

**ICCIX**

**DYNAMIC INTERNATIONAL OPPORTUNITY**



**Innealta**  
C A P I T A L

# INNEALTA CAPITAL

We are a quantitative asset manager specializing in risk-managed, global investment solutions. Proper diversification is the core principle behind our investment approach. Our investment strategies are designed with the goal of achieving high risk-adjusted returns throughout the various, and distinct phases of the business cycle.

**Legacy:** Innealta's team has a rich history in successfully managing and advising global investment portfolios delivered via models, separately managed accounts, and mutual funds; portfolio managers have an average of fifteen years of industry experience.

**Framework:** Initiated in the mid-1990s, our proprietary, rules-based, quantitative framework parses and systematically analyzes hundreds of corporate fundamental, macroeconomic, and behavioral variables to estimate future asset returns and volatility.

**Process:** Our portfolio managers use our quantitative framework to inform their decision-making process. This systematic, repeatable process allows our team to merge proprietary forecasts with portfolio optimization, trade cost analysis, and risk monitoring.

**Flexibility:** Our investment strategies utilize individual stocks, derivatives, and exchange-traded funds (ETFs). For each unique investment objective, we use the most appropriate vehicle to gain the desired exposures to various financial market segments.



# INVESTMENT TEAM

## CHIEF INVESTMENT OFFICER

### **Vito Sciaraffia, PhD**

- PhD in Business, MS in Business, and MA in Mathematics from the University of California at Berkeley
- MBA and MF from the University of Chile and BS in Economics from the Catholic University of Chile
- Prior employers include Dimensional Fund Advisors, Citigroup, and JP Morgan
- Finance faculty member at the McCombs School of Business at The University of Texas at Austin

## PORTFOLIO MANAGEMENT

### **Joshua Kocher // Portfolio Manager**

- MBA in Finance from Columbia University and BS in Chemical Engineering from the University of Virginia
- Prior employers include MKP Capital, Credit Suisse, and Susquehanna Investment Group
- Seventeen years of investment experience, including trading and portfolio management

### **Alfred Zhang // Research Analyst**

- MS in Financial Mathematics from The University of Chicago
- BS in Applied Math and Economics from China's Southwestern University of Finance and Economics

### **Ray Chen // Research Analyst**

- MS in Statistics from Rice University
- BS in Physics from Michigan State University

### **Alex Gross // Investment Analyst**

- BS in Finance from the Carlson School of Management at The University of Minnesota

## STRATEGY RESEARCH

### **Francisco Simian // Senior Economist**

- MS in Computer Science from The University of Chicago
- MA in Economics from The University of Chicago

### **Gonzalo Maturana, PhD // Academic Advisor**

- PhD in Finance from the McCombs School of Business at The University of Texas at Austin
- M.A. in Applied Economics and B.S. in Engineering from the University of Chile
- Assistant Professor of Finance at the Goizueta Business School at Emory University

*Our multidisciplinary team possesses several advanced degrees, including PhD, MBA, and MS from top academic institutions.*

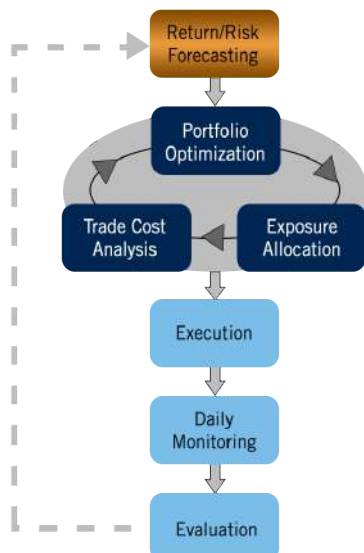
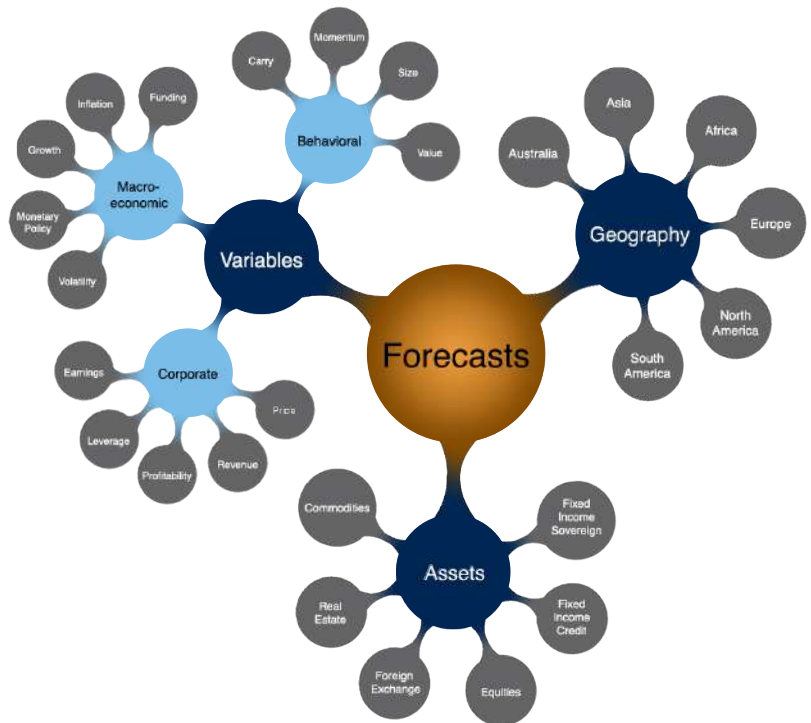


