

JPMORGAN CHASE & CO.

Notes Linked to one or more Indices or Funds

JPMorgan Chase & Co. may, from time to time, offer and sell notes linked to one or more indices (each, an "Index" and collectively, the "Indices") or funds (each, a "Fund" and collectively, the "Funds"). This underlying supplement no. 1a-I describes potential Indices and Funds to which the notes may be linked, the relationship, if any, between JPMorgan Chase & Co. and the sponsor or publisher of the Indices and Funds and other relevant information. This underlying supplement no. 1a-I supplements the terms described in the accompanying product supplement, the prospectus supplement and the prospectus. A separate term sheet or pricing supplement, as the case may be, will describe terms that apply to specific issuances of the notes, including any changes to description of any relevant Index or Fund specified below. We refer to these term sheets and pricing supplements generally as terms supplements. If the terms described in the relevant terms supplement are inconsistent with those described in this underlying supplement, any other accompanying underlying supplement, the accompanying product supplement, the prospectus supplement or the prospectus, the terms described in the relevant terms supplement will control. In addition, if this underlying supplement no. 1a-I and the accompanying product supplement or another relevant underlying supplement contain information relating to the same Index or Fund to which the notes are linked, the information contained in the document with the most recent date will control.

Investing in the notes involves a number of risks. See "Risk Factors" in the accompanying product supplement and "Risk Factors" beginning on page US-1 of this underlying supplement no. 1a-I.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of the notes or passed upon the accuracy or the adequacy of the relevant terms supplement, this underlying supplement no. 1a-I, any other accompanying underlying supplement, the accompanying product supplement, the prospectus supplement or the prospectus. Any representation to the contrary is a criminal offense.

The notes are not bank deposits, are not insured by the Federal Deposit Insurance Corporation or any other governmental agency, and are not obligations of, or guaranteed by, a bank.

J.P.Morgan

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We have not authorized anyone to provide any information other than that contained or incorporated by reference in the relevant terms supplement, this underlying supplement no. 1a-I, any other accompanying underlying supplement, the accompanying product supplement, the prospectus supplement or the prospectus with respect to the notes offered by the relevant terms supplement and with respect to JPMorgan Chase & Co. We take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. The relevant terms supplement, together with this underlying supplement no. 1a-I, any other accompanying underlying supplement, the accompanying product supplement, the prospectus supplement and the prospectus, will contain the terms of the notes and will supercede all other

prior or contemporaneous oral statements as well as any other written materials including preliminary or indicative pricing terms, correspondence, trade ideas, structures for implementation, sample structures, fact sheets, brochures or other educational materials of ours. The information in each of the relevant terms supplement, this underlying supplement no. 1a-I, any other related underlying supplement, the accompanying product supplement, the prospectus supplement and the prospectus may only be accurate as of the date of that document.

The notes are not appropriate for all investors, and involve important legal and tax consequences and investment risks that should be discussed with your professional advisers. You should be aware that the regulations of the Financial Industry Regulatory Authority, or FINRA, and the laws of certain jurisdictions (including regulations and laws that require brokers to ensure that investments are suitable for their customers) may limit the availability of the notes. The relevant terms supplement, this underlying supplement no. 1a-I, any other accompanying underlying supplement, the accompanying product supplement, the prospectus supplement and the prospectus do not constitute an offer to sell or a solicitation of an offer to buy the notes in any circumstances in which that offer or solicitation is unlawful.

In the relevant terms supplement, this underlying supplement no. 1a-I, any other accompanying underlying supplement, the accompanying product supplement, the prospectus supplement and the prospectus, "we," "us" and "our" refer to JPMorgan Chase & Co., unless the context requires otherwise.

SUPPLEMENTAL TERMS OF NOTES

The following supplemental terms of the notes supplement, and to the extent they are inconsistent, supersede, the description of the general terms of the debt securities set forth in the accompanying product supplement and under the headings "Description of Notes" in the prospectus supplement and "Description of Debt Securities" in the prospectus. Capitalized terms used but not defined in this underlying supplement no. 1a-I have the meanings assigned in the relevant terms supplement, this underlying supplement no. 1a-I, any other accompanying underlying supplement, the accompanying product supplement, the prospectus supplement and the prospectus.

General

This underlying supplement no. 1a-I describes potential Indices and Funds to which the notes may be linked, the relationship, if any, between JPMorgan Chase & Co. and the sponsor or publisher of the Indices and Funds and other relevant information. This underlying supplement no. 1a-I supplements the terms described in the accompanying product supplement, the prospectus supplement and the prospectus. A separate term sheet or pricing supplement, as the case may be, will describe terms that apply to specific issuances of the notes, including any changes to description of any relevant Index or Fund specified below. We refer to these term sheets and pricing supplements generally as terms supplements. If the terms described in the relevant terms supplement are inconsistent with those described in this underlying supplement, any other accompanying underlying supplement, the accompanying product supplement, the prospectus supplement or the prospectus, the terms described in the relevant terms supplement will control. In addition, if this underlying supplement no. 1a-I and the accompanying product supplement or another relevant underlying supplement contain information relating to the same Index or Fund to which the notes are linked, the information contained in the document with the most recent date will control.

Notwithstanding anything to the contrary in the accompanying product supplement, the "**closing level**" of the Russell 2000® Index or any relevant successor index (as defined in the accompanying product supplement) on any relevant day will equal the closing level of the Russell 2000® Index or that successor index, as applicable, as published by Bloomberg Financial Markets with respect to that day. Currently, Bloomberg Financial Markets publishes the closing level of the Russell 2000® Index to three decimal places, whereas Russell publishes the official closing level of the Russell 2000® Index to six decimal places. As a result, the closing level of the Russell 2000® Index published by Bloomberg Financial Markets will likely be slightly different from the official closing level of the Russell 2000® Index published by Russell.

RISK FACTORS

*Your investment in the notes will involve certain risks. Investing in the notes is not equivalent to investing in any of the indices or funds described herein or any of their component securities, commodities or commodity futures contracts. **You should consider carefully the following discussion of risks as well as the discussion of risks included in the relevant terms supplement, in the accompanying product supplement and in any accompanying underlying supplement before you decide that an investment in the notes is suitable for you.***

Risks Relating to Certain Equity Indices

We are currently one of the companies that make up the Dow Jones Industrial Average™, the MSCI World IndexSM, the Russell 1000® Index, the Russell 3000® Index, the S&P 500® Index and the Financial Select Sector Index, but, to our knowledge, unless otherwise specified in the relevant terms supplement, our securities are not currently included in any other Index.

As a general matter, none of the other issuers the securities of which are included in an Index will be involved in the offering of the notes in any way. As a result, we will have no ability to control the actions of the issuers of those securities, including actions that could affect the value of the securities underlying an Index or your notes. None of those issuers will have any obligation to consider your interests as a holder of the notes in taking any corporate actions that might affect the value of your notes. Unless otherwise specified in the relevant terms supplement, none of the money you pay for the notes will go to any of the other issuers of the securities included in any Index. See the relevant terms supplement for additional information about whether we are one of the companies included in an Index.

In the event that our securities are included in an Index, we will have no obligation to consider your interests as a holder of the notes in taking any action that might affect the level of that Index or the value of your notes.

For notes linked in whole or in part to the Russell 2000® Index, an investment in the notes will be subject to risks associated with small capitalization stocks.

The stocks that constitute the Russell 2000® Index are issued by companies with relatively small market capitalization. The stock prices of smaller companies may be more volatile than stock prices of large capitalization companies. Small capitalization companies may be less able to withstand adverse economic, market, trade and competitive conditions relative to larger companies. These companies tend to be less well-established than large market capitalization companies. Small capitalization companies are less likely to pay dividends on their stocks, and the presence of a dividend payment could be a factor that limits downward stock price pressure under adverse market conditions.

Risks Relating to Certain Commodity Indices

We and our affiliates have no affiliation with S&P Dow Jones Indices LLC ("S&P"), UBS Securities LLC ("UBS") or Bloomberg Finance L.P. ("Bloomberg") and are not responsible for their public disclosure of information.

We and our affiliates are not affiliated with S&P, UBS or Bloomberg Indexes in any way (except for arrangements discussed below in "Commodity Index Descriptions — The S&P GSCI Indices — License Agreement with S&P Dow Jones Indices LLC" and "Commodity Index Descriptions — The Bloomberg Commodity Indices — License Agreement") and have no ability to control S&P, UBS or Bloomberg Indexes, including any errors in or discontinuation of disclosure regarding its methods or policies relating to the calculation of the Bloomberg Commodity Indices (as defined under "Commodity Index Descriptions — The Bloomberg Commodity Indices" in this underlying

supplement) or the S&P GSCI Indices (as defined under “Commodity Index Descriptions — The S&P GSCI Indices” in this underlying supplement). None of S&P, UBS or Bloomberg Indexes is under any obligation to continue to calculate any of the S&P GSCI Indices or Bloomberg Commodity Indices nor are they required to calculate any successor index. If any of S&P, UBS or Bloomberg Indexes discontinues or suspends the calculation of a relevant index, it may become difficult to determine the market value of the notes or the amount payable at maturity. The calculation agent may designate a successor index selected in its sole discretion. If the calculation agent determines in its sole discretion that no successor index comparable to such index exists, the amount you receive at maturity may be determined by the calculation agent in its sole discretion.

S&P or Bloomberg may be required to replace a contract underlying an S&P GSCI Index or a Bloomberg Commodity Index, if the existing futures contract is terminated or replaced.

A futures contract known as a “Designated Contract” has been selected as the reference contract for the underlying physical commodity included in each S&P GSCI Index or Bloomberg Commodity Index. Data concerning this Designated Contract will be used to calculate each S&P GSCI Index and Bloomberg Commodity Index. The termination or replacement of a futures contract on an established exchange occurs infrequently; however, if one or more Designated Contracts were to be terminated or replaced by an exchange, a comparable futures contract would be selected by the S&P GSCI Index Committee or Bloomberg, as the case may be, if available, to replace each such Designated Contract. The termination or replacement of any Designated Contract may have an adverse impact on the value of the individual S&P GSCI Index or level of any Bloomberg Commodity Index. Suspension or disruptions of market trading in the commodity and related futures markets may adversely affect the value of the notes.

If the notes are linked in whole or in part to a Bloomberg Commodity Index, you may in the future have exposure to contracts that are not traded on regulated futures exchanges.

At present, the Bloomberg Commodity Indices are composed exclusively of regulated futures contracts; however, the Bloomberg Commodity Indices may in the future include over-the-counter contracts (such as swaps and forward contracts) traded on trading facilities that are subject to lesser degrees of regulation or, in some cases, no substantive regulation. As a result, trading in such contracts, and the manner in which prices and volumes are reported by the relevant trading facilities, may not be subject to the same provisions of, and the protections afforded by, the Commodity Exchange Act, as amended, or other applicable statutes and related regulations that govern trading on regulated futures exchanges. In addition, many electronic trading facilities have only recently initiated trading and do not have significant trading histories. As a result, the trading of contracts on such facilities and the inclusion of such contracts in a Bloomberg Commodity Index may expose you to certain risks not presented by most exchange-traded futures contracts, including risks related to the liquidity and price histories of the relevant contracts.

For notes linked to a Bloomberg Commodity Index, risks associated with that Bloomberg Commodity Index may adversely affect the market price of the notes.

Because the Bloomberg Commodity IndexSM and the Bloomberg Commodity Index 3 Month ForwardSM reflect the return on exchange-traded futures contracts on twenty-two different physical commodities and because the single-commodity sub-indices and the forward-month single-commodity sub-indices of Bloomberg Commodity IndexSM each reflect the return on exchange-traded futures contract on a single physical commodity, notes linked to one or more of the Bloomberg Commodity Indices may be less diversified than other funds or investment portfolios investing in a broader range of products and, therefore, could experience greater volatility. Additionally, the annual composition of the Bloomberg Commodity Indices will be calculated in reliance upon historical price, liquidity and production data that are subject to potential errors in data sources or errors that may affect the weighting of components of the Bloomberg Commodity

Indices. Any discrepancies that require revision are not applied retroactively but will be reflected in the weighting calculations of the Bloomberg Commodity Indices for the following year. However, Bloomberg may not discover every discrepancy. Furthermore, the annual weightings for the Bloomberg Commodity Indices are determined each year in the third or fourth quarter and announced as promptly as practicable following the calculation by Bloomberg under the supervision of the Bloomberg Commodity Index Oversight Committee, which has a significant degree of discretion in exercising its supervisory duties with respect to the Bloomberg Commodity Indices and has no obligation to take the needs of any parties to transactions involving the Bloomberg Commodity Indices into consideration when reweighting or making any other changes to the Bloomberg Commodity Indices. Finally, subject to the minimum/maximum diversification limits described in “Commodity Index Descriptions — The Bloomberg Commodity Indices — Diversification Rules,” the commodities underlying the exchange-traded futures contracts included in the Bloomberg Commodity IndexSM and the Bloomberg Commodity Index 3 Month ForwardSM from time to time are concentrated in a limited number of sectors, particularly energy and agriculture, and the single-commodity sub-indices and the forward-month single-commodity sub-indices of Bloomberg Commodity IndexSM are each limited to a single commodity. An investment in the notes may therefore carry risks similar to a concentrated securities investment in a limited number of industries or sectors or in a single commodity.

For notes linked to a Bloomberg Commodity Index, trading and other transactions by Bloomberg and its affiliates in the futures contracts constituting the Bloomberg Commodity Indices and the underlying commodities may affect the level of the Bloomberg Commodity Indices.

Bloomberg and its affiliates actively trade futures contracts and options on futures contracts on the commodities underlying the Bloomberg Commodity Indices. Bloomberg and its affiliates also actively enter into or trade market securities, swaps, options, derivatives, and related instruments that are linked to the performance of the Bloomberg Commodity Indices, the futures contracts underlying the Bloomberg Commodity Indices or the commodities underlying these futures contracts. Certain of Bloomberg’s affiliates may underwrite or issue other securities or financial instruments indexed to the Bloomberg Commodity Indices and related indices, and Bloomberg and certain of its affiliates may license the Bloomberg Commodity Indices for publication or for use by unaffiliated third parties.

These activities could present conflicts of interest and could affect the levels of the Bloomberg Commodity Indices. For instance, a market maker in a financial instrument linked to the performance of a Bloomberg Commodity Index may expect to hedge some or all of its position in that financial instrument. Purchase (or selling) activity in the underlying components of a Bloomberg Commodity Index in order to hedge the market maker’s position in the financial instrument may affect the market price of the futures contracts included in such Bloomberg Commodity Index, which in turn may affect the level of such Bloomberg Commodity Index and the value of your notes. With respect to any of the activities described above, none of Bloomberg or its respective affiliates has any obligation to take the needs of any buyers, sellers or holders of the notes into consideration at any time.

For notes linked to one or more S&P GSCI Component Indices, any such index may be more volatile and susceptible to price fluctuations of commodities than a broader commodities index.

Each of the S&P GSCI Component Indices (as defined under “Commodity Index Descriptions — The S&P GSCI Indices” in this underlying supplement) may be more volatile and susceptible to price fluctuations than a broader commodities index, such as the S&P GSCITM or the Bloomberg Commodity IndexSM. In contrast to the S&P GSCITM and Bloomberg Commodity IndexSM, which include contracts on the principal physical commodities that are actively traded, each of the S&P GSCI Component Indices is composed of contracts covering only a single physical commodity or only physical commodities in a single sector. As a result, price volatility in the contracts included in the

S&P GSCI™ or the Bloomberg Commodity IndexSM will likely have a greater impact on each S&P GSCI Component Index than it would on the broader S&P GSCI™ or Bloomberg Commodity IndexSM, and each S&P GSCI Component Index individually will be more susceptible to fluctuations and declines in value of the physical commodities included in such index. In addition, the S&P GSCI Component Indices may be less representative of the economy and commodity markets as a whole and might therefore not serve as a reliable benchmark for commodity market performance generally.

For notes linked to a S&P GSCI Index, changes in the composition and valuation of the S&P GSCI™ may adversely affect the market value and/or the payment at maturity.

The composition of the S&P GSCI Indices may change over time, as additional futures contracts satisfy the eligibility criteria of the S&P GSCI™ or futures contracts currently included in the S&P GSCI™ fail to satisfy such criteria. Those changes could impact the composition and valuation of the S&P GSCI Indices. The weighting factors applied to each commodity included in the S&P GSCI™ change annually, based on changes in commodity production statistics. In addition, S&P Dow Jones Indices LLC may modify the methodology for determining the composition and weighting of the S&P GSCI™ and for calculating their value in order to assure that the S&P GSCI™ represents a measure of the performance over time of the markets for the underlying commodities represented by the S&P GSCI™ and its sub-indices. A number of modifications to the methodology for determining the contracts to be included in each S&P GSCI Index, and for valuing each S&P GSCI Index, have been made in the past several years and further modifications may be made in the future. Such changes could adversely affect the market value and/or the payment at maturity.

Risks Relating to Certain Funds

We are currently one of the issuers of equity securities held by the Financial Select Sector SPDR® Fund and the SPDR® S&P 500® ETF Trust, but, to our knowledge, unless otherwise specified in the relevant terms supplement, our securities are not currently held by any other Fund.

As a general matter, none of the other issuers the securities of which are held by a Fund will be involved in the offering of the notes in any way. As a result, we will have no ability to control the actions of the other issuers of those securities, including actions that could affect the value of the securities held by a Fund or your notes. Neither those issuers nor we will have any obligation to consider your interests as a holder of the notes in taking any corporate actions that might affect the value of your notes. Unless otherwise specified in the relevant terms supplement, none of the money you pay us will go to the investment adviser of any Fund or any of the other issuers of the securities held by any Fund. See the relevant terms supplement for additional information about whether we are one of the companies held by a Fund.

In the event that our securities are held by a Fund, we will have no obligation to consider your interests as a holder of the notes in taking any action that might affect the price of that Fund or the value of your notes.

If the notes are linked in whole or in part to the Financial Select Sector SPDR® Fund, risks associated with the financial services industry will affect the value of the notes.

All or substantially all of the equity securities held by the Financial Select Sector SPDR® Fund are issued by companies whose primary line of business is directly associated with the financial sector, including the following industries: diversified financial services; insurance; commercial banks; capital markets; real estate investment trusts ("REITs"); consumer finance; thrifts and mortgage finance; and real estate management and development. The Financial Select Sector SPDR® Fund is concentrated in the financial sector, which means the Financial Select Sector SPDR® Fund will be more affected by the performance of the financial sector than a fund or index that was more diversified.

Financial services companies are subject to extensive government regulation which may limit both the amounts and types of loans and other financial commitments they can make, the interest rates and fees they can charge, the scope of their activities, the prices they can charge and the amount of capital they must maintain. Profitability is largely dependent on the availability and cost of capital funds, and can fluctuate significantly when interest rates change or competition increases. In addition, the previous deterioration of the credit markets generally has caused an adverse impact in a broad range of markets, including U.S. and international credit and interbank money markets, thereby affecting a wide range of financial institutions and markets. Certain events in the financial sector have resulted in an unusually high degree of volatility in the financial markets, both domestic and foreign, and may continue to do so. These events have caused certain financial service companies to incur large losses. Numerous financial services companies have experienced substantial declines in the valuations of their assets, taken action to raise capital (such as the issuance of debt or equity securities), or even ceased operations.

Credit losses resulting from financial difficulties of borrowers and financial losses associated with investment activities can negatively impact the sector. Insurance companies may be subject to severe price competition. Adverse economic, business or political developments affecting real estate could have a major effect on the value of real estate securities (which include real estate investment trusts). Declining real estate values could adversely affect financial institutions engaging in mortgage finance or other lending or investing activities directly or indirectly connected with the value of real estate.

The factors described above affect the financial sector generally and could affect the value of the securities held by the Financial Select Sector SPDR® Fund and thus the value of the Financial Select Sector SPDR® Fund during the term of the notes, which may adversely affect the value of your notes.

For notes linked in whole or in part to the iShares® U.S. Real Estate ETF, risks associated with the real estate industry will affect the price of shares of the iShares® U.S. Real Estate ETF and the value of the notes.

The real estate industry is cyclical and has from time to time experienced significant difficulties. The prices of the securities included in the Dow Jones U.S. Real Estate Index and held by the iShares® U.S. Real Estate ETF and, in turn, the level of the Dow Jones U.S. Real Estate Index and the price of shares of the iShares® U.S. Real Estate ETF, as applicable, will be affected by a number of factors that may either offset or magnify each other, including:

- employment levels and job growth;
- the availability of financing for real estate;
- interest rates;
- consumer confidence;
- the availability of suitable undeveloped land;
- federal, state and local laws and regulations concerning the development of land, construction, home and commercial real estate sales, financing and environmental protection; and
- competition among companies that engage in the real estate business.

The factors described above could affect the real estate industry generally or regionally and could affect the value of the securities included in the Dow Jones U.S. Real Estate Index and held by the iShares® U.S. Real Estate ETF and the level of the Dow Jones U.S. Real Estate Index and the price of shares of the iShares® U.S. Real Estate ETF, as applicable, during the term of the notes.

For notes linked in whole or in part to the iShares® U.S. Real Estate ETF, risks associated with Real Estate Investment Trusts will affect the value of the notes.

The Dow Jones U.S. Real Estate Index and the iShares® U.S. Real Estate ETF are composed of a variety of real-estate-related stocks including real estate investment trusts (“REITs”). REITs invest primarily in income-producing real estate or real-estate-related loans or interests. Investments in REITs, though not direct investments in real estate, are still subject to the risks associated with investing in real estate. The following are some of the conditions that might impact the structure of and cash flow generated by REITs and, consequently, the value of REITs and, in turn, the Dow Jones U.S. Real Estate Index and the iShares® U.S. Real Estate ETF:

- a decline in the value of real estate properties;
- extended vacancies of properties;
- increases in property and operating taxes;
- increased competition or overbuilding;
- a lack of available mortgage funds or other limits on accessing capital;
- tenant bankruptcies and other credit problems;
- limitation on rents, including decreases in market rates for rents;
- changes in zoning laws and governmental regulations;
- costs resulting from the clean-up of, and legal liability to third parties for, damages resulting from environmental problems;
- investments in developments that are not completed or that are subject to delays in completion;
- risks associated with borrowing;
- changes in interest rates;
- casualty and condemnation losses; and
- uninsured damages from floods, earthquakes or other natural disasters.

The factors above may either offset or magnify each other. To the extent that any of these conditions occur, they may affect a REIT’s cash flow and the share price of a REIT, and, consequently, the level of the Dow Jones U.S. Real Estate Index and the price of shares of the iShares® U.S. Real Estate ETF. In addition, some REITs have relatively small market capitalizations, which can increase the volatility of the market price of securities issued by those REITs. Furthermore, REITs are dependent upon specialized management skills, have limited diversification and are, as a result, subject to risks inherent in operating and financing a limited number of projects. To the extent that such risks increase the volatility of the market price of securities issued by REITs, they may also, consequently, increase the volatility of the Dow Jones U.S. Real Estate Index and the iShares® U.S. Real Estate ETF.

For notes linked in whole or in part to the iShares® U.S. Real Estate ETF, there will be no direct correlation between the value of the notes or the price of the iShares® U.S. Real Estate ETF and residential housing prices.

There is no direct linkage between the price of shares of the iShares® U.S. Real Estate ETF and residential housing prices in specific regions or residential housing prices in general. While residential housing prices may be one factor that could affect the prices of the securities held by the Real Estate Constituent and consequently the price of shares of the iShares® U.S. Real Estate ETF, the price of shares of the iShares® U.S. Real Estate ETF and therefore the value of the notes are not directly linked to movements of residential housing prices and may be affected by factors unrelated to such movements.

For notes linked in whole or in part to the iShares® Russell 2000 ETF, an investment in the notes is subject to risks associated with small capitalization stocks.

The stocks that are held by the iShares® Russell 2000 ETF are issued by companies with relatively small market capitalization. The stock prices of smaller companies may be more volatile than stock prices of large capitalization companies. Small capitalization companies may be less able to withstand adverse economic, market, trade and competitive conditions relative to larger companies. These companies tend to be less well-established than large market capitalization companies. Small capitalization companies are less likely to pay dividends on their stocks, and the presence of a dividend payment could be a factor that limits downward stock price pressure under adverse market conditions.

For notes linked in whole or in part to the Market Vectors Gold Miners ETF, risks associated with the gold and silver mining industries will affect the value of the notes.

The equity securities included in and that are generally tracked by the Market Vectors Gold Miners ETF are common stocks and ADRs of companies primarily engaged in mining for gold and silver. The shares of the Market Vectors Gold Miners ETF may be subject to increased price volatility as they are linked to a single industry, market or sector and may be more susceptible to adverse economic, market, political or regulatory occurrences affecting that industry, market or sector.

Because the Market Vectors Gold Miners ETF invests primarily in common stocks and ADRs of companies that are involved in the gold mining industries, the shares of the Market Vectors Gold Miners ETF are subject to certain risks associated with such companies. Competitive pressures may have a significant effect on the financial condition of such companies in the gold mining industry. Also, gold mining companies are highly dependent on the price of gold. Gold prices are subject to volatile price movements over short periods of time and are affected by numerous factors. These include economic factors, including, among other things, the structure of and confidence in the global monetary system, expectations of the future rate of inflation, the relative strength of, and confidence in, the U.S. dollar (the currency in which the price of gold is generally quoted), interest rates and gold borrowing and lending rates, and global or regional economic, financial, political, regulatory, judicial or other events. Gold prices may also be affected by industry factors such as industrial and jewelry demand, lending, sales and purchases of gold by the official sector, including central banks and other governmental agencies and multilateral institutions which hold gold, levels of gold production and production costs, and short-term changes in supply and demand because of trading activities in the gold market.

The Market Vectors Gold Miners ETF invests to a lesser extent in common stocks and ADRs of companies involved in the silver mining industry. Silver mining companies are highly dependent on the price of silver. Silver prices can fluctuate widely and may be affected by numerous factors. These include general economic trends, technical developments, substitution issues and regulation, as well as specific factors including industrial and jewelry demand, expectations with respect to the rate of inflation, the relative strength of the U.S. dollar (the currency in which the price of silver is

generally quoted) and other currencies, interest rates, central bank sales, forward sales by producers, global or regional political or economic events, and production costs and disruptions in major silver producing countries such as the United Mexican States and the Republic of Peru. The supply of silver consists of a combination of new mine production and existing stocks of bullion and fabricated silver held by governments, public and private financial institutions, industrial organizations and private individuals. In addition, the price of silver has on occasion been subject to very rapid short-term changes due to speculative activities. From time-to-time, above-ground inventories of silver may also influence the market. The major end-uses for silver include industrial applications, photography, jewelry and silverware.

For notes linked in whole or in part to the SPDR® Gold Trust, the price of gold is volatile and is affected by numerous factors.

The value of the SPDR® Gold Trust is closely related to the price of gold. A decrease in the price of gold may have a material adverse effect on the value of the notes and your return on your investment in the notes. Gold is subject to the effect of numerous factors. The following describes some of the factors affecting gold.

The price of gold is primarily affected by the global demand for and supply of gold. The market for gold bullion is global, and gold prices are subject to volatile price movements over short periods of time and are affected by numerous factors, including macroeconomic factors such as the structure of and confidence in the global monetary system, expectations regarding the future rate of inflation, the relative strength of, and confidence in, the U.S. dollar (the currency in which the price of gold is usually quoted), interest rates, gold borrowing and lending rates, and global or regional economic, financial, political, regulatory, judicial or other events. Gold prices may be affected by industry factors such as industrial and jewelry demand as well as lending, sales and purchases of gold by the official sector, including central banks and other governmental agencies and multilateral institutions that hold gold. Additionally, gold prices may be affected by levels of gold production, production costs and short-term changes in supply and demand due to trading activities in the gold market. From time to time, above-ground inventories of gold may also influence the market. It is not possible to predict the aggregate effect of all or any combination of these factors. The price of gold has recently been, and may continue to be, extremely volatile.

For notes linked in whole or in part to the SPDR® Gold Trust, economic or political events or crises could result in large-scale purchases or sales of gold, which could affect the price of gold and may adversely affect the value of your notes.

