



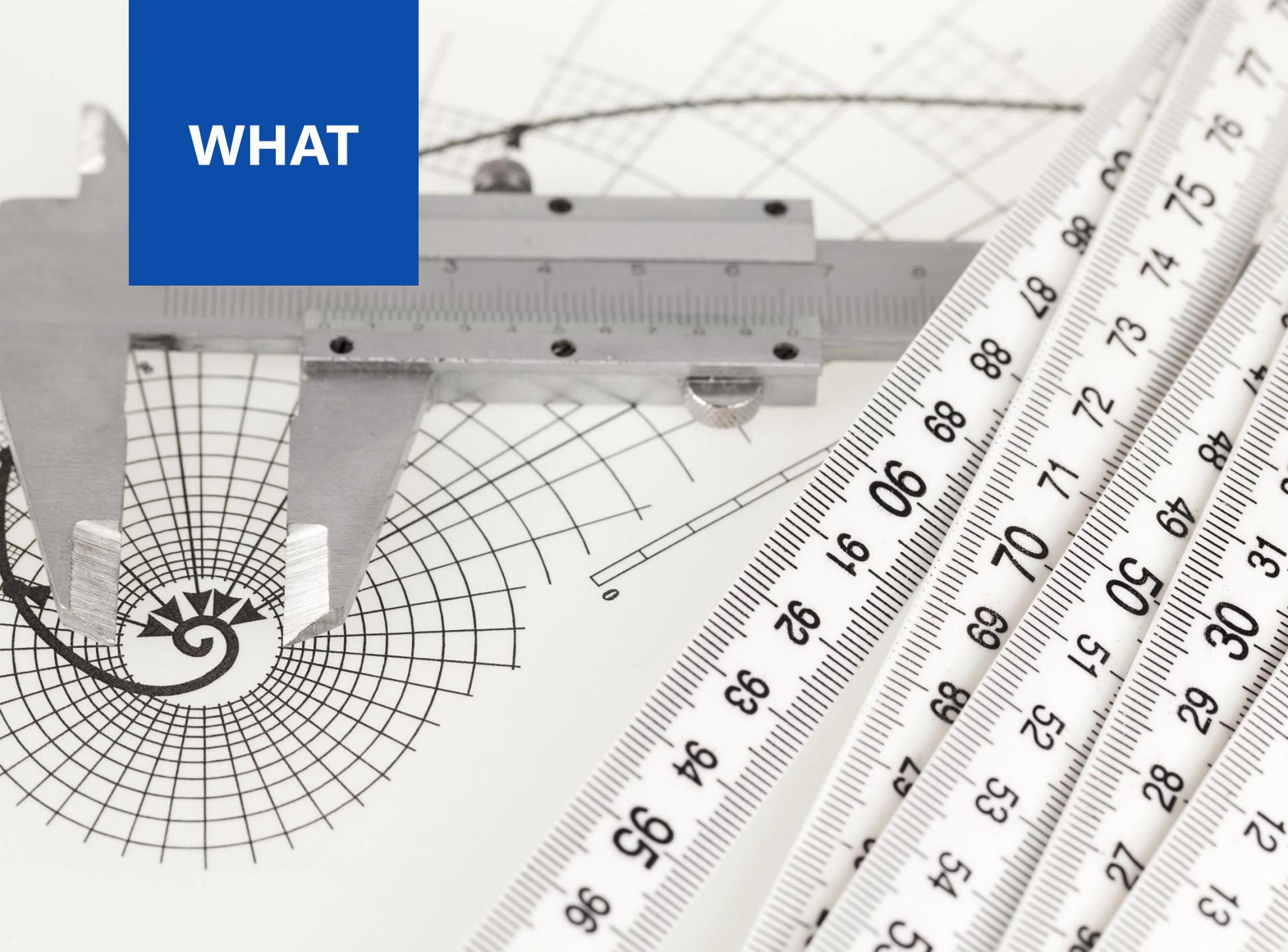
# BEST IDEAS EQUITY

FACTOR-BASED MODEL PORTFOLIO STRATEGY



2019/01

**WHAT**



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# Summary

## Key Points in a Nutshell

1

We are proud to introduce the Factor-Based Best Ideas Equity Model Portfolio Strategy with institutional level of liquidity and low portfolio turnover.