# QUANTITATIVE FRAMEWORK & PROCESS

## FRAMEWORK

Innealta employs a quantitative framework rooted in academically proven, empirically tested research. It provides a repeatable process for estimating assets' risk and returns, based on three methodologies:

- **Fundamental Analysis:** financial statements' data is used to evaluate the return potential of individual firms, results which can then be aggregated up to industries or countries. Data tend to be updated at a "slow pace."
- **Macroeconomic Analysis:** economic data are utilized to estimate the return potential of broad areas of the market, results which can then be disaggregated down to industries or countries. Data tend to be updated at a "medium pace."
- **Behavioral Analysis:** Shifts in market sentiment and patterns are studied and used to forecast the return of various market segments. Data tend to be updated at a "fast pace."



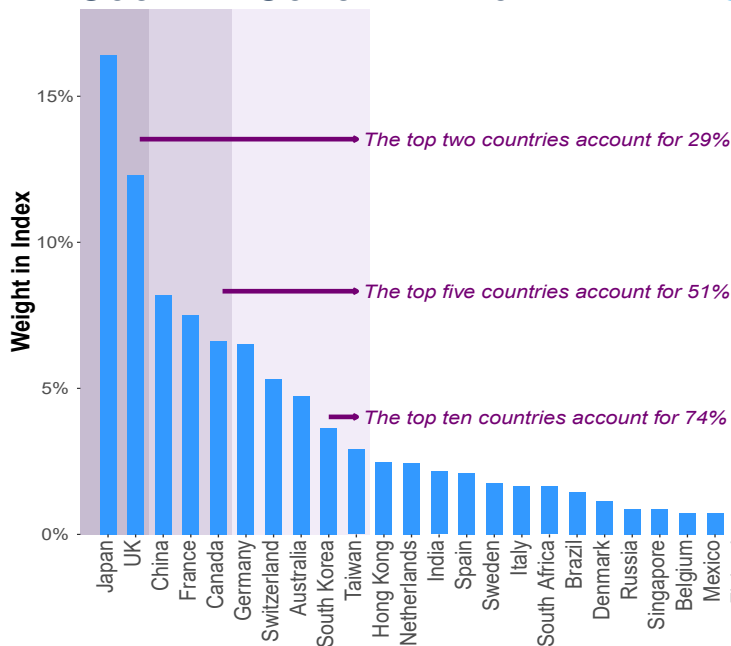
## PROCESS

The implementation of our strategies relies on a multi-step continuous loop that seeks to optimize each portfolio's risk/return characteristics. We aim to provide maximum diversification delivered in the most effective and cost-efficient manner:

