



Nationwide[®]
is on your side



BNP Paribas Global H-Factor[®] Index | Client guide

A probability-based approach to investing

Offering a balance of risk management and growth potential

A powerful partnership working for you

BNP Paribas (BNPP) offers an extensive global banking network with offices in 65 countries across 5 continents and more than 190,000 employees. This international presence combined with local market knowledge enables BNP Paribas to serve the needs of its 13,000 corporate and institutional clients and 20 million retail customers worldwide.

Nationwide® is a U.S.-based Fortune 100 company with a strong and stable financial foundation. One of the largest insurance companies in the industry, Nationwide brings a rich history of disciplined investing dating back more than 85 years.

<p>We are a FORTUNE 100 company¹</p>	<p>A+ AM Best</p> <p>received: 10/17/02 affirmed: 12/22/21²</p>	<p>A1 Moody's</p> <p>received: 3/10/09 affirmed: 5/27/20²</p>	<p>A+ Standard & Poor's</p> <p>received: 12/22/08 affirmed: 5/7/21²</p>
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The information on the BNP Paribas Global H-Factor® Index presented here should be used in conjunction with Nationwide indexed universal life insurance marketing materials. Indexed universal life insurance is not an investment and does not directly invest in the stock market or any index.

¹ Based on revenue, Fortune magazine (June 2021).

² These ratings and rankings reflect rating agency assessment of the financial strength and claims-paying ability of Nationwide Life Insurance Company and Nationwide Life and Annuity Insurance Company. They are not intended to reflect the investment experience or financial strength of any variable account, which is subject to market risk. Because the dates are updated only when there's a change in the rating, the dates above reflect the most recent ratings we have received. They are subject to change at any time.

Human behavior is the hidden risk in your portfolio

What many portfolio managers may overlook when selecting investments is the impact of investor behavior. Known financials, such as earnings statements, are easily interpreted and generally impact a stock in an unbiased, appropriate way. However, there's an element of investment risk that comes from humans interpreting information that's not clear or quantifiable, such as announcements regarding new product releases. This can cause a security to become overpriced due to irrational behavior.

This risk is known as the Human Factor or H-Factor®

H-Factor® is a **risk** that comes from humans interpreting vague or ambiguous information in a systematically incorrect way.

H-Factor® may lead to **overpricing**, making it difficult for a company to deliver the growth implied by the stock price.

Therefore, the H-Factor® may lead to loss.



Invest with the power of probabilities

Using a probability-based methodology developed by the asset management company New Age Alpha, the BNPP Global H-Factor® Index seeks to identify when the H-Factor® (investor behavior) has overpriced a stock. It calculates the probability that a company will fail to deliver the growth needed to support its stock price. It then refines the equity portion within the index to remove those equities that have a higher probability of failing to deliver the returns needed to support their stock price.

How the H-Factor® methodology works



Calculates implied growth rate

The H-Factor® methodology calculates the implied growth rate for each stock based on known financials and the current stock price.



Compares against historical data

Then for each stock, the implied growth is compared with historical growth rates from the past 12 quarters.



Determines H-Factor® score

Finally, an H-Factor® score — the probability that a stock will fail to deliver the implied growth rate — is assigned to each stock. The lower, the better.

Why is a lower H-Factor® score better?

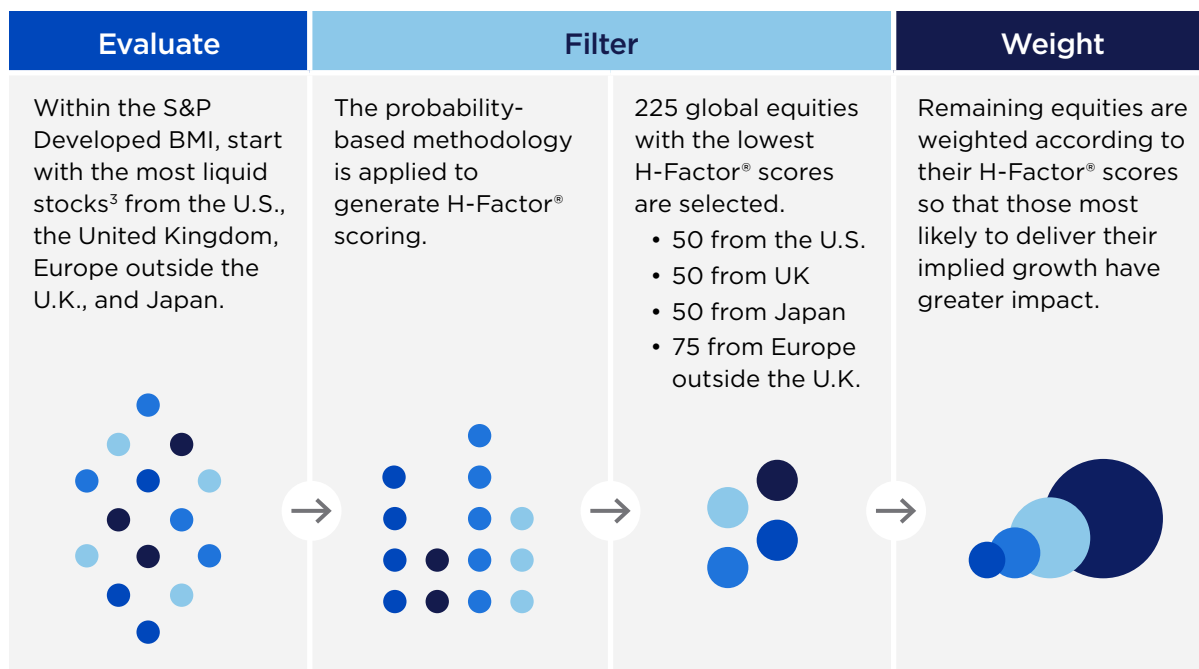
A **low H-Factor® score** represents a **low probability** of **failing to deliver** the growth implied by the stock price. In other words, the lower the H-Factor score, the more likely the stock may be to deliver growth.