Many investors, institutions, governments and others purchase and sell gold as a hedge against inflation, market turmoil or uncertainty or political events. Under such circumstances, significant large-scale purchases or sales of gold by market participants may affect the price of gold, which could adversely affect the value of your notes. Crises in the future may impair gold's price performance which would, in turn, adversely affect the shares of the SPDR® Gold Trust and your investment in the notes.

For notes linked in whole or in part to the SPDR® Gold Trust, gold is traded on the London Bullion Market Association, so an investment in the notes may be subject to risks associated with the London Bullion Market Association.

The SPDR® Gold Trust is closely related to its underlying commodity (e.g., gold), which is traded on the London Bullion Market Association (the "LBMA"). Investments in securities indexed to the value of commodities that are traded on non-U.S. exchanges involve risks associated with the markets in those countries, including risks of volatility in those markets and governmental intervention in those markets.

The final price of gold will be determined by reference to fixing prices reported by the LBMA. The LBMA is a self-regulatory association of bullion market participants. Although all market-making members of the LBMA are supervised by the Bank of England and are required to satisfy a capital adequacy test, the LBMA itself is not a regulated entity. If the LBMA should cease operations, or if bullion trading should become subject to a value added tax or other tax or any other form of regulation currently not in place, the role of LBMA price fixings as a global benchmark for the value of gold may be adversely affected. The LBMA is a principals' market which operates in a manner more closely analogous to an over-the-counter physical commodity market than regulated futures markets, and certain features of U.S. futures contracts are not present in the context of LBMA trading. For example, there are no daily price limits on the LBMA which would otherwise restrict fluctuations in the prices of LBMA contracts. In a declining or rising market, it is possible that prices would continue to decline or rise without limitation within a trading day or over a period of trading days.

For notes linked in whole or in part to the SPDR® Gold Trust, the relevant exchange for gold has no obligation to consider your interests.

The price of the SPDR® Gold Trust is closely related to the price of gold. The relevant exchange for gold is responsible for calculating the official settlement price or fixing level, as applicable, for gold. The relevant exchange may alter, discontinue or suspend calculation or dissemination of the official settlement price or fixing level, as applicable, for gold. Any of these actions could adversely affect the value of the notes. The relevant exchange has no obligation to consider your interests in calculating or revising the official settlement price or fixing level, as applicable, for gold.

For notes linked in whole or in part to the SPDR® Gold Trust, termination of the SPDR® Gold Trust could affect adversely the value of the notes.

The SPDR® Gold Trust may be required to terminate and liquidate at a time that is disadvantageous to you. If the SPDR® Gold Trust is required to terminate and liquidate, such termination and liquidation could occur at a time that is disadvantageous to you, such as when the price of gold is higher than the price of gold at the time when you purchased your notes.

The performance of the SPDR® Gold Trust may not correlate with the price of gold.

The performance of SPDR® Gold Trust may not fully replicate the performance of the price of gold due to the fees and expenses charged by the SPDR® Gold Trust or by restrictions on access to gold due to other circumstances. The SPDR® Gold Trust does not generate any income and as the SPDR® Gold Trust regularly sells gold to pay for its ongoing expenses, the amount of gold represented by each share gradually declines over time. The SPDR® Gold Trust sells gold to pay expenses on an ongoing basis irrespective of whether the trading price of the shares rises or falls in response to changes in the price of gold. The sale of SPDR® Gold Trust's gold to pay expenses at a time of low gold prices (for notes that provide long exposure to the SPDR® Gold Trust) or at a time of high gold prices (for notes that provide short exposure to the SPDR® Gold Trust) could adversely affect the value of the notes. Additionally, there is a risk that part or all of the SPDR® Gold Trust's gold could be lost, damaged or stolen due to war, terrorism, theft, natural disaster or otherwise.

The net asset value of the SPDR® Gold Trust will reflect the performance of gold. However, because the shares of the SPDR® Gold Trust are traded on NYSE Arca, Inc. and are subject to market supply and investor demand, the market value of one Share of the SPDR® Gold Trust may differ from the net asset value per share of the SPDR® Gold Trust.

For all of the foregoing reasons, the performance of the SPDR® Gold Trust over the term of the notes may not correlate with the performance of the return on gold over the same period. Consequently, the return on the notes will not be the same as investing directly in the SPDR® Gold Trust, gold or other exchange-traded or over-the-counter instruments based on gold, and will not be the same as investing in a note or another financial product with payments linked in part to the performance of the SPDR® Gold Trust.

For notes linked in whole or in part to the SPDR® S&P® Homebuilders ETF, risks associated with the homebuilding industry will affect the value of the notes.

The homebuilding industry is significantly affected by factors in general and local economic conditions and real estate markets as well as by weather conditions, natural disasters and geopolitical events, any of which could affect the ability of the companies the equity securities of which are held by the SPDR® S&P® Homebuilders ETF to conduct their businesses profitably. The homebuilding industry is cyclical and has from time to time experienced significant difficulties. The prices of the equity securities held by the SPDR® S&P® Homebuilders ETF and, in turn, the price of the SPDR® S&P® Homebuilders ETF, will be affected by a number of factors that may either offset or magnify each other, including:

- a decline in the value of real estate properties;
- employment levels and job growth;
- the availability of financing for home buyers;
- interest rates;
- consumer confidence;
- housing demand;
- the availability of suitable undeveloped land;
- raw material and labor shortages and price fluctuations;
- federal, state and local laws and regulations concerning the development of land, homebuilding, home sales, consumer financing and environmental protection;
- competition among companies which engage in the homebuilding business; and
- the supply of homes and other housing alternatives.

In addition, weather conditions and natural disasters such as hurricanes, tornadoes, earthquakes, floods and fires can harm the homebuilding business. Geopolitical events, such as the aftermath of the war with Iraq and the terrorist attacks on September 11, 2001, and related market disruptions could also have a significant impact on the homebuilding business.

The factors described above could affect the homebuilding industry generally or regionally and could affect the value of the equity securities held by the SPDR® S&P® Homebuilders ETF and thus the price of the SPDR® S&P® Homebuilders ETF during the term of the notes.

For notes linked in whole or in part to the SPDR® S&P® Homebuilders ETF, there will be no direct correlation between the value of the notes or the price of the SPDR® S&P® Homebuilders ETF and residential housing prices.

There is no direct linkage between the price of the SPDR® S&P® Homebuilders ETF and residential housing prices in specific regions or residential housing prices in general. While residential housing prices may be one factor that could affect the prices of the equity securities held by the SPDR® S&P® Homebuilders ETF and consequently the price of the SPDR® S&P® Homebuilders ETF, the price of the SPDR® S&P® Homebuilders ETF and the notes are not directly linked to movements of residential housing prices and may be affected by factors unrelated to such movements.

For notes linked in whole or in part to the SPDR® S&P® Metals & Mining ETF, risks associated with the metals and mining industry will affect the value of the notes.

All or substantially all of the equity securities held by the SPDR® S&P® Metals & Mining ETF are issued by companies whose primary lines of business are directly associated with the metals and mining industry. As a result, the value of the notes may be subject to greater volatility and be more adversely affected by a single economic, political or regulatory occurrence affecting this industry than a different investment linked to securities of a more broadly diversified group of issuers. The metals and mining industry can be significantly affected by international political and economic developments, energy conservation, the success of exploration projects, commodity prices and tax and other government regulations. Companies involved in the metals and mining industry may benefit from government subsidies or certain trade protections. If those subsidies or trade protections are reduced or removed, the profits of such companies may be affected, potentially drastically. In addition, competitive pressures and the cyclical nature of the metal and mining industry may have a significant effect on the financial condition of these companies. These companies are also subject to risks of changes in exchange rates, terrorist attacks, depletion of resources and reduced demand as a result of increases in energy efficiency, substitution and energy conservation. Such companies are subject to extensive federal, state and local environmental laws and regulations regarding air emissions and the disposal of hazardous materials and may be at risk for environmental damage claims. These factors could affect the metals and mining industry and could affect the value of the equity securities held by the SPDR® S&P® Metals & Mining ETF and the price of the SPDR® S&P® Metals & Mining ETF during the term of the notes, which may adversely affect the value of your notes.

For notes linked in whole or in part to the Technology Select Sector SPDR® Fund, risks associated with the technology sector will affect the value of the notes.

All or substantially all of the equity securities held by the Technology Select Sector SPDR® Fund are issued by companies whose primary line of business is directly associated with the technology sector, including the following industries: computers and peripherals; software; diversified telecommunication services; communications equipment; semiconductors & semiconductor equipment; internet software and services; IT services; electronic equipment, instruments and components; wireless telecommunication services and office electronics. The Technology Select Sector SPDR® Fund is concentrated in the technology sector, which means the Technology Select Sector SPDR® Fund will be more affected by the performance of the technology sector than a fund or index that was more diversified. Market or economic factors impacting technology companies and companies that rely heavily on technology advances could have a major effect on the value of the Technology Select Sector SPDR® Fund. The value of stocks of technology companies and companies that rely heavily on technology is particularly vulnerable to rapid changes in technology product cycles, rapid product obsolescence, government regulation and competition, both domestically and internationally, including competition from foreign competitors with lower production costs. Technology companies and companies that rely heavily on technology, especially those of smaller, less-seasoned companies, tend to be more volatile than the overall market. Additionally, companies in the technology sector may face dramatic and often unpredictable changes in growth rates and competition for the services of qualified personnel. These factors could affect the technology sector generally or regionally and could affect the value of the securities held by the Technology Select Sector SPDR® Fund and thus the value of the Technology Select Sector SPDR® Fund during the term of the notes, which may adversely affect the value of your notes.

The performance of the United States Oil Fund, LP may not fully replicate the performance of the price of light, sweet crude oil.

United States Commodity Funds LLC, the general partner of the United States Oil Fund, LP, is responsible for investing the assets of the United States Oil Fund, LP in accordance with the objectives and policies of the United States Oil Fund, LP. The assets of the United States Oil Fund, LP consist primarily of investments in futures contracts for light, sweet crude oil, other types of crude oil, heating oil, gasoline, natural gas, and other petroleum-based fuels that are traded on the New York Mercantile Exchange, ICE Futures or other U.S. and foreign exchanges (collectively, "oil futures contracts") and other oil interests such as cash-settled options on oil futures contracts, forward contracts for oil, and over-the-counter transactions that are based on the price of oil, other petroleum-based fuels, oil futures contracts and indices based on the foregoing (collectively, "other oil interests" and together with oil futures contracts, "oil interests"). The United States Oil Fund, LP seeks to achieve its investment objective by investing in a mix of oil futures contracts and other oil interests such that changes in the net asset value of the United States Oil Fund, LP will closely track the changes in the price of a specified oil futures contract (the "benchmark oil futures contract"). The United States Oil Fund, LP's general partner believes that the benchmark oil futures contract historically has exhibited a close correlation with the spot price of light, sweet crude oil.

There is no assurance that the general partner of the United States Oil Fund, LP will successfully implement its investment strategy and there is a risk that changes in the price of United States Oil Fund, LP units will not closely track changes in the spot price of light, sweet crude oil. The performance of the United States Oil Fund, LP may not exactly replicate the performance of the oil interests underlying the United States Oil Fund, LP because the United States Oil Fund, LP will reflect transaction costs and fees. It is also possible that the United States Oil Fund, LP may not fully replicate or may in certain circumstances diverge significantly from the performance of the oil interests underlying the United States Oil Fund, LP due to the temporary unavailability of certain securities in the secondary market or the performance of any derivative instruments contained in the United States Oil Fund, LP. This could also happen if the price of the units does not correlate closely with the United States Oil Fund, LP's net asset value; changes in the United States Oil Fund, LP's net asset value do not closely correlate with changes in the price of the benchmark oil futures contract; or changes in the price of the benchmark oil futures contract do not closely correlate with changes in the cash or spot price of light, sweet crude oil. Light, sweet crude oil has also demonstrated a lack of correlation with world crude oil prices due to structural differences between the U.S. market for crude oil and the international market for crude oil. The prices of light, sweet crude oil may be more volatile than world crude oil prices generally.

For notes linked in whole or in part to the United States Oil Fund, LP, global energy commodity prices are primarily affected by the global demand for and supply of these commodities, but are also significantly influenced by speculative actions and by currency exchange rates.

Prices for energy commodities, which includes crude oil, are affected by governmental programs and policies, national and international political and economic events, changes in interest and exchange rates, trading activities in commodities and related contracts, trade, fiscal, monetary and exchange control policies and, with respect to oil specifically, drought, floods, weather, government intervention, environmental policies, embargoes and tariffs. Demand for refined petroleum products by consumers, as well as the agricultural, manufacturing and transportation industries, affects the price of energy commodities. Sudden disruptions in the supplies of energy commodities, such as those caused by war, natural events, accidents or acts of terrorism, may cause prices of energy commodities futures contracts to become extremely volatile and unpredictable. Also, sudden and dramatic changes in the futures market may occur, for example, upon a cessation of hostilities that may exist in countries producing energy commodities, the introduction of new or previously withheld supplies into the market or the introduction of substitute products or commodities. In particular, supplies of crude oil may increase or decrease depending on, among other factors, production decisions by the Organization of Oil and Petroleum Exporting Countries ("OPEC") and other crude oil producers. Crude oil prices are determined with significant influence by OPEC, which has the capacity to influence oil prices worldwide because its members possess a significant portion of the world's oil supply. Crude oil prices are generally more volatile and subject to dislocation than prices of other commodities. Demand for energy commodities such as crude oil is generally linked to economic activity, and will tend to reflect general economic conditions.

For notes linked in whole or in part to the United States Oil Fund, LP, the price of crude oil may change unpredictably and affect the price of the United States Oil Fund, LP and the value of the notes in unforeseen ways.

The price of the United States Oil Fund, LP is linked closely to the price of light, sweet crude oil. The price of crude oil is subject to volatile price movements over short periods of time and is generally affected by numerous factors including:

- demand for refined petroleum products by consumers, as well as the agricultural, manufacturing and transportation industries;
- economic conditions that affect the end-use of crude oil as a refined product such as transport fuel, industrial fuel and in-home heating fuel;
- U.S. government regulations, such as environmental or consumption policies;
- geopolitical events, labor activity and, in particular, direct government intervention such as embargos;
- supply disruptions in major oil producing regions of the world, production decisions by OPEC and other crude oil producers and cessation of hostilities that may exist in countries producing oil;
- sudden disruptions in the supply of oil due to war, natural events, accidents or acts of terrorism; and
- the introduction of new or previously withheld supplies into the market or the introduction of substitute products or commodities.

EQUITY INDEX DESCRIPTIONS

THE DOW JONES INDUSTRIAL AVERAGE™

We have derived all information contained in this underlying supplement regarding the Dow Jones Industrial Average™, including, without limitation, its make-up, method of calculation and changes in its components, from publicly available information prepared by S&P Dow Jones Indices LLC, a subsidiary of The McGraw-Hill Companies, Inc., without independent verification. This information reflects the policies of, and is subject to change by S&P Dow Jones Indices LLC. The Dow Jones Industrial Average™ is an index calculated, published and disseminated by S&P Dow Jones Indices LLC. S&P Dow Jones Indices LLC has no obligation to continue to publish, and may discontinue publication of, the Dow Jones Industrial Average™.

The Dow Jones Industrial Average™ is reported by Bloomberg L.P. under the ticker symbol "INDU."

In July 2012, The McGraw-Hill Companies, Inc. ("McGraw-Hill"), the owner of the S&P Indices business, and CME Group Inc. ("CME Group"), the 90% owner of the CME Group and Dow Jones & Company, Inc. ("Dow Jones") joint venture that owns the Dow Jones Indexes business, formed a new joint venture, S&P Dow Jones Indices LLC, which owns the S&P Indices business and the Dow Jones Indexes business, including the Dow Jones Industrial Average™.

The Dow Jones Industrial Average™ was introduced to the investing public by Charles Dow on May 26, 1896 and originally comprised only 12 stocks. It has since become one of the most well-known and widely followed indicators of the U.S. stock market and is the oldest continuing stock market index in the world. The Dow Jones Industrial Average™ consists of 30 common stocks chosen as representative of the broad market of U.S. industry. Many of the companies represented in the Dow Jones Industrial Average™ are household names and leaders in their respective industries, and their stocks are widely held by both individual and institutional investors. Because the Dow Jones Industrial Average™ is so well known and its performance is generally perceived to reflect that of the overall domestic equity market, it is often used as a benchmark for investments in equities, mutual funds, and other asset classes.

The Dow Jones Industrial Average™ is a price-weighted index rather than market capitalization-weighted index. In essence, the Dow Jones Industrial Average™ consists of one share of each of the 30 stocks included in the Dow Jones Industrial Average™. Thus, the weightings of the components of the Dow Jones Industrial Average™ are affected only by changes in their prices, while the weightings of stocks in other indices are affected by price changes and changes in shares outstanding. This distinction stems from the fact that, when initially created, the Dow Jones Industrial Average™ was a simple average (hence the name), and was computed merely by adding up the prices of the stocks in the Dow Jones Industrial Average™ and dividing that sum by the total number of stocks in the Dow Jones Industrial Average™. However, it eventually became clear that a method was needed to smooth out the effects of stock splits and other composition changes to prevent these events from distorting the level of the Dow Jones Industrial Average™. Therefore, a divisor was created that has been periodically adjusted over time. This divisor, when divided into the sum of the prices of the stocks in the Dow Jones Industrial Average™, generates the number that is reported every day in newspapers, on television and radio, and over the internet. With the incorporation of the divisor, the Dow Jones Industrial Average™ can no longer be considered an average.

The Dow Jones Industrial Average™ is maintained by the Dow Jones Averages Index Committee (the "Averages Committee"), composed of S&P Dow Jones Indices LLC staff as well as non-S&P Dow Jones Indices LLC staff as minority members. The Averages Committee meets at least semi-annually to review and make changes to the composition of the Dow Jones Industrial Average™. While component selection is not governed by quantitative rules, a stock typically is added only if it has an

excellent reputation, demonstrates sustained growth and is of interest to a large number of investors. The inclusion of any particular company in the Dow Jones Industrial Average™ does not constitute a prediction as to the company's future results of operations or stock market performance. For the sake of continuity, composition changes are rare, and generally have occurred only after corporate acquisitions or other dramatic shifts in a component company's core business. When such an event necessitates that one component be replaced, the entire index is reviewed. As a result, multiple component changes are often implemented simultaneously.

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- have any responsibility or liability for the administration, management or marketing of the notes.
- consider the needs of the notes or the owners of the notes in determining, composing or calculating the DJIA or have any obligation to do so.

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- the accuracy or completeness of the DJIA or its data;
- the merchantability and the fitness for a particular purpose or use of the DJIA or its data;
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THE EURO STOXX 50® INDEX

We have derived all information contained in this underlying supplement regarding the EURO STOXX 50® Index, including, without limitation, its make-up, method of calculation and changes in its components, from publicly available information, without independent verification. This information reflects the policies of, and is subject to change by, STOXX Limited. The EURO STOXX 50® Index is calculated, maintained and published by STOXX Limited. STOXX Limited has no obligation to continue to publish, and may discontinue publication of, the EURO STOXX 50® Index.

The EURO STOXX 50® Index is reported by Bloomberg L.P. under the ticker symbol "SX5E."

The EURO STOXX 50® Index was created by STOXX Limited, a joint venture between Deutsche Börse AG and SIX Group AG. Publication of the EURO STOXX 50® Index began on February 26, 1998, based on an initial EURO STOXX 50® Index value of 1,000 at December 31, 1991. The EURO STOXX 50® Index is disseminated on the STOXX Limited website: <http://www.stoxx.com>, which sets forth, among other things, the country and industrial sector weightings of the securities included in the EURO STOXX 50® Index and updates these weightings at the end of each quarter. Information contained in the STOXX Limited website is not incorporated by reference in, and should not be considered a part of, this underlying supplement or the relevant terms supplement.

On March 1, 2010, STOXX Limited announced the removal of the "Dow Jones" prefix from all of its indices, including the EURO STOXX 50® Index.

EURO STOXX 50® Index Composition and Maintenance

The EURO STOXX 50® Index is composed of 50 component stocks of market sector leaders in terms of free-float market capitalization from within the 19 EURO STOXX® Supersector indices, which represent the Eurozone portion of the STOXX Europe 600® Supersector indices. The STOXX Europe 600® Supersector indices contain the 600 largest stocks traded on the major exchanges of 18 European countries.

The composition of the EURO STOXX 50® Index is reviewed annually, based on the closing stock data on the last trading day in August. The component stocks are announced on the first trading day in September. Changes to the component stocks are implemented on the third Friday in September and are effective the following trading day. The composition of the EURO STOXX 50® Index is also reviewed monthly to ensure that component stocks still remain eligible for inclusion. Any resulting changes from the monthly review are implemented on the close of the fifth trading day following the monthly review and are effective the next trading day. Changes in the composition of the EURO STOXX 50® Index are made to ensure that the EURO STOXX 50® Index includes the 50 market sector leaders from within the EURO STOXX® Index.

The free float factors for each component stock used to calculate the EURO STOXX 50® Index, as described below, are reviewed, calculated and implemented on a quarterly basis and are fixed until the next quarterly review.

The EURO STOXX 50® Index is also reviewed on an ongoing basis. Corporate actions (including initial public offerings, mergers and takeovers, spin-offs, delistings and bankruptcy) that affect the EURO STOXX 50® Index composition are immediately reviewed. Any changes are announced, implemented and effective in line with the type of corporate action and the magnitude of the effect.

EURO STOXX 50® Index Calculation

The EURO STOXX 50® Index is calculated with the “Laspeyres formula,” which measures the aggregate price changes in the component stocks against a fixed base quantity weight. The formula for calculating the EURO STOXX 50® Index value at any time can be expressed as follows:

$$\text{Index} = \frac{\text{free float market capitalization of the EURO STOXX 50® Index}}{\text{Divisor}}$$

The “free float market capitalization of the EURO STOXX 50® Index” is equal to the sum of the products of the price, number of shares, free float factor and weighting cap factor for each component stock as of the time the EURO STOXX 50® Index is being calculated. Each component’s weight is capped at 10% of the free float market capitalization of the EURO STOXX 50® Index.

The divisor for the EURO STOXX 50® Index is adjusted to maintain the continuity of EURO STOXX 50® Index values despite changes due to corporate actions. The following is a summary of the adjustments to any component stock made for corporate actions and the effect of such adjustment on the divisor, where shareholders of the component stock will receive “B” number of shares for every “A” share held (where applicable).

<p><i>(1) Cash dividend (applies to return indices only):</i></p> <p>Cash distributions that are within the scope of the regular dividend policy or that the company defines as a regular distribution</p> <p>Adjusted price = closing price – dividend announced by the company × (1 – withholding tax)</p> <p>Divisor: decreases</p>	<p><i>(2) Special cash dividend (applies to price and return indices):</i></p> <p>Cash distributions that are outside the scope of the regular dividend policy or that the company defines as an extraordinary distribution</p> <p>Adjusted price = closing price – dividend announced by the company × (1 – withholding tax if applicable)</p> <p>Divisor: decreases</p>
<p><i>(3) Split and reverse split:</i></p> <p>Adjusted price = closing price × A / B</p> <p>New number of shares = old number of shares × B / A</p> <p>Divisor: unchanged</p>	
<p><i>(4) Rights offering:</i></p> <p>If the subscription price is not available or if the subscription price is equal to or greater than the closing price on the day before the effective date, then no adjustment is made.</p> <p>In case the share increase is greater than or equal to 100% ($B / A \geq 1$), the adjustment of the shares and weight factors are delayed until the new shares are listed.</p> <p>Adjusted price = (closing price × A + subscription price × B) / (A + B)</p> <p>New number of shares = old number of shares × (A + B) / A</p>	

Divisor: increases	
<p>(5) <i>Stock dividend:</i></p> <p>Adjusted price = closing price $\times A / (A + B)$</p> <p>New number of shares = old number of shares $\times (A + B) / A$</p> <p>Divisor: unchanged</p>	<p>(6) <i>Stock dividend (from treasury stock):</i></p> <p>Stock dividends from treasury stocks will be adjusted as cash dividends.</p> <p>If treated as regular cash dividend, only the return indices are adjusted:</p> <p>Adjusted close = close – close $\times B / (A + B)$</p> <p>If treated as extraordinary dividend, the price and return indices are adjusted:</p> <p>Adjusted close = close – close $\times B / (A + B)$</p> <p>Divisor: decreases</p>
<p>(7) <i>Stock dividend of another company:</i></p> <p>Adjusted price = (closing price $\times A$ – price of other company $\times B$) / A</p> <p>Divisor: decreases</p>	<p>(8) <i>Return of capital and share consolidation:</i></p> <p>Adjusted price = (closing price – capital return announced by company $\times (1 - \text{withholding tax})$) $\times A / B$</p> <p>New number of shares = old number of shares $\times B / A$</p> <p>Divisor: decreases</p>
<p>(9) <i>Repurchase of shares / self tender:</i></p> <p>Adjusted price = ((price before tender \times old number of shares) – (tender price \times number of tendered shares)) / (old number of shares – number of tendered shares)</p> <p>New number of shares = old number of shares – number of tendered shares</p> <p>Divisor: decreases</p>	<p>(10) <i>Spin-off:</i></p> <p>Adjusted price = (closing price $\times A$ – price of spun-off shares $\times B$) / A</p> <p>Divisor: decreases</p>
<p>(11) <i>Combination stock distribution (dividend or split) and rights offering:</i></p> <p>For this corporate action, the following additional assumptions apply: Shareholders receive B new shares from the distribution and C new shares from the rights offering for every A share held. If A is not equal to one share, all the following “new number of shares” formulae need to be divided by A:</p>	
<p>- If rights are applicable after stock distribution (one action applicable to other):</p> <p>Adjusted price = (closing price $\times A$ + subscription price $\times C \times (1 + B / A)$) / ((A + B) $\times (1 + C / A)$)</p>	<p>- If stock distribution is applicable after rights (one action applicable to other):</p> <p>Adjusted price = (closing price $\times A$ + subscription price $\times C$) / ((A + C) $\times (1 + B / A)$)</p> <p>New number of shares = old number of shares $\times ((A + C) \times$</p>

New number of shares = old number of shares $\times ((A + B) \times (1 + C / A)) / A$ Divisor: increases	$(1 + B / A)$ Divisor: increases
- <i>Stock distribution and rights (neither action is applicable to the other):</i> Adjusted price = (closing price $\times A$ + subscription price $\times C$) / (A + B + C) New number of shares = old number of shares $\times (A + B + C) / A$ Divisor: increases	
(12) <i>Addition / deletion of a company:</i> No price adjustments are made. The net change in market capitalization determines the divisor adjustment.	(12) <i>Free float and shares changes:</i> No price adjustments are made. The net change in market capitalization determines the divisor adjustment.

License Agreement with STOXX Limited

We have entered into an agreement with STOXX Limited ("STOXX") providing us and certain of our affiliates or subsidiaries identified in that agreement with a non-exclusive license and, for a fee, with the right to use the EURO STOXX 50® Index, which is owned and published by STOXX Limited, in connection with certain securities, including the notes.

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 - The merchantability and the fitness for a particular purpose or use of the EURO STOXX 50® Index and its data;

- **STOXX and its Licensors will have no liability for any errors, omissions or interruptions in the EURO STOXX 50® Index or its data; and**
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THE EURO STOXX® BANKS INDEX

We have derived all information contained in this underlying supplement regarding the EURO STOXX® Banks Index, including, without limitation, its make-up, method of calculation and changes in its components, from publicly available information, without independent verification. This information reflects the policies of, and is subject to change by, STOXX Limited. The EURO STOXX® Banks Index is calculated, maintained and published by STOXX Limited. STOXX Limited has no obligation to continue to publish, and may discontinue publication of, the EURO STOXX® Banks Index.

The EURO STOXX® Banks Index is calculated in euros and is reported by Bloomberg L.P. under the ticker symbol "SX7E."

