multi-Asset Risk Strategy and Dynamic Conservative) to a low of **225bps** (Risk Managed Dynamic Income).

- **Since inception**

- Since inception, **all the model portfolios** have **outperformed** their benchmarks on a return basis.
- The absolute outperformance ranges from a high of **185bps** (Dynamic Growth & Income) to a low of **78bps** (Risk Managed Dynamic Income).
- Since inception, **all the model portfolios** have **outperformed** their benchmarks **on a Sharpe Ratio basis**. Refer to our appendix for details on our returns since inception.

# YTD Model Portfolio Returns versus Benchmark\*

**Model Returns vs. Benchmark: YTD Performance through June 30, 2020**



Source: Astoria Portfolio Advisors. Data as of June 30, 2020.

Twitter: @AstoriaAdvisors

# YTD, I-Year, and Since Inception Risk / Net Return Summary\*

Risk/Net Return Summary							
Model	YTD	1-Year	Since Inception (June 2017)	Benchmarks	YTD	1-Year	Since Inception (June 2017)
Dynamic Aggressive	-1.37%	5.01%	6.05%	Aggressive	-4.57%	1.80%	4.97%
Sharpe Ratio	-	0.29	0.39	Sharpe Ratio	-	0.09	0.30
Standard Deviation	-	14.94%	11.84%	Standard Deviation	-	16.76%	12.32%
Dynamic Growth	-0.57%	6.22%	6.19%	Growth	-3.59%	2.10%	4.78%
Sharpe Ratio	-	0.40	0.45	Sharpe Ratio	-	0.11	0.30
Standard Deviation	-	13.13%	10.20%	Standard Deviation	-	14.85%	10.87%
Dynamic Growth & Income	0.55%	7.16%	6.41%	Growth & Income	-2.65%	2.35%	4.56%
Sharpe Ratio	-	0.53	0.53	Sharpe Ratio	-	0.12	0.31
Standard Deviation	-	11.32%	8.86%	Standard Deviation	-	12.95%	9.45%
Dynamic Conservative	2.54%	6.59%	5.52%	Conservative	-0.84%	2.73%	4.04%
Sharpe Ratio	-	0.68	0.60	Sharpe Ratio	-	0.17	0.33
Standard Deviation	-	7.48%	6.02%	Standard Deviation	-	9.26%	6.74%
Risk Managed Dynamic Income	3.59%	7.45%	4.77%	Income	1.34%	3.76%	3.99%
Sharpe Ratio	-	1.13	0.74	Sharpe Ratio	-	0.38	0.44
Standard Deviation	-	5.08%	3.74%	Standard Deviation	-	6.21%	4.75%

Table Source: Astoria Portfolio Advisors. Data Source: Bloomberg, Barclays, MSCI, Wilshire, Orion Advisors, Charles Schwab. Data as of June 30, 2020. YTD numbers are not annualized. All other numbers are annualized unless denoted. Benchmarks: Dynamic Aggressive Model: 70% MSCI All Country World Index (NDUEACWF), 15% Bloomberg Barclays Global Aggregate Bond Index (LEGATRUU), 15% Wilshire Liquid Alternative Multi-Strategy Index (WLIQAMST). Dynamic Growth Model: 60% MSCI All Country World Index (NDUEACWF), 25% Bloomberg Barclays Global Aggregate Bond Index (LEGATRUU), 15% Wilshire Liquid Alternative Multi-Strategy Index (WLIQAMST). Dynamic Growth & Income Model: 50% MSCI All Country World Index (NDUEACWF), 35% Bloomberg Barclays Global Aggregate Bond Index (LEGATRUU), 15% Wilshire Liquid Alternative Multi-Strategy Index (WLIQAMST). Dynamic Conservative Model: 30% MSCI All Country World Index (NDUEACWF), 55% Bloomberg Barclays Global Aggregate Bond Index (LEGATRUU), 15% Wilshire Liquid Alternative Multi-Strategy Index (WLIQAMST). Risk Managed Dynamic Income Model: 15% MSCI All Country World Index (NDUEACWF), 80% Bloomberg Barclays Global Aggregate Bond Index (LEGATRUU), 5% Wilshire Liquid Alternative Multi-Strategy Index (WLIQAMST).

# Astoria's Portfolio Construction Thoughts

Marginally increase the cyclicalness of our portfolio by introducing a new factor tilt: Small Caps

Small Cap factor is pervasive, persistent, robust, cheap to implement, and the current entry point is particularly attractive in Astoria's view.

Reduce the portfolio's defensiveness by trimming the quality factor

Quality tends to work relatively better during later stages of economic cycles.

Keep our allocation to alternatives in the case our portfolio construction tilts do not materialize.

Why increase the cyclicalness?

- 1) Macroeconomic indicators are starting to inflect higher. Earnings have troughed
- 2) Abundance of liquidity across various central banks.
- 3) Small Cap have a well documented factor bias.

Stay strategically tilted OW equity, UW bonds,  
EW alts

OW the US, OW China, and slightly UW DM (cyclically leveraged to global economy), although we are raising our exposure to DM.

2-way turnover is 13% for our Growth & Income Model

# Astoria's Portfolio Construction Thoughts

Credit is attractive to own.

We previously bought QLTA, LQD; we want to continue adding credit.

Preferred sits below bonds but above equity on the capital structure. They are tilted toward financials which are cheap and well capitalized.

Add Small Caps which have seen significant earnings deratings and are more economically sensitive.

Trim expensive valuation stocks (US high quality stocks)

Maintain min vol ETF as we want exposure to that factor, and we are UW fixed income.

When we run a factor risk model, no major changes compared to our old model

# High quality stocks are starting to look historically expensive

Relative Price-to-Book: Highest Quality vs. Lowest Quality Quartiles



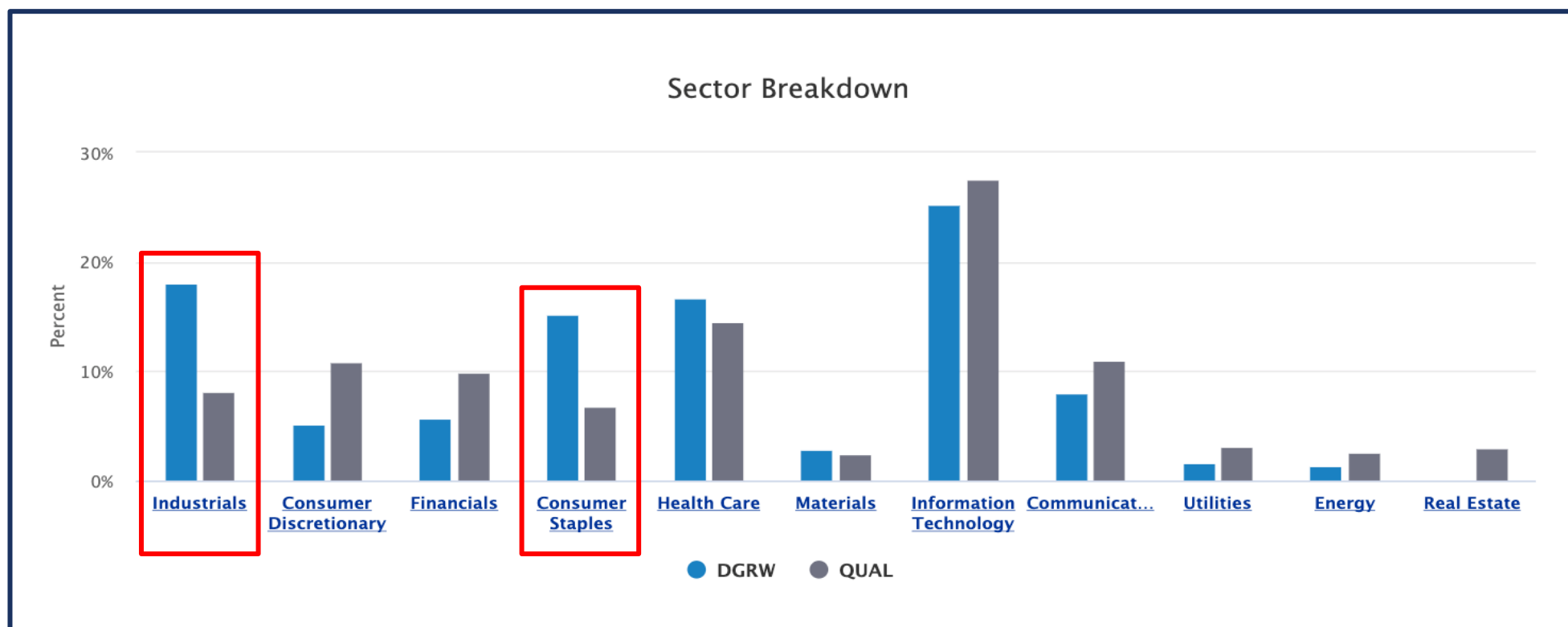
Relative Price-to-Sales: Highest Quality vs. Lowest Quality Quartiles



Source: WisdomTree, Factset, 1/31/02-6/30/20. Quality measure incorporated both static observations and trends of ROE, ROA, gross profits over assets and cash flow over assets for the 800 largest companies in the U.S. by market capitalization. Grey bars indicate recessions.

We are marginally trimming quality which worked well during the late cycle period as well as in the depths of the recession.

