

PGIM QUANTITATIVE SOLUTIONS

US MARKET PARTICIPATION STRATEGY | STRATEGY OVERVIEW

January 2022

PGIM Quantitative Solutions US Market Participation Strategy (MPS) is a strategy for all seasons. MPS offers a solution that reduces risk, lowers volatility, and provides diversification no matter the economic or market backdrop. MPS particularly shines during significant drawdown events such as the Tech Bubble bust, the Global Financial Crisis (GFC), and the COVID-19 crisis.

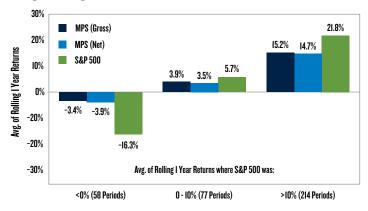
Three reasons to invest

I. Upside participation with reduced left-tail risk

In order to meet overall portfolio return targets, institutional investors require equity return exposure, but extreme left-tail market events such as the Tech Bubble bust, the GFC, and the COVID-19 crisis have taught investors painful lessons. MPS has exhibited asymmetric returns since inception, capturing approximately 60% of equity performance during significant market rallies while avoiding much of the market's downside during periods of negative returns.

COMPARISONS OF DRAWDOWNS AND RECOVERIES

Average of Rolling 1-Year Returns vs. S&P 500 Index 12/31/1992 — 12/31/2021



Source: PGIM Quantitative Solutions, S&P Dow Jones Indices LLC. Shown for illustrative purposes only. Past performance is not a guarantee or a reliable indicator of future results.

With a 30-year track record, MPS is designed to deliver consistent returns by providing upside market capture while limiting portfolio losses during market downturns.* The strategy utilizes long-dated S&P 500 call options in combination with US Treasuries. Call options seek to provide upside participation with limited downside risk, while US Treasuries serve as a safe haven during turbulent market conditions and provide downside protection. Exposures (market, volatility and interest rate) are actively managed in response to the changing market environment.

2. Low correlation and diversification

MPS provides a strong diversification to traditional asset classes within an overall portfolio. Since inception, it has offered both a low beta to stocks (historically 0.52 vs. the S&P 500) and low correlation to bonds (0.12 vs. the Bloomberg Barclays US Aggregate)— with long-run volatility similar to a 60% equity/40% bond portfolio. As a result, the strategy aims to offer a more consistent return stream with low correlations and reduced volatility over market cycles.

LOW BETA TO STOCKS AND LOW CORRELATION TO BONDS

3 Year Beta to Stocks and 3 Year Correlation to Bonds 12/31/1994 - 12/31/2021**



Shown for illustrative purposes only. Source: PGIM Quantitative Solutions, S&P Dow Jones Indices LLC, Bloomberg Barclays.

For Professional Investors Only. All investments involve risk, including the possible loss of capital.

Past performance is not a guarantee or a reliable indicator of future results. *There is no guarantee these objectives will be achieved. **Stocks are represented by the S&P 500 Index. Bonds are represented by the Bloomberg Barclays US Aggregate Bond Index. Diversification does not protect against a loss in a particular market; however, it allows you to spread that risk across various asset classes. PGIM Quantitative Solutions is the primary business name for PGIM Quantitative Solutions LLC.

3. Liquidity when you need it most

The MPS portfolio is normally comprised of approximately 80% in US Treasuries (and US Treasury Futures) that seek to provide liquidity, in particular during turbulent market conditions, when investors flee risky assets for safer ones. In addition, we believe that since declining equity markets reduce the "delta" of options (or their exposure to equity markets), options have built in downside protection. As a result, the strategy aims to provide daily liquidity and affords investors the ability to buy and sell positions when they need to without extended redemption periods or lock-outs.

What differentiates our investment approach?

A defensive approach to equity investing

Our approach seeks upside equity participation with downside protection through a forward-looking, flexible framework. The strategy dynamically adjusts factor exposures (equity market, volatility, and interest rate) utilizing liquid, transparent securities:

- S&P 500 Index options and futures, which provide equity participation with limited risk
- US Government bonds and futures, which seek to preserve capital and provide downside protection

Combines quantitative parameters and portfolio management judgment

Our MPS investment process determines portfolio equity exposure by combining quantitative parameters with portfolio manager judgment to target desired equity upside and reduce downside risk. Exposures are actively monitored and rebalanced systematically according to these parameters and then tactically adjusted by portfolio managers based on their asset allocation outlook and liquidity in the markets. This periodic rebalancing seeks to capture upside gains while reducing downside losses.

Determine Portfolio Equity Exposure	Portfolio Allocations • Equity Portfolio	Active Monitoring • Timing of	34 M Pc 30
 Quantitative parameters Asset Allocation Team outlook Market conditions 	 Options Futures Fixed Income Portfolio US Treasuries Futures Cash 	 Trining of rebalancing Equity exposure Maturity and strike price of options Mix of futures and options Duration and composition of bond portfolio 	Jo Po 15 *A *** wi ris

MPS PORTFOLIO COMPOSITION

Equities: Targeting ~60% Equity Exposure: 10–30% in Equities

- Options: Long term* listed S&P 500 Index FLEX call options (15–25%)
- Futures: S&P 500 Index futures (0% to 10%)

Fixed Income: ~40% Interest Rate Exposure: 70–90% in Fixed Income • US Government Bonds:

- Treasuries
- Ireasuries
- Futures: US Treasury Futures
- Cash

¹Targeted Delta at inception/reset for Equity Exposure; Net Interest Rate Exposure from Bonds and Options

*Long Dated Flex options are normally 4 – 6 year tenors For illustrative purposes only. Portfolio

composition subject to change.

Investment strategy:

Seeks to provide upside participation when the US stock market advances, while reducing downside risk when the US stock market declines**

Separate accounts and commingled vehicles

Seasoned portfolio management team*:

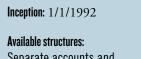
Devang Gambhirwala, MBA Portfolio Manager 34 years of experience

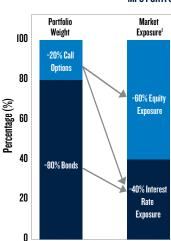
Marcus Perl, MA Portfolio Manager 30 years of experience

Joel Kallman, MBA, CFA Portfolio Manager 15 years of experience

*As of 12/31/2021

**There is no guarantee these objectives will be achieved. All investments involve risk, including the possible loss of capital.





Sources of data: PGIM Quantitative Solutions, S&P Dow Jones Indices LLC, Bloomberg Barclays.

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