The EURO STOXX® Banks Index was created by STOXX Limited, a joint venture between Deutsche Börse AG and SIX Group AG. Publication of the EURO STOXX® Banks Index began on June 15, 1998, based on an initial EURO STOXX® Banks Index value of 100 at December 31, 1991. The EURO STOXX® Banks Index is disseminated on the STOXX Limited website: <http://www.stoxx.com>, which sets forth, among other things, the country and industrial sector weightings of the securities included in the EURO STOXX® Banks Index and updates these weightings at the end of each quarter. Information contained in the STOXX Limited website is not incorporated by reference in, and should not be considered a part of, this underlying supplement.

Index Composition

The EURO STOXX® Banks Index is one of 19 EURO STOXX® Supersector indices that compose the STOXX® Europe 600 Index. The STOXX® Europe 600 Index contains the 600 largest European stocks by free float market capitalization. Each of the 19 EURO STOXX® Supersector indices contain the companies within the Eurozone subset of the STOXX® Europe 600 Index that fall within the relevant supersector, determined by reference to the Industry Classification Benchmark ("ICB"), an international system for categorizing companies that is maintained by FTSE International Limited.

The EURO STOXX® Banks Index includes companies in the banks supersector, which tracks companies providing a broad range of financial services, including retail banking, loans and money transmissions. The EURO STOXX® Banks Index currently includes 30 stocks of banks market sector leaders mainly from the twelve largest Eurozone countries: Austria, Belgium, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal and Spain.

The composition of each of the EURO STOXX® Supersector indices is reviewed quarterly, based on the closing stock data on the last trading day of the month following the implementation of the last quarterly index review. The component stocks are announced on the fourth Tuesday of the month immediately prior to the review implementation month. Changes to the component stocks are implemented on the third Friday in each of March, June, September and December and are effective the following trading day.

The STOXX® Europe 600 Index is also reviewed on an ongoing basis, and any changes affecting the STOXX® Europe 600 Index are also applied to the relevant EURO STOXX® Supersector index. Corporate actions (including initial public offerings, mergers and takeovers, spin-offs, delistings and bankruptcy) that affect the STOXX® Europe 600 Index composition are immediately reviewed. Any changes are announced, implemented and effective in line with the type of corporate action and the magnitude of the effect.

The free float factors and weighting cap factors for each component stock used to calculate the EURO STOXX® Supersector indices, as described below, are reviewed, calculated and implemented on a quarterly basis and are fixed until the next quarterly review.

Index Calculation

The EURO STOXX® Supersector indices are calculated with the “Laspeyres formula,” which measures the aggregate price changes in the component stocks against a fixed base quantity weight. The formula for calculating each EURO STOXX® Supersector index value at any time can be expressed as follows:

$$\text{Index} = \frac{\text{free float market capitalization of the relevant EURO STOXX® Supersector Index}}{\text{Divisor}}$$

The “free float market capitalization of the relevant EURO STOXX® Supersector index” is equal to the sum of the products of the price, number of shares, free float factor and weighting cap factor for each component stock as of the time the relevant EURO STOXX® Supersector index is being calculated.

The divisor for each EURO STOXX® Supersector index is adjusted to maintain the continuity of that EURO STOXX® Supersector index values despite changes due to corporate actions. The following is a summary of the adjustments to any component stock made for corporate actions and the effect of such adjustment on the divisor, where shareholders of the component stock will receive “B” number of shares for every “A” share held (where applicable).

<p>(1) <i>Cash dividend (applies to return indices only):</i></p> <p>Cash distributions that are within the scope of the regular dividend policy or that the company defines as a regular distribution</p> <p>Adjusted price = closing price – dividend announced by the company × (1 – withholding tax)</p> <p>Divisor: decreases</p>	<p>(2) <i>Special cash dividend (applies to price and return indices):</i></p> <p>Cash distributions that are outside the scope of the regular dividend policy or that the company defines as an extraordinary distribution</p> <p>Adjusted price = closing price – dividend announced by the company × (1 – withholding tax if applicable)</p> <p>Divisor: decreases</p>
<p>(3) <i>Split and reverse split:</i></p> <p>Adjusted price = closing price × A / B</p> <p>New number of shares = old number of shares × B / A</p> <p>Divisor: unchanged</p>	
<p>(4) <i>Rights offering:</i></p> <p>If the subscription price is not available or if the subscription price is equal to or greater than the closing price on the day before the effective date, then no adjustment is made.</p> <p>In case the share increase is greater than or equal to 100% ($B / A \geq 1$), the adjustment of the shares and weight factors are delayed until the new shares are listed.</p>	

<p>Adjusted price = (closing price × A + subscription price × B) / (A + B)</p> <p>New number of shares = old number of shares × (A + B) / A</p> <p>Divisor: increases</p>	
<p>(5) <i>Stock dividend:</i></p> <p>Adjusted price = closing price × A / (A + B)</p> <p>New number of shares = old number of shares × (A + B) / A</p> <p>Divisor: unchanged</p>	<p>(6) <i>Stock dividend (from treasury stock):</i></p> <p>Stock dividends from treasury stocks will be adjusted as cash dividends.</p> <p>If treated as regular cash dividend, only the return indices are adjusted:</p> <p>Adjusted close = close – close × B / (A + B)</p> <p>If treated as extraordinary dividend, the price and return indices are adjusted:</p> <p>Adjusted close = close – close × B / (A + B)</p> <p>Divisor: decreases</p>
<p>(7) <i>Stock dividend of another company:</i></p> <p>Adjusted price = (closing price × A – price of other company × B) / A</p> <p>Divisor: decreases</p>	<p>(8) <i>Return of capital and share consolidation:</i></p> <p>Adjusted price = (closing price – capital return announced by company × (1-withholding tax)) × A / B</p> <p>New number of shares = old number of shares × B / A</p> <p>Divisor: decreases</p>
<p>(9) <i>Repurchase of shares / self tender:</i></p> <p>Adjusted price = ((price before tender × old number of shares) – (tender price × number of tendered shares)) / (old number of shares – number of tendered shares)</p> <p>New number of shares = old number of shares – number of tendered shares</p> <p>Divisor: decreases</p>	<p>(10) <i>Spin-off:</i></p> <p>Adjusted price = (closing price × A – price of spun-off shares × B) / A</p> <p>Divisor: decreases</p>
<p>(11) <i>Combination stock distribution (dividend or split) and rights offering:</i></p> <p>For this corporate action, the following additional assumptions apply: Shareholders receive B new shares from the distribution and C new shares from the rights offering for every A share held. If A is not equal to one share, all the following “new number of shares” formulae need to be divided by A:</p>	
<p>- <i>If rights are applicable after stock distribution (one action applicable to other):</i></p> <p>Adjusted price = (closing price × A + subscription price × C ×</p>	<p>- <i>If stock distribution is applicable after rights (one action applicable to other):</i></p> <p>Adjusted price = (closing price × A + subscription price × C) / ((A</p>

$\frac{(1 + B / A))}{(A + B) \times (1 + C / A))}$ <p>New number of shares = old number of shares $\times ((A + B) \times (1 + C / A)) / A$</p> <p>Divisor: increases</p>	$+ C) \times (1 + B / A))$ <p>New number of shares = old number of shares $\times ((A + C) \times (1 + B / A))$</p> <p>Divisor: increases</p>
<p><i>- Stock distribution and rights (neither action is applicable to the other):</i></p> <p>Adjusted price = (closing price $\times A$ + subscription price $\times C$) / (A + B + C)</p> <p>New number of shares = old number of shares $\times (A + B + C) / A$</p> <p>Divisor: increases</p>	
<p><i>(12) Addition / deletion of a company:</i></p> <p>No price adjustments are made. The net change in market capitalization determines the divisor adjustment.</p>	<p><i>(12) Free float and shares changes:</i></p> <p>No price adjustments are made. The net change in market capitalization determines the divisor adjustment.</p>

License Agreement with STOXX Limited

Our affiliate has entered into an agreement with STOXX Limited ("STOXX") providing us and certain of our affiliates or subsidiaries identified in that agreement with a non-exclusive license and, for a fee, with the right to use the EURO STOXX® Banks Index, which is owned and published by STOXX Limited, in connection with certain securities, including the notes.

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- *STOXX and its Licensors will have no liability for any errors, omissions or interruptions in the EURO STOXX® Banks Index or its data; and*
- *Under no circumstances will STOXX or its Licensors be liable for any lost profits or indirect, punitive, special or consequential damages or losses, even if STOXX or its Licensors knows that they might occur.*

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THE FTSE™ 100 INDEX

We have derived all information in this underlying supplement regarding the FTSE™ 100 Index, including, without limitation, its make-up, method of calculation and changes in its components, from publicly available information, without independent verification. This information reflects the policies of, and is subject to change by FTSE International Limited ("FTSE"). FTSE has no obligation to continue to publish, and may discontinue publication of, the FTSE™ 100 Index.

The FTSE™ 100 Index is reported by Bloomberg L.P. under the ticker symbol "UKX."

The FTSE™100 Index is an index calculated, published and disseminated by FTSE, a company owned equally by the London Stock Exchange (the "LSE") and the Financial Times. The FTSE™ 100 Index measures the composite price performance of stocks of the largest 100 companies (determined on the basis of market capitalization) traded on the LSE. Publication of the FTSE™ 100 Index began in January 1984.

The FTSE™ 100 Index is calculated by (i) multiplying the per share price of each stock included in the FTSE™ 100 Index by the number of outstanding shares, (ii) calculating the sum of all these products (such sum being hereinafter the "FTSE Aggregate Market Value") as of the starting date of the FTSE™ 100 Index, (iii) dividing the FTSE Aggregate Market Value by a divisor which represents the FTSE Aggregate Market Value on the base date of the FTSE™ 100 Index and which can be adjusted to allow changes in the issued share capital of individual underlying stocks including the deletion and addition of stocks, the substitution of stocks, stock dividends and stock splits to be made without distorting the FTSE™ 100 Index and (iv) multiplying the result by 1,000. Because of such capitalization weighting, movements in share prices of companies with relatively larger market capitalization will have a greater effect on the level of the entire FTSE™ 100 Index than will movements in share prices of companies with relatively smaller market capitalization.

The 100 stocks included in the FTSE™ 100 Index (the "FTSE Underlying Stocks") were selected from a reference group of stocks trading on the LSE that were selected by excluding certain stocks that have low liquidity based on public float, accuracy and reliability of prices, size and number of trading days. The FTSE Underlying Stocks were selected from this reference group by selecting 100 stocks with the largest market value. A list of the issuers of the FTSE Underlying Stocks is available from FTSE.

The FTSE™ 100 Index is reviewed quarterly by the FTSE European/Middle East/Africa Regional Committee (the "Index Steering Committee") in order to maintain continuity in the level. The Index Steering Committee undertakes the reviews of the FTSE™ 100 Index and ensures that constituent changes and index calculations are made in accordance with the ground rules of the FTSE™ 100 Index. The meetings to review the constituents will be held on the Wednesday after the first Friday in March, June, September and December. Each review will be based on data from the close of business on the Tuesday before the first Friday of the review month. Any constituent changes normally will be implemented on the trading day following the third Friday of the same month.

FTSE prepares information regarding possible companies to be included or excluded from the FTSE Index using the close of business figures from the Tuesday before a review. The review is then presented to the Index Steering Committee for approval.

The FTSE Underlying Stocks may be replaced, if necessary, in accordance with deletion/addition rules that provide generally for the removal and replacement of a stock from the FTSE™ 100 Index if such stock is delisted or its issuer is subject to a takeover offer that has been declared unconditional or it has ceased, in the opinion of the Index Steering Committee, to be a viable component of the FTSE™ 100 Index. To maintain continuity, a stock will be added at the quarterly review if it has risen to 90th place or above and a stock will be deleted if at the quarterly review it

has fallen to 111th place or below, in each case ranked on the basis of market capitalization. A constant number of constituents will be maintained for the FTSE 100 Index. Where a greater number of companies qualify to be inserted in the index than those qualifying to be deleted, the lowest ranking constituents presently included in the index will be deleted to ensure that an equal number of companies are inserted and deleted at the periodic review. Likewise, where a greater number of companies qualify to be deleted than those qualifying to be inserted, the securities of the highest ranking companies which are presently not included in the index will be inserted to match the number of companies being deleted at the periodic review.

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THE FTSE GEIS INDICES

We have derived all information in this underlying supplement regarding the FTSE Emerging Index and the FTSE Developed Europe Index (each, a “FTSE GEIS Index” and together, the “FTSE GEIS Indices”) including, without limitation, its make-up, method of calculation and changes in its components, from publicly available information, without independent verification. This information reflects the policies of, and is subject to change by FTSE International Limited (“FTSE”). FTSE has no obligation to continue to publish, and may discontinue publication of, the FTSE GEIS Indices.

The FTSE Global Equity Index Series draws from a universe of over 7,400 securities in 47 different countries. It attempts to represent every equity and sector relevant to international investors’ needs and has a modular structure. The universe is divided into Developed, Advanced Emerging and Secondary Emerging segments, with indexes calculated at regional, national and sector level.

The FTSE Emerging Index

The FTSE Emerging Index is included in the FTSE Global Equity Index Series. The FTSE Emerging Index is the aggregate of the Advanced and Secondary Emerging segments of the FTSE Global Equity Index Series universe.

The FTSE Developed Europe Index

The FTSE Developed Europe Index is derived from the FTSE Global Equity Index Series. The FTSE Developed Europe Index is a market-capitalization weighted index representing the performance of around 500 large and mid cap companies in 16 Developed European markets, including the UK. It is made up of approximately 500 common stocks of companies located in 16 European countries—mostly companies in the United Kingdom, France, Switzerland and Germany (which made up approximately 33%, 14%, 14% and 13%, respectively, of the FTSE Developed Europe Index’s market capitalization as of September 30, 2014). Other countries represented in the FTSE Developed Europe Index include Austria, Belgium and Luxembourg, Denmark, Finland, Greece, Ireland, Italy, the Netherlands, Norway, Portugal, Spain, and Sweden.

Country Selection Criteria

The following criteria must be met before a country can be included:

- Permission for direct equity investment by non-nationals
- Availability of accurate and timely data
- Non-existence of any significant exchange controls which would prevent the timely repatriation of capital or dividends
- The demonstration of significant international investor interest in the local equity market
- Existence of adequate liquidity in the market

A country’s classification as Developed, Advanced Emerging or Secondary Emerging is largely dependent on the following factors:

- Wealth (Gross National Income per capita)
- Total stock market capitalization

- Breadth and depth of market
- Any restrictions on foreign investment
- Free flow of foreign exchange
- Reliable and transparent price discovery
- Efficient market infrastructure (trading, reporting and settlement systems, derivatives market etc.)
- Oversight by independent regulator

The FTSE Regional Committees will review the classification of countries between Developed, Advanced Emerging and Secondary Emerging on a regular basis. The FTSE Policy Group will publish a watch list of countries being monitored for promotion or demotion and will normally give at least six months' notice before changing the classification of any country.

New countries, which in the view of the FTSE Policy Group and FTSE Regional Committees comply with these rules, may be added at any time after a prior announcement. Once a country has met the criteria, it will be eligible for inclusion in the FTSE Global Equity Index Series. However, for the country index to be constructed and included in the FTSE Global Equity Index Series, it must have a minimum of 3 companies which pass all the eligibility criteria. An existing country index will remain in the FTSE Global Equity Index Series while any eligible constituents representing the country remain within the index. On the deletion of the last eligible constituent, the country will continue to be eligible, but the country index will be immediately removed from the FTSE Global Equity Index Series and will only be reconsidered for inclusion if it meets the minimum requirement of 3 eligible companies.

Determining Nationality

A company will be allocated to a single country. If a company is incorporated in one country and has its sole listing in the same country, FTSE will allocate the company to that country. In all other circumstances, FTSE will refer the company to the FTSE Nationality Committee who will decide the appropriate nationality for the company. The FTSE Nationality Committee will base its decision according to its assessment of various factors including, but not necessarily limited to, the following:

- The investor protection regulations present in the country of incorporation;
- The country in which the company is domiciled for tax purposes;
- The location of its factors of production;
- The location of its headquarters;
- The location of company meetings;
- The composition of its shareholder base;
- The membership of its board of directors;
- The currency denomination of the company's shares;
- The perception of investors.

If a company is incorporated in a country, has a listing in that country and listings in other countries, the FTSE Nationality Committee will normally assign the company to the country of incorporation. If the company fails FTSE's liquidity test in the country of incorporation, the FTSE Nationality Committee may assign the company to the country which exhibits the greatest liquidity. However, save for certain exceptions, a company incorporated in a country other than a developed country (as classified in the FTSE Global Equity Index Series) may not be assigned to a developed country. If a company is incorporated in a country, and is listed only in countries other than the country of incorporation, the FTSE Nationality Committee will normally allocate the company to the country with the greatest liquidity. If a company is incorporated in a country other than a developed country, has no listing in that country and is listed only in one or more developed countries, that company will only be eligible for FTSE Global Equity Index Series inclusion if the country of incorporation is internationally recognised as having a low taxation status that has been approved by the FTSE Nationality Committee. For companies incorporated in approved low taxation countries, the FTSE Nationality Committee will normally assign the company to the developed country with the greatest liquidity. The country allocation of any FTSE index constituents may be reassessed at any time at the FTSE Nationality Committee's discretion.

Eligible Securities

Most equities are eligible for inclusion in the FTSE GEIS Indices. Ineligible securities include those whose business is that of holding equity and other investments, those of Limited Liability Partnerships and Limited Liability Companies, and where a unit comprises equity and non-equity, convertible preference shares and loan stocks until converted, and where a company does not list all its shares in an eligible class, or does not list an entire class, such unlisted shares (but they may be included in the Review Universe for the purpose of ranking companies by their full market capitalization).

Algorithm and Calculation Method

The FTSE Global Equity Index Series uses actual closing mid-market or last trade prices, where available, for securities with local bourse quotations. Reuters real time exchange rates are used in the index calculations which are disseminated in real-time. Exchange rates used in the End of Day calculations are WM/Reuters Closing Spot Rates™, collected at 16:00 hrs London time.

For the purposes of computing the FTSE Global Equity Index Series, the number of outstanding shares for each constituent security is expressed to the nearest share and, to prevent a large number of insignificant weighting changes, the number of outstanding shares for each constituent security is amended only when the total outstanding shares held within the index system changes by more than 1% on a cumulative basis. Changes will be made quarterly after the close of business on the third Friday of March, June, September and December. If a corporate action is applied to an index constituent which involves a change in the number of outstanding shares, the change in shares will be applied simultaneously with the corporate action. If accumulated changes in the number of outstanding shares add up to 10% or more, or when an accumulated share change represents USD 2 billion of a company's total market capitalization, they are implemented between quarters. WM/Reuters Spot Rates will be used to convert the market capitalization into USD. The USD 2 billion threshold may be adjusted annually in December, by the FTSE Policy Group. If an adjustment is made, it will be applied for the first time at the next review in March of the following year.

The FTSE GEIS Indices are calculated using the chained Paasche methodology. The performance of a FTSE GEIS Index on a given day is determined by calculating the percentage difference between:

- the FTSE GEIS Index's market capitalization as at the close of that day and
- the market capitalization at the start of that day

'Start of the day' is defined as the previous day's close adjusted for capital changes, investability weight changes, additions and deletions.

Adjustments are applied whenever capital changes take place, so that the performance of the FTSE Global Equity Index Series reflects the experience of investors. Eligible companies may be subject to adjustment for free float and multiple lines.

Free Float and Multiple Lines Adjustments

Free Float: The FTSE Global Equity Index Series is adjusted for free float and foreign ownership limits. Free float restrictions include:

- Shares directly owned by State, Regional, Municipal and Local governments (excluding shares held by independently managed pension schemes for governments).
- Shares held by Sovereign Wealth Funds where each holding is 10% or greater. If the holding subsequently decreases below 10%, the shares will remain restricted until the holding falls below 7%.
- Shares held by directors, senior executives and managers of the company, and by their family and direct relations, and by companies with which they are affiliated.
- Shares held within employee share plans.
- Shares held by public companies or by non-listed subsidiaries of public companies.
- Shares held by founders, promoters, former directors, founding venture capital and private equity firms, private companies and individuals (including employees) where the holding is 10% or greater. If the holding subsequently decreases below 10%, the shares will remain restricted until the holding falls below 7%.
- All shares where the holder is subject to a lock-in clause (for the duration of that clause)*.
- Shares held for publicly announced strategic reasons, including shares held by several holders acting in concert.
- Shares that are subject to on-going contractual agreements (such as swaps) where they would ordinarily be treated as restricted.

* Free Float changes resulting from the expiry of a lock-in will be implemented at the next quarterly review subsequent to there being a minimum of 20 business days between the lockin expiry date and the FTSE GEIS Index review date.

Holdings that are not considered as restricted free float include portfolio holdings, nominee holdings, holdings by investment companies and ETFs. If in addition to the above restricted holdings, the company's shareholders are subject to legal restrictions, including foreign ownership restrictions, that are more restrictive, the legal restriction will be considered a free float restriction.

Free float restrictions will be calculated using available published information. For Equity Shares of companies which have been admitted to the FTSE GEIS Index that have a free float greater than 5%, the actual free float will be rounded up to the next highest whole percentage number. Companies with a free float of 5% or below are not eligible for inclusion in the FTSE GEIS Index.

The FTSE Global Equity Index Series will be periodically reviewed for changes in free float.

Market Lines:

Where there are multiple lines of equity capital in a company, all are included and priced separately, provided that:

- The secondary line's full market capitalization (i.e. before the application of any investability weightings) is greater than 25% of the full market capitalization of the company's principal line and the secondary line is eligible in its own right in all respects. Should the full market capitalization of a secondary line that is already a constituent of the FTSE All-World Index or the FTSE Global Small Cap Index fall below 20% of the full market capitalization of the company's principal line at an annual review, the secondary line will be deleted from the FTSE All-World Index or the FTSE Global Small Cap Index unless its full market capitalization remains above the qualification level for continued inclusion as a constituent in the relevant regional index at that review.
- All partly-paid classes of equity are priced on a fully-paid basis if the calls are fixed and are payable at known future dates. Those where future calls are uncertain in either respect are priced on a partly-paid basis.

Liquidity

Each security will be tested for liquidity by calculation of its median daily trading per month. The median trade is calculated by ranking each daily trade total and selecting the middle ranking day. Daily totals with zero trades are included in the ranking, therefore a security that fails to trade for more than half of the days in a month will have a zero median trade.

- A non-constituent which does not turnover at least 0.05% of its outstanding shares (after the application of any free float weightings) based on its median daily trade per month for at least ten of the twelve months prior to a full market review will not be eligible for inclusion in the FTSE Global Equity Index Series.
- An existing constituent which does not turnover at least 0.04% of its outstanding shares (after the application of any free float weightings) based on its median daily trade per month for at least eight of the twelve months prior to a full market review will be removed.
- New issues which do not have a twelve month trading record must have a minimum three month trading record when reviewed. They must turnover at least 0.05% of their outstanding shares (after the application of any free float weightings) based on their median daily trade per month in each month since their listing, unless added under fast entry rule provisions.
- In the event that the a company fails the liquidity test based on its underlying shares, the Depositary Receipt (DR) may be considered for inclusion in the FTSE GEIS Index if it passes the liquidity test in its own right and is traded on an exchange within the same regional timezone to where the underlying shares are listed. Where a company has both DR and underlying shares listed, both lines will be tested separately for liquidity. The underlying share will be included as long as it passes the liquidity test in its own right. The DR will only be eligible for inclusion if the underlying share fails the liquidity test and the DR passes in its own right. Where the DR has been included it will remain in the FTSE GEIS Index until it either fails the liquidity test or the underlying share passes a future liquidity test with greater liquidity than the DR. In the event that the underlying share fails the liquidity test and the DR trades in a different time-zone, but passes the test in its own right, the underlying share will be included as long as the DR is fully fungible (i.e. the DR can be converted into underlying shares and the underlying shares can be converted into DRs).

- At the sole discretion of a FTSE Regional Committee, the above percentage figures may be adjusted by up to 0.01% at a market review so that, in the Committee's opinion, the FTSE GEIS Index better reflects the liquid investable market of the region. This discretion may only be exercised across the whole of a region and may not be applied to individual securities or countries.

Periodic Review of Index Constituents

In order to determine which companies are included in a FTSE GEIS Index, first the 100% regional universe is defined, and companies are valued by full market capitalization. Companies are then ranked by full market capitalization in descending order, and the top 98% of the regional universe is selected as the Index Universe. Investability weights are assigned to all companies in accordance with the free float rules, the multiple lines rule is applied, all secondary lines which fail are eliminated, and the liquidity rule is applied to all remaining eligible lines of stock. From there, each company is evaluated for inclusion in a FTSE GEIS Index:

For companies not currently in the FTSE All-World Index Series or the FTSE Global Small Cap Index Series:

- Companies at or above 68% of the Index Universe by full market capitalization with a weight greater than 0.04% of the current respective regional All-World Index by full market capitalization, and with a weight greater than the inclusion percentage for the respective region by investable market capitalization, will be included in the Large Cap Index for the region under review.
- Companies ranked below 68%, but within the top 86% of the Index Universe by full market capitalization with a weight greater than 0.04% of the current respective regional All-World Index by full market capitalization, and with a weight greater than the inclusion percentage levels for the respective region by investable market capitalization, will be included in the Mid Cap Index for the region under review.
- Companies ranked below the top 86%, but within the top 98% of the Index Universe by full market capitalization or have a weight less than 0.04% of the current respective regional All-World Index by full market capitalization, and with a weight greater than the inclusion percentage levels for the respective region by investable market capitalization will be included in the Small Cap Index for the region under review.

For existing FTSE All-World Index Series or the FTSE Global Small Cap Index Series constituents:

- Existing Large Cap constituents will remain in the Large Cap Index if they fall within the top 72% of the ranking described above. If they are ranked between 72% and 92% of the Index Universe they will move to the Mid Cap. If they are ranked below 92% of the Index Universe but within the top 101% of the Index Universe, they will move to the Small Cap. If they are ranked below 101% of the Index Universe by full market capitalization or have a weight less than the exclusion percentage levels for the respective region by investable market capitalization, they will be excluded from the FTSE GEIS Index.
- Existing Mid Cap constituents will move to the Large Cap if they fall within the top 68% of the ranking described above. If they are ranked between 68% and 92% of the Index Universe they will remain in the Mid Cap. If they are ranked below 92% of the Index Universe but within the top 101% of the Index Universe, they will move to the Small Cap. If they are ranked below 101% of the Index Universe by full market capitalization or have a weight less than the exclusion percentage levels for the respective region by investable market capitalization, they will be excluded from the FTSE GEIS Index.

- Existing Small Cap constituents will move to the Large Cap if they fall within the top 68% of the ranking described above. If they are ranked between 68% and 86% of the Index Universe by full market capitalization and have a weight greater than 0.04% of the current respective regional All-World Index by full market capitalization they will move to the Mid Cap. If they are ranked below 86% of the Index Universe or have a weight less than 0.04% of the current respective regional All-World Index by full market capitalization, but within the top 101% of the Index Universe, they will remain in the Small Cap. If they are ranked below 101% of the Index Universe by full market capitalization or have a weight less than the exclusion percentage levels for the respective region by investable market capitalization, they will be excluded from the FTSE GEIS Index.

Inclusion and exclusion percentage levels by investable market capitalization for all the regions in the FTSE Global Equity Index Series to determine additions and deletions and other changes in the FTSE GEIS Index are shown below. These percentages are based from the respective regional Small Cap Index. Companies will be tested as a whole by taking the aggregate of each eligible line.

Region	For Inclusion (New Stocks)	For Inclusion (Current Stocks)
Developed Europe North America	0.02%	0.005%
Asia Pacific ex Japan Japan	0.05%	0.01%
Latin America	0.50%	0.20%
Emerging Europe Middle East & Africa	1.00%	0.20%

Fast Exit Rule

Existing constituents of all regions not undergoing a full review will be tested on a quarterly basis to identify any constituent meeting either of the following:

- The constituent has fallen below 101% of the Index Universe by full market capitalization for two consecutive quarters. This level is set at the time of the last review of the relevant region and is index adjusted using data as at February 11, May 11, August 11 or November 11, as appropriate, to reflect the change in performance of the regional index since its previous review. The previous trading day's data will be taken if any of the dates above are on a non trading day.