### DGRW and QUAL Sector Breakdown

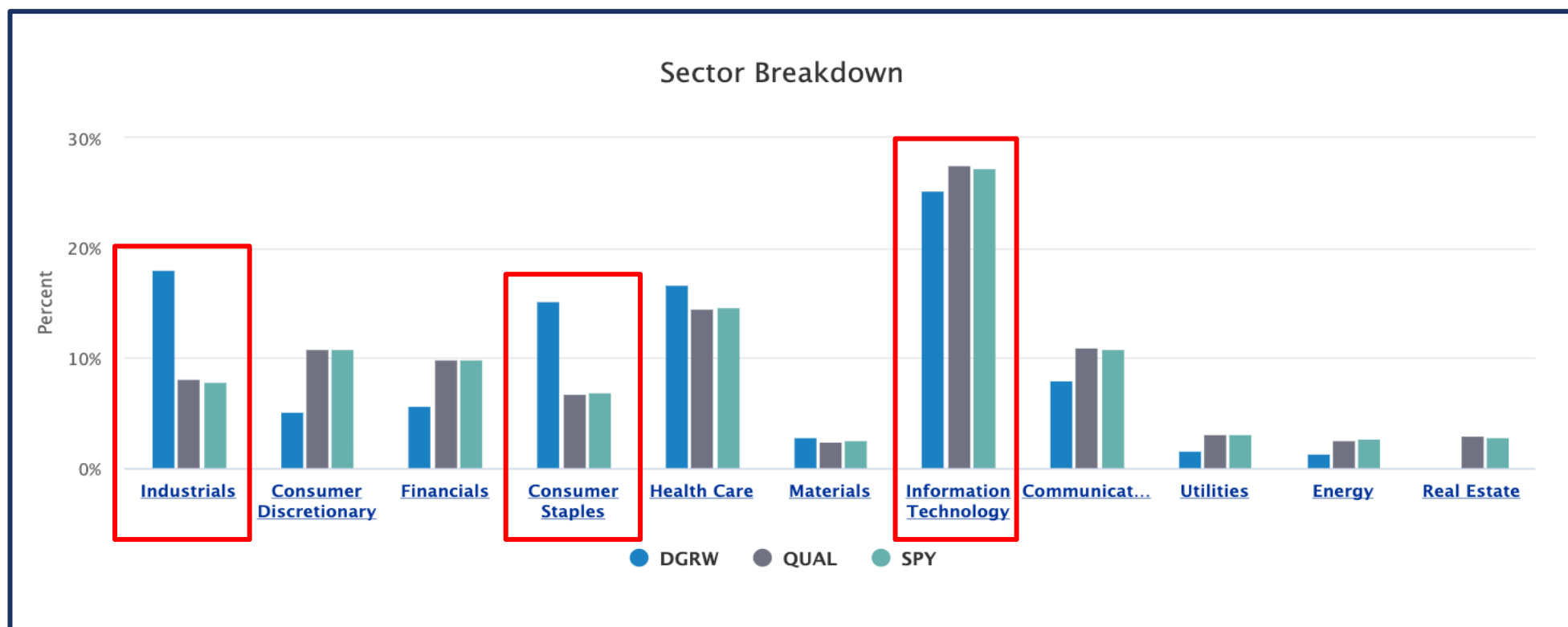


Source: [ETFAction](#). Data accessed by Astoria Portfolio Advisors on July 9, 2020.



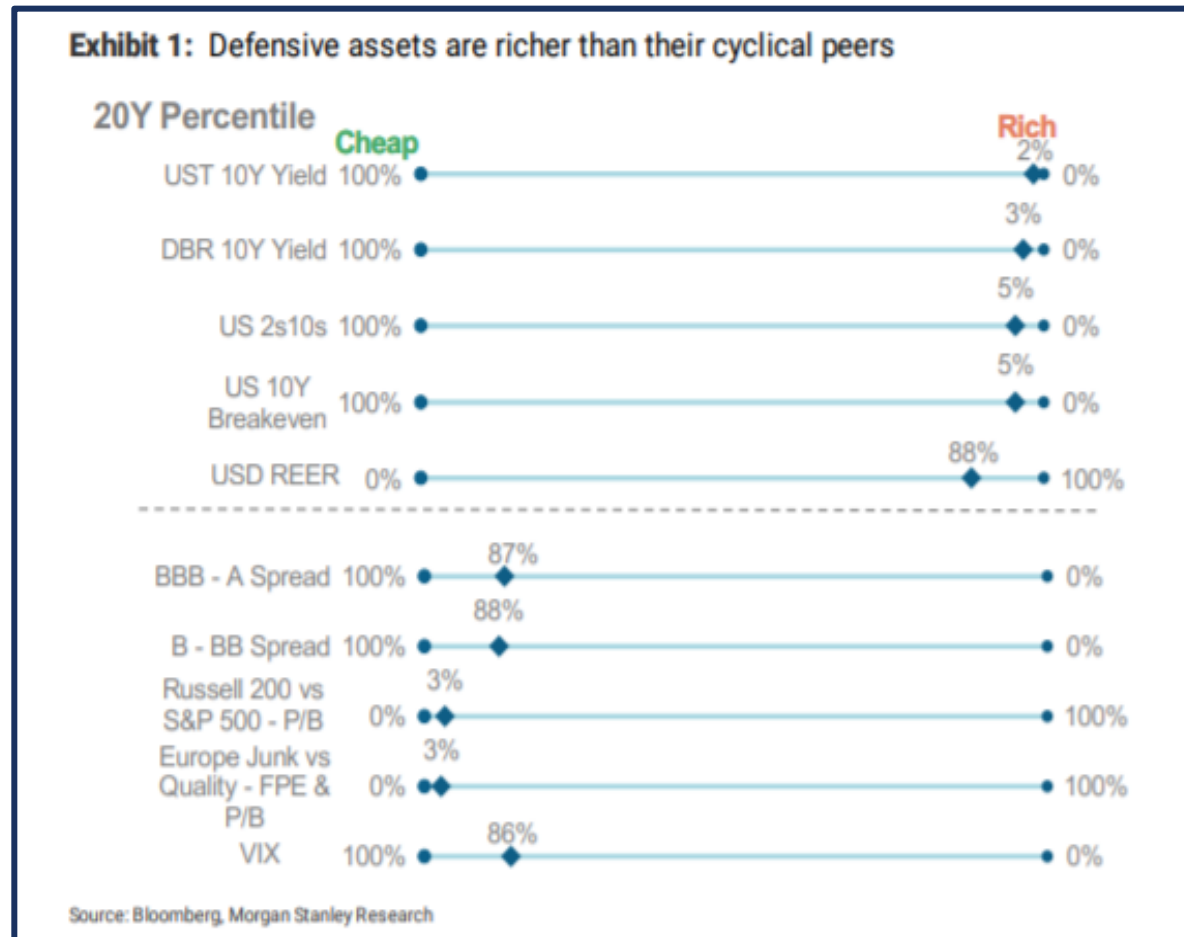
DGRW had a large tilt towards Industrials and Staples. It is UW Financials, Consumer Discretionary, Technology, and Communications.

### DGRW, QUAL, and SPY Sector Breakdown



Source: [ETFAction](#). Data accessed by Astoria Portfolio Advisors on July 9, 2020.

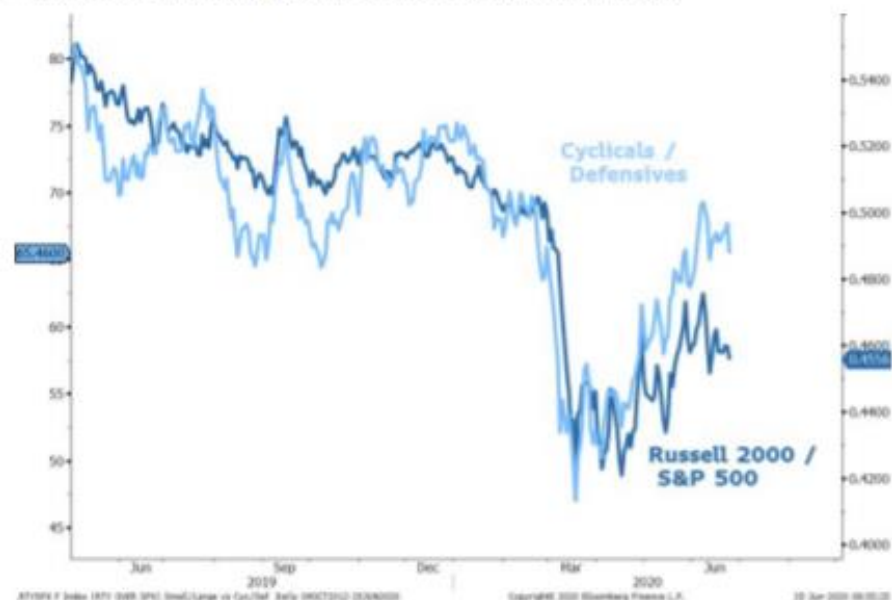
Defensives are expensive while Cyclical assets are cheap. As the economy rebounds off the lows, Cyclical assets are more attractive in Astoria's views.



Source: Morgan Stanley Research, Bloomberg.