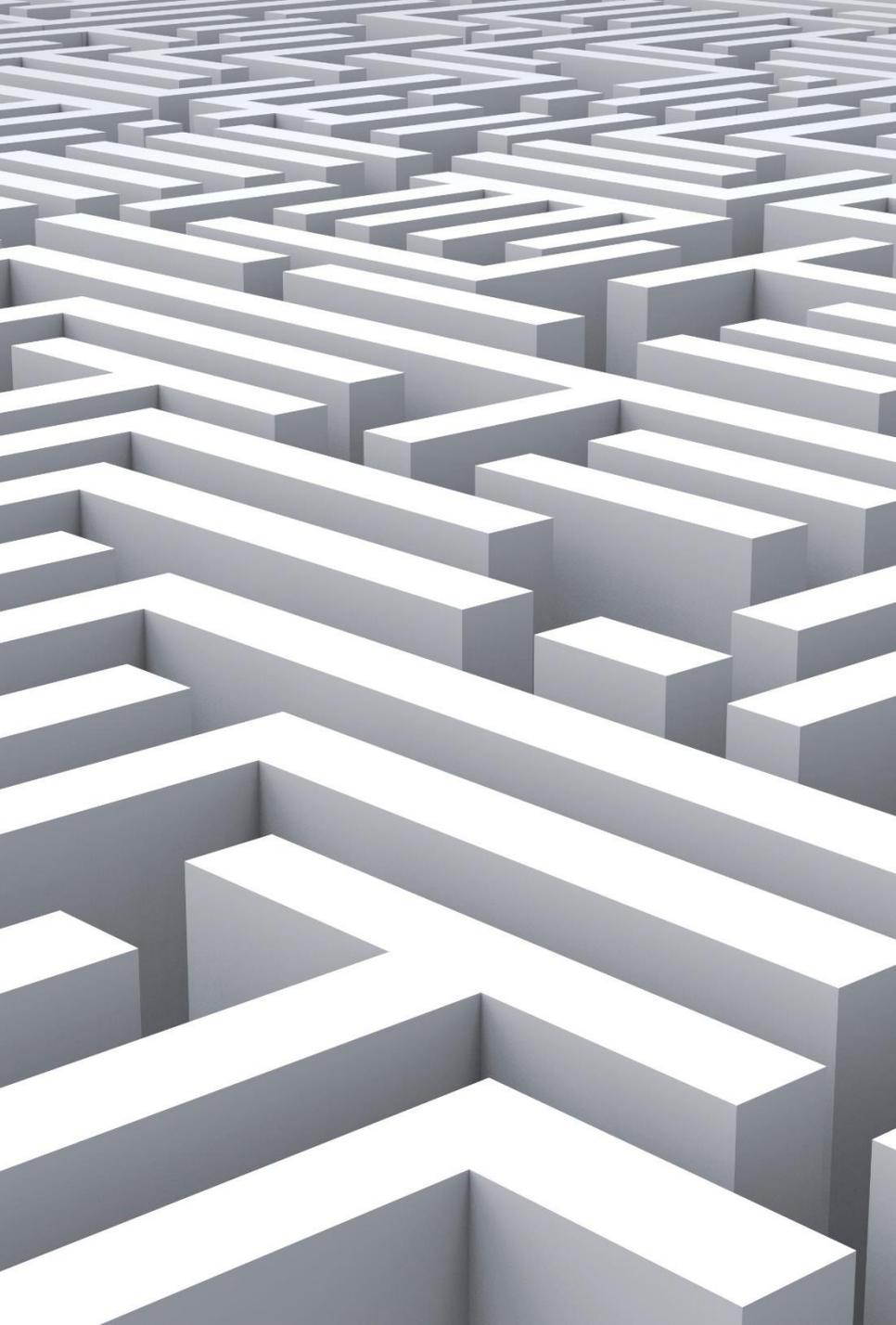
2

The portfolio gained an annualized return of 18.5% since 2000. It has proven to outperform on a relative basis against a custom blended benchmark.

3

The portfolio returns are achieved by strategically selecting 30 quality at a reasonable price (QARP) companies generating wealth for its shareholders.





# Objectives

## Setting a Way to Achieve Success

The portfolio is designed for potential investors with medium risk tolerance seeking exposure to high quality companies (10 Canadian, 10 US and 10 International stocks) by following a rigorous bottom-up factor based quantitative approach. The investment objectives of the portfolio are to:

- 1 Target long term capital appreciation among the best opportunities available.
- 2 Consistently deliver performance over a custom blended benchmark.
- 3 Maximize tax efficiency by having a low portfolio turnover ratio.

# Characteristics

## Comparison of Smart Beta Strategies



**QARP** stands for Quality At Reasonable Price. We are finding companies of quality trading at attractive multiples that consistently generate wealth for its shareholders.

	Market Cap Weighted Index	Factor-Based Best Ideas Equity
Risk management goals	None	None
Systematic rebalancing	Quarterly	Quarterly
Human input required	No	Supervised
Use of Leverage	None	None
Systematic Risk	Medium	Medium
Portfolio turnover	Low	Low
Investment process	None	Bottom-Up
Investment style	None	QARP
Market behavior	Trend Following	Relative return

# Methodology

## Quantitative Modeling



### HOW IT WORKS

A quantitative model systematically identifies mispriced stocks and attempts to deliver absolute and relative performance. Briefly, a ranking system sorts stocks from a universe based on pre-selected factors and the portfolio periodically buys the best ones and sells the ones in which conditions have deteriorated over time following various rules.

### WHY IT WORKS

By rigorously adhering to this stock selection framework based on a thoroughly tested ranking system, we are able to remove the emotional element of the investment process. 80% of portfolio managers cannot beat their benchmark because 1) it is difficult to do so and 2) they unconsciously let fear and greed emotions affect their investment decisions.

A high-contrast, black and white close-up photograph of several interlocking metal gears. The gears are made of a polished, reflective metal, likely steel, and their teeth are sharply defined. The lighting creates strong highlights and deep shadows, emphasizing the three-dimensional texture and the precision of the mechanical components. A blue rectangular box is overlaid in the top-left corner, containing the word "HOW" in white, bold, sans-serif capital letters.

**HOW**

# Philosophy

## Factor-Based (FB)

### 1. QARP (Quality At Reasonable Price)

The end goal is to invest in quality companies trading at attractive multiples that consistently generate wealth for their shareholders.

### 2. Undexing

Our goal is to beat the market over the long run. We believe the best way to do it is to create a portfolio that looks very different from it.

### 3. Concentration

We are striving to achieve a balance between diversifying to remove specific risk yet not too much to avoid ending up mimicking the index.