- The constituent is valued at less than the relevant exclusion percentage levels for the respective Small Cap Index by investable market capitalization for two consecutive quarters. This is assessed using data as at February 11, May 11, August 11 or November 11. The previous trading day data will be taken if any of the dates above are on a non trading day.

Constituents whose market capitalization falls below either of the parameters will be considered to be ineligible and will be removed from the FTSE GEIS Index. The deletion will be applied on the next trading day following the third Friday in March, June, September and December.

Changes to Constituent Companies

Under certain circumstances, companies can be added to the list of constituent stocks outside of a review when meeting certain market capitalization thresholds. Stocks can be deleted from the list of constituents if their market capitalization or weight falls below certain levels, there exists evidence of a change in circumstance regarding investability, or the constituent stock becomes delisted or becomes bankrupt, insolvent or is liquidated. Constituents can also be deleted under certain circumstances involving delisting, suspension, or relisting.

If an existing constituent is acquired for eligible shares (or a combination of eligible shares and cash) by another constituent in its own or another country, then the existing constituent is deleted on the effective date of the acquisition. The enlarged company remains a constituent of the same benchmarks within the FTSE Global Equity Index Series as the acquired company.

Mergers between a constituent and non-constituent:

- Within one country: If an existing constituent is acquired for eligible shares (or a combination of eligible shares and cash) by a quoted non-constituent in the same country, then the purchasing company is added to the same benchmarks within the FTSE Global Equity Index Series as the acquired company on the effective date of the acquisition, if eligible in all other respects. The existing constituent is deleted on the same date.
- Cross border: If an existing constituent is acquired for eligible shares (or a combination of eligible shares and cash) by a quoted non-constituent in another country, the acquiring company will be included in its own country index on the effective date of acquisition, providing it is eligible in all other respects. The existing constituent will be deleted on the same date.

THE MSCI INDICES

We have derived all information contained in this underlying supplement regarding the MSCI Brazil Index, the MSCI Canada Index, the MSCI EAFE[®] Index, the MSCI Emerging Markets Index, the MSCI Europe Index, the MSCI Italy SMID Cap Index, the MSCI Korea Index, the MSCI Malaysia Index, the MSCI Mexico Investable Market Index, the MSCI Pacific Ex-Japan Index, the MSCI Singapore Index, the MSCI South Africa Index, the MSCI Spain SMID Cap Index, the MSCI Taiwan Index, the MSCI Turkey Investable Market Index and the MSCI World IndexSM (each, an “MSCI Index” and together, the “MSCI Indices”), including, without limitation, their make-up, method of calculation and changes in their components, from publicly available information, without independent verification. This information reflects the policies of, and is subject to change by, MSCI Inc. (“MSCI”). The MSCI Indices are calculated, maintained and published by MSCI. MSCI has no obligation to continue to publish, and may discontinue publication of, any of the MSCI Indices.

Transition

On March 28, 2007, MSCI announced changes to the methodology used by MSCI to calculate its Standard and Small Cap Indices. The transition of the Standard and Small Cap Indices to the MSCI Global Investable Market Indices occurred in two phases, the first completed as of November 30, 2007 and the second completed as of May 30, 2008. The current index calculation methodology used to formulate the MSCI Indices (and which is also used to formulate the MSCI Global Investable Market Indices) (the “MSCI Global Investable Market Indices Methodology”) was implemented as of June 1, 2008.

The MSCI Brazil Index

The MSCI Brazil Index is a free float-adjusted, capitalization-weighted index of securities traded primarily on the Bolsa de Valores de São Paulo. Component companies must meet objective criteria for inclusion in the MSCI Brazil Index, taking into consideration unavailable strategic shareholdings and limitations to foreign ownership. The MSCI Brazil Index has a base date of December 31, 1987. The MSCI Brazil Index is reported by Bloomberg L.P. under the ticker symbol “MXBR.”

The MSCI Canada Index

The MSCI Canada Index is a free float-adjusted, capitalization-weighted index that aims to capture 85% of the (publicly available) total market capitalization in Canada. The MSCI Canada Index consists of stocks traded primarily on the Toronto Stock Exchange. The MSCI Canada Index is calculated daily in U.S. dollars. Component companies must meet objective criteria for inclusion in the MSCI Canada Index, taking into consideration unavailable strategic shareholdings and limitations to foreign ownership. The MSCI Canada Index is reported by Bloomberg, L.P. under the ticker symbol “MXCA.”

The MSCI EAFE[®] Index

The MSCI EAFE[®] Index is a free float-adjusted market capitalization index intended to measure the equity market performance of certain developed markets. The MSCI EAFE[®] Index is calculated daily in U.S. dollars and published in real time every 15 seconds during market trading hours. As of September 30, 2014, the MSCI EAFE[®] Index consisted of the following 21 developed market country indices: Australia, Austria, Belgium, Denmark, Finland, France, Germany, Hong Kong, Ireland, Israel, Italy, Japan, the Netherlands, New Zealand, Norway, Portugal, Singapore, Spain, Sweden, Switzerland and the United Kingdom. The MSCI EAFE[®] Index is reported by Bloomberg L.P. under the ticker symbol “MXEA.”

The MSCI Emerging Markets Index

The MSCI Emerging Markets Index is a free float-adjusted market capitalization index that is designed to measure equity market performance of global emerging markets. The MSCI Emerging Markets Index is calculated daily in U.S. dollars and published in real time every 15 seconds during market trading hours. As of September 30, 2014, the MSCI Emerging Markets Index consisted of the following 23 emerging market country indices: Brazil, Chile, China, Colombia, Czech Republic, Egypt, Greece, Hungary, India, Indonesia, Korea, Malaysia, Mexico, Peru, Philippines, Poland, Russia, Qatar, South Africa, Taiwan, Thailand, Turkey and the United Arab Emirates. The MSCI Emerging Markets Index is reported by Bloomberg L.P. under the ticker symbol "MXEF."

The MSCI Europe Index

The MSCI Europe Index is a free float-adjusted market capitalization weighted index that is designed to measure the equity market performance of the developed markets in Europe. As of September 30, 2014, the MSCI Europe Index consisted of the following 15 developed market country indices: Austria, Belgium, Denmark, Finland, France, Germany, Ireland, Italy, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom. The MSCI Europe Index is reported by Bloomberg L.P. under ticker symbol "MXEU."

The MSCI Italy SMID Cap Index

The MSCI Italy SMID Cap Index is a free float-adjusted market capitalization weighted index that is designed to measure the equity market performance of mid- and small-cap companies in Italy. The MSCI Italy SMID Cap Index is calculated in European Union euros and is reported by Bloomberg Financial Markets under the ticker symbol "MXITSM."

The MSCI Korea Index

The MSCI Korea Index is a free float-adjusted market capitalization index of securities listed on the Korea Exchange. The MSCI Korea Index is calculated daily in the local currencies and published in real time every 15 seconds during market trading hours. The MSCI Korea Index is reported by Bloomberg L.P. under the ticker symbol "MXKR."

The MSCI Malaysia Index

The MSCI Malaysia Index is a free float-adjusted market capitalization index of securities listed on the Bursa Malaysia. The MSCI Malaysia Index is calculated daily in the local currencies and published in real time every 15 seconds during market trading hours. The MSCI Singapore Index is reported by Bloomberg L.P. under the ticker symbol "MXMY."

The MSCI Mexico Investable Market Index

The MSCI Mexico Investable Market Index is a free float-adjusted market capitalization index of securities listed on the Mexican Stock Exchange. Component companies must meet objective criteria for inclusion in the MSCI Mexico Investable Market Index, taking into consideration unavailable strategic shareholdings and limitations to foreign ownership. The MSCI Mexico Investable Market Index has a base date of December 31, 1987 and is reported by Bloomberg L.P. under the ticker symbol "MXMX".

The MSCI Pacific Ex-Japan Index

The MSCI Pacific Ex-Japan Index is a free float-adjusted market capitalization index that is designed to measure equity market performance of certain developed markets in the Pacific. The MSCI Pacific Ex-Japan Index is calculated daily in U.S. dollars. As of September 30, 2014, the MSCI Pacific Ex-Japan Index consisted of the following 4 developed country indices: Australia, Hong Kong, New Zealand and Singapore. The MSCI Pacific Ex-Japan Index is reported by Bloomberg L.P. under the ticker symbol "MXAPJ."

The MSCI Singapore Index

The MSCI Singapore Index is a free float-adjusted market capitalization index of securities listed on the Singapore Stock Exchange. The MSCI Singapore Index is calculated daily in the local currencies and published in real time every 15 seconds during market trading hours. The MSCI Singapore Index is reported by Bloomberg L.P. under the ticker symbol "SIMSCI."

The MSCI South Africa Index

The MSCI South Africa Index is a free float-adjusted market capitalization index of securities listed on the JSE Limited. The MSCI South Africa Index is calculated daily in the local currencies and published in real time every 15 seconds during market trading hours. The MSCI South Africa Index is reported by Bloomberg L.P. under the ticker symbol "MXZA."

The MSCI Spain SMID Cap Index

The MSCI Spain SMID Cap Index is a free float-adjusted market capitalization weighted index that is designed to measure the equity market performance of mid- and small-cap companies in Spain. The MSCI Spain SMID Cap Index is calculated in European Union euros and is reported by Bloomberg Financial Markets under the ticker symbol "MXESSM."

The MSCI Taiwan Index

The MSCI Taiwan Index is a free float-adjusted market capitalization index of securities listed on the Taiwan Stock Exchange. The MSCI Taiwan Index is calculated daily in the local currencies and published in real time every 15 seconds during market trading hours. The MSCI Taiwan Index is reported by Bloomberg L.P. under the ticker symbol "TAMSCI."

The MSCI Turkey Investable Market Index

The MSCI Turkey Investable Market Index is a free float-adjusted market capitalization index of securities listed on the Istanbul Stock Exchange. The MSCI Turkey Investable Market Index is calculated daily in the local currencies and published in real time every 15 seconds during market trading hours. The MSCI Turkey Investable Market Index is reported by Bloomberg L.P. under the ticker symbol "MXTR."

The MSCI World IndexSM

The MSCI World IndexSM is a free float-adjusted market capitalization index intended to measure the equity market performance of certain developed equity markets. The MSCI World IndexSM is calculated daily in U.S. dollars and published in real time every 15 seconds during market trading hours. As of September 30, 2014, the MSCI World IndexSM consisted of the following 23 developed market country indices: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Hong Kong, Ireland, Israel, Italy, Japan, the Netherlands, New Zealand, Norway, Portugal, Singapore, Spain, Sweden, Switzerland, the United Kingdom and the United States. The MSCI World IndexSM is reported by Bloomberg L.P. under the ticker symbol "MXWO."

Constructing the MSCI Global Investable Market Indices

MSCI undertakes an index construction process that involves: (i) defining the Equity Universe; (ii) determining the Market Investable Equity Universe for each market; (iii) determining market capitalization size segments for each market; (iv) applying Index Continuity Rules for the MSCI Standard Index; (v) creating style segments within each size segment within each market; and (vi) classifying securities under the Global Industry Classification Standard (the "GICS").

The “relevant market” with respect to a single country index is equivalent to the single country, except in DM-classified countries in Europe (as described below), where all such countries are first aggregated into a single market for index construction purposes. Subsequently, individual DM Europe country indices within the MSCI Europe Index are derived from the constituents of the MSCI Europe Index under the MSCI Global Investable Market Indices Methodology.

The “relevant market” with respect to a composite index includes each of the single countries which comprise the composite index.

The “Global Investable Equity Universe” is the aggregation of all Market Investable Equity Universes. The “DM Investable Equity Universe” is the aggregation of all the Market Investable Equity Universes for Developed Markets.

Defining the Equity Universe

(i) Identifying Eligible Equity Securities: The Equity Universe initially looks at securities listed in any of the countries in the MSCI Global Index Series, which will be classified as Developed Markets (“DM”), Emerging Markets (“EM”) or Frontier Markets (“FM”). All listed equity securities, or listed securities that exhibit characteristics of equity securities, except mutual funds, exchange traded funds, equity derivatives, limited partnerships, and most investment trusts, are eligible for inclusion in the Equity Universe. Real Estate Investment Trusts (“REITs”) in some countries and certain income trusts in Canada are also eligible for inclusion.

(ii) Country Classification of Eligible Securities: Each company and its securities (*i.e.*, share classes) are classified in one and only one country, which allows for a distinctive sorting of each company by its respective country.

Determining the Market Investable Equity Universes

A Market Investable Equity Universe for a market is derived by applying investability screens to individual companies and securities in the Equity Universe that are classified in that market. A market is equivalent to a single country, except in DM Europe, where all DM countries in Europe are aggregated into a single market for index construction purposes. Subsequently, individual DM Europe country indices within the MSCI Europe Index are derived from the constituents of the MSCI Europe Index under the Global Investable Market Indices methodology.

The investability screens used to determine the Investable Equity Universe in each market are as follows:

- (i) Equity Universe Minimum Size Requirement: This investability screen is applied at the company level. In order to be included in a Market Investable Equity Universe, a company must have the required minimum full market capitalization. A company will meet this requirement if its cumulative free float-adjusted market capitalization is within the top 99% of the Equity Universe sorted in descending order by full market capitalization.
- (ii) Equity Universe Minimum Float-Adjusted Market Capitalization Requirement: This investability screen is applied at the individual security level. To be eligible for inclusion in a Market Investable Equity Universe, a security must have a free float-adjusted market capitalization equal to or higher than 50% of the Equity Universe Minimum Size Requirement.
- (iii) DM and EM Minimum Liquidity Requirement: This investability screen is applied at the individual security level. To be eligible for inclusion in a Market Investable Equity Universe, a security must have adequate liquidity as measured by the Annualized Traded Value Ratio (“ATVR”) and the Frequency of Trading. The ATVR screens out extreme daily trading

volumes, taking into account the free float-adjusted market capitalization size of securities. The aim of the 12-month and 3-month ATVR together with 3-month Frequency of Trading is to select securities with a sound long and short-term liquidity. A minimum liquidity level of 20% of 3-month ATVR and 90% of 3-month Frequency of Trading over the last 4 consecutive quarters, as well as 20% of 12-month ATVR are required for the inclusion of a security in a Market Investable Equity Universe of a Developed Market. A minimum liquidity level of 15% of 3-month ATVR and 80% of 3-month Frequency of Trading over the last 4 consecutive quarters, as well as 15% of 12-month ATVR are required for the inclusion of a security in a Market Investable Equity Universe of an Emerging Market.

In instances when a security does not meet the above criteria, the security will be represented by a relevant liquid eligible Depository Receipt if it is trading in the same geographical region. Depository Receipts are deemed liquid if they meet all the above mentioned criteria for 12-month ATVR, 3-month ATVR and 3-month Frequency of Trading.

- (iv) **Global Minimum Foreign Inclusion Factor Requirement:** This investability screen is applied at the individual security level. To be eligible for inclusion in a Market Investable Equity Universe, a security's Foreign Inclusion Factor ("FIF") must reach a certain threshold. The FIF of a security is defined as the proportion of shares outstanding that is available for purchase in the public equity markets by international investors. This proportion accounts for the available free float of and/or the foreign ownership limits applicable to a specific security (or company). In general, a security must have an FIF equal to or larger than 0.15 to be eligible for inclusion in a Market Investable Equity Universe.
- (v) **The Minimum Length of Trading Requirement:** This investability screen is applied at the individual security level. For an initial public offering ("IPO") to be eligible for inclusion in a Market Investable Equity Universe, the new issue must have started trading at least four months before the implementation of the initial construction of the index or at least three months before the implementation of a semi-annual index review. This requirement is applicable to small new issues in all markets. Large IPOs are not subject to the Minimum Length of Trading Requirement and may be included in a Market Investable Equity Universe and the Standard Index outside of a Quarterly or semi-annual index review.

Defining Market Capitalization Size Segments for Each Market

Once a Market Investable Equity Universe is defined, it is segmented into the following size-based indices:

- Investable Market Index (Large + Mid + Small)
- Standard Index (Large + Mid)
- Large Cap Index
- Mid Cap Index
- Small Cap Index

Creating the Size Segment Indices in each market involves the following steps: (i) defining the Market Coverage Target Range for each size segment; (ii) determining the Global Minimum Size Range for each size segment; (iii) determining the Market Size-Segment Cutoffs and associated Segment Number of Companies; (iv) assigning companies to the size segments; and (v) applying final size-segment investability requirements and index continuity rules.

Index Continuity Rules for the Standard Indices

In order to achieve index continuity, as well as provide some basic level of diversification within a market index, notwithstanding the effect of other index construction rules, a minimum number of five constituents will be maintained for a DM Standard Index and a minimum number of three constituents will be maintained for an EM Standard Index.

If after the application of the index construction methodology, a Standard Index contains fewer than five securities in a Developed Market or three securities in an Emerging Market, then the largest securities by free float-adjusted market capitalization are added to the Standard Index in order to reach five constituents in that Developed Market or three in that Emerging Market. At subsequent index reviews, if the free float-adjusted market capitalization of a non-index constituent is at least 1.50 times the free float-adjusted market capitalization of the smallest existing constituent after rebalancing, the larger free float-adjusted market capitalization security replaces the smaller one.

Creating Style Indices within Each Size Segment

All securities in the investable equity universe are classified into Value or Growth segments using the MSCI Global Value and Growth methodology.

Classifying Securities under the Global Industry Classification Standard

All securities in the Global Investable Equity Universe are assigned to the industry that best describes their business activities. To this end, MSCI has designed, in conjunction with Standard & Poor's, the Global Industry Classification Standard ("GICS"). The GICS entails four levels of classification: (1) sector; (2) industry groups; (3) industries; (4) sub-industries. Under the GICS, each company is assigned uniquely to one sub-industry according to its principal business activity. Therefore, a company can belong to only one industry grouping at each of the four levels of the GICS.

Maintenance of the MSCI Global Investable Market Indices

The MSCI Global Investable Market Indices are maintained with the objective of reflecting the evolution of the underlying equity markets and segments on a timely basis, while seeking to achieve index continuity, continuous investability of constituents and replicability of the indices, and index stability and low index turnover.

In particular, index maintenance involves:

- (i) semi-annual index reviews ("SAIRs") in May and November of the Size Segment and Global Value and Growth Indices, which include:
 - updating the indices on the basis of a fully refreshed Equity Universe;
 - taking buffer rules into consideration for migration of securities across size and style segments; and
 - updating FIFs and Number of Shares ("NOS").

The objective of the SAIRs is to systematically reassess the various dimensions of the Equity Universe for all markets on a fixed semi-annual timetable. A SAIR involves a comprehensive review of the Size Segment and Global Value and Growth Indices.

(ii) quarterly index reviews (“QIRs”) in February and August of the Size Segment Indices aimed at:

- including significant new eligible securities (such as IPOs that were not eligible for earlier inclusion) in the index;
- allowing for significant moves of companies within the Size Segment Indices, using wider buffers than in the SAIR; and
- reflecting the impact of significant market events on FIFs and updating NOS.

QIRs are designed to ensure that the indices continue to be an accurate reflection of the evolving equity marketplace. This is achieved by a timely reflection of significant market driven changes that were not captured in the index at the time of their actual occurrence but are significant enough to be reflected before the next SAIR. QIRs may result in additions or deletions due to migration to another Size Segment Index, and changes in FIFs and in NOS. Only additions of significant new investable companies are considered, and only for the Standard Index. The buffer zones used to manage the migration of companies from one segment to another are wider than those used in the SAIR. The style classification is reviewed only for companies that are reassigned to a different size segment.

- (iii) Ongoing event-related changes. Ongoing event-related changes to the indices are the result of mergers, acquisitions, spin-offs, bankruptcies, reorganizations and other similar corporate events. They can also result from capital reorganizations in the form of rights issues, bonus issues, public placements and other similar corporate actions that take place on a continuing basis. These changes generally are reflected in the indices at the time of the event. Significantly large IPOs are included in the indices after the close of the company’s tenth day of trading.

Announcement Policy

The results of the SAIRs are announced at least two weeks in advance of their effective implementation dates as of the close of the last business day of May and November. The results of the QIRs are announced at least two weeks in advance of their effective implementation dates as of the close of the last business day of February and August. All changes resulting from corporate events are announced prior to their implementation.

The changes are typically announced at least ten business days prior to the changes becoming effective in the indices as an “expected” announcement, or as an “undetermined” announcement, when the effective dates are not known yet or when aspects of the event are uncertain. MSCI sends “confirmed” announcements at least two business days prior to events becoming effective in the indices, provided that all necessary public information concerning the event is available. The full list of all new and pending changes is delivered to clients on a daily basis, between 5:30 p.m. and 6 p.m., US Eastern Time through the Advance Corporate Events (ACE) File.

In exceptional cases, events are announced during market hours for same or next day implementation. Announcements made by MSCI during market hours are usually linked to late company disclosure of corporate events or unexpected changes to previously announced corporate events.

In the case of secondary offerings representing more than 5% of a security’s number of shares for existing constituents, these changes will be announced prior to the end of the subscription period when possible and a subsequent announcement confirming the details of the event (including the date of implementation) will be made as soon as the results are available.

Both primary equity offerings and secondary offerings for U.S. securities, representing at least 5% of the security's number of shares, will be confirmed through an announcement during market hours for next day or shortly after implementation, as the completion of the events cannot be confirmed prior to the notification of the pricing.

Early deletions of constituents due to bankruptcy or other significant cases are announced as soon as practicable prior to their implementation.

Index Calculation

Price Index Level

The MSCI Indices are calculated using the Laspeyres' concept of a weighted arithmetic average together with the concept of chain-linking. As a general principle, today's index level is obtained by applying the change in the market performance to the previous period index level.

$$PriceIndexLevelUSD_t = PriceIndexLevelUSD_{t-1} \times \frac{IndexAdjustedMarketCapUSD_t}{IndexInitialMarketCapUSD_t}$$

$$PriceIndexLevelLocal_t = PriceIndexLevelLocal_{t-1} \times \frac{IndexAdjustedMarketCapForLocal_t}{IndexInitialMarketCapUSD_t}$$

Where:

- $PriceIndexLevelUSD_{t-1}$ is the Price Index level in USD at time t-1.
- $IndexAdjustedMarketCapUSD_t$ is the Adjusted Market Capitalization of the index in USD at time t.
- $IndexInitialMarketCapUSD_t$ is the Initial Market Capitalization of the index in USD at time t.
- $PriceIndexLevelLocal_{t-1}$ is the Price Index level in local currency at time t-1.
- $IndexAdjustedMarketCapForLocal_t$ is the Adjusted Market Capitalization of the index in USD converted using FX rate as of t-1 and used for local currency index at time t.

Note: $IndexInitialMarketCapUSD$ was previously called $IndexUnadjustedMarketCapPreviousUSD$

Security Price Index Level

$$SecurityPriceIndexLevel_t = SecurityPriceIndexLevel_{t-1} \times \frac{SecurityAdjustedMarketCapForLocal_t}{SecurityInitialMarketCapUSD_t}$$

$$SecurityAdjustedMarketCapForLocal_t =$$

$$\frac{EndOfDayNumberOfShares_{t-1} \times PricePerShare_t \times InclusionFactor_t \times PAF_t}{FXrate_{t-1}} \times \frac{ICI_t}{ICI_{t-1}}$$

$$SecurityInitialMarketCapUSD_t = \frac{EndOfDayNumberOfShares_{t-1} \times PricePerShare_{t-1} \times InclusionFactor_t}{FXrate_{t-1}}$$

Where:

- $SecurityPriceIndexLevel_{t-1}$ is Security Price Index level at time t-1.
- $SecurityAdjustedMarketCapForLocal_t$ is the Adjusted Market Capitalization of security s in USD converted using FX rate as of t-1.

- $SecurityInitialMarketCapUSD_t$ is the Initial Market Capitalization of security s in USD at time t.
- $EndOfDayNumberOfShares_{t-1}$ is the number of shares of security s at the end of day t-1.
- $PricePerShare_t$ is the price per share of security s at time t.
- $PricePerShare_{t-1}$ is the price per share of security s at time t-1.
- $InclusionFactor_t$ is the inclusion factor of security s at time t. The inclusion factor can be one or the combination of the following factors: Foreign Inclusion Factor, Domestic Inclusion Factor, Growth Inclusion Factor, Value Inclusion Factor, Index Inclusion Factor.
- PAF_t is the Price Adjustment Factor of security s at time t.
- $FXrate_{t-1}$ is the FX rate of the price currency of security s vs USD at time t-1. It is the value of 1 USD in foreign currency.
- ICI_t is the Internal Currency Index of price currency at time t. The ICI is different than 1 when a country changes the internal value of its currency (e.g., from Turkish Lira to New Turkish Lira – ICI = 1,000,000).
- ICI_{t-1} is the Internal Currency Index of price currency at time t-1.

Index Market Capitalization

$$IndexAdjustedMarketCapUSD_t =$$

$$\sum_{s \in I, t} \frac{EndOfDayNumberOfShares_{t-1} \times PricePerShare_t \times InclusionFactor_t \times PAF_t}{FXrate_t}$$

$$IndexAdjustedMarketCapForLocal_t =$$

$$\sum_{s \in I, t} \frac{EndOfDayNumberOfShares_{t-1} \times PricePerShare_t \times InclusionFactor_t \times PAF_t}{FXrate_{t-1}} \times \frac{ICI_t}{ICI_{t-1}}$$

$$IndexInitialMarketCapUSD_t =$$

$$\sum_{s \in I, t} \frac{EndOfDayNumberOfShares_{t-1} \times PricePerShare_t \times InclusionFactor_t}{FXrate_{t-1}}$$

Where:

- $EndOfDayNumberOfShares_{t-1}$ is the number of shares of security s at the end of day t-1.
- $PricePerShare_t$ is the price per share of security s at time t.
- $PricePerShare_{t-1}$ is the price per share of security s at time t-1.
- $InclusionFactor_t$ is the inclusion factor of security s at time t. The inclusion factor can be one or the combination of the following factors: Foreign Inclusion Factor, Domestic Inclusion Factor, Growth Inclusion Factor, Value Inclusion Factor, Index Inclusion Factor.
- PAF_t is the Price Adjustment Factor of security s at time t.
- $FXrate_t$ is the FX rate of the price currency of security s vs USD at time t. It is the value of 1 USD in foreign currency.
- $FXrate_{t-1}$ is the FX rate of the price currency of security s vs USD at time t-1. It is the value of 1 USD in foreign currency.

- ICI_t is the Internal Currency Index of price currency at time t. The ICI is different than 1 when a country changes the internal value of its currency (e.g., from Turkish Lira to New Turkish Lira – $ICI = 1,000,000$).
- ICI_{t-1} is the Internal Currency Index of price currency at time t-1.

Corporate Events

Mergers and Acquisitions

As a general principle, MSCI implements M&As as of the close of the last trading day of the acquired entity or merging entities (last offer day for tender offers), regardless of the status of the securities (index constituents or non-index constituents) involved in the event. MSCI uses market prices for implementation. This principle applies if all necessary information is available prior to the completion of the event and if the liquidity of the relevant constituent(s) is not expected to be significantly diminished on the day of implementation. Otherwise, MSCI will determine the most appropriate implementation method and announce it prior to the changes becoming effective in the indices.

Tender Offers

In tender offers, the acquired or merging security is generally deleted from an index at the end of the initial offer period, when the offer is likely to be successful and / or if the free float of the security is likely to be substantially reduced (this rule is applicable even if the offer is extended), or once the results of the offer have been officially communicated and the offer has been successful and the security's free float has been substantially reduced, if all required information is not available in advance or if the offer's outcome is uncertain. The main factors considered by MSCI when assessing the outcome of a tender offer (not in order of importance) are: the announcement of the offer as friendly or hostile, a comparison of the offer price to the acquired security's market price, the recommendation by the acquired company's board of directors, the major shareholders' stated intention whether to tender their shares, the required level of acceptance, the existence of pending regulatory approvals, market perception of the transaction, official preliminary results if any, and other additional conditions for the offer.

In certain cases, securities may be deleted earlier than the last offer day. For example, in the case of tender offers in the United Kingdom, a security is typically deleted two business days after the offer is declared unconditional in all respects.