# Cyclicals and Small Caps have led since the March lows. Is this a coincidence? Astoria does not think so.

**Exhibit 5: Leadership has Reversed with Recession....**



Source: Bloomberg, Morgan Stanley Research

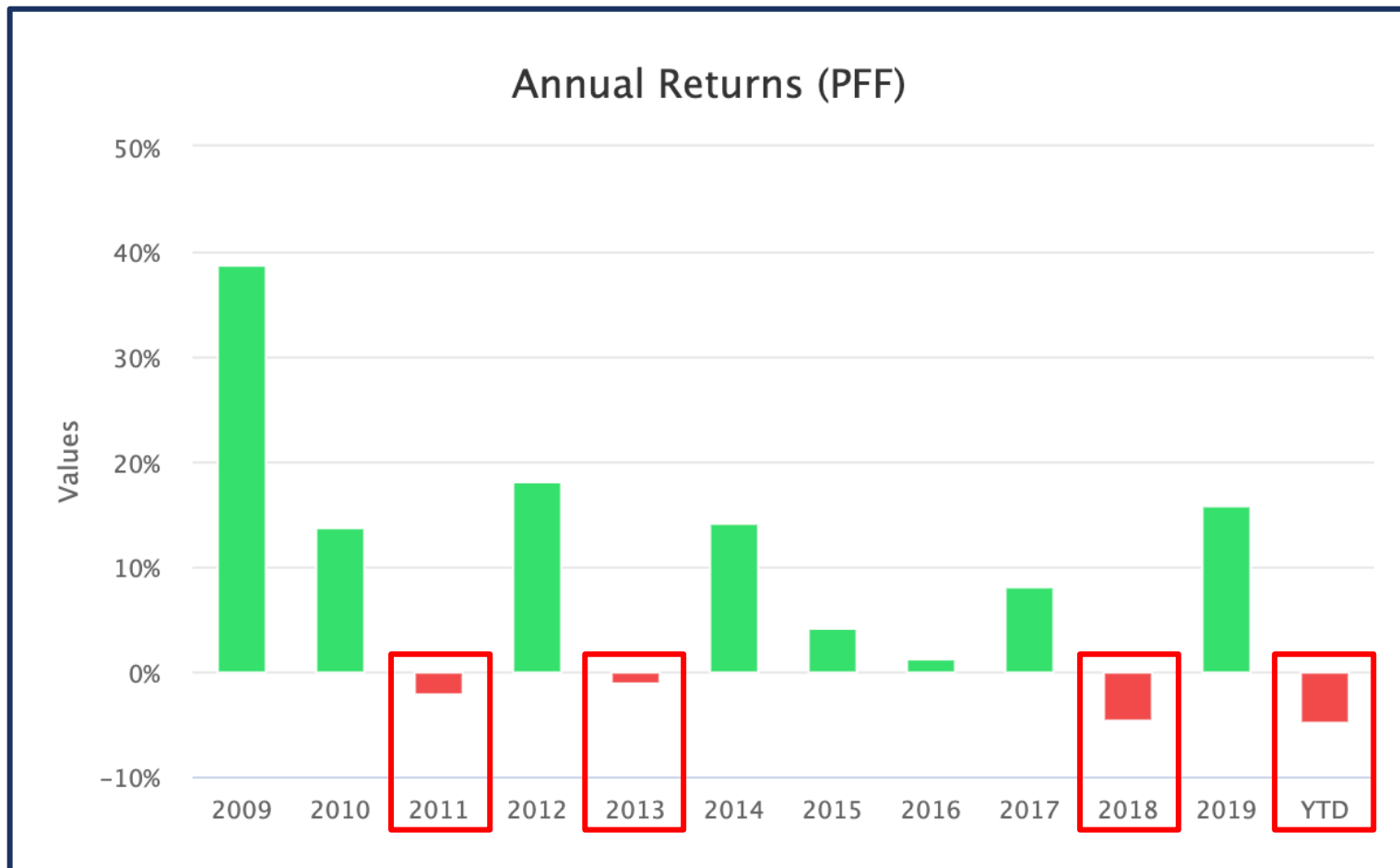
**Exhibit 6: Becoming Decidedly Cyclical Since Lows**

S&P 500 Total Return Since March 23, 2020 Low			
Cap Weight		Equal Weight	
Energy	58%	Energy	65%
Consumer Discretionary	46%	Consumer Discretionary	50%
Information Technology	46%	Materials	43%
Materials	43%	Industrials	41%
Industrials	37%	Financials	41%
S&P 500	37%	S&P 500	40%
Real Estate	34%	Information Technology	39%
Comm	32%	Health Care	38%
Health Care	31%	Communication Services	34%
Financials	31%	Real Estate	31%
Utilities	27%	Utilities	26%
Consumer Staples	20%	Consumer Staples	23%

Source: Morgan Stanley Research

Source: Morgan Stanley Research, Bloomberg.

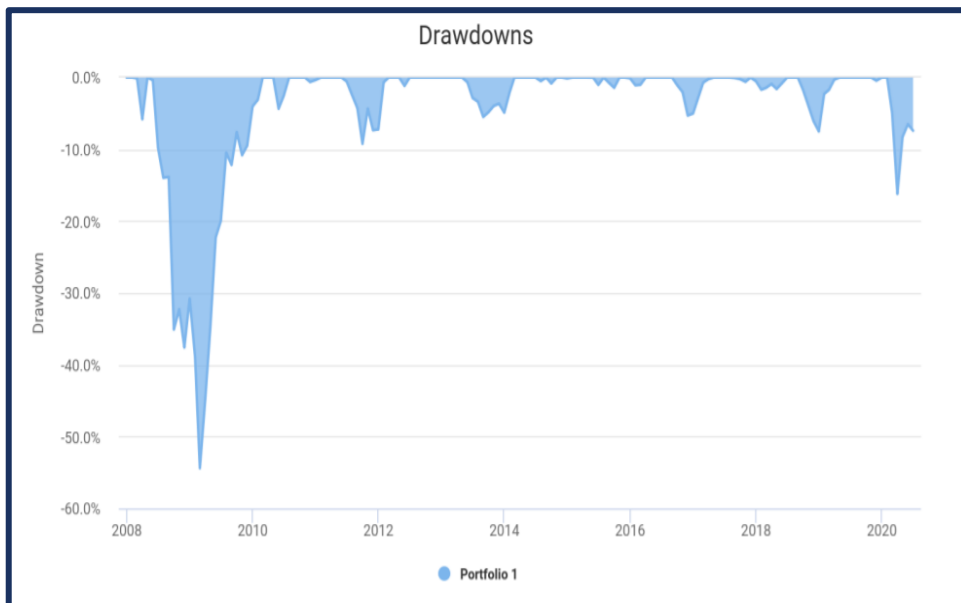
Astoria likes Preferred Shares. Historically, they have produced equity-like returns but with bond like volatility. Current Yield = 4.8%.



Source: [ETFAction](#). Data accessed by Astoria Portfolio Advisors on July 9, 2020.

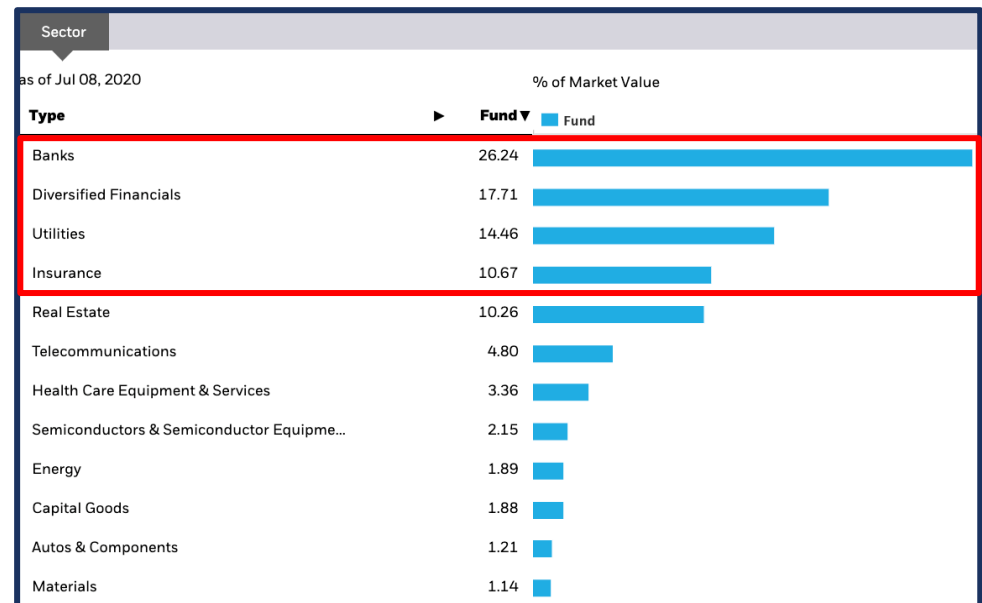
Preferred Shares fell 50% in 2008 given they traditionally have heavy exposure to the banking sector.

### PFF Drawdowns



Source: [Portfolio Visualizer](#). Data accessed by Astoria Portfolio Advisors on July 9, 2020.