### 4. Low Turnover

Excessive portfolio churning increases trading costs for an investor. It also means a lack of confidence, decisiveness and tax awareness.

# Overview

## Our Investment Process

### 6. Monitoring

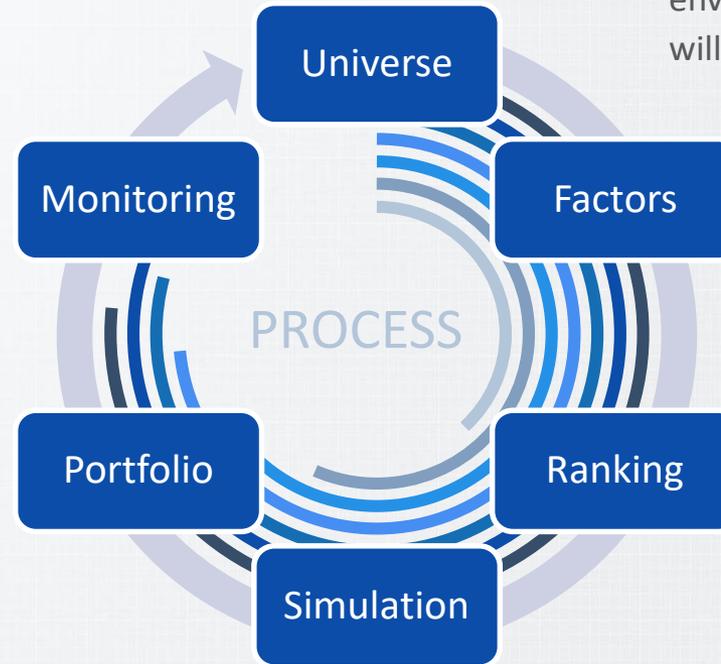
Monitor the portfolio, rebalance and carry out performance attribution.

### 5. Portfolio

Build the live portfolio by investing real money in the defined strategy.

### 4. Simulation

Form a strategy resulting from a mix of set rules and filters applied to the ranking system.



### 1. Universe

Define the investment environment in which we will pick our companies.

### 2. Factors

Design factors based on academic literature and innovative concepts.

### 3. Ranking

Create a composite of factors to rank companies from our defined universe.



# Universe

## Our Investment Environment

1+

**\$billion** of market cap minimum. This is the minimum market cap requirement for a company to be considered a large cap in the US.

10+

**\$million** of average daily liquidity for the past month expressed as price x volume.



1000+

**Stocks** coming from the S&P/TSX, the S&P 500 and the MSCI ACWI Ex US universes so this strategy is benched against a custom blended benchmark made of an equal weight of each of these indices.

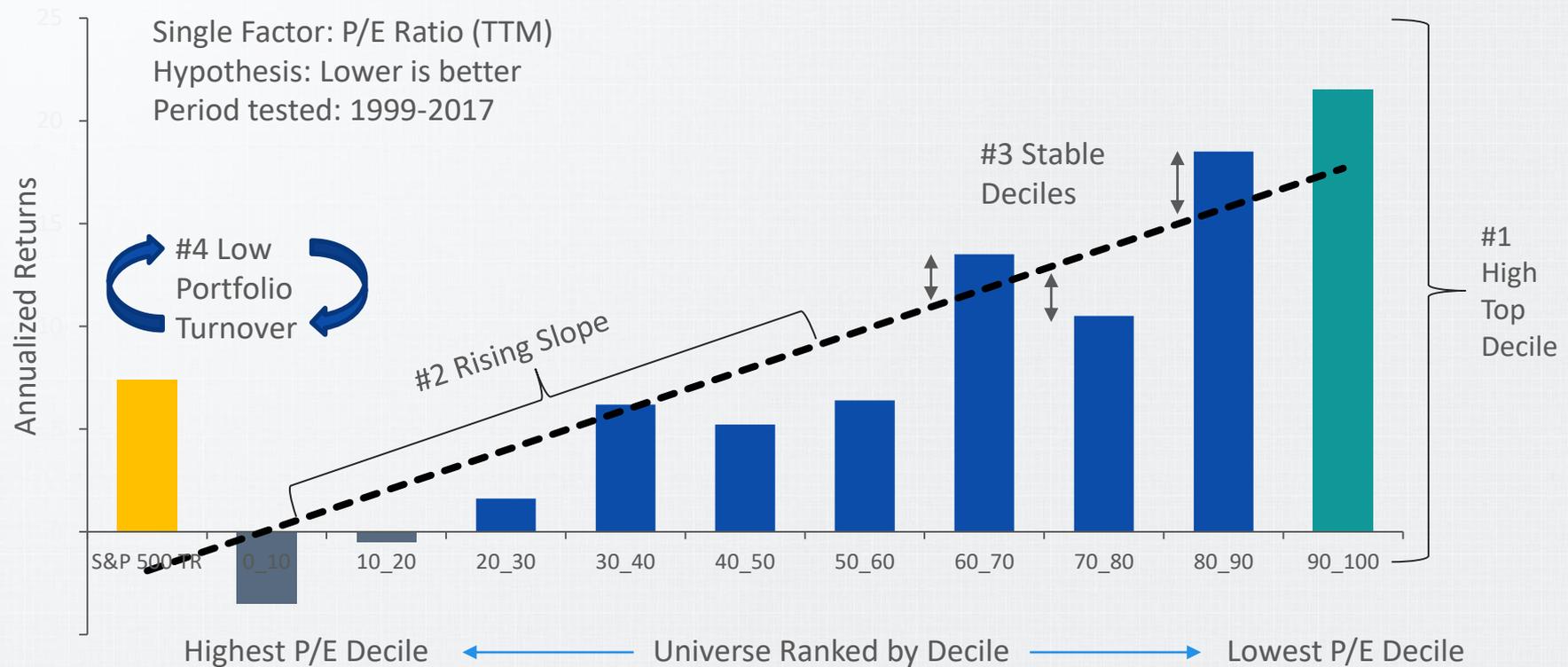
30

**Stocks** in our portfolio, are chosen from the best ranking decile.

# Factor

## Our Selection Method

We backtested in our universe hundreds of factors individually to find the ones generating the most alpha over the last two investment cycles. We then select the best factors using four criteria shown below:



