



ADVISOR CONSULTING

# Meeder's Defensive Equity Strategy

# Lessons from Stock Market History

Market history has shown, time and time again, that investors fall prey to the emotional ups and downs of the stock market, buying near market peaks and selling near market bottoms. This behavior often leaves investors experiencing severe losses, causing them to stray from their long-term objectives.

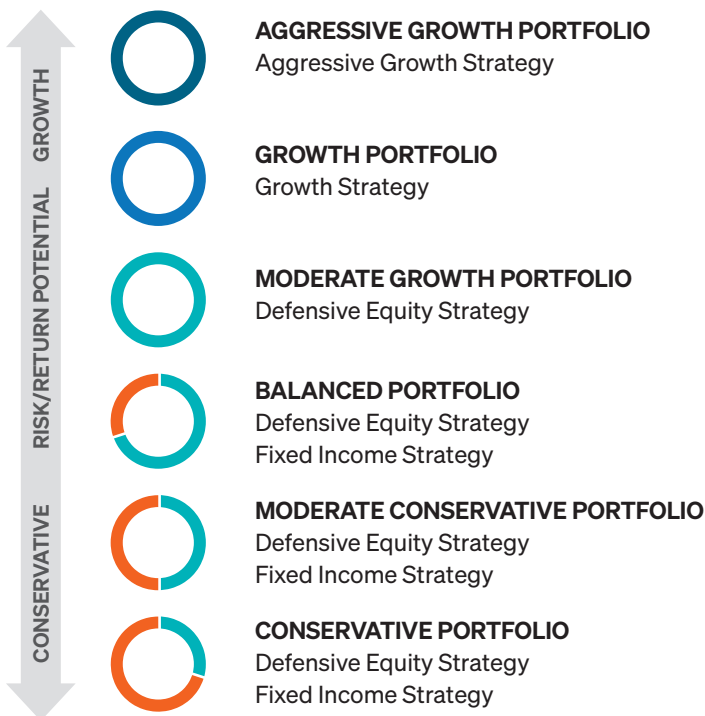
At Meeder, we believe our most important responsibility is protecting our investor's capital by minimizing the risk of these severe losses. This focus allows investors to stay committed to their investment strategy through a full market cycle, ultimately achieving their long-term goals. The Defensive Equity strategy,

developed and refined over nearly 50 years, is a systematic process that allows for an efficient method to achieve long-term appreciation with a focus on reducing downside risk for investors. It is an important component within the Meeder's Risk-based and Target Withdrawal portfolios.

EXHIBIT 1

## MEEDER'S RISK-BASED AND TARGET-WITHDRAWAL PORTFOLIOS

### RISK-BASED PORTFOLIOS



### ASSET ALLOCATION FUNDS

- » Meeder Dynamic Allocation Fund
- » Meeder Muirfield Fund
- » Meeder Balanced Fund
- » Meeder Moderate Allocation Fund
- » Meeder Conservative Allocation Fund

### EQUITY/SPECIALTY FUNDS

- » Meeder Quantex Fund
- » Meeder Spectrum Fund

### GLOBAL/INTERNATIONAL FUND

- » Meeder Global Allocation Fund

### FIXED INCOME FUND

- » Meeder Tactical Income Fund

Model portfolio allocation is shown for illustrative purposes only. Actual allocation of an account may vary from this illustration.

#### GROWTH/AGGRESSIVE GROWTH STRATEGY

The Growth Strategy is a constrained tactical strategy that can shift exposure primarily among equity securities including sector over and underweights, international securities, and market capitalization ranges. The Aggressive Growth Strategy may invest more heavily in more volatile areas of the stock market such as international securities.

