How Smart is your Beta?

Carl Moss
Senior Managing Director
INTECH Investment Management LLC

April 2014

TOPICS FOR DISCUSSION

I. Is Smart Beta a New Idea?

II. Is Smart Beta Smart Beta?

III. Towards Smart Alpha

I. IS SMART BETA A NEW IDEA?

....or old wine in new bottles

Good Old Beta

- The notion of 'Beta' is 50 years old
  - Synonymous with cap-weighting, passive
- The benefits are well-known
  - Cheap, quick, easy, big
- The problems with cap-weighting have also been long-understood
  - Not an efficient portfolio
  - Subject to various exposures

'Dumb Beta' has been an extraordinarily successful strategy for decades

Alternatives to Market Cap-Weighting Are Almost as Old

- 1982 – Dr. Robert Fernholz*
  - Cap-weighted Index NOT efficient
  - Better diversification + rebalancing → excess growth
- 'Enhanced Indexation'
  - Equal-weighted, revenue-weighted, earnings-weighted, beta-weighted, GDP-weighted etc.
- 'Risk Factor' investing
  - Size, Value, Momentum, Volatility

It wasn't called Smart Beta then

* *"Stochastic Portfolio Theory and Stock market Equilibrium"* Journal of Finance Volume XXXVII No. 2, May 1982

What's New about Smart Beta?

- **The name**
  - Smart Phones, Smart TVs, Smart Missiles, Smart Beta
- **The positioning**
  - 'New' passive
  - Don't judge the performance
- **The cost**
  - Cheaper than active

A new label for a diverse range of familiar strategies

II. IS SMART BETA SMART BETA?

....or a budget collection of sub-optimal risk exposures

The Most Popular 'Smart Beta' Categories

Category	Claimed Exposure
Equal Weights	'Size' Effect
Fundamental Weights	'Size' and 'Value' Effect
Minimum Variance *et al.*	'Low Volatility Anomaly'

The majority of Smart Beta assets are in these categories

Smart Beta is Neither Passive nor Smart

- Cap-weighting is the only truly passive strategy
  - Buy and Hold
- All alternative-weighting schemes require maintenance
  - Trading and rebalancing issues
- Some strategies are rules-based and transparent
  - Vulnerable to exploitation if popular
- Some strategies use proprietary optimization
  - Not suitable as indices
- There is no risk control relative to the market benchmark
  - Career risk, reputational risk

The popular Smart Betas have drawbacks

III. TOWARDS SMART ALPHA

…tapping into the true return source

The True Alpha Source

Q: What do all Smart Beta strategies have in common?

The True Alpha Source

Q: What do all Smart Beta strategies have in common?

A: Rebalancing

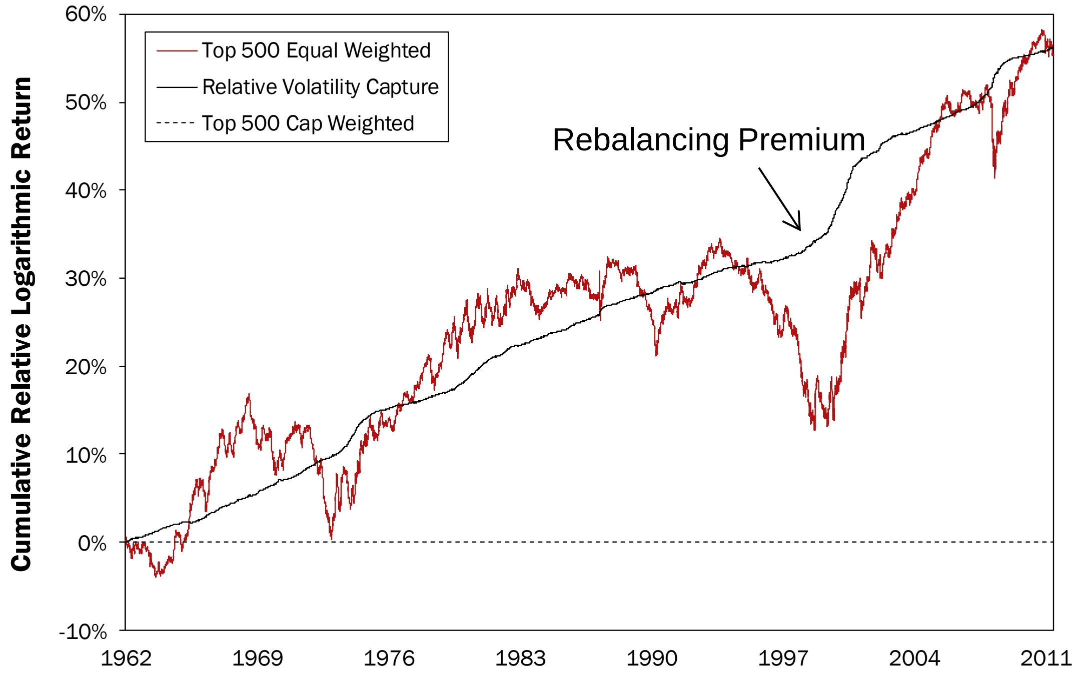
The Rebalancing Premium was identified by INTECH's founder in 1982