How this index lessens the H-Factor®

Identify stocks with a high probability of performing well

Each quarter, the BNPP Global H-Factor® Index evaluates global equities from 4 major developed markets within the S&P Developed Broad Market Index (BMI). It refines the equity portfolio by applying the H-Factor® methodology.

Here's a more detailed look at how the BNPP Global H-Factor® Index combines innovative equity selection with a daily risk control methodology to offer a balance of growth and risk management.



Adjust using a fixed component to further reduce risk

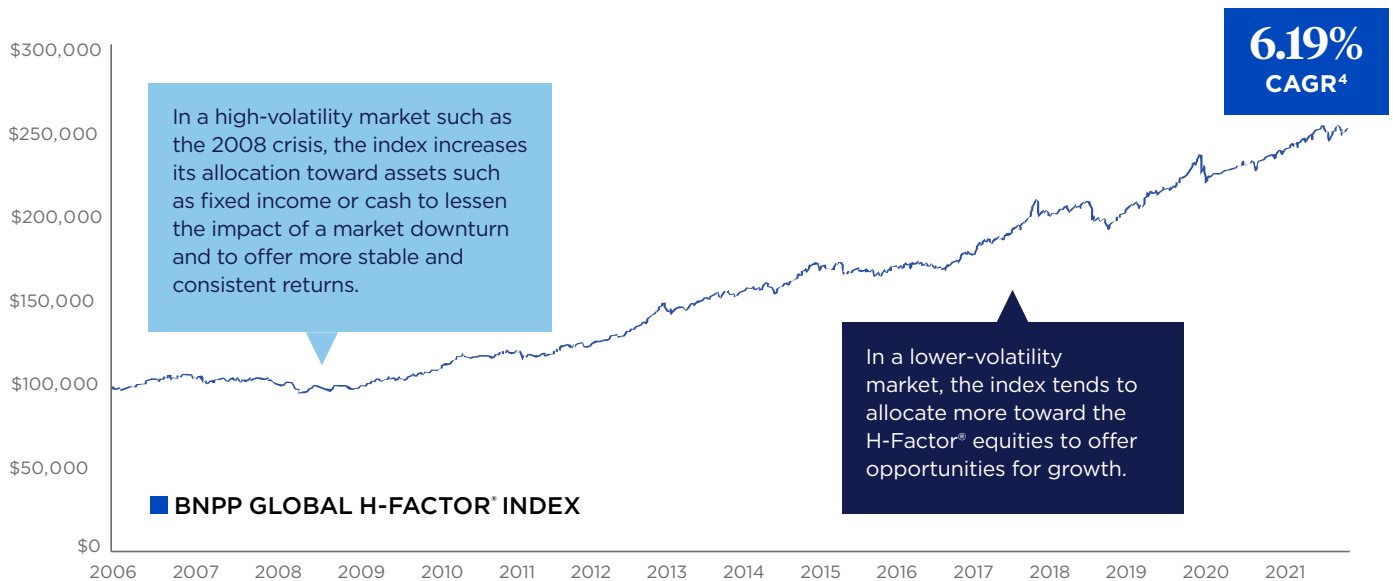
Lastly, in order to try to maintain a target of 5% volatility, the index applies a risk control methodology that makes daily adjustments to allocate between the H-Factor® equities, U.S. Treasuries and a hypothetical cash position.