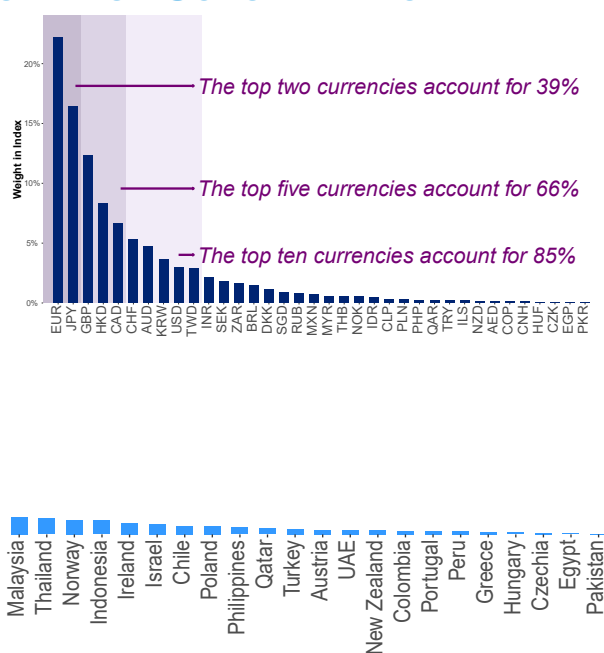
- Framework's estimates are aggregated and interpreted, and target portfolio is constructed.
- Target portfolio is adjusted based on the available representation, liquidity, and price of desired exposures.
- Execution occurs using multiple broker-dealers in order to improve efficiency, and reduce relationship-dependence.
- Daily monitoring and rebalancing ensure portfolios maintain, among others, appropriate risk/return characteristics.

# THE CHALLENGE: OVERLY CONCENTRATED BENCHMARK

## COUNTRY CONCENTRATION



## CURRENCY CONCENTRATION



SOURCE: Innealta Capital using MSCI data as of 06.30.18 for both the "Country Concentration" and "Currency Concentration" charts above.

### DEVELOPED MARKET

Country	Annualized Return	Correlation to S&P 500
Australia	3.5%	0.82
Austria	-5.7%	0.80
Belgium	2.6%	0.79
Canada	0.7%	0.83
Denmark	5.9%	0.74
Finland	0.5%	0.79
France	2.3%	0.85
Germany	2.5%	0.87
Hong Kong	7.7%	0.70
Ireland	-3.8%	0.77
Israel	-1.2%	0.57
Italy	-3.6%	0.75
Japan	3.5%	0.71
Netherlands	5.1%	0.86
New Zealand	7.6%	0.70
Norway	-1.5%	0.78
Portugal	-5.2%	0.65
Singapore	4.0%	0.75
Spain	-1.4%	0.70
Sweden	5.0%	0.83
Switzerland	5.0%	0.81
United Kingdom	2.7%	0.86

### EMERGING MARKET

Country	Annualized Return	Correlation to S&P 500
Brazil	-6.1%	0.63
Chile	2.3%	0.51
China	6.0%	0.67
Colombia	4.5%	0.49
Czech Republic	-5.8%	0.70
Egypt	-4.8%	0.46
Greece	-26.7%	0.63
Hungary	-1.7%	0.72
India	5.2%	0.66
Indonesia	4.2%	0.64
Malaysia	4.2%	0.61
Mexico	0.3%	0.77
Pakistan	0.9%	0.26
Peru	5.4%	0.55
Philippines	9.9%	0.58
Poland	-3.9%	0.75
Qatar	0.5%	0.53
Russia	-5.6%	0.69
South Africa	4.1%	0.69
South Korea	4.9%	0.73
Taiwan	6.1%	0.73
Thailand	9.4%	0.62
Turkey	-1.8%	0.53
UAE	-1.9%	0.54

### FRONTIER MARKET

Country	Annualized Return	Correlation to S&P 500
Argentina	-3.6%	0.52
Nigeria	-8.6%	0.31
Vietnam	5.4%	0.46

### MARKET-CAP WEIGHTED :

Market-capitalization weighted portfolios don't imply higher expected returns. In fact, financial research has proven that the opposite tends to be true.

### PROPER DIVERSIFICATION:

Diversification is called "the only free lunch in investing" due to its potential to increase expected returns without increasing risk. This is done by optimally combining lowly correlated assets.

### SIZE (LIQUIDITY) MATTERS:

Portfolios that are too large in assets, relative to the liquidity of the underlying markets, may lose their ability to optimally diversify, implying suboptimal allocations from a risk/return perspective.

SOURCE: Innealta Capital using Bloomberg's monthly return data from 06.30.08 to 06.30.18.