Rebalancing Exploits Stock Volatility

- Most stock price movements are just natural volatility, not trends
  - ‘Noise’ rather than ‘Signal’
- Rebalancing can add to return by capturing this volatility beneficially
  - Stock returns are asymmetric
- Some popular Smart Beta strategies are benefitting from this effect inadvertently
  - Sub-optimal, uncontrolled, inefficient

Portfolio rebalancing explains the size effect and the low volatility anomaly

A Simple 'Weight' Experiment

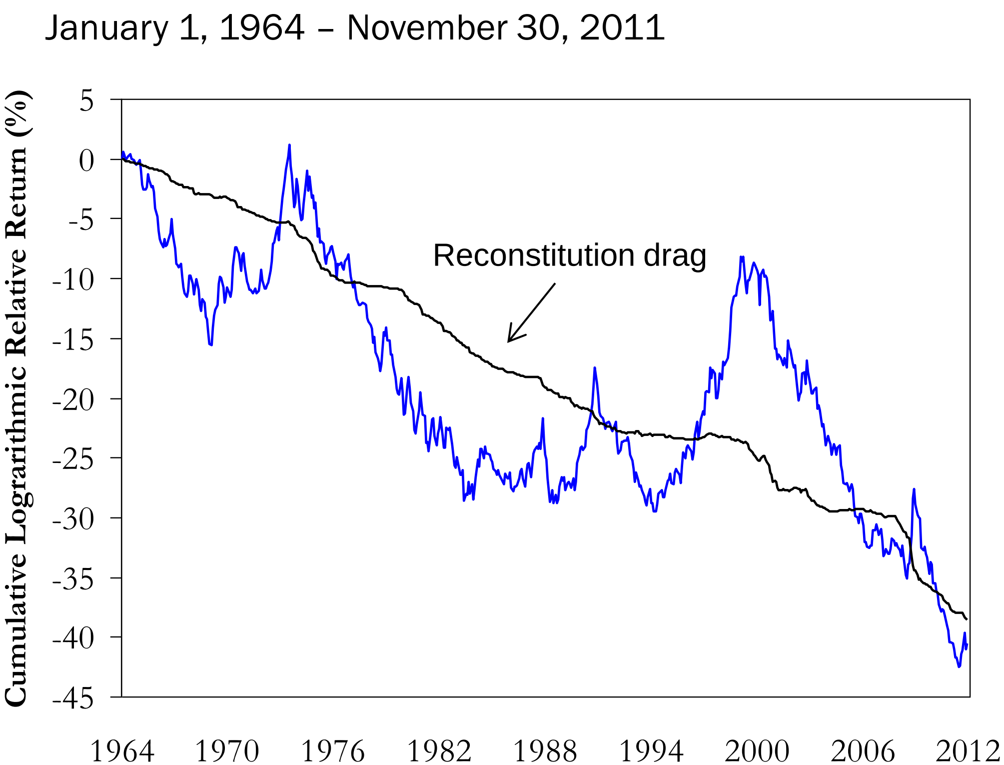


- Each day hold the 500 largest stocks in the U.S. market by capitalisation, equally-weighted
- Compare the performance to a capitalisation-weighted portfolio of the same stocks

The chart represents the top 500 stocks in the Center for Research in Security Prices (CRSP) U.S. Stock Database based on weighted capitalization for the period July 1, 1962 to December 31, 2011 rebalanced on a daily basis. Data reflects past performance, which is no guarantee of future results.

The Equal-Weighted Portfolio Outperforms due to Rebalancing

A Simple 'Size' Experiment



- Each month, hold the 100 largest stocks by capitalization in the U.S. market, at cap weight
  - Trading is sell-low, buy-high (relative to full market)
  - Estimate *reconstitution drag*: if stock drops out of top 100, resulting drag is

$$\frac{\text{Cap of Stock at Month End}}{\text{Cap of 100th Largest Stock at Month End}} - 1$$