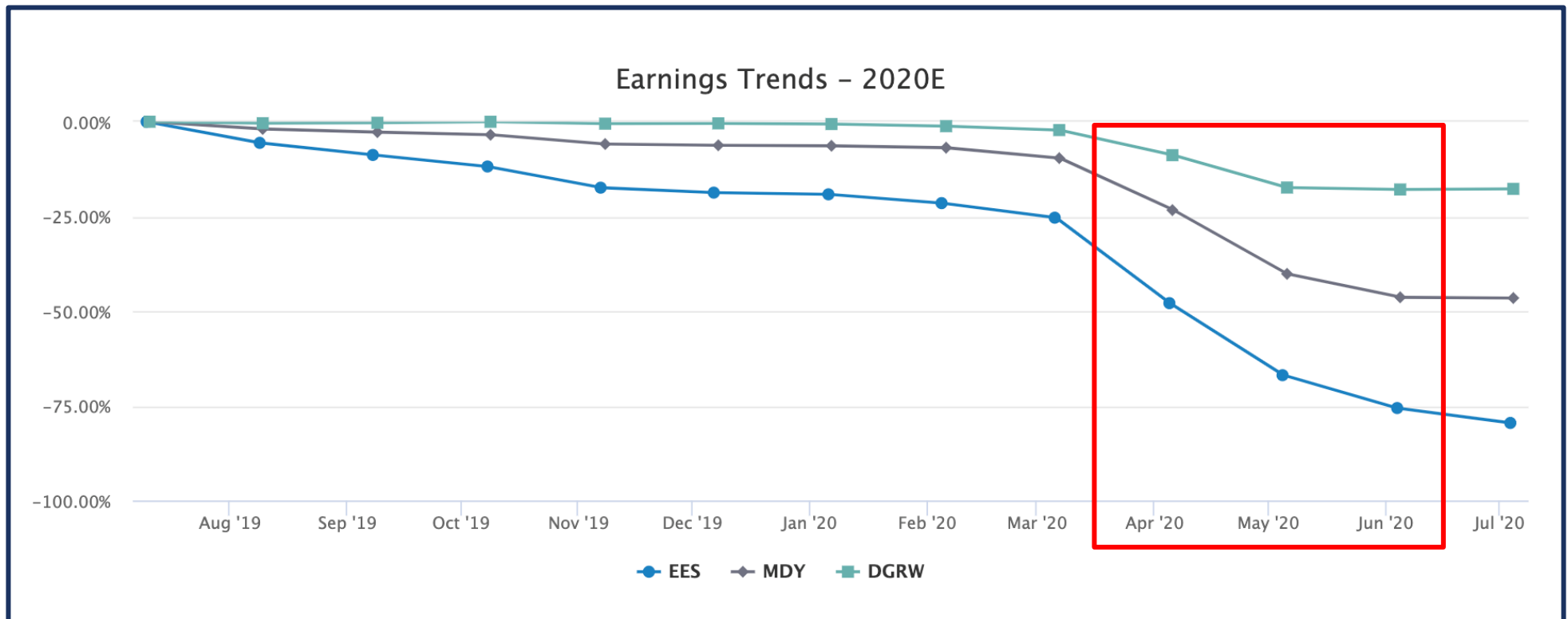
### PFF Sector Breakdown



Source: [Blackrock iShares](#). Data accessed by Astoria Portfolio Advisors on July 9, 2020.

Small Cap (EES) earnings have de-rated to a much larger degree than Mid Caps (MDY) or Large Caps (DGRW).

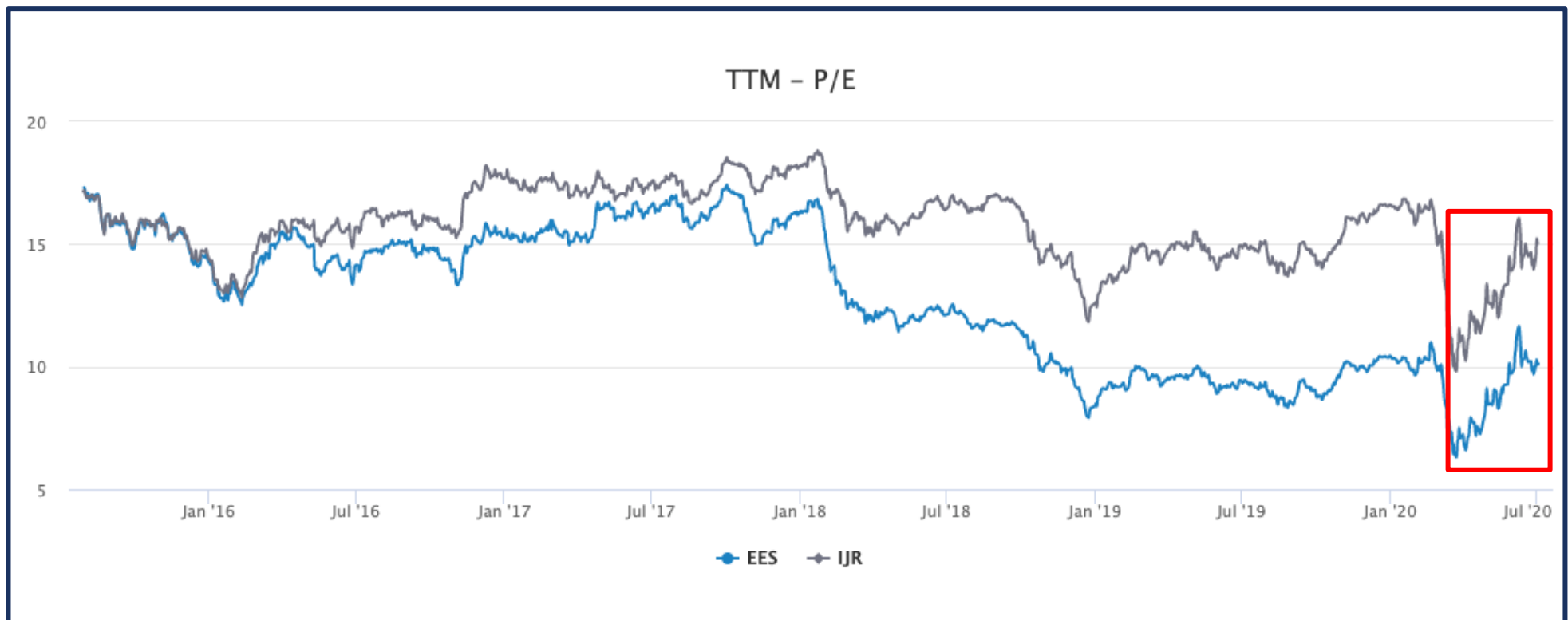
### EES, MDY, and DGRW Earnings Trends - 2020E



Source: [ETFAction](#). Data accessed by Astoria Portfolio Advisors on July 9, 2020.

Small Caps have more operating leverage to the local economy. Given their earnings were de-rated more than Large Caps, we see potential for a greater rebound. EES has a significantly lower valuation compared to IJR & higher EPS growth.

### EES and IJR Valuations



Source: [ETFAction](#). Data accessed by Astoria Portfolio Advisors on July 9, 2020.

As mentioned, EES has higher EPS growth than IJR.

### EES and IJR EPS

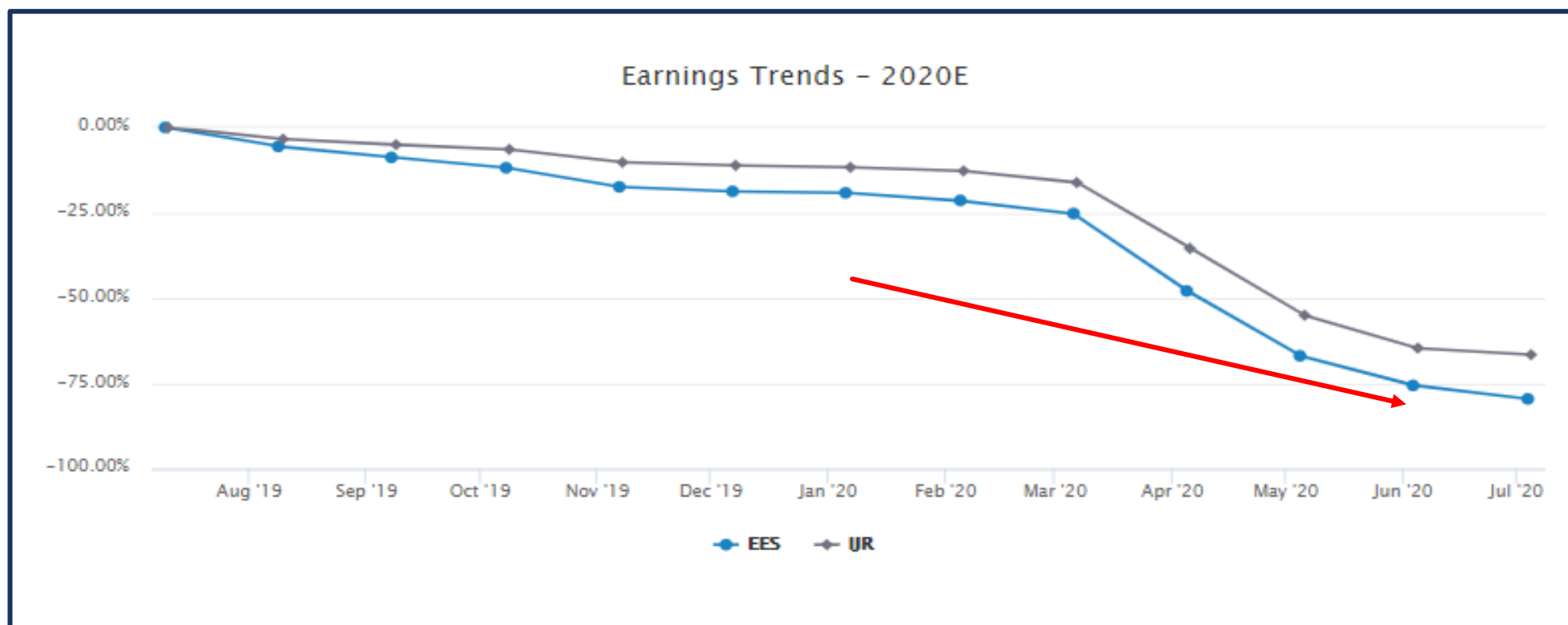


Source: [ETFAction](#). Data accessed by Astoria Portfolio Advisors on July 7, 2020.