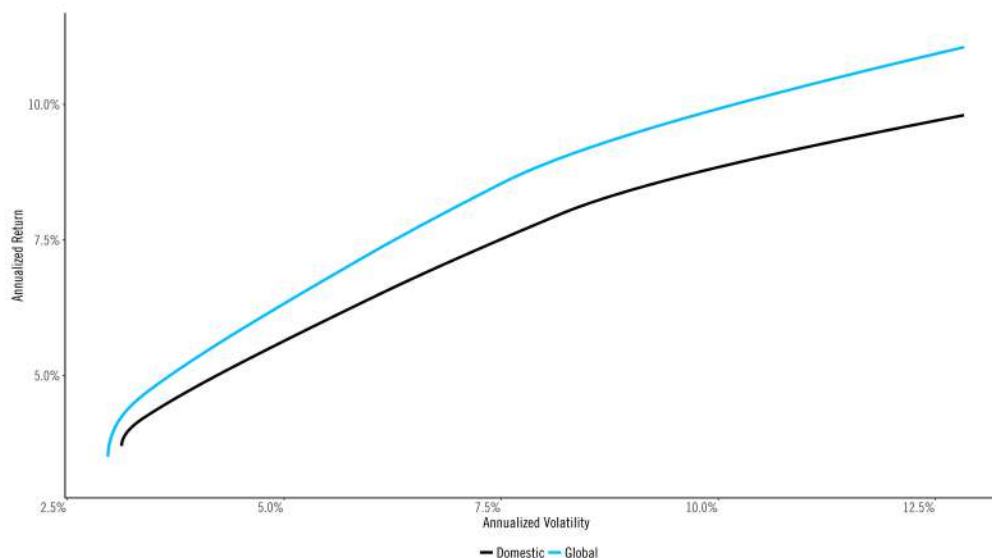
Annualized return and correlation calculated using MSCI country indices denominated in USD for each respective country and the S&P Total Return Index.



# THE OPPORTUNITY: IMPROVING DIVERSIFICATION

Financial research has shown that proper diversification may increase risk-adjusted returns. In particular, Dr. Harry Markowitz was awarded the Nobel Prize in Economics in 1990 for, among other things, proving mathematically that the overall risk of a portfolio, measured as the variance of returns, will vary depending not only on the individual risk of the underlying assets, but also on the pairwise covariance of returns of all those assets. An implication of this finding is that one can increase a portfolio's expected returns, while maintaining portfolio risk constant, by adding assets that exhibit low correlations to the existing portfolio components.

The chart below, commonly known as the Markowitz efficient frontier, shows the resulting annualized return by optimizing the underlying assets within the portfolio for a fixed volatility. The "Domestic" portfolio contains a basket of U.S. equity, fixed income sovereign, and fixed income credit indices. The "Global" portfolio includes 48 broad market international equity indices, in addition to U.S. equity. At all points, the global portfolio delivers a higher return per unit of risk than the domestic-only portfolio. The efficient frontier below highlights the importance of geographic equity diversification in the context of an institutional portfolio.