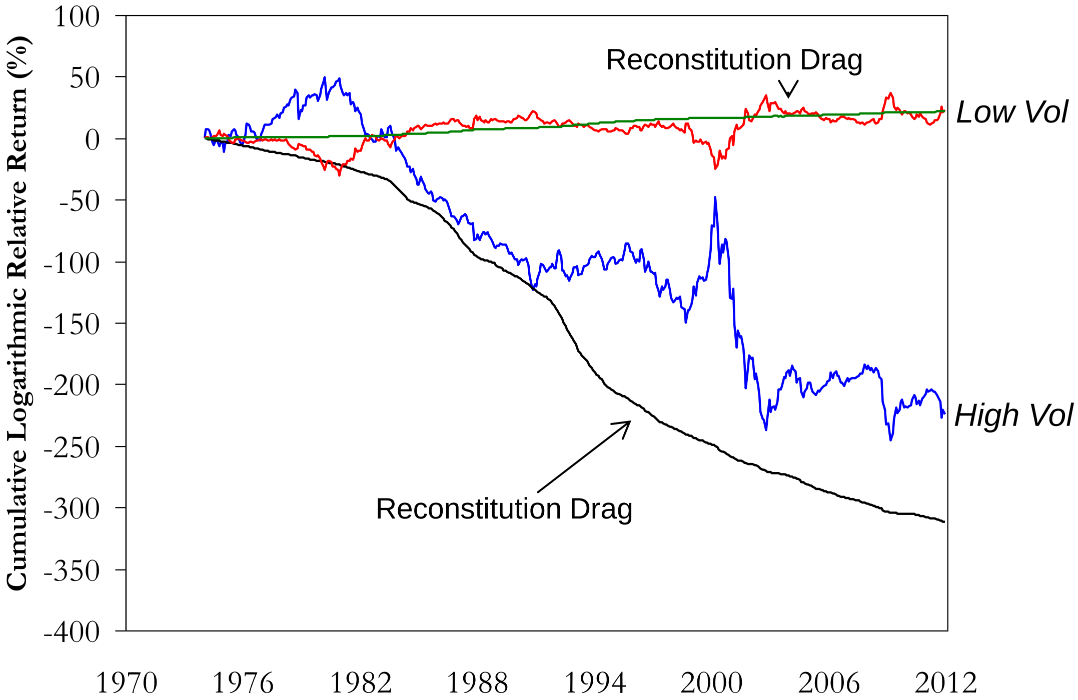
  - Weight by original cap weight
- Repeat with 1,000 stocks and compare results.

Chart represents the cumulative logarithmic relative return of the top 100 U.S. stocks by market capitalization versus the top 1,000 U.S. stocks by market capitalization for the period January 1, 1964 to November 30, 2011 rebalanced on a monthly basis.
Data source: Center for Research in Security Prices (CRSP) U.S. Stock Database.
Data reflects past performance, which is no guarantee of future results.

The Small Cap Portfolio Outperforms Large due to Reconstitution

A Simple 'Volatility' Experiment

January 1, 1974 – November 30, 2011



- Investible universe: largest 3,000 stocks in the U.S. market, ranked by capitalization.
- Construct three portfolios:
  - Index portfolio holds all 3,000 stocks
  - *Low Vol* portfolio holds 600 lowest volatility names
  - *High Vol* portfolio holds 600 highest volatility names
- All three portfolios are cap-weighted

Chart represents the cumulative logarithmic relative return of the 600 lowest volatility U.S. stocks versus the largest 3,000 U.S. stocks by market capitalization and the cumulative logarithmic relative return of the 600 highest volatility U.S. stocks versus the largest 3,000 U.S. stocks by market capitalization) for the period January 1, 1974 to November 30, 2011 rebalanced on a monthly basis. The portfolios are capitalization weighted.
Volatility is measured as trailing 1-year standard deviation of daily returns. Data source: Center for Research in Security Prices (CRSP) U.S. Stock Database.
Data reflects past performance, which is no guarantee of future results.

Low Vol Portfolio outperforms High Vol Portfolio due to Reconstitution

And others are beginning to realize the impact

"It is well-known that value portfolios empirically outperform growth portfolios over long horizons. The source of this outperformance is not as deeply understood as we might expect after so many years of study…The value portfolio wins, but not because of faster dividend growth from the value stocks. Rather, the value portfolio wins because, with each rebalance, we're shedding some lower-yielding stocks that no longer qualify as value stocks and buying new deep-value names that offer a much improved yield."

Rebalancing and the Value Effect
Dennis B. Chaves
Robert D. Arnott
Research Affiliates LLC
January 10, 2012

Perhaps ‘Smart Beta’ Isn’t Enough

Smart Alpha means:

- A deep understanding of when and why re-weighting a cap-weighted portfolio improves efficiency
- Using this understanding and portfolio risk controls to increase efficiency further
- Effective trading tailored to the strategy to avoid overcrowding and front-running of rebalancing trades
- The ability to customize portfolio solutions to meet investors’ risk budgets and return targets