# EES earnings were de-rated more so than IJR. Greater rebound ahead?

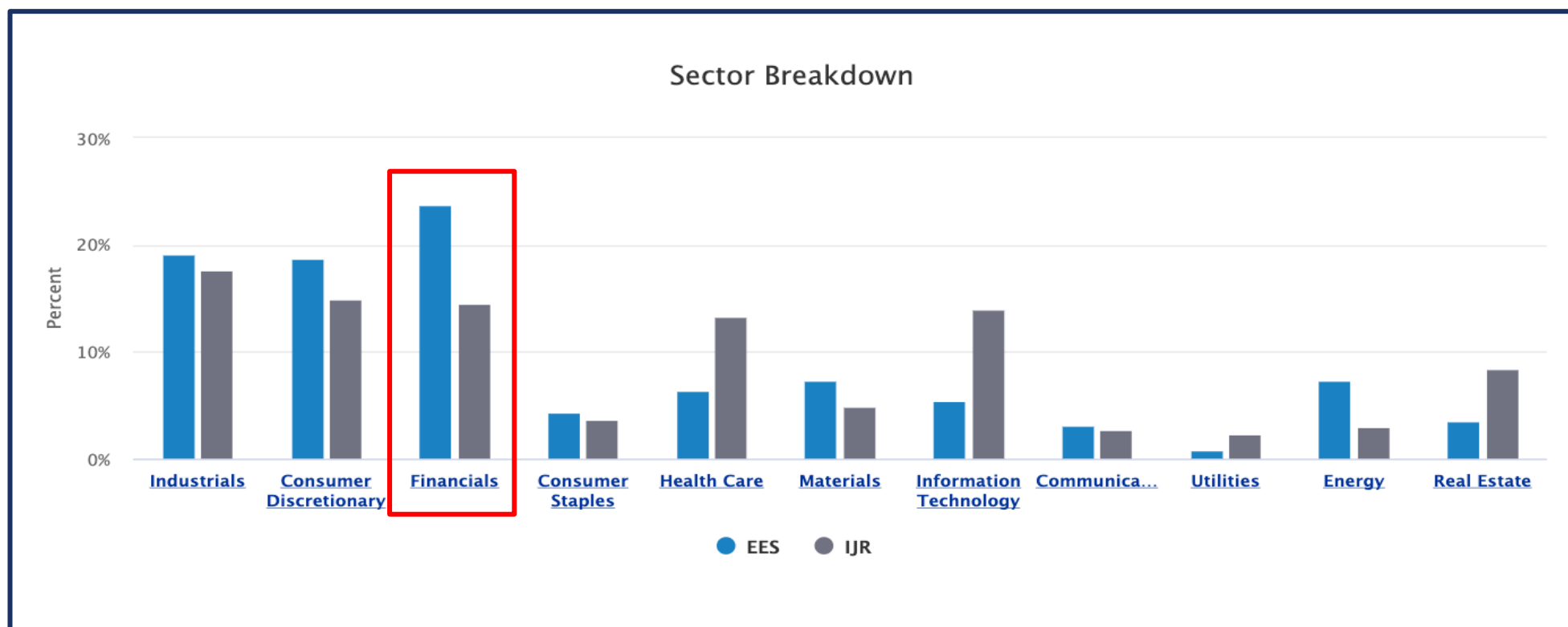
## EES and IJR Earnings Trends - 2020E



Source: [ETFAction](#). Data accessed by Astoria Portfolio Advisors on July 7, 2020.

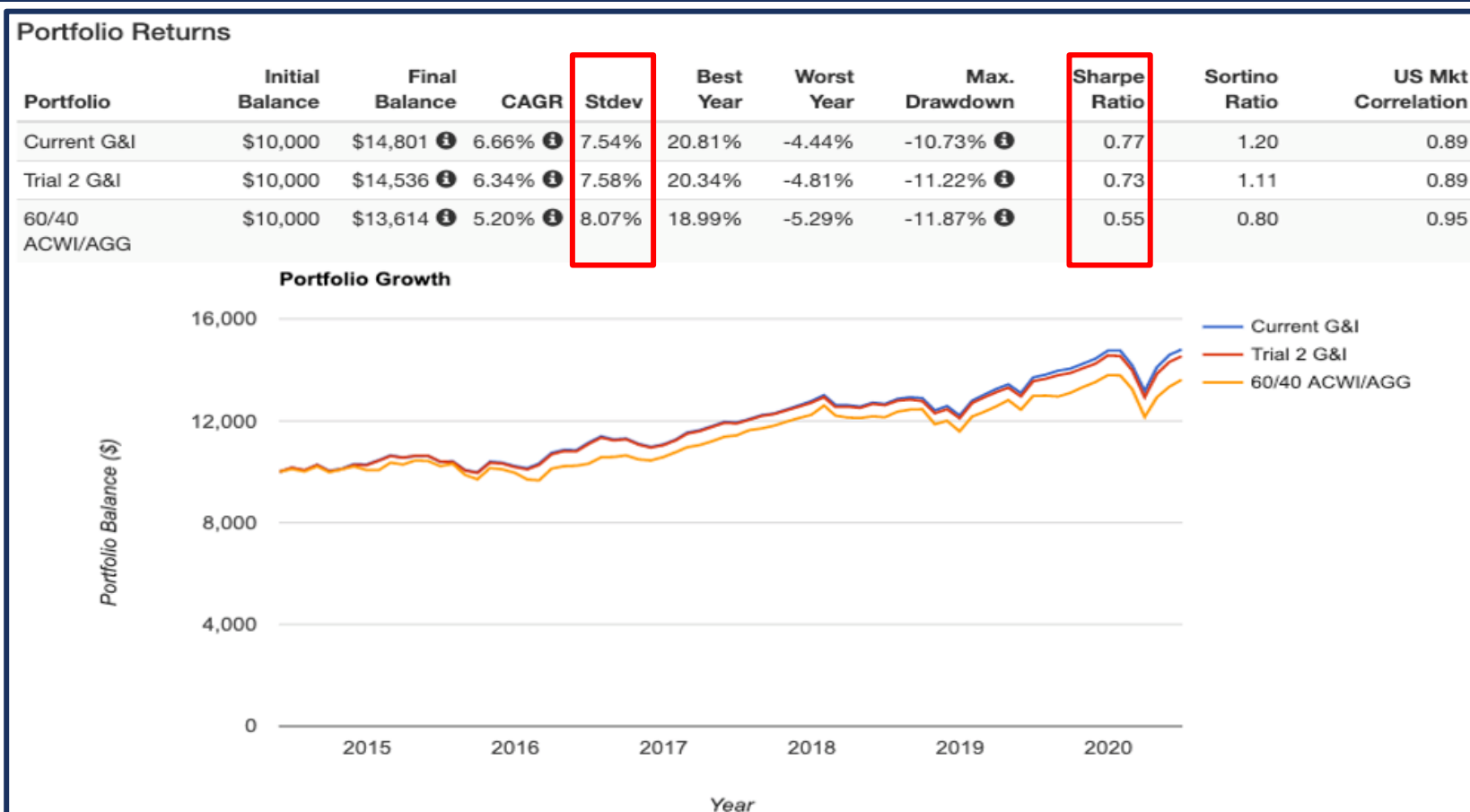
EES has more exposure to Small Cap Financials (more operating leverage to the US economy).

### EES and IJR Sector Breakdown



Source: [ETFAction](#). Data accessed by Astoria Portfolio Advisors on July 9, 2020.

Most of our aggregate portfolio risk is largely intact compared to our model. Past performance is not indicative of future results.



Source: [Portfolio Visualizer](#). Data accessed by Astoria Portfolio Advisors on July 7, 2020. Past performance is not indicative of future results. We are using the current constituents of our old and new Growth & Income model and performing a historical backtest. Past performance is not indicative of future results. In the above tables, Current = pre-rebalance model, New = pro forma model, and 60/40 ACWI/AGG = 60% ACWI / 40% AGG Benchmark.

PE multiples are on the high side. However, with Fed Funds Rate anchored at 0%, we believe there is a new upper bound for PE ratios.

Astoria's Dynamic Growth & Income Portfolio vs. 60% ACWI / 40% AGG Benchmark

Valuation multiples

Price/Earnings	18.62	Price/Earnings	19.57
Price/Book	2.89	Price/Book	2.22
Price/Sales	1.77	Price/Sales	1.66
Price/Cash flow	10.93	Price/Cash flow	11.38

Source: [Vanguard](#). Data accessed by Astoria Portfolio Advisors on July 7, 2020.

# We maintain our higher quality (higher ROE / ROA) and remain below Duration vs. benchmark.

Astoria's Dynamic Growth & Income Portfolio vs. 60% ACWI / 40% AGG Benchmark

Profitability			
Net margin	16.62%	Net margin	15.75%
ROE	24.92%	ROE	21.09%
ROA	9.39%	ROA	7.53%
Debt/Capital	37.40	Debt/Capital	39.70
Interest rate risk			
Average effective maturity	8.22	Average effective maturity	8.89
Average effective duration	6.10	Average effective duration	6.94
Average weighted coupon	3.09%	Average weighted coupon	2.62%

Source: Vanguard. Data accessed by Astoria Portfolio Advisors on July 7, 2020.

Post rebalance, we are still OW the US but we narrowed our large UW to Europe. We maintain a strategic OW to Asia.

Astoria's Dynamic Growth & Income Model vs. 60% ACWI / 40% AGG Benchmark

<b>Americas</b>	<b>59.22%</b>	<b>Americas</b>	<b>60.60%</b>
North America	57.96%	North America	59.53%
Latin America	1.26%	Latin America	1.07%
<b>Greater Europe</b>	<b>18.39%</b>	<b>Greater Europe</b>	<b>19.34%</b>
United Kingdom	4.11%	United Kingdom	4.34%
Europe-Developed	12.62%	Europe-Developed	13.30%
Europe-Emerging	0.86%	Europe-Emerging	0.58%
Africa/Middle East	0.80%	Africa/Middle East	1.12%
<b>Greater Asia</b>	<b>22.39%</b>	<b>Greater Asia</b>	<b>20.06%</b>
Japan	5.61%	Japan	6.91%
Australasia	1.70%	Australasia	1.94%
Asia-Developed	3.42%	Asia-Developed	4.28%
Asia-Emerging	11.66%	Asia-Emerging	6.93%

Source: [Vanguard](#). Data accessed by Astoria Portfolio Advisors on July 7, 2020.