# Ranking

10 stocks are picked from each ranking system



**10 Stocks** may differ from the ones selected in the 25 stocks that are part of each individual strategy. This is best explained by the different rebalancing schedules of the strategies.



**Factors** are available in the presentation document of each individual strategy. You will find the complete definition, the rationale behind usage and the interpretation.



# Simulation

## Our Portfolio Rules and Filters

### G General Rules

- The portfolio is long only and without any leverage whatsoever.
- Transactions are recorded at the average high | low of trade day.
- Rebalancing frequency is quarterly and sent before market open.
- Variable slippage (average daily \$ traded) is taken into account.
- Drift weighting scheme is applied to minimize rebalancing turnover.

### B Buy Rules

- The same buy rules from the individual strategies are applied. Please read each presentation for the exact buy rules used.
- Additional rules are used to mitigate risks of each 10 stocks. Here are some of the rules used:
  - Limit max correlation between 10 stocks.
  - Total Equity must be positive at inclusion.
  - Avoiding stocks that have stale financial statements.

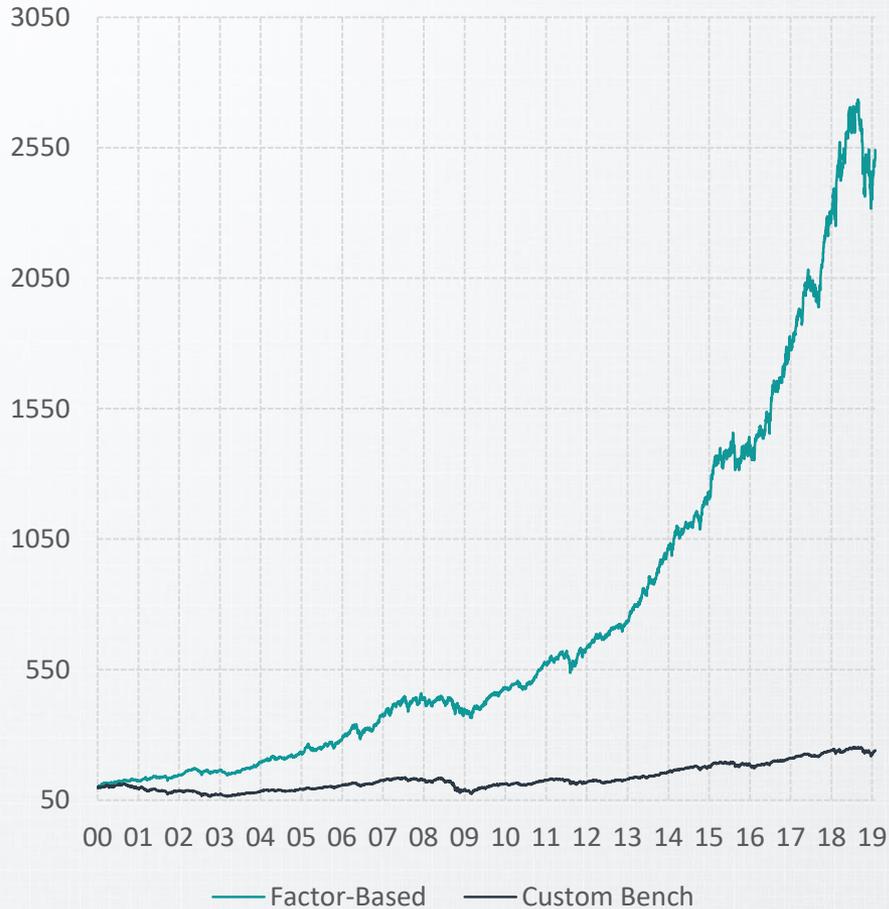
### S Sell Rules

- Sell stocks when its ranking falls below three deciles.
- Trim stocks weights back to 10% and below if their individual weights in the portfolio goes above 10%.
- We force positions in the universe if they are replaced inside our defined universe.