INTECH has been exploiting these ideas for three decades

Live INTECH Smart Alpha Portfolio Performance

Product	Inception Date	Annualized Excess Return	Annualized Tracking Error	Information Ratio
RELATIVE-RISK STRATEGIES: TARGET AN EXCESS RETURN THEN MINIMIZE TRACKING ERROR				
U.S. Enhanced Plus	01/07/1987	1.40%	1.95%	0.72
U.S. Large Cap Growth	01/07/1993	3.64%	4.20%	0.87
U.S. Large Cap Value	01/07/1993	1.94%	3.79%	0.51
U.S. Enhanced Index	01/04/1998	1.07%	1.53%	0.70
U.S. Large Cap Core	01/08/2001	1.78%	2.81%	0.63
Global Large Cap Core	01/01/2005	1.98%	2.75%	0.72
International Large Cap Core	01/11/2006	2.74%	3.74%	0.73
European Large Cap Core (EUR)	01/01/2010	5.33%	3.95%	1.35
Global All Country Enhanced Index	01/11/2011	1.31%	1.23%	1.07
Global Enhanced Index	01/06/2012	1.23%	0.93%	1.32
Product	**Inception Date**	**Annualized* Strategy Return**	**Annualized* Benchmark Return**	**Volatility Reduction Objective****
ABSOLUTE-RISK STRATEGIES: TARGET AN EXCESS RETURN THEN MINIMIZE STANDARD DEVIATION				
Global Low Volatility	01/01/2012	17.61%	21.83%	Up to 55%
U.S. Low Volatility	01/08/2012	18.88%	26.82%	Up to 45%
Emerging Markets Managed Volatility	01/04/2013	1.26%	-0.71%	Up to 35%
U.S. Managed Volatility	01/06/2013	14.95%	15.27%	Up to 40%
Emerging Markets Low Volatility	01/06/2013	-0.16%	1.05%	Up to 40%

INTECH manages $47.6bn according to Smart Alpha principles

* Periods less than one year are not annualised. Data is as at 31 December 2013.

** Volatility reduction objective is based on mathematical projections that are reflective of what the strategy attempts to achieve during the optimisation process. Information presented gross of fees. Data reflects past performance , which does not guarantee future results. See Presentation Notes and Composite Performance for additional information and benchmarks for products shown.

Presentation Notes

INTECH, an indirect subsidiary of Janus Capital Group Inc., is an investment adviser registered under the Investment Advisers Act of 1940 utilizing a mathematically-based, risk managed investment process that attempts to capitalize on volatility in stock price movements. INTECH is affiliated with Janus Capital Group Inc. and its subsidiaries and affiliates. These subsidiaries and/or affiliates include Janus Capital Management LLC and Perkins Investment Management LLC. ***Past performance cannot guarantee future results. Investing involves risk, including the possible loss of principal and fluctuation of value. In addition, the proprietary mathematical investment process used by INTECH may not achieve the desired results.*** Performance results reflect the reinvestment of dividends and other earnings. Portfolio performance results shown are time-weighted rates of return using daily valuation, include the effect of transaction costs (commissions, exchange fees, etc.), and are gross of non-reclaimable withholding taxes, if any. The composite(s) include all actual fee-paying accounts managed on a fully discretionary basis according to the investment strategy from inception date, including those no longer under management. Accounts meeting such criteria enter the composite upon the full first month under management. For periods of less than one year, performance is not annualized. Reporting currency is USD unless otherwise noted. Differences may not agree with input data due to rounding and have been provided as supplemental information. INTECH claims compliance with the Global Investment Performance Standards (GIPS®). To receive a complete list and description of INTECH's composites and/or presentations that adheres to the GIPS standards, please contact INTECH at finance@intechjanus.com. To receive performance data current to the most recent month end, please contact finance@intechjanus.com.

The gross performance results presented do not reflect the deduction of investment advisory fees. Returns will be reduced by such advisory fees and other contractual expenses as described in each client's individual contract.

The net performance results do not reflect the deduction of investment advisory fees actually charged to the accounts in the composite. However, the net performance results do reflect the deduction of model investment advisory fees. Through December 31, 2004, net returns were derived using the maximum fixed fee in effect for the product. As of January 1, 2005, net returns are calculated by applying the standard fee schedule in effect for the respective period to each account in the composite on a monthly basis. Actual advisory fees may vary among clients invested in this strategy. Actual advisory fees paid may be higher or lower than model advisory fees. Some clients may utilize a performance-based fee.

U.S. Enhanced Plus Composite, previously named the Enhanced Plus Composite, pursues a risk-managed approach to construct a diversified portfolio of large-capitalization securities. Under normal market conditions, effective October 26, 2007, the portfolio will typically include from 30% to 90% of the names in the S&P 500 Index. Previously, portfolios typically included from 50% to 90% of the names in the S&P 500 Index. The long term target return objective over the benchmark (annualized gross of fees) range is 175 - 200 basis points.

U.S. Large Cap Growth Composite, previously named the Large Cap Growth Composite, pursues a risk-managed approach to construct a diversified portfolio of large-capitalization securities. Under normal market conditions, effective October 26, 2007, the portfolio will typically include from 30% to 90% of the names in the S&P 500 Growth Index. Previously, portfolios typically included from 50% to 90% of the names in the Index. The long term target return objective over the benchmark (annualized gross of fees) range is 300 - 400 basis points.

U.S. Large Cap Value Composite, previously named the Large Cap Value Composite, pursues a risk-managed approach to construct a diversified portfolio of large-capitalization securities. Under normal market conditions, effective October 26, 2007, the portfolio will typically include from 30% to 90% of the names in the S&P 500 Value Index. Previously, portfolios typically included from 50% to 90% of the names in the Index. The long term target return objective over the benchmark (annualized gross of fees) range is 175 - 225 basis points.