# Sector Comparison

Astoria's Dynamic Growth & Income Model vs. 60% ACWI / 40% AGG Benchmark

<b>■ Sensitive</b>	<b>39.57%</b>	<b>■ Sensitive</b>	<b>41.84%</b>
Commun Svs	8.13%	Commun Svs	10.05%
Energy	2.27%	Energy	3.61%
Industrials	11.72%	Industrials	9.34%
Technology	17.45%	Technology	18.84%
<b>■ Cyclical</b>	<b>32.12%</b>	<b>■ Cyclical</b>	<b>33.51%</b>
Basic Matls	9.59%	Basic Matls	4.44%
Consumer Cyc	9.98%	Consumer Cyc	11.01%
Financial Svs	9.32%	Financial Svs	15.01%
Real Estate	3.23%	Real Estate	3.05%
<b>■ Defensive</b>	<b>28.31%</b>	<b>■ Defensive</b>	<b>24.65%</b>
Consumer Def	11.75%	Consumer Def	8.38%
Healthcare	13.62%	Healthcare	13.07%
Utilities	2.94%	Utilities	3.20%

Source: [Vanguard](#). Data accessed by Astoria Portfolio Advisors on July 7, 2020.

We remain UW Treasuries. Yields are low with little room to decline further and our view is that we do not go into negative rate territory. We remain OW Corp & Securitized debt.

### Astoria's Dynamic Growth & Income Model vs. 60% ACWI / 40% AGG Benchmark

Fixed income sectors			
Type		Type	
Government	29.60%	Government	60.09%
Municipal	0.25%	Municipal	0.30%
Corporate	43.18%	Corporate	20.09%
Securitized	22.95%	Securitized	13.87%
Cash & Equivalents	4.03%	Cash & Equivalents	5.65%
Derivative	0.00%	Derivative	0.00%
Maturity breakdown			
Effective maturity	Portfolio	Effective maturity	Portfolio
1-3	16.04%	1-3	18.90%
3-5	17.84%	3-5	17.24%
5-7	9.34%	5-7	11.37%
7-10	10.03%	7-10	13.56%
10-15	4.54%	10-15	7.39%
15-20	6.00%	15-20	6.04%
20-30	32.44%	20-30	22.74%
>30	3.77%	>30	2.75%

Source: [Vanguard](#). Data accessed by Astoria Portfolio Advisors on July 7, 2020.



# We still maintain a higher quality bond allocation.

Astoria's Dynamic Growth & Income Model vs. 60% ACWI / 40% AGG Benchmark

## Credit quality breakdown

Credit quality		Credit quality	
AAA	56.69%	AAA	45.58%
AA	5.11%	AA	15.03%
A	23.96%	A	18.68%
BBB	14.10%	BBB	20.69%
BB	0.13%	BB	0.02%
B	0.00%	B	0.00%
Below B	0.00%	Below B	0.00%
NR/NA	0.01%	NR/NA	0.00%

Source: [Vanguard](#). Data accessed by Astoria Portfolio Advisors on July 7, 2020.

# Astoria's Dynamic Growth & Income Model factor loadings did not significantly change with our recent rebalance.

## Astoria's Dynamic Growth & Income Model vs. 60% ACWI / 40% AGG Benchmark

Current Model Equity + Alt Factor Loadings	
Market (Rm-Rf)	0.75
Size (SMB)	-0.13
Value (HML)	-0.13
Prof (RMW)	0.29
Invest (CMA)	0.02

New Model Equity + Alt Factor Loadings	
Market (Rm-Rf)	0.74
Size (SMB)	-0.12
Value (HML)	-0.12
Prof (RMW)	0.31
Invest (CMA)	-0.01

Current Model Fixed Income Factor Loadings	
Intermed Term Rate Risk (ITRM)	0.64
Long Term Rate Risk (LTRM)	0.07
Credit Risk (CDT)	0.21
High Yield Credit Risk (HY)	0.07

New Model Fixed Income Factor Loadings	
Intermed Term Rate Risk (ITRM)	0.58
Long Term Rate Risk (LTRM)	0.07
Credit Risk (CDT)	0.24
High Yield Credit Risk (HY)	0.11

Source: [Portfolio Visualizer](#). Data accessed by Astoria Portfolio Advisors on July 7, 2020. In the above tables, Current = pre-rebalance model and New = pro forma model.

# Old Portfolio Construction Tilts: OW US, UW Europe, OW EM Asia, UW Government & Munis, OW Corporates & Securitized, and UW Duration

## Astoria's Pre-Rebalance Core Risk Based Model Portfolio Characteristics

Model	Country/Region Tilts (bps)				US Factor Exposure (bps)		Fixed Income Tilts (bps)				
	North America	Europe	Greater Asia	Asia EM	Value	Growth	Government	Municipal	Corporate	Securitized	Duration
Dynamic Aggressive Model	351	-342	-9	399	94	-717	-2950	-5	2160	949	-0.92
Dynamic Growth Model	374	-331	-43	361	113	-560	-3133	-5	2522	791	-0.74
Multi-Asset Risk Strategy	917	-908	-35	555	529	-372	-3695	-1	2211	1626	-0.71
Dynamic Growth & Income Model	399	-278	-121	258	112	-485	-3000	-4	2273	894	-0.85
Dynamic Conservative Model	429	-302	-127	188	-11	-444	-3023	-4	2328	867	-0.81
Risk Managed Dynamic Income Model	335	-299	-36	250	131	-197	-3002	-4	2284	888	-0.83

Source: [Vanguard](#). Data accessed by Astoria Portfolio Advisors on July 5, 2020. All data shown is expressed in basis points (bps) aside from Duration.

# New Portfolio Construction Tilts: Marginally UW US & Europe and we remain strategically OW Asia. In fixed income, no major changes from our old portfolios.

## Astoria's Pro Forma Core Risk Based Model Portfolio Characteristics

Model	Country/Region Tilts (bps)				US Factor Exposure (bps)		Fixed Income Tilts (bps)				
	North America	Europe	Greater Asia	Asia EM	Value	Growth	Government	Municipal	Corporate	Securitized	Duration
Dynamic Aggressive Model	-164	-95	240	488	-85	-949	-2827	-9	3289	-199	-0.5
Dynamic Growth Model	-167	-59	211	451	-64	-826	-3279	-8	2733	749	-0.71
Multi-Asset Risk Strategy	-218	-295	480	787	33	-694	-2895	-5	2013	1042	-1.01
Dynamic Growth & Income Model	-124	-103	209	457	-79	-711	-3043	-5	2318	905	-0.84
Dynamic Conservative Model	119	-143	-21	183	-5	-492	-3101	-5	2428	861	-0.8
Risk Managed Dynamic Income Model	-26	-117	87	253	124	-220	-3041	-5	2319	901	-0.83

Source: [Vanguard](#). Data accessed by Astoria Portfolio Advisors on July 7, 2020. All data shown is expressed in basis points (bps) aside from Duration.

## Appendix:

- 1) Trailing Returns of Astoria's Core Risk Based Model Portfolios.
- 2) Performance of Astoria's Model Portfolios since March 23, 2020

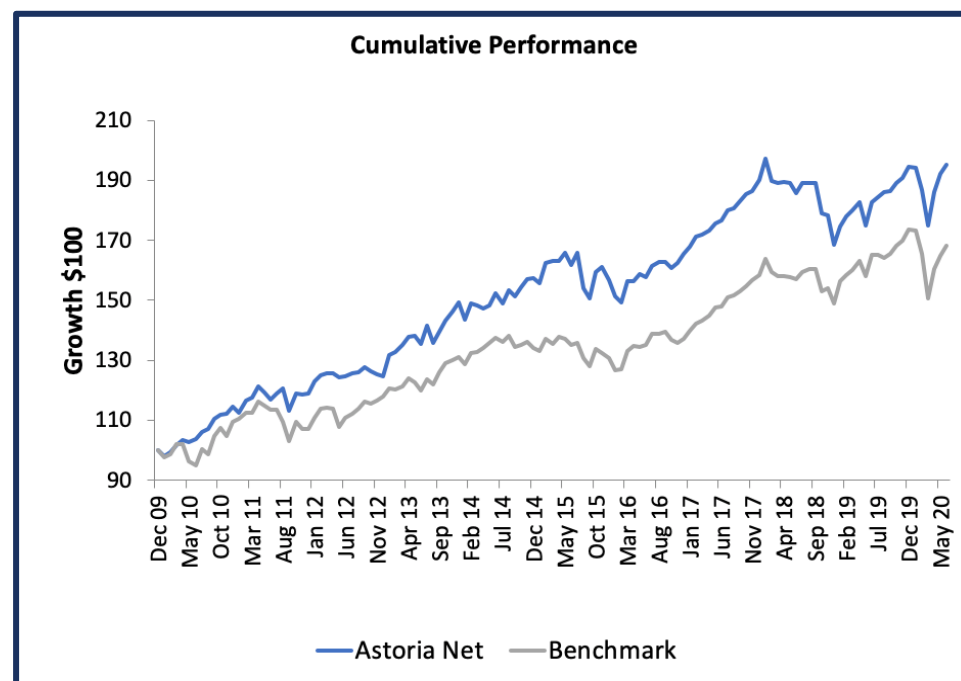


# Multi-Asset Risk Strategy (MARS) YTD, 1-Year, 3-Year, 5-Year, and Since Inception Risk / Net Return Summary (Continued)\*

Performance	YTD	1 Year	3 Years	5 Years	Since Jan 2010
MARS Gross	0.53%	7.26%	3.92%	4.32%	7.10%
MARS Net	0.28%	6.72%	3.40%	3.80%	6.57%
MARS Benchmark	-3.10%	1.90%	4.40%	4.49%	5.07%
Standard Deviation	YTD	1 Year	3 Years	5 Years	Since Jan 2010
MARS Gross	—	11.16%	9.87%	9.49%	8.58%
MARS Net	—	11.16%	9.87%	9.49%	8.58%
MARS Benchmark	—	13.27%	9.80%	8.71%	8.60%
Sharpe Ratio	YTD	1 Year	3 Year	5 Year	Since Jan 2010
MARS Gross	—	0.54	0.24	0.34	0.74
MARS Net	—	0.50	0.19	0.28	0.68
MARS Benchmark	—	0.09	0.29	0.38	0.52

Table Source: Astoria Portfolio Advisors. Data Source: Bloomberg, Barclays, MSCI, Wilshire, Orion Advisors, Charles Schwab. Data as of June 30, 2020. YTD numbers are not annualized. All other numbers are annualized. Benchmark: Multi-Asset Risk Strategy: 50% MSCI All Country World Index (NDUEACWF), 30% Bloomberg Barclays Global Aggregate Bond Index (LEGATRUU), 20% Wilshire Liquid Alternative Multi-Strategy Index (WLIQAMST).