Increases in a security's number of shares resulting from acquisition of non-listed companies and conversion of unlisted shares are implemented at the next regularly scheduled index review following completion of the event.

Increases in a security's number of shares resulting from acquisition of listed non-index constituent securities representing at least 5% of the security's number of shares are generally implemented as of the close of the last trading day of the acquired entity if all necessary information is available prior to the completion of the event or if such information is not available prior to the completion of the event, as soon as practicable following the completion of the event. Changes representing less than 5% of the security's number of shares are implemented at the next regularly scheduled index review following the completion of the event.

If a security is deleted from an index, the security will not be reinstated immediately after its deletion even when the tender offer is subsequently declared unsuccessful and/or the free float of the security is not substantially reduced. It may be reconsidered for index inclusion at the following regularly scheduled index review.

Late Announcements of Completion of Mergers and Acquisitions

When the completion of an event is announced too late to be reflected as of the close of the last trading day of the acquired or merging entities, implementation occurs as of the close of the following day or as soon as practicable thereafter. In these cases, MSCI uses a calculated price for the acquired or merging entities. The calculated price is determined using the terms of the transaction and the price of the acquiring or merged entity, or, if not appropriate, using the last trading day's market price of the acquired or merging entities.

Conversions of Share Classes

Conversions of a share class into another share class resulting in the deletion and/or addition of one or more classes of shares are implemented as of the close of the last trading day of the share class to be converted.

Spin-Offs

On the ex-date of a spin-off, a PAF is applied to the price of the security of the parent company. The PAF is calculated based on the terms of the transaction and the market price of the spun-off security. If the spun-off entity qualifies for inclusion, it is included as of the close of its first trading day. In cases of spin-offs of partially owned companies, the post-event free float of the spun-off entity is calculated using a weighted average of the existing shares and the spun-off shares, each at their corresponding free float. Any resulting changes to FIFs and/or DIFs are implemented as of the close of the ex-date.

In cases of spin-offs of partially-owned companies, the post-event free float of the spun-off entity is calculated using a weighted average of the existing shares and the spun-off shares, each at their corresponding free float. Any resulting changes to FIFs and/or DIFs are implemented as of the close of the ex-date.

When the spun-off security does not trade on the ex-date, a "detached" security is created to avoid a drop in the free float-adjusted market capitalization of the parent entity, regardless of whether the spun-off security is added or not. The detached security is included until the spun-off security begins trading, and is deleted thereafter. Generally, the value of the detached security is equal to the difference between the cum price and the ex price of the parent security.

Corporate Actions

Corporate actions such as splits, stock dividends and rights issues, which affect the price of a security, require a price adjustment. In general, the PAF is applied on the ex-date of the event to ensure that security prices are comparable between the ex-date and the cum date. To do so, MSCI adjusts for the value of the right and/or the value of the special assets that are distributed and the changes in number of shares and FIF, if any, are reflected as of the close of the ex-date. In general, corporate actions do not impact the free float of the securities because the distribution of new shares is carried out on a pro rata basis to all existing shareholders. Therefore, MSCI will generally not implement any pending number of shares and/or free float updates simultaneously with the event.

If a security does not trade for any reason on the ex-date of the corporate action, the event will be generally implemented on the day the security resumes trading.

Share Placements and Offerings

Changes in number of shares and FIF resulting from primary equity offerings representing at least 5% of the security's number of shares are generally implemented as of the close of the first trading day of the new shares, if all necessary information is available at that time. Otherwise, the event is implemented as soon as practicable after the relevant information is made available. A primary equity offering involves the issuance of new shares by a company. Changes in number of shares and FIF resulting from primary equity offerings representing less than 5% of the security's number of shares are deferred to the next regularly scheduled index review following the completion of the event. For public secondary offerings of existing constituents representing at least 5% of the security's number of shares, where possible, MSCI will announce these changes and reflect them shortly after the results of the subscription are known. Secondary public offerings that, given lack of sufficient notice, were not reflected immediately will be reflected at the next regularly scheduled index review. Secondary offerings involve the distribution of existing shares of current shareholders' in a listed company and are usually pre-announced by a company or by a company's shareholders and open for public subscription during a pre-determined period.

Debt-to-Equity Swaps

In general, large debt-to-equity swaps involve the conversion of debt into equity originally not convertible at the time of issue. In this case, changes in numbers of shares and subsequent FIF and/or DIF changes are implemented as of the close of the first trading day of the newly issued shares, or shortly thereafter if all necessary information is available at the time of the swap. In general, shares issued in debt-to-equity swaps are assumed to be issued to strategic investors. As such, the post event free float is calculated on a pro forma basis assuming that all these shares are non-free float. Changes in numbers of shares and subsequent FIF and/or DIF changes due to conversions of convertible bonds or other convertible instruments, including periodical conversions of preferred stocks and small debt-to-equity swaps are implemented at a following regularly scheduled index review.

Suspensions and Bankruptcies

MSCI will remove from an index as soon as practicable companies that file for bankruptcy, companies that file for protection from their creditors. MSCI will delete from an index after 40 business days of suspension securities of companies facing financial difficulties (e.g., liquidity issues, debt repayment issues, companies under legal investigation, etc.) with at least two business days advance notice. Subsequently, if and when these securities resume normal trading, they may be considered as a potential addition to an index at the next scheduled semi-annual index review. Securities of companies suspended due to pending corporate events (e.g., merger, acquisition, etc.), will continue to be maintained in an index until they resume trading regardless of the duration of the suspension period. When the primary exchange price is not available, MSCI will delete securities at an over the counter or equivalent market price when such a price is available and deemed relevant. If no over the counter or equivalent price is available, the security will be deleted at the smallest price (unit or fraction of the currency) at which a security can trade on a given exchange. For securities that are suspended, MSCI will carry forward the market price prior to the suspension during the suspension period.

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THE MSCI 25/50 INDICES

We have derived all information contained in this underlying supplement regarding the MSCI Brazil 25/50 Index and the MSCI Mexico Investable Market (IMI) 25/50 Index (each, an “MSCI 25/50 Index” and together, the “MSCI 25/50 Indices”), including, without limitation, their make-up, method of calculation and changes in their components, from publicly available information, without independent verification. This information reflects the policies of, and is subject to change by, MSCI Inc. (“MSCI”). The MSCI Indices are calculated, maintained and published by MSCI. MSCI has no obligation to continue to publish, and may discontinue publication of, any of the MSCI Indices.

The MSCI Brazil 25/50 Index

The MSCI Brazil 25/50 Index is an index created by applying the weight constraints described below to the MSCI Brazil Index. For more information about the MSCI Brazil Index, please see “— The MSCI Indices” in this underlying supplement. The MSCI Brazil 25/50 Index is calculated daily in the local currencies and published in real time every 15 seconds during market trading hours. The MSCI Brazil 25/50 Index is reported by Bloomberg L.P. under the ticker symbol “MXBR2550.”

The MSCI Mexico IMI 25/50 Index

The MSCI Mexico IMI 25/50 Index is an index created by applying the weight constraints described below to the MSCI Mexico IMI Index. For more information about the MSCI Index, please see “— The MSCI Indices” in this underlying supplement. The MSCI Mexico IMI 25/50 Index is calculated daily in the local currencies and published in real time every 15 seconds during market trading hours. The MSCI Mexico IMI 25/50 Index is reported by Bloomberg L.P. under the ticker symbol “MXMX5IM.”

Objectives and Guiding Principles Underlying the MSCI 25/50 Indices

Under current regulations, a fund needs to satisfy certain tests, such as those relating to asset diversification and sources of income, for qualification as a “regulated investment company” or “RIC.” More specifically, one requirement of a RIC is that, at the end of each quarter of a RIC’s tax year, no more than 25% of the value of the RIC’s assets may be invested in a single issuer and the sum of the weights of all issuers representing more than 5% of the fund should not exceed 50% of the fund’s total assets. The MSCI 25/50 Indices take into account these investment limits, offering a benchmarking alternative for RIC compliant funds.

The following principles have guided MSCI in designing a methodology for constructing the MSCI 25/50 Indices from underlying non-constrained indices.

Reflecting the 25% and 50% concentration constraints. Reflecting the 25% and 50% concentration constraints is the primary consideration in terms of both index construction and index maintenance. Ensuring timely and on-going reflection of the constraints requires an MSCI 25/50 Index to be rebalanced periodically. The MSCI 25/50 Indices are rebalanced in February, May, August and November.

Minimizing tracking error to the Parent Index. Minimizing the tracking error between an MSCI 25/50 Index and the relevant parent index, while keeping the index turnover to a reasonable level, is another important objective. MSCI seeks to achieve this by rebalancing an MSCI 25/50 Index using an optimization process that aims to minimize the constituent weight differences between that MSCI 25/50 Index and the relevant parent index.

Index Construction and Maintenance Methodology

Constructing and Rebalancing the MSCI 25/50 Indices

The MSCI 25/50 Index methodology follows a portfolio optimization framework. The Barra Optimizer is utilized to perform the optimization function, which is aimed at minimizing index turnover, tracking error and extreme deviation from the relevant parent index. The Barra Optimizer is an algorithm designed to facilitate the portfolio construction process.

Constraint targets. Each MSCI 25/50 Index is subject to the following constraints:

- no issuer may exceed 25% of index weight; and
- all issuers with weight above 5% may not exceed 50% of the index weight.

Minimizing weight distance from the relevant parent index. The MSCI 25/50 Index methodology aims at minimizing the weight distance from the relevant parent index. The active risk or the tracking error of an MSCI 25/50 Index versus the relevant parent index is measured as the distance between the constituent weights of that MSCI 25/50 Index and the relevant parent index.

Minimizing transaction cost. A transaction cost is applied as a proxy for index turnover on rebalancing from each MSCI 25/50 Index.

Minimum weight of constituents. The minimum weight of any MSCI 25/50 Index constituent is equal to the weight of the smallest constituent in the relevant parent index.

Buffer Rules

A buffer of 10% of the value of each constraint is used in order to reduce the risk of non-compliance due to short term market movements between two quarterly rebalancing. As a result, at the point of constructing or rebalancing the MSCI 25/50 Indices, the weight of any single issuer cannot exceed 22.5% of the index weight and all issuers with weight above 4.5% cannot exceed 45% of the index weight.

Maintenance Rules

Quarterly Index Reviews. The MSCI 25/50 Indices are rebalanced quarterly and the changes resulting from the rebalancing are made as of the close of the last business day of each February, May, August and November, to coincide with the quarterly index reviews of their parent indices.

The MSCI 25/50 Indices are in general rebalanced five business days before the effective date. The changes resulting from the rebalancing are announced on the same day.

In case a pro forma MSCI 25/50 Index violates the 25/50 constraints between the announcement date and the effective date, the previously announced results will be discarded and a newly rebalanced MSCI 25/50 Index will be announced.

There is no index rebalancing due to non-compliance between quarterly index reviews.

At each rebalancing, a constraint factor is calculated for each constituent of each MSCI 25/50 Index. The constraint factor is defined as the weight in the applicable MSCI 25/50 Index at the time of the rebalancing *divided by* the weight in the relevant parent index. The constraint factor as well as the constituents of each MSCI 25/50 Index remains constant between index reviews except in case of corporate events.

Ongoing Event Related Changes. A security added to a parent index following a corporate event is added to the relevant MSCI 25/50 Index with an estimated capped weight, without rebalancing of the MSCI 25/50 index.

In the event of a merger or an acquisition where an index constituent acquires another index constituent or merges with another index constituent, the remaining company is maintained in the relevant MSCI 25/50 Index with a constraint factor calculated as the weighted average of the constraint factors before the corporate event.

If a spun-off security of an index constituent is added to a parent index, it will be added to the relevant MSCI 25/50 Index with the same constraint factor as the parent security.

The deletion of a constituent from a parent index following a corporate event triggers its deletion from the relevant MSCI 25/50 Index without rebalancing of that MSCI 25/50 Index.

The addition of a newly eligible security in a parent index — for example, an early inclusion of a large initial public offering, or a security migrating to that parent index from another size segment — will result in the inclusion of that security in the relevant MSCI 25/50 Index and consequently trigger the full rebalancing of that MSCI 25/50 Index.

Issuer Concentration Issues

A minimum of 15 issuers in the relevant parent index is required at any point in time for an MSCI 25/50 Index to be rebalanced as described above. In the event the number of issuers drops below 15 but remains above 11 following a corporate event or a regular index review, MSCI will apply the following adjustments:

- Number of issuers drops to 14: the buffer mentioned above will be reduced from 10% to 9%. Thus, the weight of any single issuer cannot exceed 22.75% of the index weight and all issuers with weight above 4.55% cannot exceed 45.5% of the index weight.
- Number of issuers drops to 13: the buffer mentioned above will be reduced from 10% to 4%. Thus, the weight of any single issuer cannot exceed 24% of the index weight and all issuers with weight above 4.8% cannot exceed 48% of the index weight.
- Number of issuers drops to 12: the buffer mentioned above will be reduced from 10% to 0%. Thus, the weight of any single issuer cannot exceed 25% of the index weight and all issuers with weight above 5% cannot exceed 50% of the index weight.

An MSCI 25/50 Index will need to be discontinued if the number of issuers drops below 12 as mathematically no solution can satisfy the 25% and 50% constraints. MSCI will however temporarily maintain the MSCI 25/50 Index for a minimum of two months before discontinuation by adding the necessary number of securities to that MSCI 25/50 Index. The index discontinuation will coincide with one of the subsequent regular index reviews. The securities to be added will be chosen in the following order of priority:

- Securities deleted from the relevant MSCI 25/50 Index, *provided* they exhibit required liquidity and were not deleted due to financial difficulties, etc.
- Eligible securities of relevant size not included in the relevant parent index, e.g., largest small cap size- segment securities.

In the event that no securities are eligible for temporary addition to the relevant MSCI 25/50 Index, MSCI will provide an index, as close as possible to the 25/50 constraints, for a minimum of two months before discontinuation. The index discontinuation will coincide with one of the subsequent regular index reviews.

Index Calculation and Corporate Events

Please refer to “—The MSCI Indices” in this underlying supplement for information relating to the calculation of the MSCI 25/50 Indices and the treatment of corporate events. For these purposes, the MSCI 25/50 Indices are deemed to be included in the MSCI Indices described in “— The MSCI Indices” in this underlying supplement.

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THE NASDAQ-100 INDEX®

We have derived all information contained in this underlying supplement regarding the NASDAQ-100 Index®, including, without limitation, its make-up, method of calculation and changes in its components, from publicly available information, without independent verification. This information reflects the policies of, and is subject to change by The Nasdaq Stock Market, Inc. ("Nasdaq"). The NASDAQ-100 Index® was developed by Nasdaq and is calculated, maintained and published by The NASDAQ OMX Group, Inc. ("NASDAQ OMX"). Neither Nasdaq nor NASDAQ OMX has any obligation to continue to publish, and may discontinue publication of, the NASDAQ-100 Index®.

General

The NASDAQ-100 Index® is a modified market capitalization-weighted index of stocks of the 100 largest non-financial companies listed on The Nasdaq Global Market tier of The NASDAQ Stock Market. The NASDAQ-100 Index®, which includes companies across a variety of major industry groups, was launched on January 31, 1985, with a base index value of 125.00, as adjusted. Current information regarding the market value of the NASDAQ-100 Index® is available from Nasdaq as well as numerous market information services. The NASDAQ-100 Index® is reported by Bloomberg L.P. under the ticker symbol "NDX."

The NASDAQ-100 Index® share weights of the component securities of the NASDAQ-100 Index® at any time are based upon the total shares outstanding in each of those securities and are additionally subject, in certain cases, to rebalancing. Accordingly, each underlying stock's influence on the level of the NASDAQ-100 Index® is directly proportional to the value of its NASDAQ-100 Index® share weight.

Calculation of the NASDAQ-100 Index®

At any moment in time, the value of the NASDAQ-100 Index® equals the aggregate value of the then-current NASDAQ-100 Index® share weights of each of the NASDAQ-100 Index® component securities, which are based on the total shares outstanding of each such NASDAQ-100 Index® component security, multiplied by each such security's respective last sale price on The NASDAQ Stock Market (which may be the official closing price published by The NASDAQ Stock Market), and divided by a scaling factor (the "divisor"), which becomes the basis for the reported NASDAQ-100 Index® value. The divisor serves the purpose of scaling such aggregate value to a lower order of magnitude which is more desirable for NASDAQ-100 Index® reporting purposes.

Underlying Stock Eligibility Criteria

Initial Eligibility Criteria

To be eligible for initial inclusion in the NASDAQ-100 Index®, a security must meet the following criteria:

- the security's U.S. listing must be exclusively on the NASDAQ Global Select Market or the NASDAQ Global Market (unless the security was dually listed on another U.S. market prior to January 1, 2004 and has continuously maintained such listing);
- the security must be issued by a non-financial company;
- the security may not be issued by an issuer currently in bankruptcy proceedings;
- the security must have an average daily trading volume of at least 200,000 shares;

- if the security is of a foreign issuer (a foreign issuer is determined based on its country of organization), it must have listed options on a recognized options market in the United States or be eligible for listed-options trading on a recognized options market in the United States;
- only one class of security per issuer is allowed;
- the issuer of the security may not have entered into a definitive agreement or other arrangement which would likely result in the security no longer being NASDAQ-100 Index® eligible;
- the issuer of the security may not have annual financial statements with an audit opinion that is currently withdrawn; and
- the security must have “seasoned” on the NASDAQ, NYSE or NYSE Amex (generally, a company is considered to be seasoned if it has been listed on a market for at least three full months (excluding the first month of initial listing)).

Continued Eligibility Criteria

In addition, to be eligible for continued inclusion in the NASDAQ-100 Index®, the security must meet the following criteria:

- the security’s U.S. listing must be exclusively on the NASDAQ Global Select Market or the NASDAQ Global Market (unless the security was dually listed on another U.S. market prior to January 1, 2004 and has continuously maintained such listing);
- the security must be issued by a non-financial company;
- the security may not be issued by an issuer currently in bankruptcy proceedings;
- the security must have an average daily trading volume of at least 200,000 shares as measured annually during the ranking review process described below;
- if the security is of a foreign issuer, it must have listed options on a recognized options market in the United States or be eligible for listed-options trading on a recognized options market in the United States, as measured annually during the ranking review process;
- the security must have an adjusted market capitalization equal to or exceeding 0.10% of the aggregate adjusted market capitalization of the NASDAQ-100 Index® at each month-end. In the event a company does not meet this criterion for two consecutive month-ends, it will be removed from the NASDAQ-100 Index® effective after the close of trading on the third Friday of the following month; and
- the issuer of the security may not have annual financial statements with an audit opinion that is currently withdrawn.

For the purposes of NASDAQ-100 Index® eligibility criteria, if the security is a depositary receipt representing a security of a non-U.S. issuer, then references to the “issuer” are references to the issuer of the underlying security.

These NASDAQ-100 Index® eligibility criteria may be revised from time to time by Nasdaq without regard to the notes.

Annual Ranking Review

The composition of the NASDAQ-100 Index[®] is evaluated on an annual basis, except under extraordinary circumstances that may result in an interim evaluation, as follows (this evaluation is referred to herein as the “Ranking Review”). Securities listed on The NASDAQ Stock Market that meet the applicable eligibility criteria are ranked by market value. NASDAQ-100 Index[®]-eligible securities which are already in the NASDAQ-100 Index[®] and which are ranked in the top 100 eligible securities (based on market capitalization) are retained in the NASDAQ-100 Index[®]. A security that is ranked 101 to 125 is also retained, provided that such security was ranked in the top 100 eligible securities as of the previous Ranking Review or was added to the NASDAQ-100 Index[®] subsequent to the previous Ranking Review. Securities not meeting such criteria are replaced. The replacement securities chosen are those NASDAQ-100 Index[®]-eligible securities not currently in the NASDAQ-100 Index[®] that have the largest market capitalization. The data used in the ranking includes end of October market data from The NASDAQ Stock Market and is updated for total shares outstanding submitted in a publicly filed SEC document via EDGAR through the end of November.

Generally, the list of annual additions and deletions is publicly announced via a press release in the early part of December. Replacements are made effective after the close of trading on the third Friday in December. Moreover, if at any time during the year other than the Ranking Review, a NASDAQ-100 Index[®] security no longer meets the continued eligibility criteria or is otherwise determined by Nasdaq to become ineligible for continued inclusion in the NASDAQ-100 Index[®], the security will be replaced with the largest market capitalization security not currently in the NASDAQ-100 Index[®] and meeting the NASDAQ-100 Index[®] initial eligibility criteria listed above. Ordinarily, a security will be removed from the NASDAQ-100 Index[®] at its last sale price. If, however, at the time of its removal the security is halted from trading on its primary listing market and an official closing price cannot readily be determined, the security may, in Nasdaq’s discretion, be removed at a zero price. The zero price will be applied to the security after the close of the market but prior to the time the official closing value of the NASDAQ-100 Index[®] is disseminated.

Index Maintenance

Changes in the price and/or the aggregate value of the then-current NASDAQ-100 Index[®] share weights of each of the NASDAQ-100 Index[®] component securities driven by corporate events such as stock dividends, stock splits and certain spin-offs and rights issuances are adjusted on the ex-date. If the change in total shares outstanding arising from other corporate actions is greater than or equal to 10.0%, the change will be made to the NASDAQ-100 Index[®] as soon as practicable. Otherwise, if the change in total shares outstanding is less than 10.0%, then all such changes are accumulated and made effective at one time on a quarterly basis after the close of trading on the third Friday in each of March, June, September and December. The NASDAQ-100 Index[®] share weights for those underlying stocks are derived from each security’s total shares outstanding. The NASDAQ-100 Index[®] share weights for those underlying stocks are adjusted by the same percentage amount by which the total shares outstanding have changed in those NASDAQ-100 Index[®] securities.

A special cash dividend announced by the listing exchange will result in an adjustment to the last sale price of a NASDAQ-100 Index[®] component security prior to market open on the ex-date for the special amount distributed. A special dividend may also be referred to as extra, extraordinary, non-recurring, one-time, unusual, etc.

Ordinarily, whenever there is a change in the NASDAQ-100 Index[®] share weights, a change in a component security included in the NASDAQ-100 Index[®], or a change to the price of a component security due to spin-offs, rights issuances or special cash dividends, Nasdaq adjusts the divisor to ensure that there is no discontinuity in the level of the NASDAQ-100 Index[®] that might otherwise be caused by any such change. All changes will be announced in advance and will be reflected in the NASDAQ-100 Index[®] prior to market open on the effective date of such changes.

Index Rebalancing

The NASDAQ-100 Index® is calculated under a “modified capitalization-weighted” methodology, which is a hybrid between equal weighting and conventional capitalization weighting. This methodology is expected to: (1) retain in general the economic attributes of capitalization weighting; (2) promote portfolio weight diversification (thereby limiting domination of the NASDAQ-100 Index® by a few large stocks); (3) reduce NASDAQ-100 Index® performance distortion by preserving the capitalization ranking of companies; and (4) reduce market impact on the smallest NASDAQ-100 Index® securities from necessary weight rebalancings.

Under the methodology employed, on a quarterly basis coinciding with Nasdaq’s quarterly scheduled weight adjustment procedures, the NASDAQ-100 Index® securities are categorized as either “Large Stocks” or “Small Stocks” depending on whether their current percentage weights (after taking into account scheduled weight adjustments due to stock repurchases, secondary offerings or other corporate actions) are greater than, or less than or equal to, the average percentage weight in the NASDAQ-100 Index® (*i.e.*, as a 100-stock index, the average percentage weight in the NASDAQ-100 Index® is 1.0%).

This quarterly examination will result in a NASDAQ-100 Index® rebalancing if either one or both of the following two weight distribution requirements are not met: (1) the current weight of the single largest market capitalization component security must be less than or equal to 24.0% and (2) the “collective weight” of those component securities the individual current weights of which are in excess of 4.5%, when added together, must be less than or equal to 48.0%. In addition, Nasdaq may conduct a special rebalancing if it is determined necessary to maintain the integrity of the NASDAQ-100 Index®.

If either one or both of these weight distribution requirements are not met upon quarterly review, or Nasdaq determines that a special rebalancing is required, a weight rebalancing will be performed. First, relating to weight distribution requirement (1) above, if the current weight of the single largest component security exceeds 24.0%, then the weights of all Large Stocks (those greater than 1%) will be scaled down proportionately towards 1.0% by enough for the adjusted weight of the single largest component security to be set to 20.0%. Second, relating to weight distribution requirement (2) above, for those component securities the individual current weights or adjusted weights in accordance with the preceding step of which are in excess of 4.5%, if their “collective weight” exceeds 48.0%, then the weights of all Large Stocks will be scaled down proportionately towards 1.0% by just enough for the “collective weight,” so adjusted, to be set to 40.0%.

The aggregate weight reduction among the Large Stocks resulting from either or both of the above rescalings will then be redistributed to the Small Stocks (those stocks less than or equal to 1%) in the following iterative manner. In the first iteration, the weight of the largest Small Stock will be scaled upwards by a factor which sets it equal to the average Index weight of 1.0%. The weights of each of the smaller remaining Small Stocks will be scaled up by the same factor reduced in relation to each stock’s relative ranking among the Small Stocks such that the smaller the component security in the ranking, the less the scale-up of its weight. This is intended to reduce the market impact of the weight rebalancing on the smallest component securities in the NASDAQ-100 Index®.

In the second iteration, the weight of the second largest Small Stock, already adjusted in the first iteration, will be scaled upwards by a factor which sets it equal to the average index weight of 1.0%. The weights of each of the smaller remaining Small Stocks will be scaled up by this same factor reduced in relation to each stock’s relative ranking among the Small Stocks such that, once again, the smaller the component stock in the ranking, the less the scale-up of its weight.

Additional iterations will be performed until the accumulated increase in weight among the Small Stocks exactly equals the aggregate weight reduction among the Large Stocks from rebalancing in accordance with weight distribution requirement (1) and/or weight distribution requirement (2).

Then, to complete the rebalancing procedure, once the final percent weights of each of the component securities are set, the NASDAQ-100 Index® share weights will be determined anew based upon the last sale prices and aggregate capitalization of the NASDAQ-100 Index® at the close of trading on the last day in February, May, August and November. Changes to the NASDAQ-100 Index® share weights will be made effective after the close of trading on the third Friday in March, June, September and December, and an adjustment to the NASDAQ-100 Index® divisor will be made to ensure continuity of the NASDAQ-100 Index®.

Ordinarily, new rebalanced weights will be determined by applying the above procedures to the current NASDAQ-100 Index® share weights. However, NASDAQ OMX may from time to time determine rebalanced weights, if necessary, by instead applying the above procedure to the actual current market capitalization of the component securities. In such instances, NASDAQ OMX would announce the different basis for rebalancing prior to its implementation.

NASDAQ OMX may, from time to time, exercise reasonable discretion as it deems appropriate in order to ensure the integrity of the NASDAQ-100 Index®.

License Agreement

We have entered into a non-exclusive license agreement with NASDAQ OMX providing for the license to us, in exchange for a fee, of the right to use the NASDAQ-100 Index® in connection with certain securities, including the notes.

The license agreement between NASDAQ OMX and us provides that the following language must be stated in this underlying supplement:

The notes are not sponsored, endorsed, sold or promoted by, The NASDAQ OMX Group, Inc. or its affiliates (NASDAQ OMX, with its affiliates, are referred to as the "Corporations"). The Corporations have not passed on the legality or suitability of, or the accuracy or adequacy of descriptions and disclosures relating to, the notes. The Corporations make no representation or warranty, express or implied, to the owners of the notes or any member of the public regarding the advisability of investing in securities generally or in the notes particularly, or the ability of the NASDAQ-100 Index® to track general stock market performance. The Corporations' only relationship to JPMorgan Chase & Co. and its affiliates is in the licensing of the Nasdaq®, NASDAQ OMX®, OMX® and NASDAQ-100 Index® registered trademarks, service marks and certain trade names of the Corporations and the use of the NASDAQ-100 Index® which is determined, composed and calculated by NASDAQ OMX without regard to JPMorgan Chase & Co. or the notes. NASDAQ OMX has no obligation to take the needs of JPMorgan Chase & Co. or the owners of the notes into consideration in determining, composing or calculating the NASDAQ-100 Index®. The Corporations are not responsible for and have not participated in the determination of the timing of, prices at, or quantities of the notes to be issued or in the determination or calculation of the equation by which the notes are to be converted into cash. The Corporations have no liability in connection with the administration, marketing or trading of the notes.