U.S. Enhanced Index Composite, previously named the Enhanced Index Composite, pursues a risk-managed approach to construct a diversified portfolio of large-capitalization securities. Under normal market conditions, effective October 26, 2007, the portfolio will typically include from 30% to 90% of the names in the S&P 500 Index. Previously, portfolios typically included from 50% to 90% of the names in the S&P 500 Index. The long term target return objective over the benchmark (annualized gross of fees) range is 125 - 135 basis points.

U.S. Broad Large Cap Growth Composite, previously named Broad Large Cap Growth Composite, pursues a risk-managed approach to construct a diversified portfolio of large-capitalization securities. Under normal market conditions, effective October 26, 2007, the portfolio will typically include from 30% to 90% of the names in the Russell 1000 Growth Index. Previously, portfolios typically included from 50% to 90% of the names in the Russell 1000 Growth Index. The long term target return objective over the benchmark (annualized gross of fees) range is 300 - 400 basis points.

U.S. Broad Enhanced Plus Composite, previously named the Broad Enhanced Plus Composite, pursues a risk-managed approach to construct a diversified portfolio of large-capitalization securities. Under normal market conditions, effective October 26, 2007, the portfolio will typically include from 30% to 90% of the names in the Russell 1000 Index. Previously, portfolios typically included from 50% to 90% of the names in the Russell 1000 Index. The long term objective over the benchmark (annualized gross of fees) range is 175 - 200 basis points.

U.S. Large Cap Core Composite, previously named the Large Cap Core Composite, pursues a risk-managed approach to construct a diversified portfolio of large-capitalization securities. Under normal market conditions, effective October 26, 2007, the portfolio will typically include from 30% to 90% of the names in the S&P 500 Index. Previously, portfolios typically included from 50% to 90% of the names in the S&P 500 Index. The long term target return objective over the benchmark (annualized gross of fees) range is 300 - 400 basis points.

U.S. Broad Large Cap Value Composite, previously named the Broad Large Cap Value Composite, pursues a risk-managed approach to construct a diversified portfolio of large-capitalization securities. Under normal market conditions, effective October 26, 2007, the portfolio will typically include from 30% to 90% of the names in the Russell 1000 Value Index. Previously, portfolios typically included from 50% to 90% of the names in the Russell 1000 Value Index. The long term target return objective over the benchmark (annualized gross of fees) range is 175 - 225 basis points.

Enhanced Plus USA Composite pursues a risk-managed approach to construct a diversified portfolio of large-capitalization securities. Under normal market conditions, effective October 26, 2007, the portfolio will typically include from 30% to 90% of the names in the MSCI USA Index. Previously, portfolios typically included from 50% to 90% of the names in the MSCI USA Index. The long term target return objective over the benchmark (annualized gross of fees) range is 175 - 200 basis points.

U.S. Broad Enhanced Index Composite, previously named the Broad Enhanced Index Composite, pursues a risk-managed approach to construct a diversified portfolio of large-capitalization securities. Under normal market conditions, effective October 26, 2007, the portfolio will typically include from 30% to 90% of the names in the Russell 1000 Index. Previously, portfolios typically included from 50% to 90% of the names in the Russell 1000 Index. The long term target return objective over the benchmark (annualized gross of fees) range is 125 - 135 basis points.

U.S. Broad Large Cap Core Composite, previously named Broad Large Cap Core, pursues a risk-managed approach to construct a diversified portfolio of large-capitalization securities. Under normal market conditions the portfolio will typically include from 30% to 90% of the names in the Russell 1000 Index. The long term objective over the benchmark (annualized gross of fees) range is 300-400 basis points.

Enhanced Index North America Composite includes all fully discretionary, fee paying, separately managed accounts invested in this strategy. This strategy pursues a risk-managed approach to construct a diversified portfolio of large capitalization securities. Under normal market conditions, the portfolio will typically include from 30% to 90% of the names in the MSCI North America Index. The long term target return over the benchmark (annualized gross of fees) range is 115 - 125 bps.

Large Cap Core USA Composite includes all fully discretionary, fee paying, separately managed accounts invested in this strategy. This strategy pursues a risk-managed approach to construct a diversified portfolio of large capitalization securities. Under normal market conditions, the portfolio will typically include from 30% to 90% of the names in the MSCI USA Index. The long term target return objective over the benchmark (annualized gross of fees) range is 250 - 300 basis points.

Global Large Cap Core Composite, previously named the Global Core Composite, pursues a risk-managed approach to construct a diversified portfolio of large capitalization securities. Under normal market conditions, effective October 26, 2007, the portfolio will typically include from 20% to 70% of the names in the MSCI World Index. Previously, portfolios typically included from 20% to 60% of the names in the MSCI World Index. The long term target return objective over the benchmark (annualized gross of fees) range is 250 - 300 basis points.