- From January 2010 through June 2020, the Multi-Asset Risk Strategy has cumulatively outperformed its benchmark by 27.48%.



Source: Bloomberg, Astoria Portfolio Advisors. Data as of June 30, 2020. Benchmark: Multi-Asset Risk Strategy: 50% MSCI All Country World Index (NDUEACWF), 30% Bloomberg Barclays Global Aggregate Bond Index (LEGATRUU), 20% Wilshire Liquid Alternative Multi-Strategy Index (WLIQAMST).

# The Multi-Asset Risk Strategy (MARS) is the longest running model with a 10-Year track record.\*

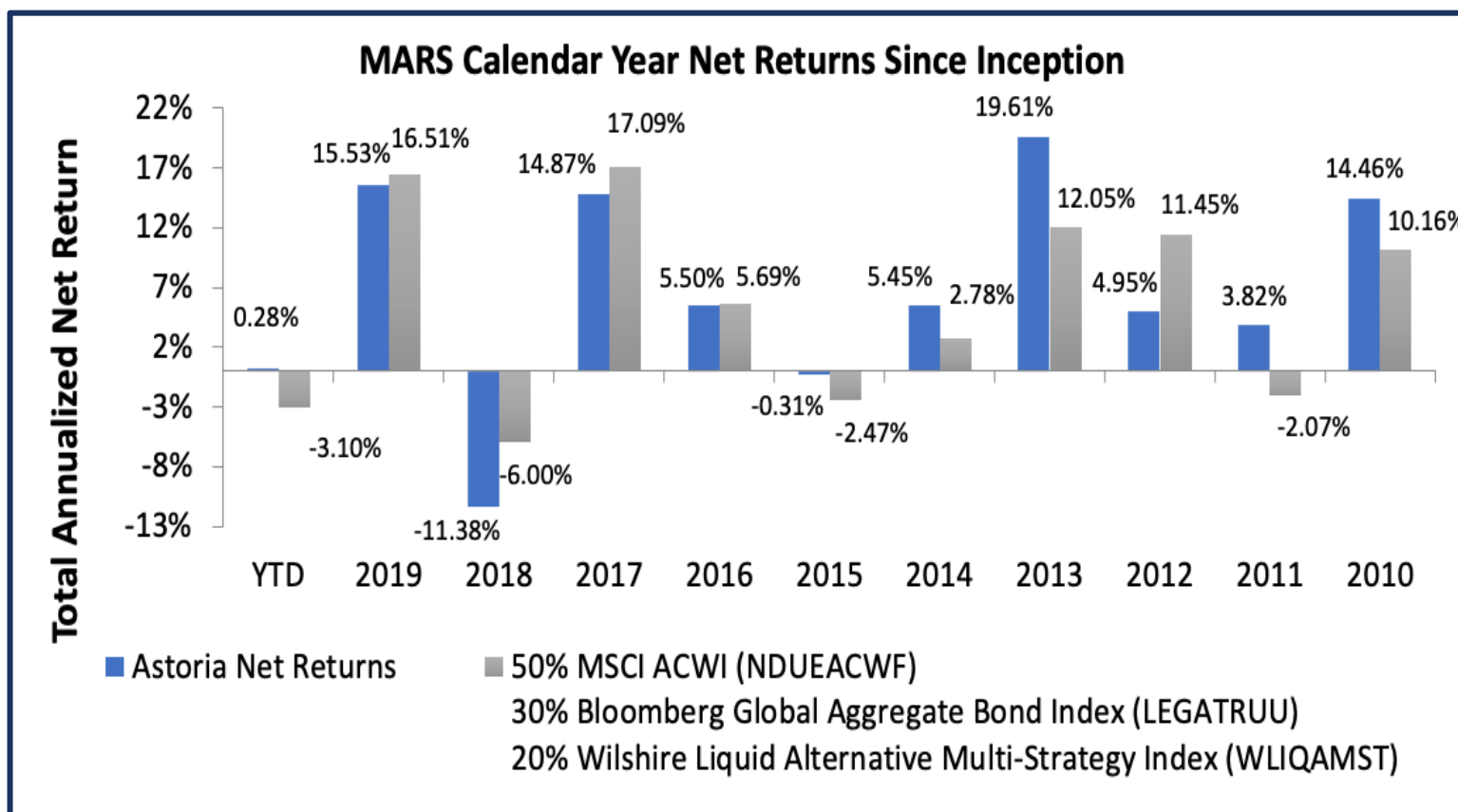


Chart Source: Astoria Portfolio Advisors. Data Source: Bloomberg, Barclays, MSCI, Wilshire, Orion Advisors, Charles Schwab. Data as of June 30, 2020. YTD numbers are not annualized. All other numbers are annualized unless denoted. Net Returns incorporate 50bps annualized management fee. Benchmark for the Multi-Asset Risk Strategy is 50% MSCI All Country World Index (NDUEACWF), 30% Bloomberg Barclays Global Aggregate Bond Index (LEGATRUU), 20% Wilshire Liquid Alternative Multi-Strategy Index (WLIQAMST).



# Model Portfolio Calendar Year Net Returns\*

## Dynamic Aggressive Model

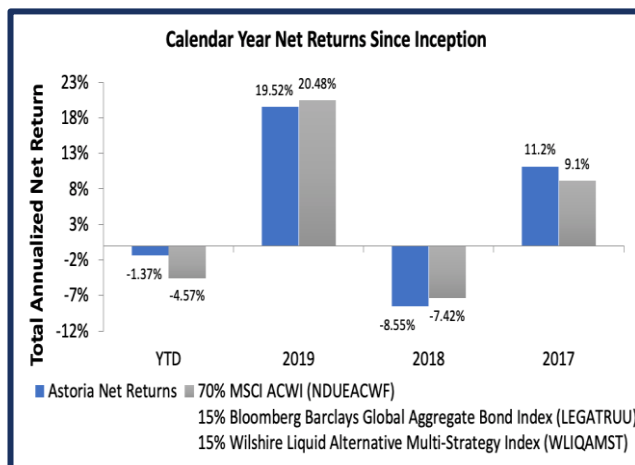


Chart Source: Astoria Portfolio Advisors. Data Source: Bloomberg, Barclays, MSCI, Wilshire, Orion Advisors, Charles Schwab. Data as of June 30, 2020. YTD numbers are not annualized. All other numbers are annualized unless denoted. Net Returns incorporate 15bps annualized management fee. Benchmark for the Dynamic Aggressive Model is 70% MSCI All Country World Index (NDUEACWF), 15% Bloomberg Barclays Global Aggregate Bond Index (LEGATRUU), 15% Wilshire Liquid Alternative Multi-Strategy Index (WLIQAMST).

## Dynamic Growth Model

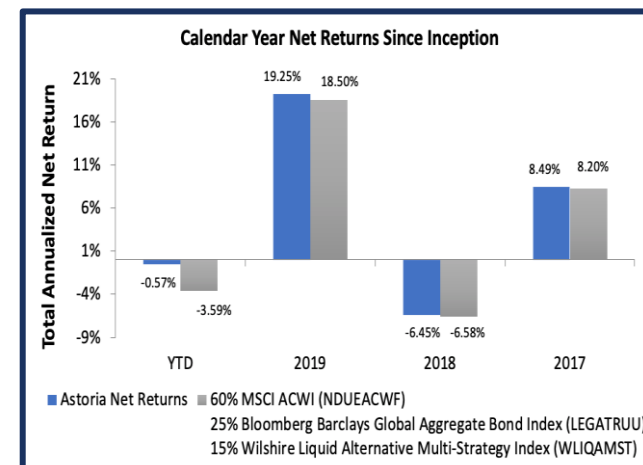


Chart Source: Astoria Portfolio Advisors. Data Source: Bloomberg, Barclays, MSCI, Wilshire, Orion Advisors, Charles Schwab. Data as of June 30, 2020. YTD numbers are not annualized. All other numbers are annualized unless denoted. Net Returns incorporate 15bps annualized management fee. Benchmark for the Dynamic Growth Model is 60% MSCI All Country World Index (NDUEACWF), 25% Bloomberg Barclays Global Aggregate Bond Index (LEGATRUU), 15% Wilshire Liquid Alternative Multi-Strategy Index (WLIQAMST).