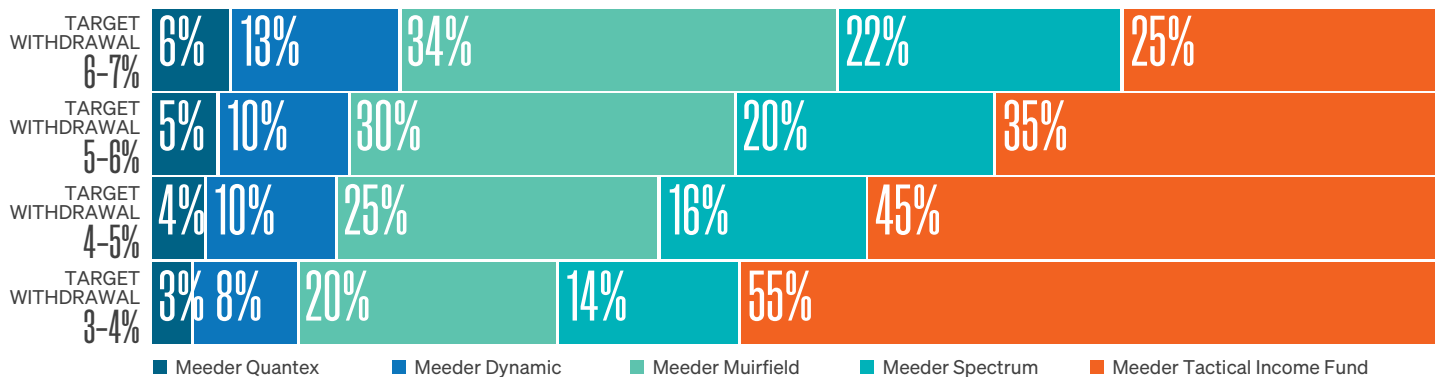
#### DEFENSIVE EQUITY STRATEGY

The Defensive Equity Strategy is an unconstrained tactical strategy that can shift from equity securities to cash or fixed income securities when the risk/reward relationship of the stock market is deemed unfavorable.

#### FIXED INCOME STRATEGY

The Fixed Income Strategy is a strategy that can shift between U.S. government and agency securities, investment-grade bonds, high-yield corporate bonds, and international debt. It also incorporates duration management to maneuver between short or long duration positions.

## MEEDER'S TARGET WITHDRAWAL PORTFOLIOS



Model portfolio allocation is shown for illustrative purposes only. Actual allocation of an account may vary from this illustration.



# Investment Philosophy

We are dedicated to improving investor outcomes by keeping clients committed to their investment strategy throughout a full market cycle.

Studies show that historically, the average investor has participated in just a fraction of the market's long-term gains. This is because wide swings in the markets will often lead investors to make decisions based on emotion (rather than data), especially in periods of market selloffs. Therefore, to keep investors committed to their goals, we have developed quantitative models to analyze data to make fact-based decisions when allocating our portfolios. These models attempt to identify the risk/reward relationship of the market and reduce equity exposure when that relationship is deemed unfavorable, ultimately attempting to reduce participation in more severe market declines.

Our investment philosophy encourages a multidimensional view, as we believe there are multiple forces that influence the market, and many ways to achieve investment objectives. This wide view of the markets, and our quantitative process, allows us to customize solutions and services for a variety of clients.

We believe investment performance should be judged by growth of capital and preservation of those gains for continued investment. Our multi-discipline/multi-factor approach and quantitative modeling process supports the development of investment solutions designed to meet both these standards.



# The Investment Process

Meeder utilizes a multi-discipline, multi-factor approach to portfolio construction, which distinguishes it from most managers in the marketplace.

Our models are constructed to incorporate a “weight of the evidence” approach, relying on multiple disciplines such as trend and momentum factors, along with macroeconomic, sentiment, valuation, and fundamental indicators. We feel that each of these approaches are valid and have produced solid results over time but can often be out of sync with each other and the market. Therefore, we incorporate components from each of these disciplines for a more holistic approach.

EXHIBIT 2

**MEEDER UTILIZES A MULTI-DISCIPLINE, MULTI-FACTOR APPROACH**

**VALUATIONS  
FUNDAMENTALS  
SENTIMENT**

+

**ECONOMIC  
MONETARY  
FISCAL POLICY**

+

**TREND  
TECHNICAL  
MOMENTUM**

To execute our investment strategy, we combine a top down and bottom-up approach. We utilize top-down models to determine our equity exposure and desired allocation to U.S., developed international, and emerging markets. In contrast, we use a bottom-up approach to systematically evaluate stocks that we hold in our portfolios. Exhibit 2 demonstrates this three-step process that utilizes these two approaches.

EXHIBIT 2

**TACTICAL PROCESS**

01

Determine Equity Exposure

02

Determine Asset Allocation

03

Determine Security Selection

# 1. Determine Equity Exposure

For our tactical portfolios and funds, the portfolio construction process begins with our tactical asset allocation model, which gauges the risk/reward relationship present in the stock market. In its most simple form, we divide our REWARD value, which is comprised of more 70+ factors, by our RISK value, which is our proprietary measure of expected market risk. The resulting output is the target equity exposure for the Defensive Equity portion of each respective portfolio. When REWARD is higher than RISK, the Defensive Equity portion will be fully invested in equities. When REWARD is less than RISK, the Defensive Equity portion will be partially defensive.