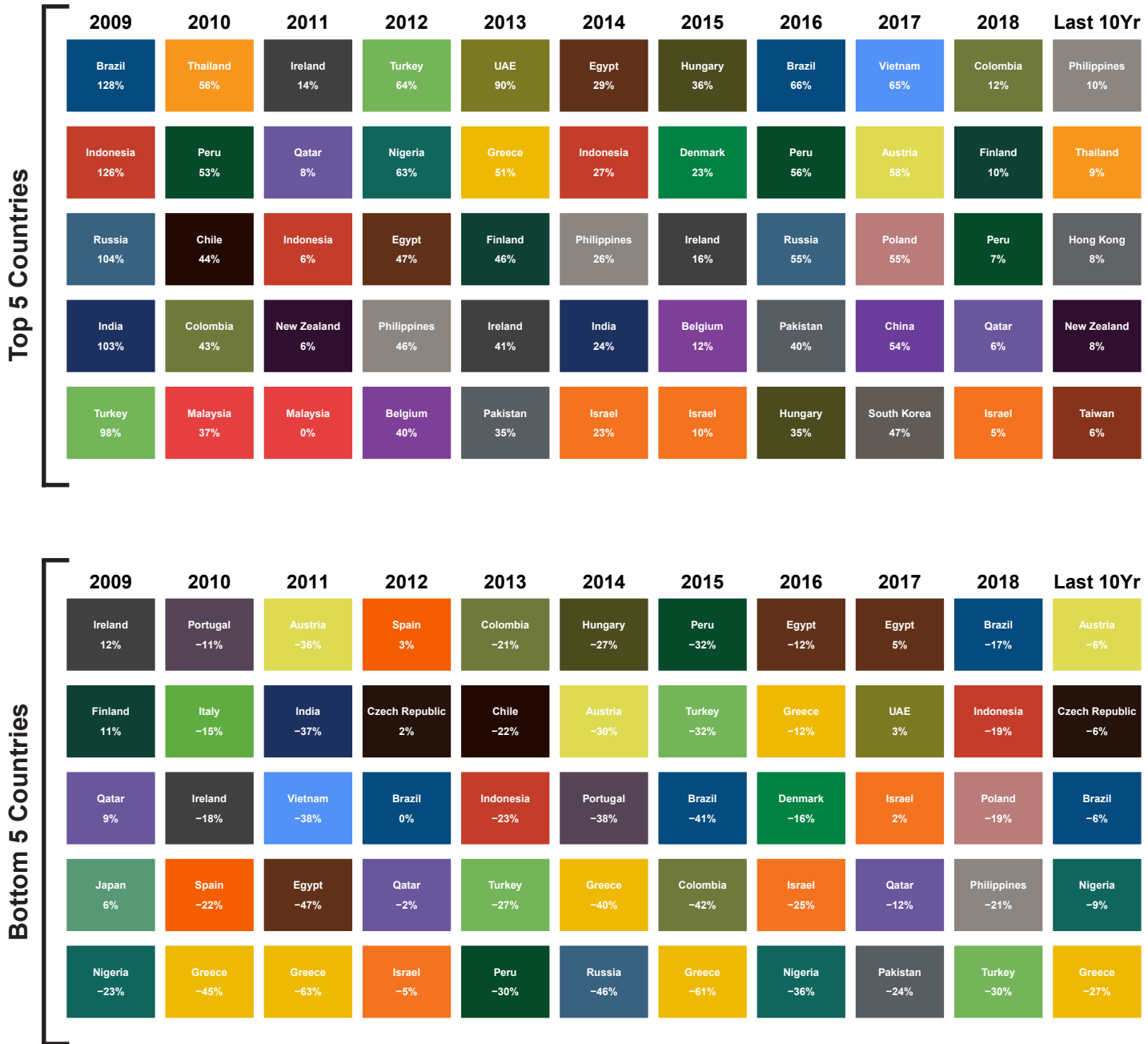
Compared to a traditional market capitalization weighted portfolio, our Dynamic International Opportunity strategy is capable of investing across over 40 international equity markets, as well as international fixed income. The investment goal is capital appreciation, which the strategy seeks to achieve by a combination of country selection and proper diversification.

*CHART SOURCE: Innealta Capital using data from Bloomberg. There is no guarantee that any investment will achieve its objectives, generate positive returns, or avoid losses.*

*The above chart uses daily total return data denominated in USD from 06.30.08 to 06.30.18. Each point along the efficient frontier corresponds to an optimization that maximizes return for a given volatility by changing the asset weights. Short selling is prohibited in the analysis. Please refer to important notes for additional information about basket constituents.*

# WHY INDIVIDUAL COUNTRY EQUITY MARKETS?

Investing directly in individual international equity markets may create an opportunity to capitalize on the significant return dispersion observed in global equity markets. Shown below are the top-five and bottom-five international equity performers for a given year. With complete hindsight, the return potential of buying winners and avoiding losers is large. In addition, the constituents of the top/bottom-five performers change over time, implying that an international portfolio could benefit from proper active management. Innealta Capital's quantitative framework parses the hundreds of variables necessary to continuously analyze each of these markets, informing the investment team about potential opportunities.



SOURCE: Innealta Capital using data from Bloomberg. Total return data denominated in USD from 06.30.08 to 06.30.18.

"The Opportunity: Improving Diversification", "The Challenge: Concentrated Benchmark" and the "Why Individual Country Equity Markets" charts contain references to individual MSCI country indices. Each country index is designed to measure the performance of the large and mid cap segments of the country market indicated. More information can be found at <https://www.msci.com/end-of-day-data-search> under the "Country" tab. "Last 10Yr" refers to annualized total return over the trailing 10-year period.

## IMPORTANT NOTES

Innealta Capital, LLC is a Registered Investment Advisor to individually managed client accounts and certain mutual funds. The firm only transacts business in states where it is properly registered or exempt from registration. Registration of an investment adviser does not imply any certain level of skill or training.

The Innealta ETF Country Rotation strategy is based on a quantitatively driven asset allocation approach that apportions portfolio assets to specific country equity markets based on the specific risk/reward characteristics of each. Dollars not allocated to equities are invested in an actively managed portfolio of ETFs representing fixed income and other asset classes. The ETFs that are included in the portfolio change over time.