# Model Portfolio Calendar Year Net Returns (Continued)\*

## Dynamic Growth & Income Model

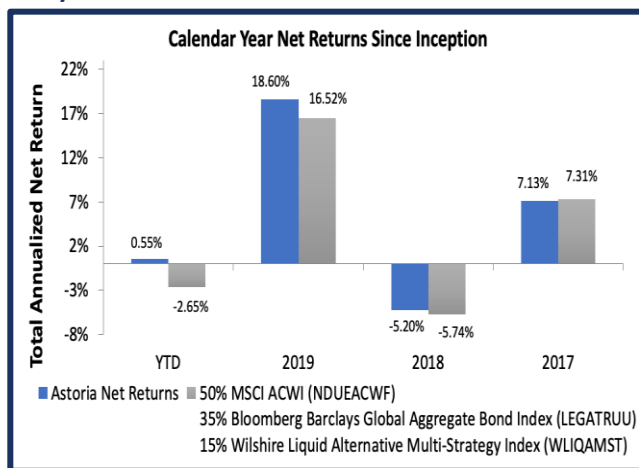


Chart Source: Astoria Portfolio Advisors. Data Source: Bloomberg, Barclays, MSCI, Wilshire, Orion Advisors, Charles Schwab. Data as of June 30, 2020. YTD numbers are not annualized. All other numbers are annualized unless denoted. Net Returns incorporate 15bps annualized management fee. Benchmark for the Dynamic Growth & Income Model is 50% MSCI All Country World Index (NDUEACWF), 35% Bloomberg Barclays Global Aggregate Bond Index (LEGATRUU), 15% Wilshire Liquid Alternative Multi-Strategy Index (WLIQAMST).

## Dynamic Conservative Model

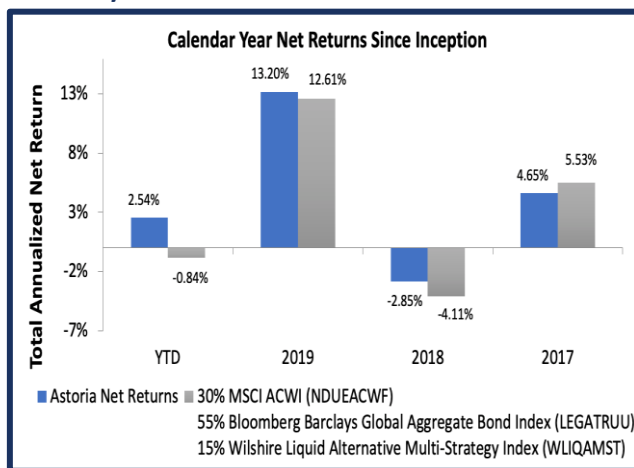


Chart Source: Astoria Portfolio Advisors. Data Source: Bloomberg, Barclays, MSCI, Wilshire, Orion Advisors, Charles Schwab. Data as of June 30, 2020. YTD numbers are not annualized. All other numbers are annualized unless denoted. Net Returns incorporate 15bps annualized management fee. Benchmark for the Dynamic Conservative Model is 30% MSCI All Country World Index (NDUEACWF), 55% Bloomberg Barclays Global Aggregate Bond Index (LEGATRUU), 15% Wilshire Liquid Alternative Multi-Strategy Index (WLIQAMST).

## Risk Managed Dynamic Income Model

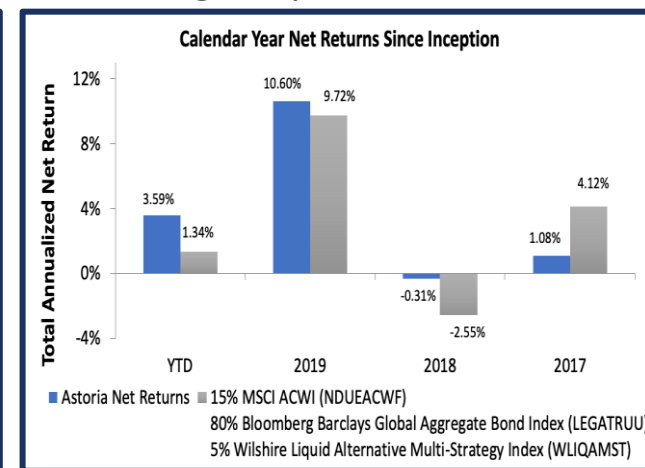


Chart Source: Astoria Portfolio Advisors. Data Source: Bloomberg, Barclays, MSCI, Wilshire, Orion Advisors, Charles Schwab. Data as of June 30, 2020. YTD numbers are not annualized. All other numbers are annualized unless denoted. Net Returns incorporate 15bps annualized management fee. Benchmark for the Risk Managed Dynamic Income Model is 15% MSCI All Country World Index (NDUEACWF), 80% Bloomberg Barclays Global Aggregate Bond Index (LEGATRUU), 5% Wilshire Liquid Alternative Multi-Strategy Index (WLIQAMST).

# Astoria's Model Portfolios have also outperformed during the risk on rally since March 23, 2020.

- **Performance from March 23, 2020 to June 30, 2020**
  - **All of our Dynamic Strategic Model Portfolios**, as well as **MARS** (Multi Asset Risk Strategy), have **outperformed** their benchmarks on a **return basis since March 23, 2020**.
  - The **outperformance** of the six strategies ranges from **14bps to 374bps** (average is **166bps**). See table below.

## Astoria's Model Portfolio Returns vs. Benchmark since March 23, 2020


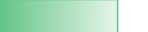

Benchmark	March 23 – June 30	Model	March 23 – June 30 (Net of Fees)*	Out/Under Performance
Risk Managed Dynamic Income Benchmark (15/80/5)	10.43%	Risk Managed Dynamic Income Model	14.17%	 3.74%
Dynamic Conservative Benchmark (30/55/15)	14.52%	Dynamic Conservative Model	16.84%	 2.32%
Dynamic Growth & Income Benchmark (50/35/15)	19.75%	Dynamic Growth & Income Model	21.61%	 1.86%
Dynamic Growth Benchmark (60/25/15)	22.41%	Dynamic Growth Model	23.57%	 1.16%
Multi-Asset Risk Strategy Benchmark (50/30/20)	19.86%	Multi-Asset Risk Strategy	20.61%	 0.75%
Dynamic Aggressive Benchmark (70/15/15)	25.09%	Dynamic Aggressive Model	25.23%	 0.14%

Table Source: Astoria Portfolio Advisors. Data Source: Orion Advisors. Data as of June 30, 2020. See important disclosures at the end of the presentation.

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# Model Disclosure

- Model portfolio performance for the Dynamic Aggressive Model, Dynamic Growth Model, Dynamic Growth & Income Model, Dynamic Conservative Model, and Risk Managed Dynamic Income Model is shown net of the model advisory fee of 0.15% charged by Astoria Portfolio Advisors and does not include trading costs. The Company's track record for the Multi-Asset Risk Strategy prior to June 9, 2017 includes the performance record established by the Portfolio Manager while affiliated with a prior firm. Astoria's Multi-Asset Risk Strategy performance is shown net of advisory fee of 0.50% charged by Astoria Portfolio Advisors and reflects the deduction of trading costs. The model delivery performance results are net of Astoria Portfolio Advisors' fee and does not include any additional advisory fees charged by advisors employing Astoria's models. Any additional fees charged by an advisor will reduce an investor's return. Performance results shown include the reinvestment of dividends and interest on cash balances where applicable. The data used to calculate the model performance was obtained from sources deemed reliable and then organized and presented by Astoria Portfolio Advisors. The performance calculations have not been audited by any third party. Actual performance of client portfolios may differ materially due to the timing related to additional client deposits or withdrawals and the actual deployment and investment of a client portfolio, the reinvestment of dividends, the length of time various positions are held, the client's objectives and restrictions, and fees and expenses incurred by any specific individual portfolio.
- **Benchmarks:** The Dynamic Aggressive Model performance results shown are compared to the performance of 70% MSCI All Country World Index (NDUEACWF), 15% Bloomberg Barclays Global Aggregate Bond Index (LEGATRUU), and 15% Wilshire Liquid Alternative Multi-Strategy Index (WLIQAMST). The index results do not reflect fees and expenses and you typically cannot invest in an index. The Dynamic Growth Model performance results shown are compared to the performance of 60% MSCI All Country World Index (NDUEACWF), 25% Bloomberg Barclays Global Aggregate Bond Index (LEGATRUU), and 15% Wilshire Liquid Alternative Multi-Strategy Index (WLIQAMST). The index results do not reflect fees and expenses and you typically cannot invest in an index. The Multi-Asset Risk Strategy performance results shown are compared to the performance of 50% MSCI All Country World Index (NDUEACWF), 30% Bloomberg Barclays Global Aggregate Bond Index (LEGATRUU), and 20% Wilshire Liquid Alternative Multi-Strategy Index (WLIQAMST). The index results do not reflect fees and expenses and you typically cannot invest in an index. The Dynamic Growth & Income Model performance results shown are compared to the performance of 50% MSCI All Country World Index (NDUEACWF), 35% Bloomberg Barclays Global Aggregate Bond Index (LEGATRUU), and 15% Wilshire Liquid Alternative Multi-Strategy Index (WLIQAMST). The index results do not reflect fees and expenses and you typically cannot invest in an index. The Dynamic Conservative Model performance results shown are compared to the performance of 30% MSCI All Country World Index (NDUEACWF), 55% Bloomberg Barclays Global Aggregate Bond Index (LEGATRUU), and 15% Wilshire Liquid Alternative Multi-Strategy Index (WLIQAMST). The index results do not reflect fees and expenses and you typically cannot invest in an index. The Risk Managed Dynamic Income Model performance results shown are compared to the performance of 15% MSCI All Country World Index (NDUEACWF), 80% Bloomberg Barclays Global Aggregate Bond Index (LEGATRUU), 5% Wilshire Liquid Alternative Multi-Strategy Index (WLIQAMST). The index results do not reflect fees and expenses and you typically cannot invest in an index.
- **Return Comparison:** Both the MSCI All Country World Index and the Bloomberg Global Aggregate Bond indices were chosen as they are generally well recognized as an indicator or representation of the stock and bond market and include a cross section of holdings. Also, the Wilshire Liquid Alternative Multi-Strategy Index was chosen as it is generally well recognized as an indicator or representation of liquid alternative holdings. Indices are typically not available for direct investment, are unmanaged and do not incur fees or expenses. The results do not represent actual trading and actual results may significantly differ from the theoretical results presented.