EXHIBIT 3  
REWARD/RISK DETERMINES EQUITY EXPOSURE 0%

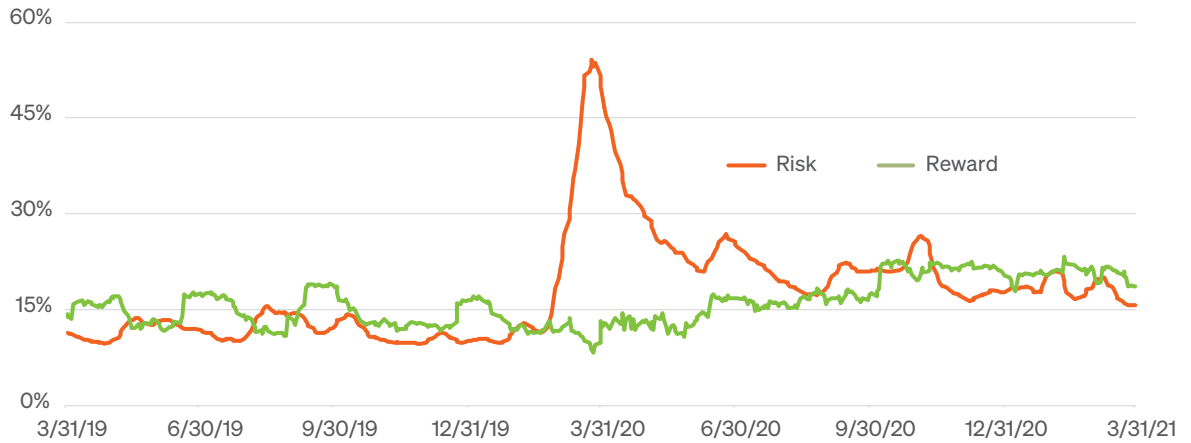
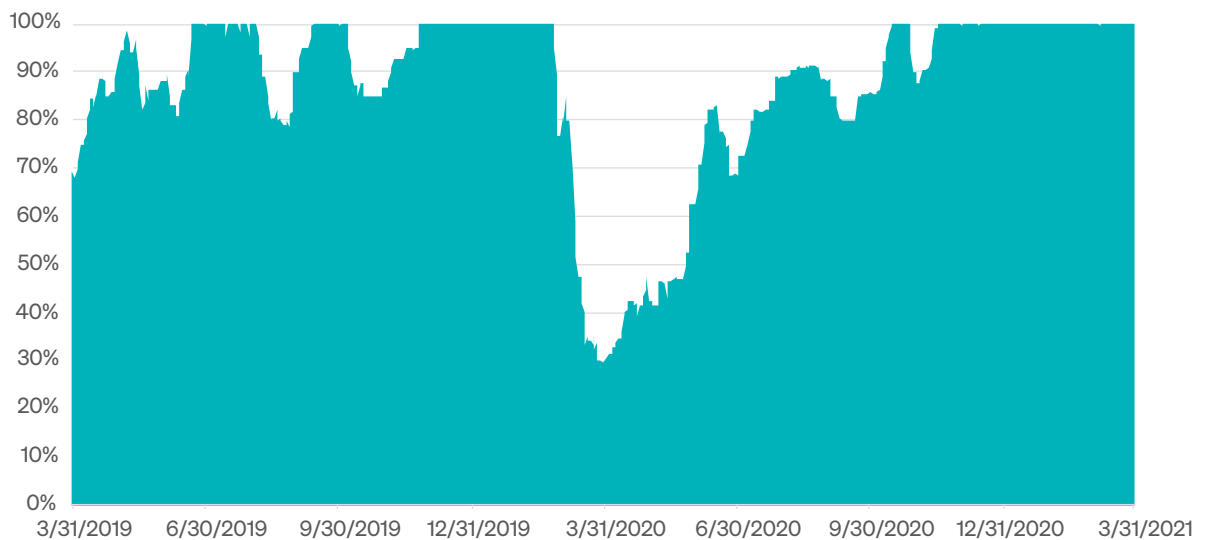