Investing involves risk, principal loss is possible, and there can be no assurance that investment objectives will be achieved. Past performance is not indicative of future results. Exchange traded funds (ETFs) are subject to risks similar to those of stocks, such as market risk, and investors who have their funds invested in accordance with the portfolios may experience losses. Additionally, fixed income (bond) ETFs are subject to interest rate risk, which is the risk that debt securities in a portfolio will decline in value because of increases in market interest rates. Investments in foreign investments may incur greater risks than domestic investments. For more information on the risks associated with investment in ETFs, please refer to Innealta Capital's Form ADV Part 2A.

The total return indices within the "Proper Diversification" domestic portfolio are the: S&P 500 Total Return, Merrill Lynch 10y US Treasury Futures Index, Merrill Lynch 5y US Treasury Futures Index, Merrill Lynch 30y US Treasury Futures Index, Russell 1000 Index, Russell 2000 Index, and the Dow Jones US Real Estate Index.

The total return indices within the "Proper Diversification" global portfolio are the: S&P 500 Total Return, Merrill Lynch 10y US Treasury Futures Index, Merrill Lynch 5y US Treasury Futures Index, Merrill Lynch 30y US Treasury Futures Index, Russell 1000 Index, Russell 2000 Index, Dow Jones US Real Estate Index, MSCI Australia NR Index, MSCI Austria NR Index, MSCI Belgium NR Index, MSCI Canada NR Index, MSCI Denmark NR Index, MSCI Finland NR Index, MSCI France NR Index, MSCI Germany NR Index, MSCI Hong Kong NR Index, MSCI Ireland NR Index, MSCI Israel NR Index, MSCI Italy NR Index, MSCI Japan NR Index, MSCI Netherlands NR Index, MSCI New Zealand NR Index, MSCI Norway NR Index, MSCI Portugal NR Index, MSCI Singapore NR Index, MSCI Spain NR Index, MSCI Sweden NR Index, MSCI Switzerland NR Index, MSCI United Kingdom NR Index, MSCI Brazil NR Index, MSCI Chile NR Index, MSCI China NR Index, MSCI Columbia NR Index, MSCI Czech Republic NR Index, MSCI Egypt NR Index, MSCI Greece NR Index, MSCI Hungary NR Index, MSCI India NR Index, MSCI Indonesia NR Index, MSCI Korea NR Index, MSCI Malaysia NR Index, MSCI Mexico NR Index, MSCI Nigeria NR Index, MSCI Pakistan NR Index, MSCI Peru NR Index, MSCI Philippines NR Index, MSCI Poland NR Index, MSCI Qatar NR Index, MSCI Russia NR Index, MSCI South Africa, NR Index, MSCI Taiwan NR Index, MSCI Thailand NR Index, MSCI Turkey NR Index, MSCI United Arab Emirates NR Index, and the MSCI Vietnam NR Index.

The **MSCI ACWI ex US NR Index** captures large- and mid-cap representation across 22 of 23 developed markets countries-excluding the United States. The **S&P 500 Index** is a broad market sample based on the market capitalizations of 500 large companies having common stock listed on the NYSE or NASDAQ. The **Merrill Lynch 10y Treasury Futures Index** measures the performance of a fully collateralized rolling 10-year U.S. Treasury Futures position. The **Merrill Lynch 5y Treasury Futures Index** measures the performance of a fully collateralized rolling 5-year U.S. Treasury Futures position. The **Merrill Lynch 30y Treasury Futures Index** measures the performance of a fully collateralized rolling 30-year U.S. Treasury Futures position. The **Russell 1000 Index** measures the performance of small-cap stocks in the US equity market and is comprised of the smallest 1000 stocks in the Russell 3000 Index. The **Russell 2000 Index** measures the performance of small-cap stocks in the US equity market and is comprised of the smallest 2000 stocks in the Russell 3000 Index. The **Dow Jones US Real Estate Index** tracks the performance of real estate investment trusts (REIT) and other companies that invest directly or indirectly in real estate.

Net total return indexes reinvest dividends after the deduction of withholding taxes, using a tax rate applicable to non-resident institutional investors who do not benefit from double taxation treaties.

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The U.S. Dollar is the currency used to express performance. It is not possible to invest directly in an index. Indexes are unmanaged and have no fees or expenses. The Funds consist of securities that may vary significantly from those in the ICCIX and performance calculation methods may not be entirely comparable. Accordingly, comparing results shown to those of the ICCIX may be of limited use.

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