³ Approximately 4,000 stocks are evaluated. U.S. stocks must have a minimum of \$5 million in 6-month average daily trading value and at least a \$3 stock price to be eligible. Non-U.S. stocks must have a minimum of \$1 million in 6-month average daily trading value and a minimum market capitalization of \$100 million.

How this strategy could have performed in the past

Historical performance

The methodology underlying the BNPP Global H-Factor® Index drives stock selection, using technology, actuarial science, and 20 years of research to score and seek avoidance of human behavior risk that can cause stocks to be overpriced. This unique design could have provided steady growth through a variety of market environments with positive returns in 14 of the past 16 years.



Source: BNP Paribas from 6/1/2006 to 12/31/2021. The BNPP Global H-Factor® Index was launched on 4/8/2022. This chart is provided for illustrative purposes only and reflects a 0.50% per year index fee. Past performance should not be read as a guarantee or an indication of the future performance of the index. Data shows hypothetical, historical data from before the index's launch. It has inherent limitations and assumptions, such as sufficient market liquidity to have allowed the necessary trading. If the Index had existed during the time period above, actual results may have been different.

⁴ The CAGR is the compound annual growth rate.

Addressing volatile markets

In times of high volatility, providing any upward performance can be a challenge for some traditional market indices, but the actuarial-based approach of the BNPP Global H-Factor® Index is designed to:

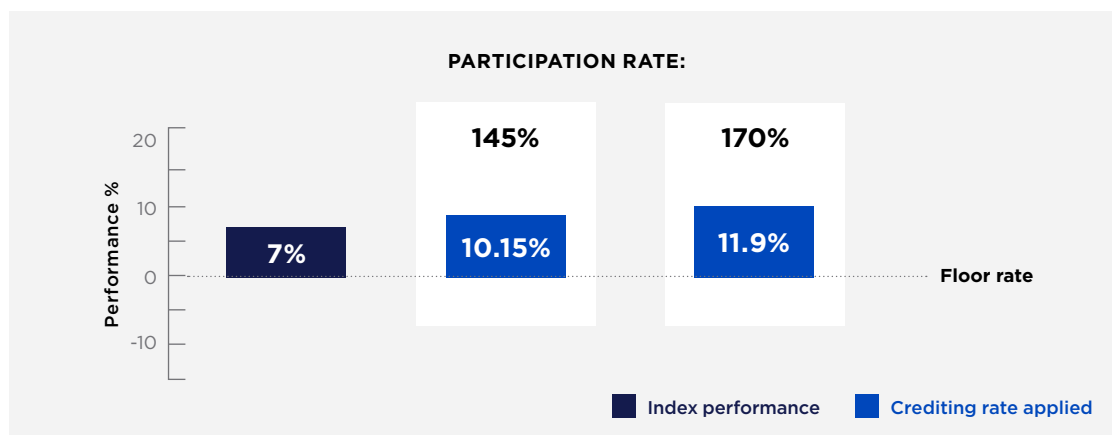
- Include equities with a higher probability to deliver growth
- Use diversified exposure to both equity and fixed income
- Employ a strategic risk reduction mechanism

The index aims to combine these principles in a way that over time offers more consistent returns and greater growth potential.

The benefits of a volatility control index in an IUL product

Access to BNP Paribas Global H-Factor® Index interest crediting options inside a Nationwide indexed universal life (IUL) product adds to its protection, tax advantages and cash value growth potential by delivering:

- An option for greater growth potential during volatile market conditions
- A complement to more growth-oriented indices like the S&P 500® to help address needs throughout the entire time you have the policy⁵
- No cap rates and greater participation rates due to the lower cost and volatility of the index; below is an example of how 145% and 170% participation rates affect the calculation of the crediting rate inside an IUL product



The illustrations used here contain hypothetical figures and do not represent actual results. Past performance is no guarantee of future performance. Participation, cap or spread and floor rates are illustrative in nature, may vary and are subject to the values guaranteed in the policy at issue. The guaranteed values are subject to change for future issues of the product. Different time scenarios will produce varying results, which could be less or more favorable depending on the performance of each reference index. Indexed UL policies are not stock market investments and do not directly participate in any stock or equity investments.

⁵ In general, a volatility control index will tend to limit performance in periods of high growth in equity markets.



To learn more about the BNPP Global H-Factor[®] Index, please talk to your insurance professional or visit global-h-factor-index.bnpparibas.com



This material is not a recommendation to buy or sell a financial product or to adopt an investment strategy. Investors should discuss their specific situation with their financial professional.

Guarantees and protections are subject to the claims-paying ability of Nationwide Life and Annuity Insurance Company.

Indexed universal life insurance policies are not stock market investments, do not directly participate in any stock or equity investments and do not receive dividends or capital gains. Past index performance is no indication of future crediting rates. Also, be aware that interest crediting fluctuations can lead to the need for additional premium in your client's policy.

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