EXHIBIT 4  
HISTORICAL DEFENSIVE EQUITY EXPOSURE



## REWARD VALUE CONSTRUCTION

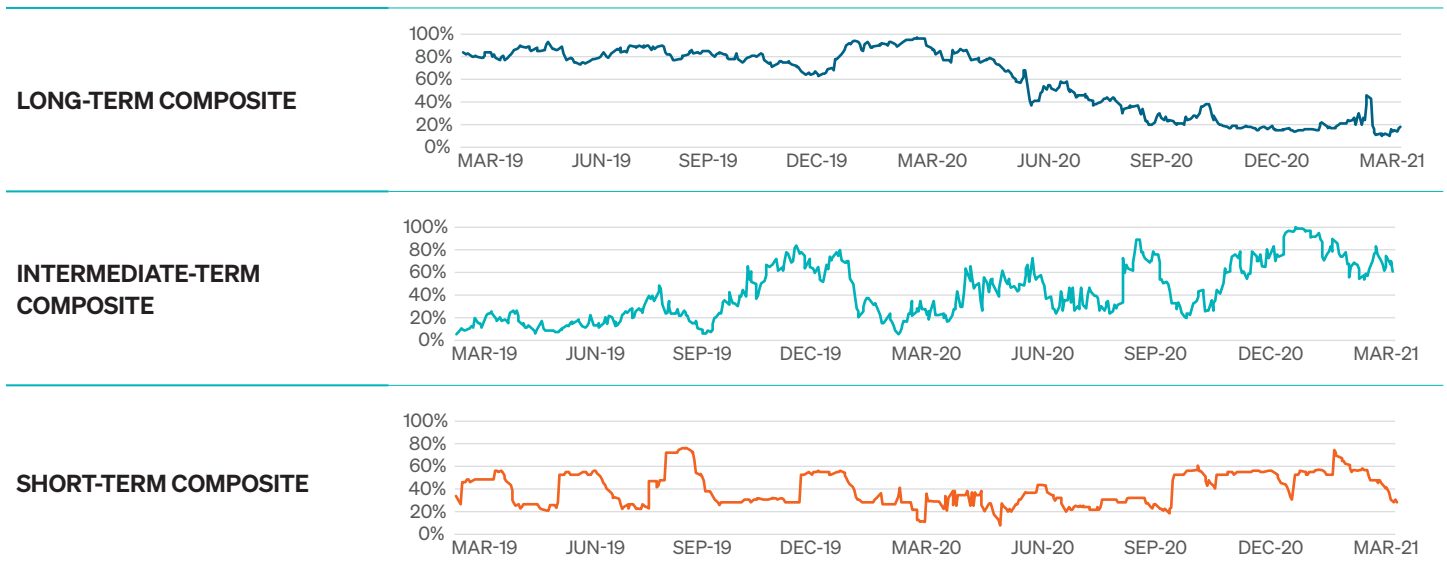
The REWARD value is comprised of 70+ factors, categorized by the times frames of long-term, intermediate-term, and short-term. Each one of the factors within these three categories are standardized using its z-score, which is a statistical measure that allows us to compare and combine different types of indicators with each other. This standardization technique is also beneficial because it allows our model to measure how high or low a factor’s current reading is relative to its history.

EXHIBIT 5  
**THE REWARD COMPONENT IS COMPRISED OF VARIOUS FACTORS, CATEGORIZED BY TIME FRAME**

REWARD	LONG TERM	EXPECTED RETURNS
		MACROECONOMIC
		TRENDS
	INTERMEDIATE TERM	DEMAND
		SENTIMENT
	SHORT TERM	TECHNICAL SIGNALS
		ASYMMETRICAL SIGNALS

A score is then calculated for the long-, intermediate-, and short-term models based on the combination of each time frame’s factors. These three models are then combined to form the overall REWARD value for the model. The REWARD is then compared to RISK to determine the equity exposure of the Defensive Equity portion of each respective portfolio daily.

EXHIBIT 6  
**THE LONG-, INTERMEDIATE-, AND SHORT-TERM MODELS MAKE UP THE REWARD VALUE**



## DETERMINE ALLOCATION

This is an overview of how our geographic equity allocations are updated daily. We have a baseline allocation target for each of our funds. For example, the Muirfield Fund’s baseline target allocation is 90% to U.S. equities, 8% to Developed International Equities, and 2% to Emerging Market Equities. The baseline allocations are set to provide diversification while also keeping the funds’ allocations in line with Morningstar and Platform peer groups. Second, we get market data from approximately 10 external data providers including Bloomberg and FactSet. Third, we import the updated data into the International Model, which automatically calculates and determines our new target allocations. For example, the model output could update Muirfield’s Developed International Allocation from 8% to 9% and the Emerging Markets allocation from 2% to 2.5%. This leaves 88.5% to be invested for the U.S. equity allocation. The final step involves making the trades.