THE CORPORATIONS DO NOT GUARANTEE THE ACCURACY AND/OR UNINTERRUPTED CALCULATION OF THE NASDAQ-100 INDEX® OR ANY DATA INCLUDED THEREIN. THE CORPORATIONS MAKE NO WARRANTY, EXPRESS OR IMPLIED, AS TO RESULTS TO BE OBTAINED BY JPMORGAN CHASE & CO., OWNERS OF THE NOTES, OR ANY OTHER PERSON OR ENTITY FROM THE USE OF THE NASDAQ-100 INDEX® OR ANY DATA INCLUDED THEREIN. THE CORPORATIONS MAKE NO EXPRESS OR IMPLIED WARRANTIES, AND EXPRESSLY DISCLAIM ALL WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE WITH RESPECT TO THE NASDAQ-100 INDEX® OR ANY DATA INCLUDED THEREIN. WITHOUT LIMITING ANY OF THE FOREGOING, IN NO EVENT SHALL THE CORPORATIONS HAVE ANY LIABILITY FOR ANY LOST PROFITS OR SPECIAL, INCIDENTAL, PUNITIVE, INDIRECT, OR CONSEQUENTIAL DAMAGES, EVEN IF NOTIFIED OF THE POSSIBILITY OF SUCH DAMAGES.

THE NIKKEI 225 INDEX

We have derived all information contained in this underlying supplement regarding the Nikkei 225 Index, including, without limitation, its make-up, method of calculation and changes in its components, from publicly available information without independent verification. This information reflects the policies of, and is subject to change by Nikkei Inc. The Nikkei 225 Index was developed by Nikkei Inc. and is calculated, maintained and published by Nikkei Inc. Nikkei Inc. has no obligation to continue to publish, and may discontinue the publication of, the Nikkei 225 Index.

The Nikkei 225 Index is reported by Bloomberg L.P. under the ticker symbol “NKY.”

The Nikkei 225 Index is a stock index that measures the composite price performance of selected Japanese stocks. The Nikkei 225 Index, as of the date of this underlying supplement, is based on 225 underlying stocks (the “Nikkei Underlying Stocks”) trading on the Tokyo Stock Exchange (“TSE”) representing a broad cross-section of Japanese industries. Non-ordinary shares, such as shares of ETFs, REITs, preferred stock or other preferred securities or tracking stocks are excluded from the Nikkei 225 Index.

All 225 Nikkei Underlying Stocks are stocks listed in the First Section of the TSE. Stocks listed in the First Section of the TSE are among the most actively traded stocks on the TSE. Nikkei Inc. rules require that the 75 most liquid issues (one-third of the component count of the Nikkei 225 Index) be included in the Nikkei 225 Index. Nikkei Inc. first calculated and published the Nikkei 225 Index in 1970.

Rules of the Periodic Review

Nikkei Underlying Stocks are reviewed annually (the “**periodic review**”) in accordance with the following rules, and results of the review are applied on the first trading day in October. Results of the review become effective on the first trading day of October, and there is no limit to the number of Nikkei Underlying Stocks that can be affected. Stocks selected by the procedures outlined below are presented as candidates to a committee comprised of academics and market professionals for comment; based on comments from the committee, Nikkei Inc. determines and announces any changes to the Nikkei Underlying Stocks.

High Liquidity Group

The top 450 most liquid stocks are chosen from the TSE First Section. For purposes of this selection, liquidity is measured by (i) trading volume in the preceding 5-year period and (ii) the magnitude of price fluctuation by volume in the preceding 5-year period. These 450 stocks constitute the “**High Liquidity Group**” for the review. Those Nikkei Underlying Stocks that are not in the High Liquidity Group are removed. Those stocks that are not currently Nikkei Underlying Stocks but that are in the top 75 of the High Liquidity Group are added.

Sector Balance

The High Liquidity Group is then categorized into the following six sectors: Technology, Financials, Consumer Goods, Materials, Capital Goods/Others and Transportation and Utilities. These six sector categories are further divided into 36 industrial classifications as follows:

- Technology — Pharmaceuticals, Electrical Machinery, Automobiles, Precision Machinery, Telecommunications;
- Financials — Banks, Miscellaneous Finance, Securities, Insurance;
- Consumer Goods — Marine Products, Food, Retail, Services;

- Materials — Mining, Textiles, Paper and Pulp, Chemicals, Oil, Rubber, Ceramics, Steel, Nonferrous Metals, Trading House;
- Capital Goods/Others — Construction, Machinery, Shipbuilding, Transportation Equipment, Miscellaneous Manufacturing, Real Estate; and
- Transportation and Utilities — Railroads and Buses, Trucking, Shipping, Airlines, Warehousing, Electric Power, Gas.

The “**appropriate number**” of constituents for each sector is defined to be half the number of stocks in that sector. After the liquidity-based adjustments, discussed above, a rebalancing is conducted if any of the sectors are over- or under-represented. The degree of representation is evaluated by comparing the actual number of constituents in the sector against the appropriate number for that sector.

For over-represented sectors, current constituents in the sector are deleted in the order of liquidity (lowest liquidity first) to correct the overage. For under-represented sectors, non-constituent stocks are added from the High Liquidity Group in the order of liquidity (highest liquidity first) to correct the shortage.

Extraordinary Replacement Rules

Nikkei Underlying Stocks removed from the TSE First Section are deleted from the Nikkei 225 Index. Reasons for removal from the TSE First Section include: designation as a “security to be delisted” or actual delisting by reason of bankruptcy (including filing under the Corporate Reorganization Act, Civil Rehabilitation Act or liquidation), delisting due to corporate restructuring such as merger, share exchange or share transfer, designation as a “security to be delisted” or actual delisting due to excess debt or transfer to the Second Section. In addition, a component stock transferred to the “Kanri-Post” (Posts for stocks under supervision) is in principle a candidate for deletion. However, the decision to delete such candidates will be made by examining the sustainability and the probability of delisting in the individual case.

When a Nikkei Underlying Stock is deleted from the Nikkei 225 Index as outlined in the preceding paragraph, a new Nikkei Underlying Stock will be selected and added, in principle, from the same sector of the High Liquidity Group in order of liquidity. Notwithstanding the foregoing, the following rules may apply depending on the timing and circumstances of the deletion: (i) when such deletion is scheduled close to the periodic review, additional stocks may be selected as part of the periodic review process and (ii) when multiple deletions are scheduled in a season other than the periodic review, additions may be selected using the sector balancing rules outlined above.

Procedures to Implement Constituent Changes

As a general rule, for both the periodic review and the extraordinary replacement rules, additions and deletions are made effective on the same day in order to keep the number of Nikkei Underlying Stocks 225. However, under the circumstances outlined below, when an addition cannot be made on the same day as a deletion, the Nikkei 225 Index may be calculated with fewer than 225 Nikkei Underlying Stocks. In this case, the divisor is adjusted to ensure continuity.

The first instance when the Nikkei 225 Index may be calculated with fewer than 225 Nikkei Underlying Stocks is when a Nikkei Underlying Stock is delisted by reason of share exchange or transfer and the succeeding company becomes listed a short period of time later. The second instance is when a Nikkei Underlying Stock is deleted due to a sudden announcement of bankruptcy, or is designated as a “security to be delisted” for the same reason, and there is not sufficient time to add a new Nikkei Underlying Stock in the same day.

Calculation of the Nikkei 225 Index

The Nikkei 225 Index is a modified, price-weighted index (*i.e.*, a Nikkei Underlying Stock's weight in the index is based on its price per share rather than the total market capitalization of the issuer) which is calculated by (i) multiplying the per share price of each Nikkei Underlying Stock by the corresponding weighting factor for such Nikkei Underlying Stock (a "Weight Factor"), (ii) calculating the sum of all these products and (iii) dividing such sum by a divisor (the "Divisor"). The Divisor was initially set at 225 for the date of May 16, 1949 using historical numbers from May 16, 1949, the date on which the TSE was reopened. The Divisor was 25.473 as of November 4, 2014, and is subject to periodic adjustments as set forth below. Each Weight Factor is computed by dividing ¥50 by the par value of the relevant Nikkei Underlying Stock, so that the share price of each Nikkei Underlying Stock when multiplied by its Weight Factor corresponds to a share price based on a uniform par value of ¥50. The stock prices used in the calculation of the Nikkei 225 Index are those reported by a primary market for the Nikkei Underlying Stocks (currently the TSE). The level of the Nikkei 225 Index is calculated once per minute during TSE trading hours.

In order to maintain continuity in the Nikkei 225 Index in the event of certain changes due to non-market factors affecting the Nikkei Underlying Stocks, such as the addition or deletion of stocks, substitution of stocks, stock splits or distributions of assets to stockholders, the Divisor used in calculating the Nikkei 225 Index is adjusted in a manner designed to prevent any instantaneous change or discontinuity in the level of the Nikkei 225 Index. Thereafter, the Divisor remains at the new value until a further adjustment is necessary as the result of another change. As a result of such change affecting any Nikkei Underlying Stock, the Divisor is adjusted in such a way that the sum of all share prices immediately after such change multiplied by the applicable Weight Factor and divided by the new Divisor (*i.e.*, the level of the Nikkei 225 Index immediately after such change) will equal the level of the Nikkei 225 Index immediately prior to the change.

License Agreement with Nikkei Inc. and Disclaimers

We expect to enter into an agreement with Nikkei Inc. that would provide us and certain of our affiliates or subsidiaries identified in that agreement with a non-exclusive license and, for a fee, with the right to use the Nikkei 225 Index, which is owned and published by Nikkei Inc., in connection with certain securities, including the notes.

Our license agreement with Nikkei Inc. will provide that Nikkei Inc. will assume no obligation or responsibility for use of the Nikkei 225 Index by us or our affiliates.

The Nikkei 225 Index is an intellectual property of Nikkei Inc. Nikkei Inc. was formerly known as Nihon Keizai Shimbun, Inc. The name was changed on January 1, 2007. "Nikkei," "Nikkei Stock Average," and "Nikkei 225" are the service marks of Nikkei Inc. Nikkei Inc. reserves all the rights, including copyright, to the index. Nikkei Digital Media, Inc., a wholly owned subsidiary of Nikkei Inc., calculates and disseminates the Nikkei 225 Index under exclusive agreement with Nikkei Inc. Nikkei Inc. and Nikkei Digital Media Inc. are collectively referred to as the "Nikkei 225 Index Sponsor."

THE NOTES ARE NOT IN ANY WAY SPONSORED, ENDORSED OR PROMOTED BY THE NIKKEI 225 INDEX SPONSOR. THE NIKKEI 225 INDEX SPONSOR DOES NOT MAKE ANY WARRANTY OR REPRESENTATION WHATSOEVER, EXPRESS OR IMPLIED, EITHER AS TO THE RESULTS TO BE OBTAINED AS TO THE USE OF THE NIKKEI 225 INDEX OR THE FIGURE AT WHICH THE NIKKEI 225 INDEX STANDS AT ANY PARTICULAR DAY OR OTHERWISE. THE NIKKEI 225 INDEX IS COMPILED AND CALCULATED SOLELY BY THE NIKKEI 225 INDEX SPONSOR. HOWEVER, THE NIKKEI 225 INDEX SPONSOR SHALL NOT BE LIABLE TO ANY PERSON FOR ANY ERROR IN THE NIKKEI 225 INDEX AND THE NIKKEI 225 INDEX SPONSOR SHALL NOT BE UNDER ANY OBLIGATION TO ADVISE ANY PERSON, INCLUDING A PURCHASER OR VENDOR OF THE NOTES, OF ANY ERROR THEREIN.

In addition, the Nikkei 225 Index Sponsor gives no assurance regarding any modification or change in any methodology used in calculating the Nikkei 225 Index and is under no obligation to continue the calculation, publication and dissemination of the Nikkei 225 Index.

The Tokyo Stock Exchange

The TSE is one of the world's largest securities exchanges in terms of market capitalization. Trading hours are currently from 9:00 a.m. to 11:00 a.m. and from 12:30 p.m. to 3:00 p.m., Tokyo time, Monday through Friday.

Due to the time zone difference, on any normal trading day the TSE will close prior to the opening of business in New York City on the same calendar day. Therefore, the closing level of the Nikkei 225 Index on a trading day will generally be available in the United States by the opening of business on the same calendar day.

The TSE has adopted certain measures, including daily price floors and ceilings on individual stocks, intended to prevent any extreme short-term price fluctuations resulting from order imbalances. In general, any stock listed on the TSE cannot be traded at a price lower than the applicable price floor or higher than the applicable price ceiling. These price floors and ceilings are expressed in absolute Japanese yen, rather than percentage limits based on the closing price of the stock on the previous trading day. In addition, when there is a major order imbalance in a listed stock, the TSE posts a "special bid quote" or a "special asked quote" for that stock at a specified higher or lower price level than the stock's last sale price in order to solicit counter-orders and balance supply and demand for the stock. Prospective investors should also be aware that the TSE may suspend the trading of individual stocks in certain limited and extraordinary circumstances, including, for example, unusual trading activity in that stock. As a result, changes in the Nikkei 225 Index may be limited by price limitations or special quotes, or by suspension of trading, on individual stocks that make up the Nikkei 225 Index, and these limitations, in turn, may adversely affect the value of the notes.

THE RUSSELL INDICES

We have derived all information contained in this underlying supplement regarding the Russell 1000[®] Index, the Russell 2000[®] Index and the Russell 3000[®] Index (each, a “Russell Index” and collectively, the “Russell Indices”), including, without limitation, their make-up, method of calculation and changes in their components, from publicly available information, without independent verification. This information reflects the policies of, and is subject to change by, Russell Investments (“Russell”). The Russell Indices were developed by Russell Investment Group (formerly, Frank Russell Company) and are calculated, maintained and published by Russell, a subsidiary of Russell Investment Group. Russell has no obligation to publish, and may discontinue the publication of, the Russell Indices.

The Russell 1000[®] Index

The Russell 1000[®] Index measures the composite price performance of stocks of 1,000 companies (with respect to the Russell 1000[®] Index, the “Component Stocks”) domiciled in the U.S. and its territories. All stocks included in the Russell 1000[®] Index are traded on a major U.S. exchange. The companies included in the Russell 1000[®] Index are the 1,000 largest companies that form the Russell 3000E[™] Index, which is composed of the 4,000 largest U.S. companies as determined by total market capitalization and represents approximately 99% of the U.S. equity market. The Russell 1000[®] Index is reported by Bloomberg L.P. under the ticker symbol “RIY.”

The Russell 2000[®] Index

The Russell 2000[®] Index measures the capitalization-weighted price performance of the small-cap stocks included in the Russell 2000[®] Index (with respect to the Russell 2000[®] Index, the “Component Stocks”) and is designed to track the performance of the small capitalization segment of the U.S. equity market. All stocks included in the Russell 2000[®] Index are traded on a major U.S. exchange. The companies included in the Russell 2000[®] Index are the middle 2,000 of the companies that form the Russell 3000E[™] Index, which is composed of the 4,000 largest U.S. companies as determined by total market capitalization and represents approximately 99% of the U.S. equity market. The Russell 2000[®] Index is reported by Bloomberg L.P. under the ticker symbol “RTY.”

The Russell 3000[®] Index

The Russell 3000[®] Index measures the capitalization-weighted price performance of the stocks included in the Russell 3000[®] Index (with respect to the Russell 3000[®] Index, the “Component Stocks”) and is designed to represent the broad U.S. equity market. All stocks included in the Russell 3000[®] Index are traded on a major U.S. exchange. The companies included in the Russell 3000[®] Index are the 3,000 largest U.S. companies that form the Russell 3000E[™] Index, which is composed of the 4,000 largest U.S. companies as determined by total market capitalization and represents approximately 99% of the U.S. equity market. The Russell 3000[®] Index consists of the 3,000 companies included in the Russell 1000[®] Index and the Russell 2000[®] Index, which are subsets of the Russell 3000E[™] Index, and represents approximately 98% of the U.S. equity market. The Russell 3000E[™] Index is not the same as the Russell 3000[®] Index, which is a subset of the Russell 3000E[™] Index. The Russell 3000[®] Index is reported by Bloomberg L.P. under the ticker symbol “RAY.”

Selection of Stocks Underlying the Russell Indices

The Russell Indices are sub-indices of the Russell 3000E[™] Index. To be eligible for inclusion in the Russell 3000E[™] Index, and, consequently, a Russell Index, a company’s stock must be listed on the last trading day in May of a given year, and Russell must have access to documentation on that date verifying the company’s eligibility for inclusion. Eligible initial public offerings are added to

Russell Indices at the end of each calendar quarter, based on total market capitalization rankings within the market-adjusted capitalization breaks established during the most recent reconstitution. To be added to any Russell Index during a quarter outside of reconstitution, initial public offerings must meet all eligibility criteria, and as of the most recent reconstitution, must (i) be priced and traded and (ii) rank larger in total market capitalization than the market-adjusted smallest company in the Russell 3000E™ Index.

U.S. companies are eligible for inclusion in the Russell 3000E™ Index and, consequently, any Russell Index. Russell uses the following method for determining whether a company is a U.S. company. If a company incorporates in, has a stated headquarters location in, and also trades in the same country (ADRs and ADSs are not eligible), the company is assigned to its country of incorporation. If any of the three do not match, Russell then defines 3 Home Country Indicators ("HCIs"). The HCIs are as follows:

- country of incorporation;
- country of headquarters; and
- country of the most liquid exchange as defined by 2-year average daily dollar trading volume (ADDTV) from all exchanges within a country.

After the HCIs are defined, the next step in the country assignment involves an analysis of assets by location. Russell cross-compares the primary location of the company's assets with the three HCIs. If the primary location of assets matches ANY of the HCIs, then the company is assigned to its primary asset location.

If there is not enough information to determine a company's primary country of assets, Russell uses the primary location of the company's revenue for the same cross-comparison and assigns the company to the appropriate country in a similar fashion. In 2011, Russell began using an average of two years of assets or revenues data for analysis to reduce potential turnover.

If conclusive country details cannot be derived from assets or revenue, Russell assigns the company to the country where its headquarters are located unless the country is a Benefit Driven Incorporation ("BDI") country. If the country in which its headquarters are located is a BDI country, the company is assigned to the country of its most liquid stock exchange. The BDI countries are Anguilla, Antigua and Barbuda, Aruba, Bahamas, Barbados, Belize, Bermuda, Bonaire, British Virgin Islands, Cayman Islands, Channel Islands, Cook Islands, Curacao, Faroe Islands, Gibraltar, Isle of Man, Liberia, Marshall Islands, Panama, Saba, Sint Eustatius, Sint Maarten and Turks and Caicos Islands.

The following securities are specifically excluded from the Russell Indices: (i) stocks that are not traded on a major U.S. exchange (Bulletin Board, Pink Sheet and over-the-counter (OTC) securities are not eligible); (ii) preferred stock, convertible preferred stock, redeemable shares, participating preferred stock, warrants, rights and trust receipts; and (iii) royalty trusts, limited liability companies, closed-end investment companies (Due to SEC treatment of reporting, business development companies, or "BDCs," are no longer eligible effective June 2014 rebalance), blank check companies, special purpose acquisition companies ("SPACs") and limited partnerships.

The primary criterion used to determine the initial list of securities eligible for the Russell 3000E™ Index and, consequently, any Russell Index, is total market capitalization, which is defined as the total number of outstanding shares times the closing price of the shares as of the last trading day in May for those securities being considered at annual reconstitution. Initial public offering eligibility is determined each quarter. Common stock, non-restricted exchangeable shares and partnership units/membership interests (in certain cases) are used to calculate a company's total market capitalization. Exchangeable shares are shares that may be exchanged at any time, at the

holder's option, on a one-for-one basis for common stock. Partnership units/membership interests represent an economic interest in a limited partnership or limited liability company. Russell includes partnership units/membership interests as part of total market capitalization when the company in question is a holding company whose sole asset is its partnership units/membership interests in an underlying entity. In these cases, total market capitalization will be calculated based on 100% of the value of all partnership units/membership interests. Any other form of shares — such as preferred or convertible preferred stock, redeemable shares, participating preferred stock, warrants and rights or trust receipts — is excluded from the calculation. If multiple share classes of common stock exist, they are combined. In cases where the common stock share classes act independently of each other (e.g., tracking stocks), each class is considered for inclusion separately.

During annual reconstitution, a stock's closing price on its primary exchange on the last trading day in May is used to determine total market capitalization. If a stock does not trade on its primary exchange, the lowest price from another major U.S. exchange is used. In cases where multiple share classes have been combined, the price of the primary trading vehicle (usually the most liquid) is used in the total market capitalization calculations. Primary trading vehicles are determined by the last two years' average trading volume, as of the last trading day in May. For new members, the common share class with the highest trading volume will be considered the primary trading vehicle, and its associated price and trading symbol will be included in the Russell Indices.

Companies with only a total market capitalization of less than \$30 million are not eligible for inclusion in the Russell 3000E™ Index or, consequently, any Russell Index.

In addition, companies with only 5% or less of their shares available in the marketplace are not eligible for inclusion in the Russell 3000E™ Index or, consequently, any Russell Index. When unavailable shares are determined to be 94.5% or greater, this will be rounded to 95%. Also, stocks must have a closing price at or above \$1.00 on their primary exchange on the last trading day in May to be eligible for inclusion in any Russell Index at annual reconstitution. In order to reduce unnecessary turnover, if an existing Component Stock's closing price is less than \$1.00 on its primary exchange on the last trading day in May, it will be considered eligible if the average of the daily closing prices from its primary exchange during the month of May is equal to or greater than \$1.00. Furthermore, if a stock, new or existing, does not have a closing price at or above \$1.00 on its primary exchange on the last trading day in May, but does have a closing price at or above \$1.00 on another major U.S. exchange on that day, the stock will be eligible for inclusion. Quarterly initial public offering additions must have a closing price at or above \$1.00 on the last day of their eligibility period in order to qualify for index inclusion.

Companies that produce unrelated business taxable income (UBTI) are restricted from ownership for tax-exempt investors. In recognition of this, Russell screens all REITs and PTPs, removing any security from eligibility that generates or has historically generated UBTI and has not taken steps to block UBTI to equity holders. The research process is conducted as part of Russell's annual rebalance effort. Additional screening will not be assessed or changed outside of the reconstitution period. Information used to confirm UBTI impact includes the following publicly available sources: 10-K, SEC Form S-3, K-1, company annual report, dividend notices and the company website.

The Russell Indices are reconstituted annually to reflect changes in the marketplace. The list of companies is ranked based on total market capitalization as of the last trading day in May, with the actual reconstitution occurring on the last Friday in June each year, except that if the last Friday in June of any year is the 28th, 29th or 30th, reconstitution will occur on the preceding Friday. Changes in the Component Stocks are pre-announced and subject to change if any corporate activity occurs or if any new information is received prior to release.

Capitalization Adjustments

As a capitalization-weighted index, the each Russell Index reflects changes in the capitalization, or market value, of the Component Stocks relative to the capitalization on a base date. The current value of each Russell Index is calculated by adding the market values of the Component Stocks, which are derived by multiplying the price of each stock by the number of available shares, to arrive at the available market capitalization of the 2,000 stocks. The available market capitalization is then divided by a divisor, which represents the “adjusted” capitalization of the applicable Russell Index on the base date of December 31, 1986. To calculate the Russell Indices, last sale prices will be used for exchange-traded and NASDAQ stocks. If a Component Stock is not open for trading, the most recently traded price for that security will be used in calculating the Russell Indices. In order to provide continuity for the value of the Russell Indices, the applicable divisor is adjusted periodically to reflect events including changes in the number of common shares outstanding for Component Stocks, company additions or deletions, corporate restructurings and other capitalization changes.

Available shares are assumed to be shares available to the public for purchase. Exclusion of capitalization held by other listed companies and large holdings of private investors (10% or more) is based on information recorded in SEC corporate filings, including DEF 14, 424B and 10K filings (but not 13F filings), or other reliable sources in the event of missing or questionable data.

The following types of shares are removed from total market capitalization to arrive at available market capitalization:

- Corporate cross-owned shares — shares of a company in the applicable Russell Index held by another member of a Russell Index (including Russell Global Indexes). Any percentage held in this class will be adjusted;
- Large corporate and private holdings — shares held by a listed corporation not in the applicable Russell Index, by an individual or by a group of individuals acting together if the holding constitutes 10% or more of shares outstanding. However, not to be included in this class are institutional holdings, which are shares held by investment companies, partnerships, insurance companies, mutual funds, banks or venture capital firms, unless these firms have a direct relationship to the company in the applicable Russell Index, in which case the holdings are considered strategic holdings and are excluded;
- ESOP or LESOP shares — shares held by an Employee Stock Ownership Plan (“ESOP”) or a Leveraged Employee Stock Ownership Plan (“LESOP”) that comprise 10% or more of shares outstanding;
- Unlisted share classes — classes of common stock that are not traded on a U.S. securities exchange;
- Initial public offering lock-ups — shares locked up during an initial public offering are not available to the public and will be excluded from the market value at the time the initial public offering enters the applicable Russell Index; and
- Government Holdings:
 - Direct government holders — those holdings listed as “government of” are considered unavailable and will be removed entirely from available shares;
 - Indirect government holders — shares held by government investment boards and/or investment arms will be treated similarly to large private holdings and removed if the holding is greater than 10% of shares outstanding; and

- Government pensions — any holding by a government pension plan is considered an institutional holding and will not be removed from available shares.

Corporate Actions Affecting the Russell Indices

The Russell Indices are adjusted in response to certain corporate actions when the actions are final. Russell determines whether a corporate action is final based on sources of public information including company press releases, SEC filings, exchange notifications and Bloomberg or other sources that Russell deems reliable. If Russell determines that an action was not final after communication was given to clients, the changes to the applicable Russell Index will still occur. Prior to the completion of a corporate action, Russell estimates the effective date. Russell then adjusts the anticipated effective date based on public information until the date is considered final. Depending on the time on a given day that an action is determined to be final, Russell either (1) applies the action after the close of the current market day (t); or (2) applies the action after the close of the following day (t+1). Russell applies the following methodology guidelines when adjusting the applicable Russell Index in response to corporate actions:

- “No Replacement” Rule — Securities that leave the relevant Russell Index, between reconstitution dates, for any reason (e.g., mergers, acquisitions or other similar corporate activity) are not replaced. Thus, the number of securities in the relevant Russell Index over a year will fluctuate according to corporate activity.
- Mergers and Acquisitions — Mergers and acquisitions result in changes to the membership and weighting of members within the relevant Russell Index. Deletions due to cash acquisitions may not require delisting confirmation from the exchange, provided all other conditions (regulatory & shareholder) have been satisfied. In the event a merger or acquisition occurs between a member of the relevant Russell Index and another member of a Russell Index, the acquired company is deleted and its market capitalization moves to the acquiring company’s stock according to the terms of the merger; hence, if the merger or acquisition occurs between members of the relevant Russell Index, it has no effect on the relevant Russell Index’s total capitalization. Cross-ownership of the surviving entity is determined by a weighted average (by market value as of t-1) of the cross-ownership of the two previous companies. If Russell is able to determine that the action is final prior to 1:00 p.m. Eastern Standard Time on a given day, the action will be applied after the close of the current day (t). If Russell is able to determine that the action is final after 1:00 p.m. Eastern Standard Time on a given day, the action will be applied after the close of the following day (t+1). If the acquiring company is a member of the relevant Russell Index but the acquired company is not a member of any Russell Index, the acquiring company’s shares are adjusted at month-end. If the acquired company is a member of the relevant Russell Index but the acquiring company is not a member of any Russell Index, there are two possibilities:
 - Reverse Merger — If the acquiring company is a private, non-publicly traded company or OTC company, Russell will review the action to determine if it is considered a reverse merger, defined as a transaction that results in a publicly traded company that meets all requirements for inclusion in a Russell Index. If it is determined that an action is a reverse merger, the newly formed entity will be placed in the appropriate market capitalization index after the close of the day’s trade (when issued trade will not be recognized) following the completion of the merger (t+1), using the market-adjusted breakpoints from the most recent reconstitution. The acquired company will be removed from the current index simultaneously. Cross-ownership will be determined on the basis of the most recent SEC filings.