# Portfolio

## Historical Performance



## Key Portfolio Statistics

**Annualized Return (%)**  
(Custom Bench TR = 4.7) 18.5

**Maximum Drawdown (%)**  
(Custom Bench TR = -45.9) -20.6

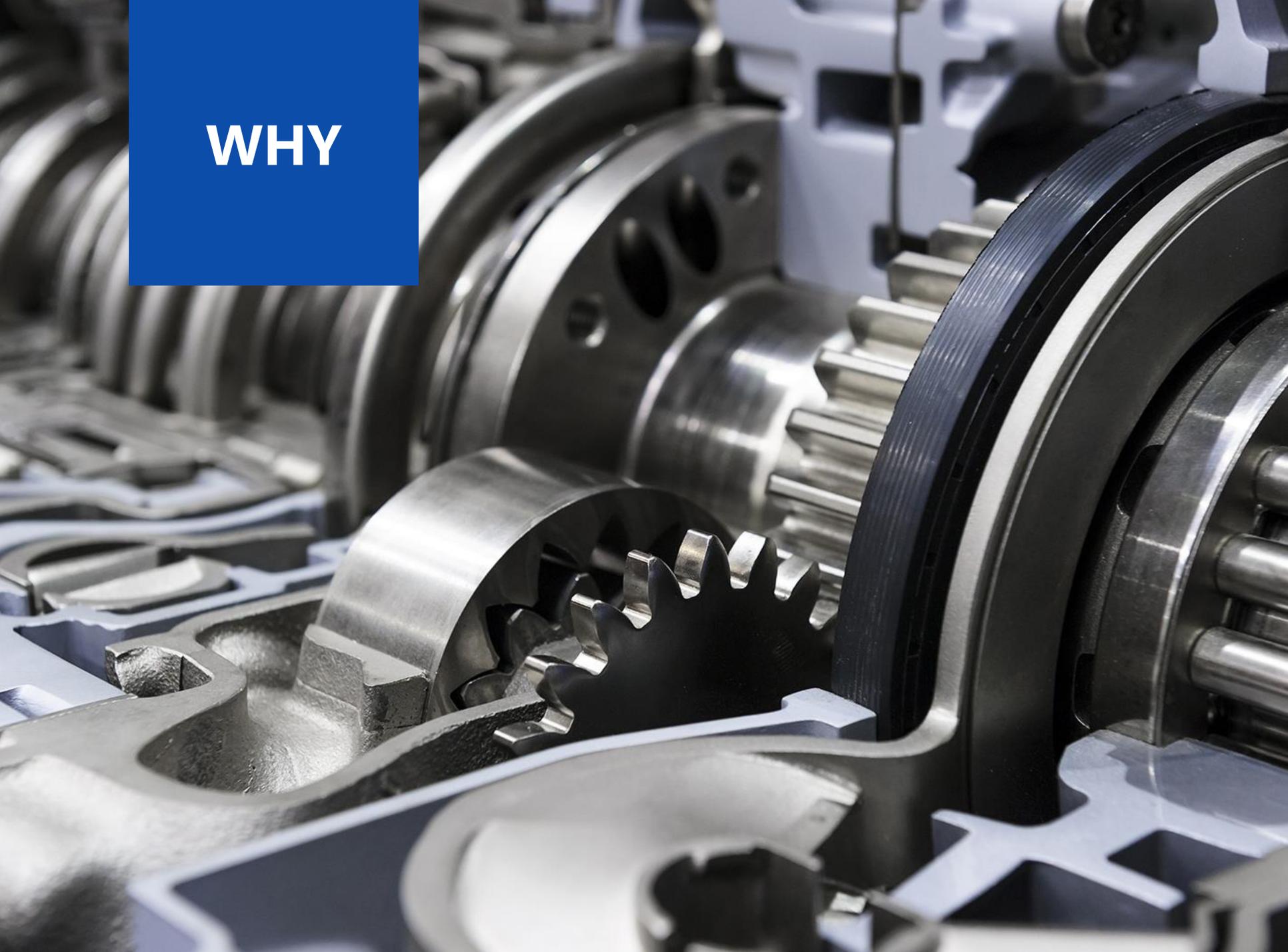
**Portfolio Turnover (%)**  
(Custom Bench TR = 6.0) 62.6

**Index Correlation**  
(Custom Bench TR = 1.00) 0.65

**Sharpe Ratio**  
(Custom Bench TR = 0.31) 1.49

Since Inception (January 1<sup>st</sup>, 2000)

**WHY**





# Statistics

## Calendar Performance

### Yearly

Calendar Returns	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Factor-Based	27.7	14.9	12.0	19.3	19.1	19.8	35.9	16.9	-11.6	21.9
Custom Bench	-3.5	-11.1	-17.1	17.2	10.5	14.7	20.0	2.3	-31.0	25.5
Difference	31.2	26.0	29.0	2.1	8.6	5.1	15.9	14.5	19.5	-3.6

Calendar Returns	2010	2011	2012	2013	2014	2015	2016	2017	2018	YTD
Factor-Based	19.6	10.2	15.9	38.8	19.7	16.5	25.7	26.8	7.7	4.4
Custom Bench	12.5	-6.9	10.2	22.3	12.7	5.3	11.8	13.2	-4.3	5.7
Difference	7.1	17.1	5.8	16.6	7.0	11.3	13.9	13.6	12.0	-1.4