After determining the target equity exposure, we incorporate our International model, which determines our exposure to U.S., developed international, and emerging markets. One important aspect of the international model is that it utilizes relative measures to determine which areas should be favored. For example, international and U.S. equities may both show strong momentum relative to their own histories, but one of them will be demonstrating stronger momentum relative to the other. This step allows us to determine our asset allocation among these regions.

EXHIBIT 7  
**THE INTERNATIONAL MODEL IS COMPRISED OF RELATIVE TRENDS, VALUATION, ECONOMIC, AND TRENDS FACTORS**

INTERNATIONAL MODEL	TRENDS
	VALUATION
	ECONOMIC
	FLAWS

## 2. Security Selection

Once we have determined the equity allocation and the target exposure for U.S. and international, the next step is to determine just what equities to invest in within those regions. In the international allocation, we utilize futures to gain exposure to those regions. In the U.S., our bottom-up equity selection process begins with the investment universe for each respective portfolio. Once the investable universe is determined, we utilize a factor-based model that evaluates individual equities. Factors that we use to evaluate equities include such things as value, quality, profitability, momentum, and others.

EXHIBIT 8:  
THE STOCK SELECTION MODEL IS COMPRISED OF INDUSTRY-NEUTRAL AND INDUSTRY SCORES

OVERALL STOCK SCORE	INDUSTRY NEUTRAL STOCK SCORE	VALUE
		MOMENTUM
		STABILITY
		SENTIMENT
		EARNINGS QUALITY
		MANAGEMENT SIGNALING
	INDUSTRY SCORE	VALUE
		MOMENTUM

A similar z-score standardization technique that is used in our tactical equity model is also applied to our security selection model, helping to combine different types of indicators. Another feature of the stock selection model is the use of industry-neutral factors. Different industries have different structures of businesses, so evaluating banks with technology companies, or retailers with gold miners does not always make sense. To address this, the model first compares a stock to other stocks in its industry. As you can see in Exhibit 9, Target and Kohl's have factor scores for each category and all the categories are combined to calculate the industry neutral score for each respective stock.

EXHIBIT 9:  
TARGET AND KOHL'S Z-SCORES FOR EACH FACTOR CATEGORY

	VALUE	MOMENTUM	STABILITY	SENTIMENT	EARNINGS QUALITY	MANAGEMENT SIGNALING	INDUSTRY NEUTRAL SCORE
TARGET	0.12	0.18	0.17	0.66	0.78	0.14	0.50
KOHL'S	0.23	-0.97	-0.75	-1.52	-0.61	-0.14	-0.49

» Each industry will be evaluated based on value and momentum factors as well. A stock will have its own industry-neutral stock score and an industry score. For example, every stock in the same industry will have different industry-neutral scores, but the same industry score. As an example, in Exhibit 10, Target's industry has more attractive value and momentum characteristics, leading to a higher overall industry score compared to JPMorgan Chase. Each stock would then receive a combined score based off both, with more weight given to their industry-neutral score than its industry score.

EXHIBIT 10:  
TARGET AND JPMORGAN CHASE'S Z-SCORES FOR EACH FACTOR CATEGORY

	VALUE	MOMENTUM	INDUSTRY SCORE
TARGET	1.16	0.14	0.82
JPMORGAN CHASE & CO.	0.24	-1.21	-0.68

## Portfolio Construction & Risk Management

After ranking every stock in our universe based on the equity selection model described above, we construct the portfolio with the objective of tilting toward higher ranked stocks and away from lower ranked stocks, while satisfying risk constraints. Depending on the portfolio's investment strategy, risk is managed at the absolute or active level. Examples of other risk constraints include security weight and sector over/under weight relative to benchmark.

The portfolio construction process is highly quantitative and systematic. Adjustments to total market exposure and individual equity holdings, given certain turnover constraints, are made daily. Portfolio attribution and risk monitoring reports are received by portfolio managers daily as well.

# The Meeder Difference

We believe a quantitative process allows for a repeatable and efficient method of achieving long-term appreciation with a focus on reducing equity exposure when market risk is high and increasing equity exposure when market risk is low. To drive this systematic process, we use a multi-factor, multi-discipline approach that relies on indicators from technical, fundamental, and macroeconomic analysis. This unemotional process is ultimately driven by the pursuit of helping investors achieve better outcomes.



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