

# INTRODUCING MARKET PARTICIPATION STRATEGY

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# MARKET PARTICIPATION STRATEGY

## DEFENSIVE, DIVERSIFYING, DURABLE

PGIM Quantitative Solutions' Market Participation Strategy (MPS) seeks to deliver risk mitigation with consistent returns by providing upside market capture while dramatically reducing the largest market drawdowns.



### LOWER VOLATILITY EQUITY REPLACEMENT

MPS seeks to lower overall risk (standard deviation) of a well-diversified portfolio while maintaining similar returns.



### RISK MITIGATION

Risk, particularly the risk of large drawdowns, can be costly. MPS has limited losses during periods of market turbulence.



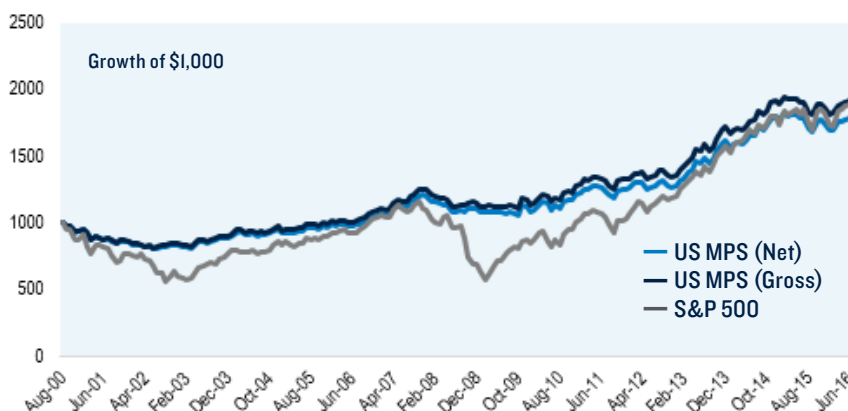
### ALTERNATIVE INVESTMENT

Similar to hedge funds, MPS can enhance diversification and risk-adjusted returns but with more attractive fees.<sup>1</sup>

MPS is a strategy for all seasons, offering a solution that seeks to reduce risk, lower volatility, and provide diversification no matter the economic or market backdrop. MPS may help clients achieve their long-term return objectives by capturing 60% of the performance of the S&P 500 on average in appreciating equity markets and capturing 30% of the performance of the S&P 500 on average in declining equity markets over a market cycle, but with substantially lower volatility.<sup>2</sup>

## THE NUMBERS SPEAK FOR THEMSELVES

It can take a long time to recover from big drawdowns like the Tech Bubble bust and Global Financial Crisis. It took 16 years for the returns of the S&P to catch with MPS after the Tech Bubble.<sup>3</sup>



Source: PGIM Quant, S&P Dow Jones Indices LLC. **Past performance is not a guarantee or a reliable indicator of future results.** This chart demonstrates the growth of \$1000 and is shown for illustrative purposes only. Shown as a point in time demonstration. Actual results may vary. Performance results are stated gross and net of model fees. Gross performance has been calculated in US dollars and reflects the reinvestments of dividends and other earnings. Returns for each client will be reduced by such fees and expenses as described in their individual contract. Net returns are calculated by deducting the highest tier of the PGIM Quant fee schedule in effect for the respective time period from the monthly gross composite return. Please see 'Notes to Disclosure' page for Important Information including risk factors and disclosures.

<sup>1</sup> Diversification does not protect against a loss in a particular market; however, it allows you to spread that risk across various asset classes.

<sup>2</sup> Objectives are not guaranteed.

<sup>3</sup> Data from 8/31/2000 - 7/31/-2016

## HOW HAS MPS PERFORMED?



### ATTRACTIVE TRACK RECORD

With a track record of more than 30 years MPS has mitigated large losses through its bond-like defensive features in turbulent markets, while also providing growth through upside participation in rising equity markets.