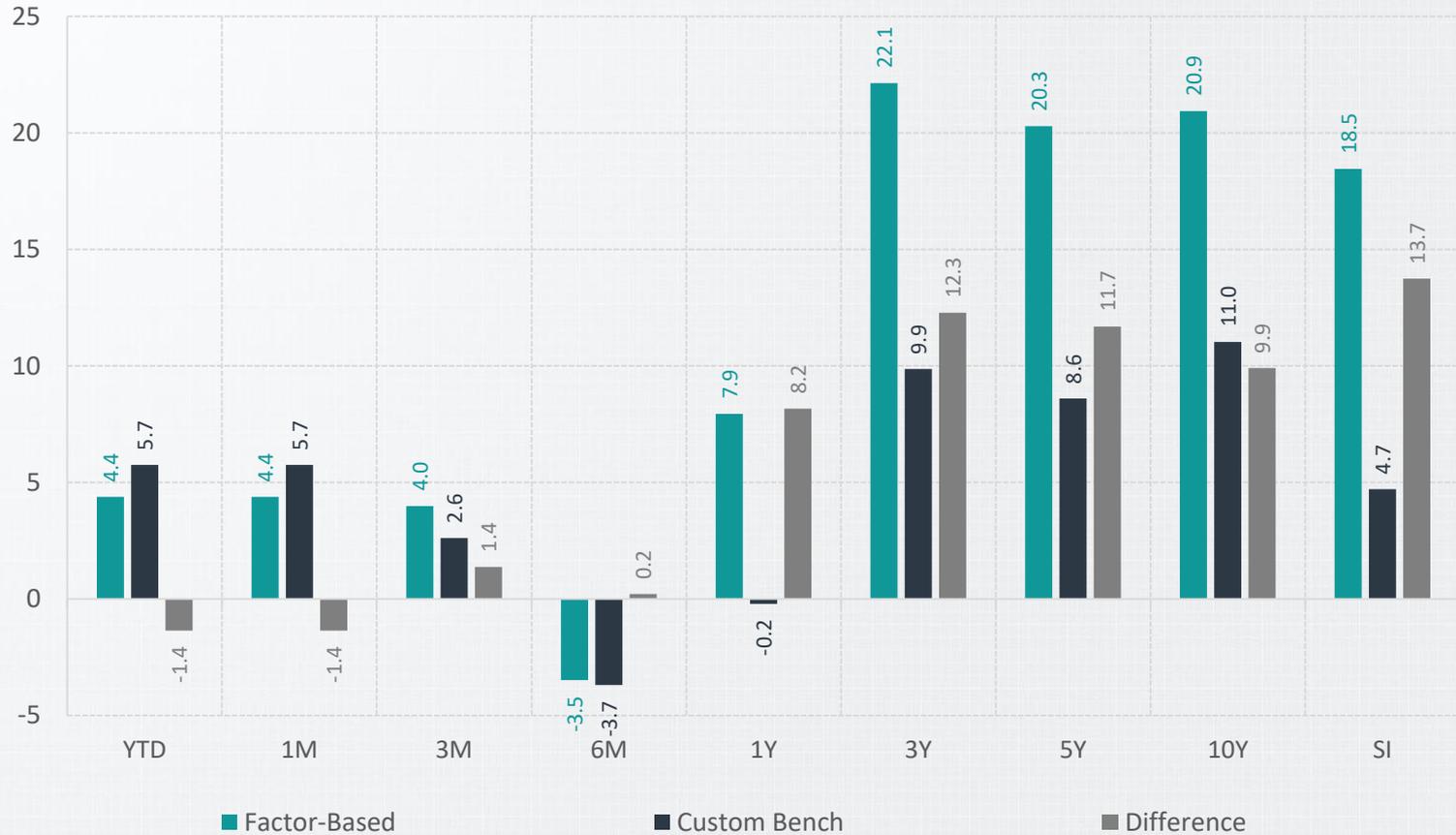
### Monthly

Calendar Returns	02-18	03-18	04-18	05-18	06-18	07-18	08-18	09-18	10-18	11-18	12-18	01-19
Factor-Based	4.3	0.2	2.5	2.5	0.9	0.9	3.4	-3.9	-6.6	3.2	-3.5	4.4
Custom Bench	-1.3	-1.2	1.2	2.0	1.2	1.7	0.4	-0.7	-5.9	2.1	-5.0	5.7
Difference	5.6	1.3	1.3	0.6	-0.3	-0.8	3.0	-3.3	-0.7	1.1	1.5	-1.4