- **Standard Action** — The acquired company is deleted after the action is final. If Russell is able to determine that the action is final prior to 1:00 p.m. Eastern Standard Time on a given day, the action will be applied after the close of the current day (t). If Russell is able to determine that the action is final after 1:00 p.m. Eastern Standard Time on a given day, the action will be applied after the close of the following day (t+1).
- **Reincorporations** — Members of the relevant Russell Index that reincorporate to another country are analyzed for country assignment during annual reconstitution, as long as they continue to trade in the United States. Members of the relevant Russell Index that reincorporate to another country and no longer trade in the United States are immediately deleted from the relevant Russell Index. Companies that reincorporate to the United States are assessed for membership during annual reconstitution.
- **Reclassifications of Shares (Primary Vehicles)** — Primary vehicles will not be assessed or changed outside of a reconstitution period unless the existing class ceases to exist. In the event of extenuating circumstances signaling a necessary primary vehicle change, proper notification will be made.
- **Rights Offerings** — A right offered to shareholders is reflected in the relevant Russell Index only if the value of the right is at a premium to the market price. If the subscription price is at a premium to the market price, the right is reflected in the relevant Russell Index at the market open on the ex-date (for both transferable and non-transferable rights). The price is adjusted to account for the value of the right, and shares are increased according to the terms of the offering. If the rate is not available by the market close on the ex-date, the changes will be applied at the end of the subscription period. If the rate becomes available on the ex-date, the changes will be delayed one day. Late notifications also will delay the price and share adjustments by one day. Russell will not apply rights issued in anticipation of a takeover event or entitlements that give shareholders the right to purchase ineligible securities such as convertible debt.
- **Changes to Shares Outstanding** — Changes to shares outstanding due to buybacks (including Dutch auctions), secondary offerings, merger activity with a non-Russell Index member and other potential changes are updated at the end of the month (with the exception of June) in which the change is reflected in vendor-supplied updates and verified by Russell using an SEC filing. For a change in shares to occur, the cumulative change to available shares must be greater than 5%. These share changes are communicated to premier clients three trading days prior to month-end and include shares provided by the vendor and verified by Russell four days prior to month-end. The float factor determined at reconstitution is applied to the new shares issued or bought back. If any new shares issued are unavailable according to the filing, that portion will not be added to the relevant Russell Index.
- **Spin-offs and Initial Public Offerings** — The only additions between reconstitution dates are as a result of spin-offs and initial public offerings. Spun-off companies are added to the parent company's index and capitalization tier of membership if the spun-off company is sufficiently large. To be eligible, the spun-off company must rank larger in total market capitalization than the market-adjusted smallest company in the Russell 3000E™ Index as of the most recent reconstitution. If the spun-off company is not large enough to be added to the relevant Russell Index and is not trading on a "when-issued" basis, the relevant Russell Index will recognize the performance of the spin-off during its first day of trading through a synthetic price/performance of the parent company. This will allow holders one trading day to liquidate positions and replicate the relevant Russell Index. If the spun-off company is not large enough to be added to the relevant Russell Index but is trading on a when-issued

basis, the relevant Russell Index will remove the spun-off company's value by using the when-issued price. If the price of a spin-off is not available, a price will be established by first using an exchange-provided estimate or a Russell-calculated estimate if the exchange does not provide one. At the close of the first day of trading, a synthetic price/performance will be calculated to account for the actual opening price of the spin-off. This price/performance is calculated to capture the accurate performance of both the spin-off and parent for the day. Real-time calculations will reflect only the estimated performance of the two companies as actual performance is not captured until end of day.

- **Tender Offers** — A company acquired as a result of a tender offer is removed if (1) the initial tender offer has expired, (2) shareholders have validly tendered, not withdrawn, and the share have been accepted for payment, (3) all regulatory requirements have been fulfilled and (4) the acquirer will seek to complete the acquisition via a short-form merger or by compulsorily acquiring any remaining shares outstanding. In the case where a tender offer completes and does not result in the full acquisition of the target company, Russell will make a share adjustment to the target company's shares, on a date pre-announced by Russell, in cases where the available shares have decreased by 30% or more. Russell does not review partial tender offers and acquisitions.
- **Delisted Stocks** — When Component Stocks are deleted as a result of exchange delisting or reconstitution, the price used will be the closing primary exchange price on the day the action is final (t) or the closing OTC price on the following day (t+1). For stocks continuing to trade on the primary exchange, if Russell determines that the action is final prior to 1:00 p.m. Eastern Standard Time on a given day, the deletes will be applied after the close of the current day (t), using the last traded price. If, instead, Russell determines that the action is final after 1:00 p.m. Eastern Standard Time on a given day, the deletes will be applied after the close of the following day (t+1), using the closing OTC price. Stocks previously halted that fail to trade on the primary exchange prior to being moved to OTC will always be removed the following day (t+1) at the OTC closing price, regardless of the time of notification.
- **Bankruptcy and Voluntary Liquidations** — A company that files for a Chapter 7 liquidation bankruptcy or that files a liquidation plan will be removed from the relevant Russell Index at the time of filing. When shareholder approval is required to finalize the liquidation plan, Russell will remove the security once shareholder approval has been granted. A company that files for a Chapter 11 reorganization bankruptcy will remain a member of the relevant Russell Index, unless the company's stock is delisted from the primary exchange, in which case normal delisting rules apply. If a company files for bankruptcy, its stock is delisted, and it can be confirmed that the stock will not trade OTC, Russell may remove the stock at a nominal price of \$0.0001.
- **Stock Distributions** — A price adjustment for a stock distribution is applied on the ex-date of the distribution. When the distribution is a fixed amount of stock distributed on the ex-date, Russell increases the number of shares on the ex-date. When the distribution is an undetermined amount of stock based on future earnings and profits to be distributed at a future date, Russell increases the number of shares on the pay-date.
- **Dividends** — Gross dividends are included in the daily total return calculation of the relevant Russell Index on the basis of their ex-dates. The ex-date is used rather than the pay-date because the marketplace price adjustment for the dividend occurs on the ex-date. Monthly, quarterly and annual total returns are calculated by compounding the reinvestment of dividends daily. The reinvestment and compounding is at the total index level, not at the security level. Stock prices are adjusted to reflect special cash dividends on the ex-date. If a

dividend is payable in stock and cash and the stock rate cannot be determined by the ex-date, the dividend is treated as all cash.

- **Halted Stocks** — When a stock's trading has been halted, Russell holds the stock at its most recent closing price until trading is resumed or it is officially delisted. In addition, Russell will review stocks in two categories for removal: (1) stocks halted due to financial difficulty, debt or cash flow issues for a period longer than 40 calendar days and (2) those stocks suspended due to exchange listing rules or legal regulatory issues longer than one calendar quarter. Determination for removal will be made on a case-by-case basis and based upon reasonable likelihood of trade resumption and likelihood of residual value returned to equity holders. Should removal be deemed appropriate, it will be announced with monthly share changes and removed on month-end at zero value (though for system purposes the actual value used is \$0.0001).

Pricing of Securities Included in the Russell Indices

Primary exchange closing prices are used in the daily Russell Index calculations. FT Interactive data is used as the primary source for U.S. security prices, income, and total shares outstanding.

Disclaimers

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THE S&P 500® INDEX

We have derived all information contained in this underlying supplement regarding the S&P 500® Index, including, without limitation, its make-up, method of calculation and changes in its components, from publicly available information, without independent verification. This information reflects the policies of, and is subject to change by, S&P Dow Jones Indices LLC. The S&P 500® Index is calculated, maintained and published by S&P Dow Jones Indices LLC. S&P Dow Jones Indices LLC has no obligation to continue to publish, and may discontinue the publication of, the S&P 500® Index.

The S&P 500® Index is reported by Bloomberg L.P. under the ticker symbol "SPX."

In July 2012, The McGraw-Hill Companies, Inc. ("McGraw-Hill"), the owner of the S&P Indices business, and CME Group Inc. ("CME Group"), the 90% owner of the CME Group and Dow Jones & Company, Inc. joint venture that owns the Dow Jones Indexes business, formed a new joint venture, S&P Dow Jones Indices LLC, which owns the S&P Indices business and the Dow Jones Indexes business, including the S&P 500® Index.

The S&P 500® Index is intended to provide a performance benchmark for the U.S. equity markets. The calculation of the level of the S&P 500® Index (discussed below in further detail) is based on the relative value of the aggregate Market Value (as defined below) of the common stocks of 500 companies (the "S&P Component Stocks") as of a particular time as compared to the aggregate average Market Value of the common stocks of 500 similar companies during the base period of the years 1941 through 1943. Historically, the "Market Value" of any S&P Component Stock was calculated as the product of the market price per share and the number of the then-outstanding shares of such S&P Component Stock. As discussed below, on March 21, 2005, S&P Dow Jones Indices LLC began to use a new methodology to calculate the Market Value of the S&P Component Stocks and on September 16, 2005, S&P Dow Jones Indices LLC completed its transition to the new calculation methodology. The 500 companies are not the 500 largest companies listed on the New York Stock Exchange (the "NYSE") and not all 500 companies are listed on such exchange. S&P Dow Jones Indices LLC chooses companies for inclusion in the S&P 500® Index with the objective of achieving a distribution by broad industry groupings that approximates the distribution of these groupings in the common stock population of the U.S. equity market. S&P Dow Jones Indices LLC may from time to time, in its sole discretion, add companies to, or delete companies from, the S&P 500® Index to achieve the objectives stated above. Relevant criteria employed by S&P Dow Jones Indices LLC include the viability of the particular company, the extent to which that company represents the industry group to which it is assigned, the extent to which the company's common stock is widely-held and the Market Value and trading activity of the common stock of that company.

The S&P 500® Index is a float-adjusted index. Under float adjustment, the share counts used in calculating the S&P 500® Index reflect only those shares that are available to investors, not all of a company's outstanding shares. Float adjustment excludes shares that are closely held by control groups, other publicly traded companies or government agencies.

Beginning September 21, 2012, all share-holdings with a position greater than 5% of a stock's outstanding shares, other than holdings by "block owners," are removed from the float for purposes of calculating the S&P 500® Index. Generally, these "control holders" include officers and directors, private equity, venture capital & special equity firms, other publicly traded companies that hold shares for control, strategic partners, holders of restricted shares, ESOPs, employee and family trusts, foundations associated with the company, holders of unlisted share classes of stock or government entities at all levels (other than government retirement/pension funds) and any individual person who controls a 5% or greater stake in a company as reported in regulatory filings.

Holdings by block owners, such as depository banks, pension funds, mutual funds & ETF providers, 401(k) plans of the company, government retirement/pension funds, investment funds of insurance companies, asset managers and investment funds, independent foundations and savings and investment plans, are ordinarily considered to be part of the float.

Prior to September 21, 2012, S&P Dow Jones Indices LLC defined three groups of shareholders whose holdings were subject to float adjustment if the relevant group's holdings exceeded 10% of the outstanding shares:

- holdings by other publicly traded corporations, venture capital firms, private equity firms, strategic partners, or leveraged buyout groups;
- holdings by government entities, including all levels of government in the United States or foreign countries; and
- holdings by current or former officers and directors of the company, founders of the company or family trusts of officers, directors or founders, as well as holdings of trusts, foundations, pension funds, employee stock ownership plans, or other investment vehicles associated with and controlled by the company.

Under these previous float-adjustment rules, in cases where holdings in a group exceeded 10% of the outstanding shares of a company, the holdings of that group were excluded from the float-adjusted count of shares to be used in the S&P 500® Index calculation. Mutual funds, investment advisory firms, pension funds or foundations not associated with the company and investment funds in insurance companies and shares that trust beneficiaries may buy or sell without difficulty or significant additional expense beyond typical brokerage fees were part of the float.

Treasury stock, stock options, equity participation units, warrants, preferred stock, convertible stock and rights are generally not part of the float. However, shares held in a trust to allow investors in countries outside the country of domicile (e.g., ADRs, CDIs and Canadian exchangeable shares) are normally part of the float unless those shares form a control block. If a company has more than one class of stock outstanding, shares in an unlisted or non-traded class are treated as a control block.

For each stock, an investable weight factor ("IWF") is calculated by dividing the available float shares by the total shares outstanding. Beginning September 21, 2012, available float shares are defined as total shares outstanding less shares held by control holders. Prior to September 21, 2012, available float shares were defined as the total shares outstanding less shares held in one or more of the three groups listed above where the group holdings exceeded 10% of the outstanding shares. The S&P 500® Index is calculated by dividing the sum of the IWF multiplied by both the price and the total shares outstanding for each stock by the Index Divisor.

As of the date of this underlying supplement, the S&P 500® Index is calculated using a base-weighted aggregate methodology: the level of the S&P 500® Index reflects the total Market Value of all 500 S&P Component Stocks relative to the S&P 500® Index's base period of 1941–43 (the "Base Period").

An indexed number is used to represent the results of this calculation in order to make the value easier to work with and track over time.

The actual total Market Value of the S&P Component Stocks during the Base Period has been set equal to an indexed value of 10. This is often indicated by the notation 1941–43=10. In practice, the daily calculation of the S&P 500® Index is computed by dividing the total Market Value of the S&P Component Stocks by a number called the Index Divisor. By itself, the Index Divisor is an arbitrary number. However, in the context of the calculation of the S&P 500® Index, it is the only link to the original Base Period level of the S&P 500® Index. The Index Divisor keeps the S&P 500®

Index comparable over time and is the manipulation point for all adjustments to the S&P 500® Index ("Index Maintenance").

Index Maintenance includes monitoring and completing the adjustments for company additions and deletions, share changes, stock splits, stock dividends and stock price adjustments due to company restructurings or spin-offs.

To prevent the level of the S&P 500® Index from changing due to corporate actions, all corporate actions which affect the total Market Value of the S&P 500® Index require an Index Divisor adjustment. By adjusting the Index Divisor for the change in total Market Value, the level of the S&P 500® Index remains constant. This helps maintain the level of the S&P 500® Index as an accurate barometer of stock market performance and ensures that the movement of the S&P 500® Index does not reflect the corporate actions of individual companies in the S&P 500® Index. All Index Divisor adjustments are made after the close of trading and after the calculation of the closing level of the S&P 500® Index. Some corporate actions, such as stock splits and stock dividends, require simple changes in the common shares outstanding and the stock prices of the companies in the S&P 500® Index and do not require Index Divisor adjustments.

The table below summarizes the types of Index Maintenance adjustments and indicates whether or not an Index Divisor adjustment is required.

Type of Corporate Action	Comments	Divisor Adjustment
Company added/deleted	Net change in market value determines divisor adjustment.	Yes
Change in shares outstanding	Any combination of secondary issuance, share repurchase or buy back – share counts revised to reflect change.	Yes
Stock split	Share count revised to reflect new count. Divisor adjustment is not required since the share count and price changes are offsetting.	No
Spin-off	If the spun-off company is not being added to the index, the divisor adjustment reflects the decline in index market value (<i>i.e.</i> , the value of the spun-off unit).	Yes
Spin-off	Spun-off company added to the index, no company removed from the index.	No
Spin-off	Spun-off company added to the index, another company removed to keep number of names fixed. Divisor adjustment reflects deletion.	Yes
Change in IWF	Increasing (decreasing) the IWF increases (decreases) the total market value of the index. The divisor change reflects the change in market value caused by the change to an IWF.	Yes
Special dividend	When a company pays a special dividend the share price is assumed to drop by the amount of the dividend; the divisor adjustment reflects this drop in index market value.	Yes

Type of Corporate Action	Comments	Divisor Adjustment
Rights offering	Each shareholder receives the right to buy a proportional number of additional shares at a set (often discounted) price. The calculation assumes that the offering is fully subscribed. Divisor adjustment reflects increase in market cap measured as the shares issued multiplied by the price paid.	Yes

Stock splits and stock dividends do not affect the Index Divisor, because following a split or dividend, both the stock price and number of shares outstanding are adjusted by S&P Dow Jones Indices LLC so that there is no change in the Market Value of the S&P Component Stock. All stock split and dividend adjustments are made after the close of trading on the day before the ex-date.

Each of the corporate events exemplified in the table requiring an adjustment to the Index Divisor has the effect of altering the Market Value of the S&P Component Stock and consequently of altering the aggregate Market Value of the S&P Component Stocks (the "Post-Event Aggregate Market Value"). In order that the level of the S&P 500® Index (the "Pre-Event Index Value") not be affected by the altered Market Value (whether increase or decrease) of the affected Component Stock, a new Index Divisor ("New Divisor") is derived as follows:

$$\frac{\text{Post-Event Aggregate Market Value}}{\text{New Divisor}} = \text{Pre-Event Index Value}$$

$$\text{New Divisor} = \frac{\text{Post-Event Aggregate Market Value}}{\text{Pre-Event Index Value}}$$

A large part of the Index Maintenance process involves tracking the changes in the number of shares outstanding of each of the S&P 500® Index companies. Four times a year, on a Friday close to the end of each calendar quarter, the share totals of companies in the S&P 500® Index are updated as required by any changes in the number of shares outstanding. After the totals are updated, the Index Divisor is adjusted to compensate for the net change in the total Market Value of the S&P 500® Index. In addition, any changes over 5% in the current common shares outstanding for the S&P 500® Index companies are carefully reviewed on a weekly basis, and when appropriate, an immediate adjustment is made to the Index Divisor.

License Agreement with S&P Dow Jones Indices LLC

S&P Dow Jones Indices LLC and JPMorgan Chase & Co. have entered into a non-exclusive license agreement providing us, and certain of our affiliated or subsidiary companies, in exchange for a fee, the right to use the S&P 500® Index, which is owned and published by S&P Dow Jones Indices LLC, in connection with certain securities, including the notes.

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issuance or sale of the notes or in the determination or calculation of the equation by which the notes are to be converted into cash. S&P Dow Jones Indices LLC has no obligation or liability in connection with the administration, marketing or trading of the notes. There is no assurance that investment products based on the S&P 500® Index will accurately track the S&P 500® Index's performance or provide positive investment returns. S&P Dow Jones Indices LLC, its subsidiaries and their third party licensors are not investment advisors. Inclusion of a security within the S&P 500® Index is not a recommendation by S&P Dow Jones Indices LLC to buy, sell or hold such security, nor is it considered to be investment advice.

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THE S&P MIDCAP 400® INDEX

We have derived all information contained in this underlying supplement regarding the S&P MidCap 400® Index, including, without limitation, its make-up, method of calculation and changes in its components, from publicly available information, without independent verification. This information reflects the policies of, and is subject to change by, S&P Dow Jones Indices LLC. The S&P MidCap 400® Index is calculated, maintained and published by S&P Dow Jones Indices LLC. S&P Dow Jones Indices LLC has no obligation to continue to publish, and may discontinue the publication of, the S&P MidCap 400® Index.

The S&P MidCap 400® Index is reported by Bloomberg L.P. under the ticker symbol "MID."

In July 2012, The McGraw-Hill Companies, Inc. ("McGraw-Hill"), the owner of the S&P Indices business, and CME Group Inc. ("CME Group"), the 90% owner of the CME Group and Dow Jones & Company, Inc. joint venture that owns the Dow Jones Indexes business, formed a new joint venture, S&P Dow Jones Indices LLC, which owns the S&P Indices business and the Dow Jones Indexes business, including the S&P MidCap 400® Index.

The S&P MidCap 400® Index is intended to provide a performance benchmark for the medium capitalization segment of the U.S. equity markets. It tracks the stock price movement of 400 companies with mid-sized market capitalizations, primarily ranging from US \$1.4 billion to US \$5.9 billion. The market capitalization requirements are reviewed periodically so as to ensure consistency with market standards. The S&P MidCap 400® Index is maintained with similar methodologies and rules as the S&P 500® Index, with variations only to account for differences in capitalization requirements.

The calculation of the level of the S&P MidCap 400® Index (discussed below in further detail) is based on the relative value of the aggregate Market Value (as defined below) of the common stocks of 400 companies (the "S&P MidCap Component Stocks") as of a particular time as compared to the aggregate average Market Value of the common stocks of 400 similar companies on the base date of June 28, 1991 (the "base date"). Historically, the "Market Value" of any S&P MidCap Component Stock was calculated as the product of the market price per share and the number of the then-outstanding shares of such S&P MidCap Component Stock. As discussed below, on March 21, 2005, S&P began to use a new methodology to calculate the Market Value of the S&P MidCap Component Stocks and on September 16, 2005, S&P completed its transition to the new calculation methodology. S&P chooses companies for inclusion in the S&P MidCap 400® Index with the objective of achieving a distribution by broad industry groupings that approximates the distribution of these groupings in the common stock population of the medium capitalization segment of the U.S. equity market. S&P may from time to time, in its sole discretion, add companies to, or delete companies from, the S&P MidCap 400® Index to achieve the objectives stated above. Relevant criteria employed by S&P include the viability of the particular company, the extent to which that company represents the industry group to which it is assigned, the extent to which the company's common stock is widely-held and the Market Value and trading activity of the common stock of that company.

On March 21, 2005, S&P began to calculate the S&P MidCap 400® Index based on a half float-adjusted formula, and on September 16, 2005, the S&P MidCap 400® Index became fully float adjusted. S&P's criteria for selecting stocks for the S&P MidCap 400® Index was not changed by the shift to float adjustment. However, the adjustment affects each company's weight in the S&P MidCap 400® Index (*i.e.*, its Market Value).

Under float adjustment, the share counts used in calculating the S&P MidCap 400® Index reflect only those shares that are available to investors, not all of a company's outstanding shares. S&P defines three groups of shareholders whose holdings are subject to float adjustment if the relevant group's holdings exceed 5% of the outstanding shares:

- holdings by other publicly traded corporations, venture capital firms, private equity firms, strategic partners or leveraged buyout groups;
- holdings by government entities, including all levels of government in the United States or foreign countries; and
- holdings by current or former officers and directors of the company, founders of the company, or family trusts of officers, directors or founders, as well as holdings of trusts, foundations, pension funds, employee stock ownership plans or other investment vehicles associated with and controlled by the company.

In cases where holdings in a group exceed 5% of the outstanding shares of a company, the holdings of that group will be excluded from the float-adjusted count of shares to be used in the S&P MidCap 400® Index calculation. Mutual and exchange-traded funds, investment advisory firms, pension funds or foundations not associated with the company and investment funds of insurance companies, and shares that trust beneficiaries may buy or sell without difficulty or significant additional expense beyond typical brokerage fees, are part of the float. Shares held in a trust to allow investors in countries outside the country of domicile (e.g., ADRs, CDIs and Canadian exchangeable shares) are normally part of the float unless those shares form a control block. However, treasury stock, stock options, equity participation units, warrants, preferred stock, convertible stock and rights are not part of the float.

For each stock, an investable weight factor (“IWF”) is calculated by dividing the available float shares, defined as the total shares outstanding less shares held in one or more of the three groups listed above where the group holdings exceed 5% of the outstanding shares, by the total shares outstanding. (On March 21, 2005, the S&P MidCap 400® Index moved halfway to float adjustment, meaning that if a stock has an IWF of 0.80, the IWF used to calculate the S&P MidCap 400® Index between March 21, 2005 and September 16, 2005 was 0.90. On September 16, 2005, S&P began to calculate the S&P MidCap 400® Index on a fully float-adjusted basis, meaning that if a stock has an IWF of 0.80, the IWF used to calculate the S&P MidCap 400® Index on and after September 16, 2005 is 0.80.) The float-adjusted Index is calculated by dividing the sum of the IWF multiplied by both the price and the total shares outstanding for each stock by the Index Divisor. For companies with multiple classes of stock, S&P calculates the weighted average IWF for each stock using the proportion of the total company market capitalization of each share class as weights.

As of the date of this underlying supplement, the S&P MidCap 400® Index is calculated using a base-weighted aggregate methodology: the level of the S&P MidCap 400® Index reflects the total Market Value of all 400 S&P MidCap Component Stocks relative to the S&P MidCap 400® Index’s Base Date. An indexed number is used to represent the results of this calculation in order to make the value easier to work with and track over time.

The actual total Market Value of the S&P MidCap Component Stocks on the Base Date has been set equal to an indexed value of 100. This is often indicated by the notation 6/28/91 = 100. In practice, the daily calculation of the S&P MidCap 400® Index is computed by dividing the total Market Value of the S&P MidCap Component Stocks by a number called the Index Divisor. By itself, the Index Divisor is an arbitrary number. However, in the context of the calculation of the S&P MidCap 400® Index, it is the only link to the original Base Period level of the S&P MidCap 400® Index. The Index Divisor keeps the S&P MidCap 400® Index comparable over time and is the manipulation point for all adjustments to the S&P MidCap 400® Index (“Index Maintenance”).

Index Maintenance includes monitoring and completing the adjustments for company additions and deletions, share changes, stock splits, stock dividends and stock price adjustments due to company restructurings or spin-offs.

To prevent the level of the S&P MidCap 400® Index from changing due to corporate actions, all corporate actions which affect the total Market Value of the S&P MidCap 400® Index require an Index Divisor adjustment. By adjusting the Index Divisor for the change in total Market Value, the level of the S&P MidCap 400® Index remains constant. This helps maintain the level of the S&P MidCap 400® Index as an accurate barometer of stock market performance and ensures that the movement of the S&P MidCap 400® Index does not reflect the corporate actions of individual companies in the S&P MidCap 400® Index. All Index Divisor adjustments are made after the close of trading and after the calculation of the closing level of the S&P MidCap 400® Index. Some corporate actions, such as stock splits and stock dividends, require simple changes in the common shares outstanding and the stock prices of the companies in the S&P MidCap 400® Index and do not require Index Divisor adjustments.

The table below summarizes the types of Index Maintenance adjustments and indicates whether or not an Index Divisor adjustment is required.

Type of Corporate Action	Comments	Divisor Adjustment
Company added/deleted	Net change in market value determines divisor adjustment.	Yes
Change in shares outstanding	Any combination of secondary issuance, share repurchase or buy back – share counts revised to reflect change.	Yes
Stock split	Share count revised to reflect new count. Divisor adjustment is not required since the share count and price changes are offsetting.	No
Spin-off	If the spun-off company is not being added to the index, the divisor adjustment reflects the decline in index market value (<i>i.e.</i> , the value of the spun off unit).	Yes
Spin-off	Spun-off company added to the index, no company removed from the index.	No
Spin-off	Spun-off company added to the index, another company removed to keep number of names fixed. Divisor adjustment reflects deletion.	Yes
Change in IWF	Increasing (decreasing) the IWF increases (decreases) the total market value of the index. The divisor change reflects the change in market value caused by the change to an IWF.	Yes
Special dividend	When a company pays a special dividend the share price is assumed to drop by the amount of the dividend; the divisor adjustment reflects this drop in index market value.	Yes
Rights offering	Each shareholder receives the right to buy a proportional number of additional shares at a set (often discounted) price. The calculation assumes that the offering is fully subscribed. Divisor adjustment reflects increase in market cap measured as the shares issued multiplied by the price paid.	Yes

Stock splits and stock dividends do not affect the Index Divisor, because following a split or dividend, both the stock price and number of shares outstanding are adjusted by S&P so that there is no change in the Market Value of the S&P MidCap Component Stock. All stock split and dividend adjustments are made after the close of trading on the day before the ex-date.