### DEFENSE DURING MARKET CRISES

MPS particularly shines during significant drawdowns such as the Tech Bubble bust, the Global Financial Crisis, and most recently, during the sharp COVID correction.



### LONG TERM

MPS' strength as a true downside protection strategy during times of significant crises is compelling, but longer-term performance shows that MPS provides upside participation during rising markets as well.

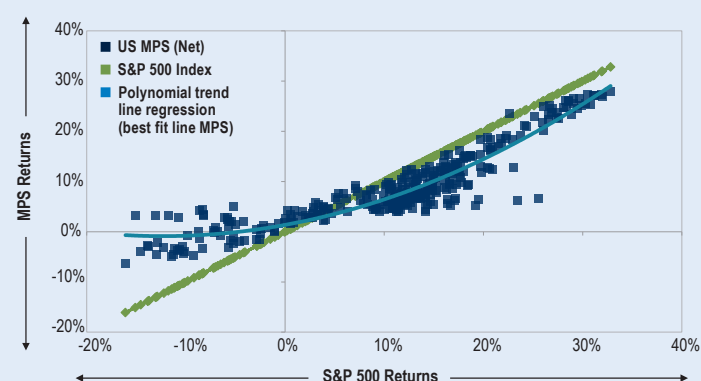


### ASYMMETRIC PAYOFF

MPS' asymmetric returns since inception have captured approximately 60% of equity performance during significant market rallies while avoiding much of the market's downside during periods of negative returns.

## PERFORMANCE PROFILE

Composite Return Profile—Rolling 3 Year Net Returns Since Inception<sup>^</sup>



Since Inception–9/30/2022^	MPS Composite		S&P 500 Index
	Net	Gross	
Return Statistics			
Annualized Return	7.73%	8.18%	9.40%
Risk Statistics			
Standard Deviation	8.98%		14.73%
Sharpe Ratio	0.65		0.48
Sortino Ratio	1.12		0.72
Maximum Drawdown	-19.03%		-50.95%

<sup>^</sup>Inception date for the US Market Participation Strategy Composite is 1/1/1992. Data shown as of 9/30/2022.

Source: PGIM Quant, S&P Dow Jones Indices LLC, Bloomberg.

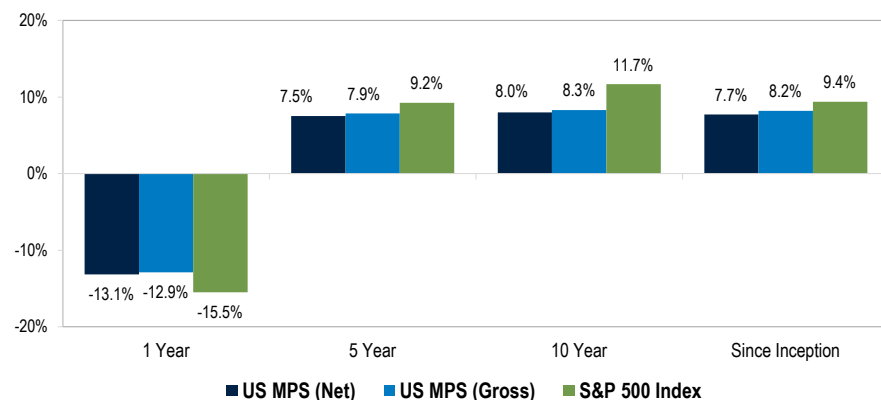
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## HOW DOES MPS STACK UP?