# Statistics

## Trailing Performance





# Statistics

## Return & Risk Measurements

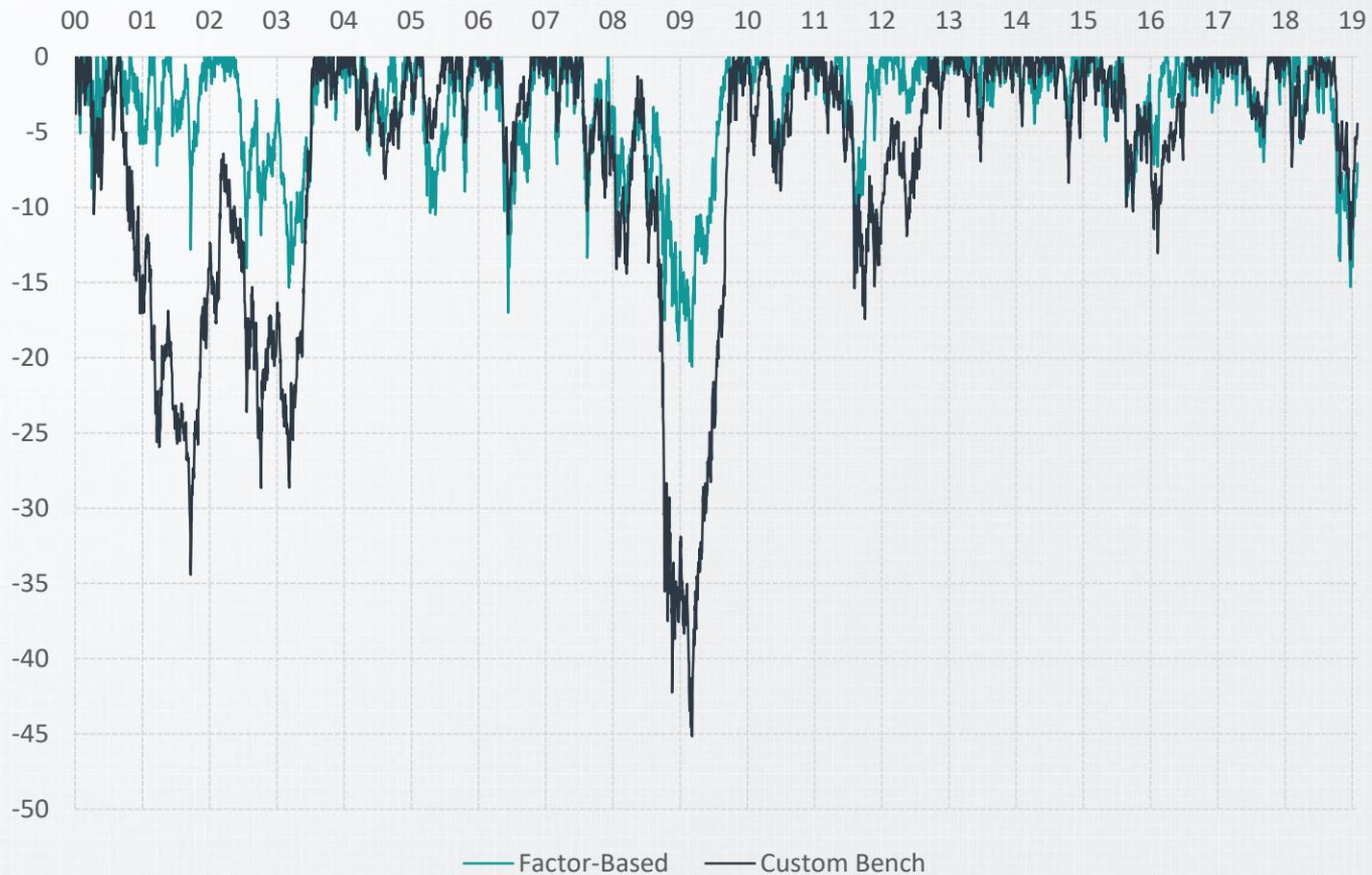
Trailing 3 Year	Factor-Based	Custom Bench	Difference
Annualized Return (%)	22.1	9.9	12.3
Standard Deviation (%)	10.5	8.5	2.0
Max Drawdown (%)	-15.3	-13.5	-1.8
Portfolio Turnover	62.6	6.0	56.6
Sharpe Ratio	1.77	0.87	0.90
Sortino Ratio	2.40	1.22	1.18
Index Correlation	0.79	1.00	-0.21
R-Squared	0.62	1.00	-0.38
Beta	0.98	1.00	-0.02
Alpha (%) (Annualized)	12.28	0.00	12.28

Since Inception	Factor-Based	Custom Bench	Difference
Annualized Return (%)	18.5	4.7	13.7
Standard Deviation (%)	10.7	11.6	-0.9
Max Drawdown (%)	-20.6	-45.9	25.3
Portfolio Turnover	62.6	6.0	56.6
Sharpe Ratio	1.49	0.31	1.17
Sortino Ratio	2.10	0.40	1.70
Index Correlation	0.65	1.00	-0.35
R-Squared	0.42	1.00	-0.58
Beta	0.60	1.00	-0.40
Alpha (%) (Annualized)	13.75	0.00	13.75