International Large Cap Core Composite, previously named the International Equity Composite, is composed of both separately managed accounts and registered pooled accounts. This strategy pursues a risk-managed approach to construct a diversified portfolio of large-capitalization securities. Under normal market conditions, the portfolio will typically include from 20% to 70% of the names in the MSCI EAFE Index. The long term target return objective over the benchmark (annualized gross of fees) range is 275 - 325 basis points.

Global Large Cap Core ex Japan (Kokusai) Composite, previously named the Kokusai (Global Core ex Japan) Composite, pursues a risk-managed approach to construct a diversified portfolio of securities. Under normal market conditions, the portfolio will typically include from 20% to 70% of the names in the MSCI Kokusai (World ex Japan) Index. The long term target return objective over the benchmark (annualized gross of fees) range is 250 - 300 basis points.

European Large Cap Core Composite, previously named the European Equity Composite, pursues a risk-managed approach to construct a diversified portfolio of predominantly large capitalization securities. Under normal market conditions, the portfolio will typically include from 20% to 70% of the names in the MSCI Europe Index (EUR). The long term target return objective over the benchmark (annualized gross of fees) range is 275 – 325 basis points.

Global Enhanced Index ex Australia Composite, previously named the Enhanced Global Core ex Australia composite, pursues a risk-managed approach to construct a diversified portfolio of large capitalization securities. Under normal market conditions, the portfolio will typically include from 20% to 70% of the names in the MSCI World ex Australia Index. The long term target return objective over the benchmark (annualized gross of fees) range is 125 - 135 basis points.

Global All Country Enhanced Index Composite, previously named the Enhanced Global All County Composite, includes all fully discretionary, fee paying, separately managed accounts invested in this strategy. The strategy pursues a risk-managed approach to construct a diversified portfolio of predominantly large capitalization securities. Under normal market conditions, the portfolio will typically include from 20% to 70% of the names in the MSCI ACWI Index. The long term target tracking error objective over the benchmark (annualized gross of fees) range is 100 basis points.

Global High Dividend Core Composite includes all fully discretionary, fee paying, separately managed accounts invested in this strategy. This strategy pursues a risk-managed approach to construct a diversified portfolio of predominantly large capitalization securities. Under normal market conditions, the portfolio will typically include from 40% to 90% of the names in the MSCI World High Dividend Yield Index. The long term target return objective over the benchmark (annualized gross of fees) range is 250 – 300 basis points.

Global Enhanced Index Composite includes all fully discretionary, fee paying, separately managed accounts invested in this strategy. The strategy pursues a risk-managed approach to construct a diversified portfolio of large capitalization securities. Under normal market conditions, the portfolio will typically include from 20% to 70% of the names in the MSCI World Index. The long term target return objective over the benchmark (annualized gross of fees) range is 125 – 135 basis points.

Global All Country Core Composite includes all fully discretionary, fee paying, separately managed accounts invested in this strategy. This strategy pursues a risk-managed approach to construct a diversified portfolio of predominantly large capitalization securities. Under normal market conditions, the portfolio will typically include from 20% to 50% of the names in the MSCI All Country World Index. The long term target return objective over the benchmark (annualized gross of fees) range is 250 – 350 basis points.

Global All Country Core Select Composite includes all fully discretionary, fee paying, separately managed accounts invested in this strategy. This strategy pursues a risk-managed approach to construct a diversified portfolio of predominantly large capitalization securities. Under normal market conditions, the portfolio will typically include from 20% to 45% of the names in the MSCI All Country World Index. The long term target return objective over the benchmark (annualized gross of fees) range is 375 – 425 basis points.

Emerging Markets Core Composite includes all fully discretionary, fee paying, separately managed accounts invested in this strategy. This strategy pursues a risk-managed approach to construct a diversified portfolio of predominantly large capitalization securities. Under normal market conditions, the portfolio will typically include from 20% to 55% of the names in the MSCI Emerging Markets Index. The long term target return objective over the benchmark (annualized gross of fees) range is 300 – 400 basis points.

Presentation Notes

Global Low Volatility Composite includes all fully discretionary, fee paying, separately managed accounts invested in this strategy. This strategy pursues a risk-managed approach to construct a diversified portfolio of predominantly large capitalization securities. Under normal market conditions, the portfolio will typically include from 10% to 50% of the names in the MSCI World Index. This strategy targets modest above-market returns, but with significantly lower standard deviation than the index and a higher Sharpe Ratio, over the long term.

U.S. Low Volatility Composite includes all fully discretionary, fee paying, separately managed accounts invested in this strategy. This strategy pursues a risk-managed approach to construct a diversified portfolio of predominantly large capitalization securities. The strategy targets modest above-market returns (net of fees), in the long run, with significantly lower levels of volatility than the Russell 1000 Index and at higher Sharpe Ratios.

Eurozone Low Volatility Composite includes all fully discretionary, fee paying separately managed accounts invested in this strategy. This strategy pursues a risk-managed approach to construct a diversified portfolio of predominantly large capitalization securities. Under normal market conditions, the portfolio will typically include from 20% to 60% of the names in the MSCI EMU Index. The strategy targets modest above-market returns (net of fees), in the long run, with significantly lower levels of volatility, and at higher Sharpe Ratios.