- ✓ EXPERIENCED TEAM**  
 Managed by an experienced portfolio management team with a track record of more than 30 years.
- ✓ ACTIVE MANAGEMENT**  
 PGIM Quant's tactical views are incorporated into the portfolio as an overlay to our systematic parameters, implemented by modifying the timing and magnitude of our equity exposure and duration resets—two key levers driving portfolio performance.
- ✓ LIQUIDITY WHEN YOU NEED IT MOST**  
 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.<sup>4</sup>
- ✓ LOW TURNOVER**  
 Long-term call options eliminate the need for frequent trading. Low portfolio turnover can be especially beneficial during periods of equity market turbulence/drawdowns, when liquidity is often an issue.
- ✓ LOW CORRELATION AND DIVERSIFICATION**  
 A strong diversifier to traditional asset classes within an overall portfolio with a low beta to stocks and virtually zero correlation to bonds.
- ✓ ATTRACTIVE RISK/RETURN RATIOS**  
 MPS has met its objective of decreasing total portfolio standard deviation while increasing Sharpe and Sortino ratios and lowering maximum drawdowns.
- ✓ RISK CONTAINMENT**  
 MPS incurs no counterparty risk. Call options are designed with brokers and then listed on the CBOE. MPS has positive exposure to volatility, a key component in reducing risk.
- ✓ HIGHLY CUSTOMIZABLE**  
 MPS typically targets 60% equity exposure but is completely customizable to various market exposures. MPS is available on both a US and Global Equity market basis. We are able to create versions using US Small Cap, Non-US and Global indices which capitalize on the same competitive advantages as the US MPS strategy.

The 30+ year track record of the MPS Composite has delivered 87% of the annualized return with only 61% of the volatility of the S&P 500. MPS has a beta to the S&P 500 of 0.47, and a correlation with U.S. Aggregate bonds of 0.24.

### US MPS Annualized Net and Gross Returns (as of 9/30/2022)



Inception date for the US Market Participation Strategy Composite is 1/1/1992.

Source: PGIM Quant, S&P Dow Jones Indices LLC.

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# PGIM QUANTITATIVE SOLUTIONS

## ABOUT US

PGIM Quantitative Solutions, the quantitative and multi-asset specialist of PGIM, combines the agility of an independently run boutique with the stability and scale of one of the world's top-15 asset managers.\* For over 45 years, PGIM Quant Solutions has designed proprietary methods to solve beyond alpha by combining the latest technology with scalable, rigorous risk controls to nimbly build and manage diversified and customized solutions that help solve clients' evolving challenges. PGIM Quant manages portfolios across equities, multi asset, liquid alts and retirement for a global client base with \$81 billion in assets under management as of 9/30/2022.\*

## MEET THE TEAM



**DEVANG  
GAMBHIRWALA**

Principal & Portfolio  
Manager  
Quantitative Equity

34 years of Industry  
Experience



**MARCUS M.  
PERL**

Principal & Portfolio  
Manager  
Multi Asset

29 years of Industry  
Experience



**EDWARD J.  
TOSTANOSKI III, CFA**

Principal & Portfolio  
Manager  
Multi Asset

15 years of Industry  
Experience



**LORNE  
JOHNSON, PHD**

Managing Director  
Head of Multi-Asset  
Portfolio Design

22 years of Industry  
Experience

**\$81 Bn**

AUM

**17 Yrs**

Average investment  
experience

**\$1.3 Tn+**

AUM of  
parent company

\* Data as of 09/30/2022 unless otherwise noted. Assets under management (AUM) are based on company estimates and are subject to change.

PGIM is the investment management business of Prudential Financial, Inc. (PFI). PFI is the 11th largest investment manager (out of 431 firms surveyed) in terms of worldwide institutional assets under management based on Pensions & Investments' Top Money Managers list published June 2022. This ranking represents institutional client assets under management by PFI as of December 31, 2021. Participation in the P&I ranking is voluntary and open to managers that have any kind of U.S. institutional tax-exempt AUM. Managers self-report their data via a survey. P&I sends the survey to previously identified managers and to any new managers asking to participate in the survey/ranking. No compensation is required to participate in the ranking.

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The performance results herein represent the investment performance record for the US Market Participation Strategy Composite managed by PGIM Quantitative Solutions LLC. Characteristics are for the representative portfolio within the composite and are subject to change. Diversification does not protect against a loss in a particular market; however, it allows you to spread that risk across various asset classes. No investment strategy or risk management technique can guarantee returns or eliminate risk in any market environment.

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