# Statistics

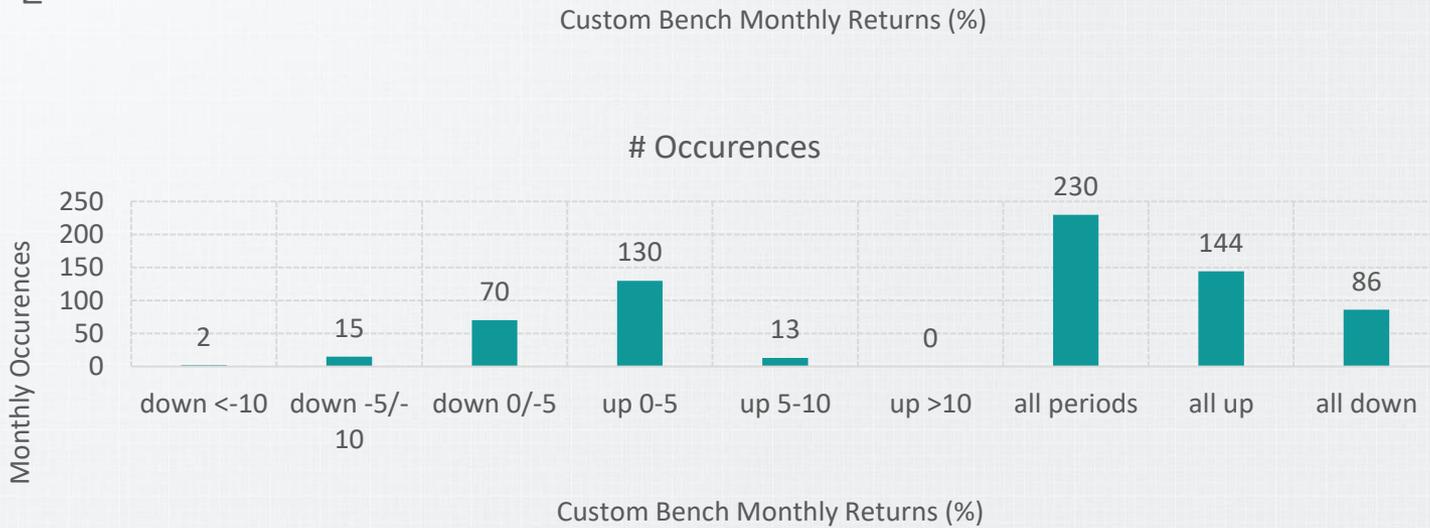
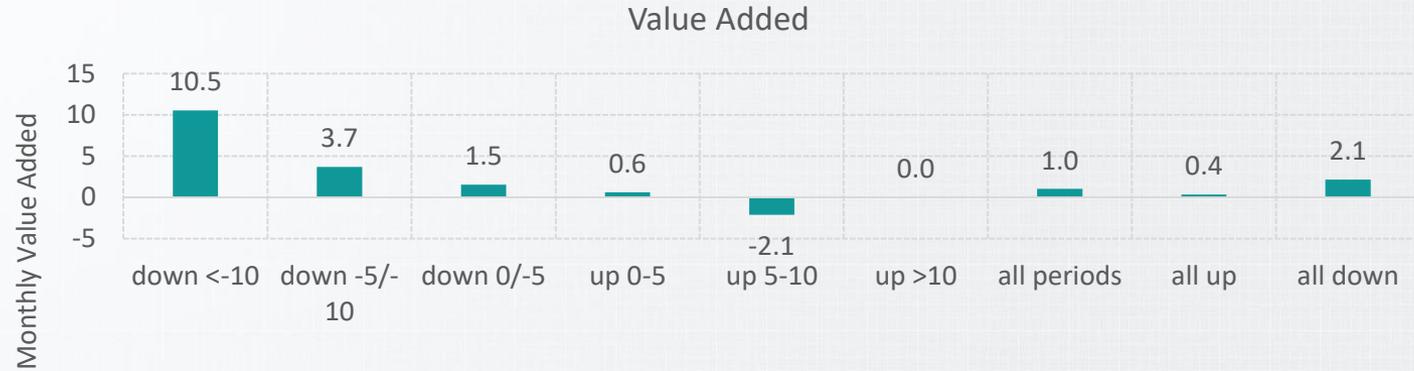
## Rolling Maximum Drawdown





# Statistics

## Outperformance in Different Market Conditions





# Characteristics

## Top Ten Holdings & Fundamentals

Ticker	Weight (%)	Sector
CCEP	5.0	Staples
QBR.B:CN	4.7	Telecom
GIL:CN	4.0	Discretionary
RHHBY	4.0	Health Care
IBA	4.0	Staples
CSCO	4.0	Info Tech
HSY	3.9	Staples
MRK	3.9	Health Care
SEDG	3.9	Info Tech
GSK	3.8	Health Care

Median	Factor-Based	Custom Bench
Market Cap (\$B)	55.4	11.4
Price / Earnings	13.9	14.9
Price / Book	3.6	2.4
Price / Sales	2.3	2.0
Price / Cash Flow	14.1	11.0
Return on Equity	2.7	12.3
Dividend Yield	2.8	2.0
5Y EPS Growth	8.5	10.2
Debt / Equity	0.5	0.6
5Y Beta	0.81	1.00



# Allocation

## Sector Weights & Benchmark Deviations

Weights	Factor-Based	Custom Bench	Deviations
Info Tech	23.6	11.9	11.7
Staples	16.5	7.0	9.5
Discretionary	15.2	8.4	6.8
Health Care	15.1	8.5	6.6
Materials	12.9	7.4	5.5
Telecom	7.4	6.6	0.8
Utilities	0.0	3.5	-3.5
Industrials	5.2	10.6	-5.5
Energy	0.0	10.3	-10.3
Financials	3.6	25.8	-22.2

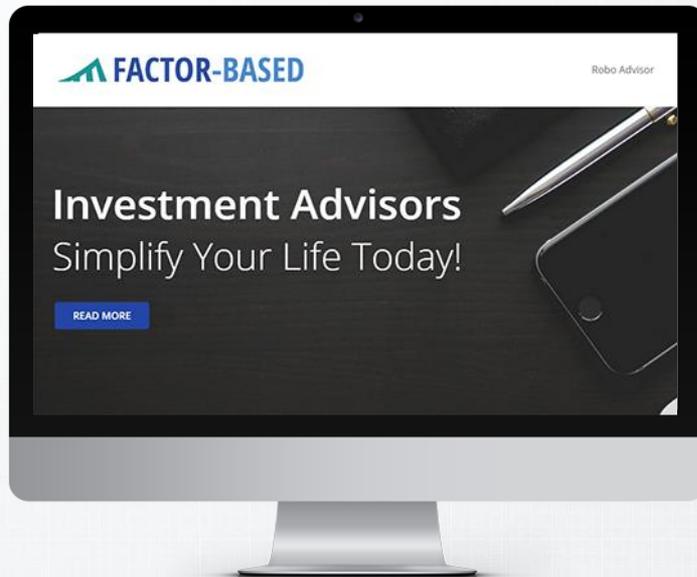
**WHO**



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# Who We Are

Factor-Based (FB)



## IN A NUTSHELL...

Factor-Based (FB) is a financial research firm that specializes mostly in equities for private, investment advisors and institutional clients. We are dedicated to produce exceptional risk adjusted returns for our investors by strictly adhering to factor-based investing methods.

# Disclosures

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