Emerging Markets Managed Volatility Composite includes all fully discretionary, fee paying, separately managed accounts invested in this strategy. This strategy pursues a risk-managed approach to construct a diversified portfolio of predominantly large capitalization securities. Under normal market conditions, the portfolio will typically include from 10% to 25% of the names in the MSCI Emerging Markets Index. The strategy has a long term target return objective over the benchmark (annualized gross of fees) of 300 – 400 basis points, while also targeting a lower standard deviation and higher Sharpe Ratio than the index.

Emerging Markets Low Volatility Composite includes all fully discretionary, fee paying, separately managed accounts invested in this strategy. This strategy pursues a risk-managed approach to construct a diversified portfolio of predominantly large capitalization securities. Under normal market conditions, the portfolio will typically include from 10% to 25% of the names in the MSCI Emerging Markets Index. The strategy targets modest above-market returns, but with significantly lower levels of volatility and a higher Sharpe Ratio than the index, over the long-term.

U.S. Managed Volatility Composite includes all fully discretionary, fee paying, separately managed accounts invested in this strategy. This strategy pursues a risk-managed approach to construct a diversified portfolio of predominantly large capitalization securities. The strategy has a long term target return objective over the Russell 1000 Index (annualized gross of fees) of 300 - 400 basis points, while also targeting a lower standard deviation and higher Sharpe Ratio than the index.

The S&P 500 Index is an unmanaged index of 500 stocks that is generally representative of the performance of larger companies in the U.S.

For the U.S. Large Cap Growth Composite, from inception to 12/31/05, the composite's benchmark was the S&P 500/Barra Growth Index ("Barra Growth Index"). In 2005, S&P announced index name and methodology changes affecting the Barra Growth Index, which later became the S&P 500/Citigroup Growth Index ("Citigroup Growth Index"). During the transitional period, from 1/1/06 to 3/31/06, the benchmark return consisted partially of the return of the Barra Growth Index and the Citigroup Growth Index. On 4/1/06 the composite's benchmark was changed to the Citigroup Growth Index. Effective 12/9/2009, the Citigroup Growth Index's name was changed to S&P 500 Growth Index.

The S&P 500 Growth Index is a market-capitalization-weighted index developed by Standard and Poor's consisting of those stocks within the S&P 500 Index that exhibit strong growth characteristics. The index measures the performance of the growth style of investing in large cap U.S. stocks. The S&P 500 Growth Index will be reconstituted annually.

For the U.S. Large Cap Value Composite, from inception to 12/31/05, the composite's benchmark was the S&P 500/Barra Value Index ("Barra Value Index"). In 2005, S&P announced index name and methodology changes affecting the Barra Value Index, which later became the S&P 500/Citigroup Value Index ("Citigroup Value Index"). During the transitional period, from 1/1/06 to 3/31/06, the benchmark return consisted partially of the return of the Barra Value Index and the Citigroup Value Index. On 4/1/06, the composite's benchmark was changed to the Citigroup Value Index. Effective 12/9/2009, the Citigroup Value Index's name was changed to S&P 500 Value Index.

The S&P 500 Value Index is a market-capitalization-weighted index developed by Standard and Poor's consisting of those stocks within the S&P 500 Index that exhibit strong value characteristics. The index measures the performance of the value style of investing in large cap U.S. stocks. The S&P 500 Value Index will be reconstituted annually.

The Russell 1000 Growth Index measures the performance of those Russell 1000 companies with higher price-to-book ratios and higher forecasted growth values.

The Russell 1000 Index measures performance of the 1,000 largest companies in the Russell 3000 Index.

The Russell 1000 Value Index measures the performance of those Russell 1000 companies with lower price-to-book ratios and lower forecasted growth values.

The MSCI North America Index is a free float-adjusted market capitalization-weighted index that is designed to measure the performance of the developed equity markets in Canada and the United States.

The MSCI World Index is a free float-adjusted market capitalization weighted index that is designed to measure global developed market equity performance.

The MSCI World ex Australia Index is a free float-adjusted market capitalization weighted index that is designed to measure the equity market performance of developed markets excluding Australia.

The MSCI Kokusai (World ex Japan) Index is a free float-adjusted market capitalization weighted index that is designed to measure the equity market performance of developed markets excluding Japan.

The MSCI USA Index is a free float-adjusted market capitalization-weighted index that covers approximately 85% of large cap and mid cap investable securities in the U.S. equity markets.

The MSCI EAFE Index (Europe, Australasia, Far East) is a free float-adjusted market capitalization index that is designed to measure the equity market performance of developed markets, excluding the US & Canada.

The MSCI Europe Index (EUR) is a free float-adjusted market capitalization weighted index that is designed to measure the equity market performance of the developed markets in Europe.

The MSCI All Country World Index is a free float-adjusted market capitalization weighted index that is designed to measure performance of global developed and emerging equity markets.

MSCI World High Dividend Yield Index is a free float-adjusted market capitalization-weighted index based on the MSCI World Index, its parent index, which includes large- and mid-cap stocks across 24 Developed Market Countries. The MSCI World High Dividend Yield Index is designed to reflect the performance of equities with higher-than-average dividend yields and pass dividend sustainability and persistence screens.

MSCI EMU (European Economic and Monetary Union) Index is a free float-adjusted market capitalization weighted index that is designed to measure the equity market performance of countries within EMU.

MSCI Emerging Markets Index is a free float-adjusted market capitalization-weighted index that is designed to measure performance of emerging equity markets.

The Index returns are provided to represent the investment environment existing during the time periods shown and are not covered by the report of independent verifiers. For comparison purposes, the index is fully invested, which includes the reinvestment of dividends and capital gains. The returns for the index do not include any transactions costs, management fees or other costs, and are gross of dividend tax withholdings unless otherwise noted. Composition of each separately managed account portfolio may differ from securities in the corresponding benchmark index. The index is used as a performance benchmark only, as INTECH does not attempt to replicate an index. The weightings of securities within the portfolio may differ significantly from the weighting within the index. The index is not available for direct investment; therefore, its performance does not reflect the expenses associated with the active management of an actual portfolio.

Prior to May 21, 2010, with respect to non-U.S. securities traded on non-U.S. exchanges, INTECH used fair value prices that reflected current market conditions at the end of regular trading hours of the NYSE, normally 4:00 PM ET, rather than unadjusted closing prices in local markets. Therefore, the prices as well as foreign exchange rates used to calculate the U.S. dollar market values of securities may have differed from those used by an index. Indices typically use the unadjusted closing price in local markets instead of fair value pricing. As of May 21, 2010, prices for non-U.S. securities traded on non-U.S. exchanges are valued as of the close of their respective local markets. Prices for non-U.S. securities traded on non-U.S. exchanges are valued as of the close of their respective local markets. Non-U.S. securities are translated into U.S. dollars using the 4:00 PM London spot rate. Non-U.S. investments are subject to certain risks of overseas investing, including currency fluctuations and changes in political and economic conditions, which could result in significant market fluctuations. These risks are magnified in emerging markets.

With respect to the European Large Cap Core Composite, prices assigned to investments are published prices on their primary markets or exchanges since the composite's inception.

Disclaimer

Issued in Hong Kong by Janus Capital Asia Limited, licensed and regulated by the Securities and Futures Commission.

This document does not constitute investment advice or an offer to sell, buy or a recommendation for securities, other than pursuant to an agreement in compliance with applicable laws, rules and regulations. Janus Capital Group and its subsidiaries are not responsible for any unlawful distribution of this document to any third parties, in whole or in part, or for information reconstructed from this presentation and do not guarantee that the information supplied is accurate, complete, or timely, or make any warranties with regards to the results obtained from its use. As with all investments, there are inherent risks that each individual should address.

The distribution of this document or the information contained in it may be restricted by law and may not be used in any jurisdiction or any circumstances in which its use would be unlawful. Should the intermediary wish to pass on this document or the information contained in it to any third party, it is the responsibility of the intermediary to investigate the extent to which this is permissible under relevant law, and to comply with all such law.

The gross performance results presented do not reflect the deduction of investment advisory fees, and returns will be reduced by such advisory fees, and other contractual expenses as described in the individual contract and Form ADV Part II. Net performance results do not reflect the deduction of investment advisory fees actually charged to the accounts in the composite but they do reflect the deduction of model investment advisory fees based on the maximum fixed fee rate in effect for the respective time period. Actual advisory fees may vary among clients invested in the strategy shown and may be higher or lower than model advisory fees. Composites may include accounts with performance-based fees. Returns for each client will be reduced by such fees and expenses as negotiated in any client contract as discussed in Form ADV Part II. No account has been taken for taxation as the impact of taxation depends upon individual circumstances. To obtain a complete list and description of composites and/or a presentation prepared in compliance with the GIPS standards, please contact London@janus.com.

INTECH Investment Management LLC will act as sub-adviser to Janus Capital International.

All characteristics sourced by INTECH.

Due to the recent inception of these strategies, 1 year performance is not available for Global All Country Core, Global All Country Core Select, Emerging Markets Core, Emerging Markets Managed Volatility, U.S. Managed Volatility and Emerging Markets Low Volatility. All performance data for INTECH Emerging Markets Low Volatility presented since strategy inception on 1st June 2013.

The opinions are those of the authors and are subject to change at any time due to changes in market or economic conditions. The comments should not be construed as a recommendation of individual holdings or market sectors, but as an illustration of broader themes.

The opinions are those of the authors as of 02/28/2014 and are subject to change at any time due to changes in market or economic conditions. The comments should not be construed as a recommendation of individual holdings or market sectors, but as an illustration of broader themes.

Not for public viewing or distribution. For HKRSA conference use only. Not for public viewing or distribution

FL0314(15)0414.HKRSA