Each of the corporate events exemplified in the table requiring an adjustment to the Index Divisor has the effect of altering the Market Value of the S&P MidCap Component Stock and consequently of altering the aggregate Market Value of the S&P MidCap Component Stocks (the "Post-Event Aggregate Market Value"). In order that the level of the S&P MidCap 400® Index (the "Pre-Event Index Value") not be affected by the altered Market Value (whether increase or decrease) of the affected Component Stock, a new Index Divisor ("New Divisor") is derived as follows:

$$\frac{\text{Post - Event Aggregate Market Value}}{\text{New Divisor}} = \text{Pre - Event Index Value}$$

$$\text{New Divisor} = \frac{\text{Post - Event Aggregate Market Value}}{\text{Pre - Event Index Value}}$$

A large part of the Index Maintenance process involves tracking the changes in the number of shares outstanding of each of the S&P MidCap 400® Index companies. Four times a year, on a Friday close to the end of each calendar quarter, the share totals of companies in the S&P MidCap 400® Index are updated as required by any changes in the number of shares outstanding. After the totals are updated, the Index Divisor is adjusted to compensate for the net change in the total Market Value of the S&P MidCap 400® Index. In addition, any changes over 5% in the current common shares outstanding for the S&P MidCap 400® Index companies are carefully reviewed on a weekly basis, and when appropriate, an immediate adjustment is made to the Index Divisor.

License Agreement with S&P Dow Jones Indices LLC

S&P Dow Jones Indices LLC and J.P. Morgan Securities LLC have entered into a non-exclusive license agreement providing for the sub-license to us, and certain of our affiliated or subsidiary companies, in exchange for a fee, of the right to use the S&P MidCap 400® Index, which is owned and published by S&P Dow Jones Indices LLC, in connection with certain securities, including the notes.

The notes are not sponsored, endorsed, sold or promoted by S&P Dow Jones Indices LLC or its third party licensors. Neither S&P Dow Jones Indices LLC nor its third party licensors makes any representation or warranty, express or implied, to the owners of the notes or any member of the public regarding the advisability of investing in securities generally or in the notes particularly or the ability of the S&P MidCap 400® Index to track general stock market performance. S&P Dow Jones Indices LLC' and its third party licensor's only relationship to JPMorgan Chase & Co. is the licensing of certain trademarks and trade names of S&P Dow Jones Indices LLC and the third party licensors and of the S&P MidCap 400® Index which is determined, composed and calculated by S&P Dow Jones Indices LLC or its third party licensors without regard to JPMorgan Chase & Co. or the notes. S&P Dow Jones Indices LLC and its third party licensors have no obligation to take the needs of JPMorgan Chase & Co. or the owners of the notes into consideration in determining, composing or calculating the S&P MidCap 400® Index. Neither S&P Dow Jones Indices LLC nor its third party licensors is responsible for and has not participated in the determination of the prices and amount of the notes or the timing of the issuance or sale of the notes or in the determination or calculation of the equation by which the notes are to be converted into cash. S&P Dow Jones Indices LLC has no obligation or liability in connection with the administration, marketing or trading of the notes.

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THE S&P SELECT INDUSTRY INDICES

We have derived all information contained in this underlying supplement regarding the S&P® Homebuilders Select Industry™ Index and the S&P® Metals & Mining Select Industry™ Index (each, a “Select Industry Index” and collectively, the “Select Industry Indices”), including, without limitation, their make-up, method of calculation and changes in their components, from publicly available information, without independent verification. This information reflects the policies of, and is subject to change by, S&P Dow Jones Indices LLC. S&P Dow Jones Indices LLC has no obligation to continue to calculate and publish, and may discontinue calculation and publication of the Select Industry Indices.

In July 2012, The McGraw-Hill Companies, Inc. (“McGraw-Hill”), the owner of the S&P Indices business, and CME Group Inc. (“CME Group”), the 90% owner of the CME Group and Dow Jones & Company, Inc. joint venture that owns the Dow Jones Indexes business, formed a new joint venture, S&P Dow Jones Indices LLC, which owns the S&P Indices business and the Dow Jones Indexes business, including the S&P Select Industry Indices.

Additional information concerning the Select Industry Indices may be obtained at the S&P Dow Jones Indices LLC website (<http://us.spindices.com/>). Information contained in the S&P Dow Jones Indices LLC website is not incorporated by reference in, and should not be considered part of, this underlying supplement.

The S&P Total Market Index

The S&P Total Market Index (the “S&P TM Index”) offers broad market exposure to companies of all market capitalization, including all U.S. common equities listed on the New York Stock Exchange (including NYSE Arca), the NYSE MKT, the NASDAQ Global Select Market, the NASDAQ Global Select Market, the NASDAQ Select Market and the NASDAQ Capital Market. Only U.S. companies are eligible for inclusion in the S&P TM Index.

The S&P® Homebuilders Select Industry™ Index

The S&P® Homebuilders Select Industry™ Index is an equal-weighted index that is designed to measure the performance of the homebuilders sub-industry portion of the S&P TM Index, a benchmark that measures the performance of the U.S. equity market. The S&P® Homebuilders Select Industry™ Index includes companies in the following sub-industries: homebuilding, building products, home furnishings, home improvement retail, homefurnishing retail and household appliances. Each of the companies in the S&P® Homebuilders Select Industry™ Index is a constituent company within the homebuilding sub-industry of the S&P TM Index. The S&P® Homebuilders Select Industry™ Index is reported by Bloomberg L.P. under the ticker symbol “SPSIHO.”

The S&P® Metals & Mining Select Industry™ Index

The S&P® Metals & Mining Select Industry™ Index is an equal-weighted index that is designed to measure the performance of the metals and mining sub-industry portion of the S&P TM Index, a benchmark that measures the performance of the U.S. equity market. The S&P® Metals & Mining Select Industry™ Index includes companies in the following sub-industries: aluminum, coal & consumable fuels, diversified metals & mining, gold, precious metals & minerals, silver and steel. Each of the companies in the S&P® Metals & Mining Select Industry™ Index is a constituent company within the metals and mining sub-industry of the S&P TM Index. The S&P® Metals & Mining Select Industry™ Index is reported by Bloomberg L.P. under the ticker symbol “SPSIMM.”

Index Eligibility

For purposes of membership in the Select Industry Indices, S&P Dow Jones Indices LLC applies the inclusion and exclusion criteria separately. Membership is based on a company's GICS classification, as well as liquidity and market cap requirements.

Index Inclusion Criteria

To be eligible for inclusion in the Select Industry Indices, companies must be in the S&P TM Index, must be included in the relevant GICS sub-industry (*i.e.* homebuilding) and must satisfy one of the two following combined size and liquidity criteria:

1. float-adjusted market capitalization above US\$500 million and float-adjusted liquidity ratio ("FALR") above 90%; or
2. float-adjusted market capitalization above US\$400 million and float-adjusted liquidity ratio above 150%.

A number of companies in the S&P TM Index are represented by multiple share class lines. To determine eligibility for the Select Industry Indices, the float-adjusted market capitalization of each share class line of multiple class companies is combined to arrive at a company float-adjusted market capitalization figure. The liquidity of each individual share class line is evaluated independently based on the float-adjusted market capitalization of that individual line. If an individual share class line of a multiple share class company does not meet the liquidity criteria, the remaining share class line has its float-adjusted market capitalization reevaluated independently to ensure that it continues to meet the size criteria on its own.

All companies satisfying the above requirements are included in a Select Industry Index. The total number of companies in each Select Industry Index should be at least 35. If there are fewer than 35 companies in a Select Industry Index, companies from a supplementary list of highly correlated sub-industries, that meet the market capitalization and liquidity thresholds above, are included in order of their float-adjusted market capitalization to reach 35 companies. Minimum market capitalization requirements may be relaxed to ensure there are at least 22 companies in each Select Industry Index as of each rebalancing effective date.

Index Exclusion Criteria

Existing index constituents are removed at the quarterly rebalancing effective date if either their float-adjusted market capitalization falls below US\$300 million or their FALR falls below 50%.

Eligibility Factors

Market Capitalization. Float-adjusted market capitalization should be at least US\$400 million for inclusion in a Select Industry Index. Existing index components must have a float-adjusted market capitalization of US\$300 million to remain in the applicable Select Industry Index at each rebalancing.

Liquidity. The liquidity measurement used is a liquidity ratio, defined as dollar value traded over the previous 12-months divided by the float-adjusted market capitalization as of the applicable Select Industry Index rebalancing reference date.

Constituents having a float-adjusted market capitalization above US\$500 million must have a liquidity ratio greater than 90% to be eligible for addition to a Select Industry Index. Constituents having a float-adjusted market capitalization between US\$400 and US\$500 million must have a liquidity ratio greater than 150% to be eligible for addition to a Select Industry Index. Existing index constituents must have a liquidity ratio greater than 50% to remain in the applicable Select Industry Index at the quarterly rebalancing. The length of time to evaluate liquidity is reduced to the available trading period for IPOs or spin-offs that do not have 12 months of trading history. In these cases, the dollar value traded available as of the rebalance reference date is annualized

Takeover Restrictions. At the discretion of S&P Dow Jones Indices LLC, constituents with shareholder ownership restrictions defined in company bylaws may be deemed ineligible for inclusion in a Select Industry Index. Ownership restrictions preventing entities from replicating the index weight of a company may be excluded from the eligible universe or removed from the applicable Select Industry Index.

Turnover. S&P Dow Jones Indices LLC believes turnover in index membership should be avoided when possible. At times a company may appear to temporarily violate one or more of the addition criteria. However, the addition criteria are for addition to a Select Industry Index, not for continued membership. As a result, an index constituent that appears to violate criteria for addition to a Select Industry Index will not be deleted unless ongoing conditions warrant a change in the composition of the applicable Select Industry Index.

Sector Classification. A Select Industry Index includes companies in the applicable GICS sub-industries set forth above.

Index Construction and Calculations

The Select Industry Indices are equal-weighted, with adjustments to individual constituent weights to ensure concentration and liquidity requirements, and calculated by the divisor methodology.

The initial divisor is set to have a base index value of 1000 on December 17, 1999. The index value is simply the index market value divided by the index divisor:

$$\text{Index Value} = (\text{Index Market Value}) / \text{Divisor}$$

$$\text{Index Market Value} = \sum_{i=1}^N P_i \times \text{Shares}_i \times \text{IWF}_i \times \text{AWF}_i$$

where N is the number of stocks in the index, P_i the price of stock i , IWF_i is the float factor of stock i , and AWF_i is the adjustment factor of stock i assigned at each index rebalancing date, t , which makes all index constituents modified market capitalization equal (and, therefore, equal weight), while maintaining the total market value of the overall index. The AWF for each index constituent, i , at rebalancing date, t , is calculated by:

$$\text{AWF}_{i,t} = Z / N \times \text{FloatAdjustedMarketValue}_{i,t}$$

where Z is an index specific constant set for the purpose of deriving the AWF and, therefore, each stock's share count used in the index calculation (often referred to as modified index shares).

In order to maintain index series continuity, it is also necessary to adjust the divisor at each rebalancing.

$$(\text{Index Value})_{\text{before rebalance}} = (\text{Index Value})_{\text{after rebalance}}$$

Therefore,

$$(\text{Divisor})_{\text{after rebalance}} = (\text{Index Market Value})_{\text{after rebalance}} / (\text{Index Value})_{\text{before rebalance}}$$

Constituent Weightings

At each quarterly rebalancing, companies are initially equally-weighted using closing prices as of the second Friday of the last month of the quarter as the reference price. For those companies with multiple share class lines in an index, the weight assigned to each share class line is

proportional to its float-adjusted market capitalization as of the rebalance reference date. Adjustments are then made to ensure that there are no individual constituents whose weight in the applicable Select Industry Index is more than can be traded in a single day for a US\$ 500 million portfolio.

S&P Dow Jones Indices LLC calculates a maximum basket liquidity weight for each constituent in the applicable Select Industry Index using the ratio of its three-month average daily value traded to US\$ 500 million. Each constituent's weight in the applicable Select Industry Index is, then, compared to its maximum basket liquidity weight and is set to the lesser of its maximum basket liquidity weight or its initial equal weight. All excess weight is redistributed across the applicable Select Industry Index to the uncapped stocks. If necessary, a final adjustment is made to ensure that no stock in the applicable Select Industry Index has a weight greater than 4.5%. This step of the iterative weighting process may force the weight of those stocks limited to their maximum basket liquidity weight to exceed that weight. In such cases, S&P Dow Jones Indices LLC will make no further adjustments.

Index Maintenance

The membership to the Select Industry Indices is reviewed quarterly. Rebalancings occur after the closing on the third Friday of the quarter ending month. The reference date for additions and deletions is after the closing of the last trading date of the previous month. Closing prices as of the second Friday of the last month of the quarter are used for setting index weights.

Timing of Changes

Additions. Companies are added between rebalancings only if a deletion in the applicable Select Industry Index causes the stock count to fall below 22. In those cases, each company deletion is accompanied with a company addition. The new company will be added to the applicable Select Industry Index at the weight of the deleted company. In the case of mergers involving at least one index constituent, the merged company will remain in the applicable Select Industry Index if it meets all of the eligibility requirements. The merged company will be added to the applicable Select Industry Index at the weight of the pre-merger index company. If both companies involved in a merger are index constituents, the merged company will be added at the weight of the company deemed the acquirer in the transaction. In the case of spin-offs, the applicable Select Industry Index will follow the S&P TM Index's treatment of the action. If the S&P TM Index treats the pre- and post-spin company as a deletion/addition action, using the stock's when-issued price, the applicable Select Industry Index will treat the spin-off this way as well.

Deletions. A company is deleted from the applicable Select Industry Index if the S&P TM Index drops the company. If a company deletion causes the number of companies in the relevant index to fall below 22, each company deletion is accompanied with a corresponding company addition. In case of GICS changes, where a company does not belong to a qualifying sub-industry after the classification change, it is removed from the applicable Select Industry Index at the next rebalancing.

Adjustments

The tables below summarize the types of index maintenance adjustments and indicate whether or not an index adjustment is required.

S&P TM Index Actions

S&P TM Index Action	Adjustment Made to a Select Industry Index	Divisor Adjustment
Constituent Deletion	If the constituent is a member of a Select Industry Index, it is dropped.	Yes
Constituent Addition	Only in cases where the deletion causes the company count to fall below 22 stocks, then the deletion is accompanied by an addition assuming the weight of the dropped company. If a stock is removed from a Select Industry Index at a price of \$0.00, the stock's replacement will be added to the applicable Select Industry Index at the weight using the previous day's closing value, or the most immediate prior business day that the deleted stock was not valued at \$0.00.	No, except in the case of stocks removed at \$0.00
GICS Change	None. If, after the GICS change, a company no longer qualifies to belong to a Select Industry Index, it is removed at the next rebalancing.	No

Corporate Actions

Type of Corporate Action	Adjustment Made to a Select Industry Index	Divisor Adjustment
Spin-Off	In general, both the parent company and spun-off companies will remain in the applicable Select Industry Index until the next index rebalancing, regardless of whether they conform to the theme of the applicable Select Industry Index. When there is no market-determined price available for the spin, the spin is added to the applicable Select Industry Index at zero price at the close of the day before the ex-date.	No
Rights Offering	The price is adjusted to the price of the parent company minus (the price of the rights subscription/rights ratio). The index shares change so that the company's weight remains the same as its weight before the spin-off.	No
Stock Dividend, Stock Split or Reverse Stock Split	The index shares are multiplied by and price is divided by the split factor.	No
Share Issuance or Share Repurchase	None	No
Special Dividends	Price of the stock making the special dividend payment is reduced by the per share special dividend amount after the close of trading on the day before the dividend ex-date.	Yes

THE SELECT SECTOR INDICES

We have derived all information contained in this underlying supplement regarding the Financial Select Sector Index and the Technology Select Sector Index (each, a "Select Sector Index" and collectively, the "Select Sector Indices"), including, without limitation, their make-up, method of calculation and changes in their components, from publicly available information, without independent verification. This information reflects the policies of, and is subject to change by, S&P Dow Jones Indices LLC or BofA Merrill Lynch Research, as index compilation agent (the "Index Compilation Agent"). For further information about the S&P 500® Index, please see "Equity Index Descriptions — The S&P 500® Index" in this underlying supplement.

In July 2012, The McGraw-Hill Companies, Inc. ("McGraw-Hill"), the owner of the S&P Indices business, and CME Group Inc. ("CME Group"), the 90% owner of the CME Group and Dow Jones & Company, Inc. joint venture that owns the Dow Jones Indexes business, formed a new joint venture, S&P Dow Jones Indices LLC, which owns the S&P Indices business and the Dow Jones Indexes business, including the Select Sector Indices.

The constituents included in the Select Sector Indices are selected by the Index Compilation Agent in consultation with S&P Dow Jones Indices LLC from the universe of companies represented by the S&P 500® Index. The composition and weighting of the components included in the Select Sector Indices can be expected to differ from the composition and weighting of components included in any similar S&P 500® sector index that is published and disseminated by S&P Dow Jones Indices LLC. S&P Dow Jones Indices LLC acts as the index calculation agent in connection with the calculation and dissemination of the Select Sector Indices. S&P Dow Jones Indices LLC's only relationship to the Index Compilation Agent is the licensing of certain trademarks and trade names of S&P and of the S&P 500® Index which is determined, composed and calculated by S&P Dow Jones Indices LLC without regard to the Index Compilation Agent.

The Financial Select Sector Index

The Financial Select Sector Index is a modified market capitalization-based index, intended to provide an indication of the pattern of common stock price movements of companies that are components of the S&P 500® Index and are involved in the development or production of financial products. Companies in the Financial Select Sector Index include a wide array of diversified financial services firms whose business lines range from investment management to commercial and business banking. The Financial Select Sector Index is one of the nine Select Sector sub-indices of the S&P 500® Index, each of which we refer to as a "Select Sector Index."

As of October 31, 2014, the Financial Select Sector Index had a 16.42% weighting in the S&P 500® Index based on the market capitalization of the constituent stocks.

The Technology Select Sector Index

The Technology Select Sector Index is a modified market capitalization-based index, intended to provide an indication of the pattern of common stock price movements of companies that are components of the S&P 500® Index and are involved in the development or production of technology products, which include products developed by defense manufacturers, telecommunications equipment, microcomputer components, integrated computer circuits and process monitoring systems. The Technology Select Sector Index is one of the nine Select Sector sub-indices of the S&P 500® Index, each of which we refer to as a "Select Sector Index."

As of October 31, 2014, the Technology Select Sector Index had a 21.94% weighting in the S&P 500® Index based on the market capitalization of the constituent stocks.

Construction and Maintenance

The Select Sector Indices are developed, maintained and calculated in accordance with the following criteria:

- Each of the component stocks in the Select Sector Indices (the “Component Stocks”) is a constituent company of the S&P 500® Index.
- Each stock in the S&P 500® Index is allocated to one and only one of the Select Sector Indices.
- The Index Compilation Agent assigns each constituent stock of the S&P 500® Index to a Select Sector Index. The Index Compilation Agent, after consultation with S&P Dow Jones Indices LLC, assigns a particular company’s stock to a Select Sector Index based on that company’s classification under the Global Industry Classification Standard (GICS).
- The Select Sector Indices are calculated using the same methodology utilized by S&P Dow Jones Indices LLC in calculating the S&P 500® Index. See “Equity Index Descriptions — The S&P 500® Index” in this underlying supplement. The daily calculation of a Select Sector Index is computed by dividing the total market value of the companies in that Select Sector Index by a number called the index divisor.
- The Select Sector Indices are calculated by S&P Dow Jones Indices LLC using a modified “market capitalization” methodology subject to a capping methodology that implements Internal Revenue Code diversification requirements that are applicable to exchange-traded funds. For reweighting purposes, the Select Sector Indices are rebalanced quarterly after the close of business on the second to last calculation day of March, June, September and December using the following procedures:
 1. The rebalancing reference date is two business days prior to the last calculation day of March, June, September and December.
 2. With prices reflected on the rebalancing reference date, and membership, shares outstanding, and other metrics as of the rebalancing effective date, each company is weighted using the modified market capitalization methodology. Modifications are made as described below.
 3. The Select Sector Indices are first evaluated based on their companies’ modified market capitalization weights to ensure none of the Select Sector Indices breach the maximum allowable limits defined in paragraphs 4 and 7 below. If a Select Sector Index breaches any of the allowable limits, the companies are reweighted based on their float-adjusted market capitalization weights calculated using the prices as of the rebalancing reference date, and membership, shares outstanding and other metrics as of the rebalancing effective date.
 4. If any company has a weight greater than 24%, that company has its float-adjusted market capitalization weight capped at 23%. The cap is set to 23% to allow for a 2% buffer. This buffer is needed to ensure that no company exceeds 25% as of the quarter end diversification requirement date.
 5. All excess weight is equally redistributed to all uncapped companies within the relevant Select Sector Capped Index.

6. After this redistribution, if the float-adjusted market capitalization weight of any other company then breaches 23%, the process is repeated iteratively until no company breaches the 23% weight cap.
7. The sum of the companies with weight greater than 4.8% cannot exceed 50% of the total index weight. These caps are set to allow for a buffer below the 5% limit.
8. If the rule in paragraph 7 is breached, all the companies are ranked in descending order of their float-adjusted market capitalization weights and the first stock that causes the 50% limit to be breached is identified. The weight of this company is, then, reduced to 4.6%.
9. This excess weight is equally redistributed to all companies with weights below 4.6%. This process is repeated iteratively until paragraph 7 is satisfied.
10. Index share amounts are assigned to each constituent to arrive at the weights calculated above. Since index shares are assigned based on prices one business day prior to rebalancing, the actual weight of each constituent at the rebalancing differs somewhat from these weights due to market movements.

If necessary, the reweighting process may take place more than once prior to the close on the last business day of March, June, September or December to ensure the Select Sector Indices conform to all diversification requirements.

THE TOPIX® INDEX

We have derived all information contained in this underlying supplement regarding the Tokyo Stock Price Index, or the TOPIX® Index, including, without limitation, its make-up, method of calculation and changes in its components, from publicly available information, including the websites of the TSE and other sources we believe to be reliable, without independent verification. This information reflects the policies of, and is subject to change by, the TSE. The TOPIX® Index was developed by the TSE and is calculated, maintained and published by the TSE.

The TOPIX® Index is reported by Bloomberg L.P. under the ticker symbol "TPX."

The TOPIX® Index was developed by the TSE. Publication of the TOPIX® Index began on July 1, 1969, based on an initial Index value of 100 at January 4, 1968, which was reset at 1,000 on April 1, 1998. The TOPIX® Index is computed and published every second via TSE's Market Information System, and is reported to securities companies across Japan and available worldwide through computerized information networks.

The component stocks of the TOPIX® Index consist of all Japanese common stocks listed on the First Section of the TSE which have an accumulative length of listing of at least six months. The TOPIX® Index measures changes in the aggregate market value of these stocks. The TSE Japanese stock market is divided into two sections: the First Section and the Second Section. Listings of stocks on the TSE are divided between these two sections, with stocks listed on the First Section typically being limited to larger, longer established and more actively traded issues and the Second Section to smaller and newly listed companies. The component stocks of the TOPIX® Index are determined based on market capitalization and liquidity. Review and selection of component stocks is conducted semiannually, based on market data as of the base date for selection.

The TOPIX® Index is a weighted index, with the market price of each component stock multiplied by the number of shares listed. The TSE is responsible for calculating and maintaining the TOPIX® Index, and can add, delete or substitute the stocks underlying the TOPIX® Index or make other methodological changes that could change the value of the TOPIX® Index. The underlying stocks may be removed, if necessary, in accordance with deletion/addition rules which provide generally for the deletion of a stock from the TOPIX® Index if such stock ceases to meet the criteria for inclusion. Stocks listed on the Second Section of the TSE may be transferred to the First Section if they satisfy applicable criteria. Such criteria include numerical minimum values for number of shares listed, number of shareholders and average monthly trading volume, among others. Similarly, when a First Section stock falls within the coverage of TSE rules prescribing reassignment thereof to the Second Section, such stock will be removed from the First Section. As of October, 2014, stocks of 1,840 Japanese companies were assigned to the First Section of the TSE and stocks of 541 companies were assigned to the Second Section.

The TOPIX® Index is not expressed in Japanese Yen, but is presented in terms of points (as a decimal figure) rounded off to the nearest one-hundredth. The TOPIX® Index is calculated by multiplying 100 by the figure obtained by dividing the current free-float adjusted market value (the current market price per share at the time of the index calculation multiplied by the number of free-float adjusted common shares listed on the First Section of the TSE at the same instance) (the "Current Market Value") by the base market value (*i.e.*, the Current Market Value on the base date) (the "Base Market Value").

The calculation of the TOPIX® Index can be represented by the following formula:

$$\text{Index} = \frac{\text{Current Market Value}}{\text{Base Market Value}} \times 100$$

In order to maintain continuity, the Base Market Value is adjusted from time to time to ensure that it reflects only price movements resulting from auction market activity, and to eliminate the effects of other factors and prevent any instantaneous change or discontinuity in the level of the TOPIX® Index. Such factors include, without limitation: new listings, delistings, new share issues either through public offerings or through rights offerings to shareholders, issuance of shares as a consequence of exercise of convertible bonds or warrants, and transfer of listed securities from the First Section to the Second Section of the TSE.

The formula for the adjustment is as follows:

$$\frac{\text{Adjusted Market Value on Adjustment Date}}{\text{Base Market Value before adjustment}} = \frac{(\text{Adjusted Market Value on Adjustment Date} \pm \text{Adjustment Amount})}{\text{Base Market Value after adjustment}}$$

Where Adjustment Amount is equal to the changes in the number of shares included in the calculation of the TOPIX® Index *multiplied* by the price of those shares used for the purposes of the adjustment.

Therefore,

$$\text{New Base Market Value} = \frac{\text{Old Base Market Value} \times (\text{Adjusted Market Value on Adjustment Date} \pm \text{Adjustment Amount})}{\text{Adjusted Market Value on Adjustment Date}}$$

The Base Market Value remains at the new value until a further adjustment is necessary as a result of another change. As a result of such change affecting the Current Market Value or any stock underlying the TOPIX® Index, the Base Market Value is adjusted in such a way that the new value of the TOPIX® Index will equal the level of the TOPIX® Index immediately prior to such change.

No adjustment is made to the Base Market Value, however, in the case of events such as stock splits or decreases in capital without compensation, which theoretically do not affect market value.

License Agreement with the TSE

We have entered into a non-exclusive license agreement with the TSE providing for the license to J.P. Morgan Securities LLC and certain of our affiliated or subsidiary companies, in exchange for a fee, of the right to use the TOPIX® Index, which is owned and published by the TSE, in connection with the notes.

The TOPIX® Index Value and the TOPIX® Trademarks are subject to the intellectual property rights owned by the Tokyo Stock Exchange, Inc. and the Tokyo Stock Exchange, Inc. owns all rights relating to the TOPIX® Index, such as calculation, publication and use of the TOPIX® Index Value and relating to the TOPIX® Trademarks.

The Tokyo Stock Exchange, Inc. shall reserve the rights to change the methods of calculation or publication, to cease the calculation or publication of the TOPIX® Index Value or to change the TOPIX® Trademarks or cease the use thereof.

The Tokyo Stock Exchange, Inc. makes no warranty or representation whatsoever, either as to the results stemming from the use of the TOPIX® Index Value and the TOPIX® Trademarks or as to the figure at which the TOPIX® Index Value stands on any particular day.

The Tokyo Stock Exchange, Inc. gives no assurance regarding accuracy or completeness of the TOPIX® Index Value and data contained therein. Further, the Tokyo Stock Exchange, Inc. shall not be liable for the miscalculation, incorrect publication, delayed or interrupted publication of the TOPIX® Index Value.

The notes are in no way sponsored, endorsed or promoted by the Tokyo Stock Exchange, Inc.

The Tokyo Stock Exchange, Inc. shall not bear any obligation to give an explanation of the notes or any advice on investments to any purchaser of the notes or to the public.

The Tokyo Stock Exchange, Inc. neither selects specific stocks or groups thereof nor takes into account any needs of the issuer or any purchaser of the notes, for calculation of the TOPIX Index Value.

Including but not limited to the foregoing, the Tokyo Stock Exchange, Inc. shall not be responsible for any damage resulting from the issue and sale of the notes.

“TOPIX®” and “TOPIX® Index” are trademarks of the Tokyo Stock Exchange, Inc. and prior to the settlement date we expect them to be licensed for use by J.P. Morgan Securities LLC. The notes have not been and will not be passed on by the TSE as to their legality or suitability. The notes will not be issued, endorsed, sold or promoted by the TSE. THE TSE MAKES NO WARRANTIES AND BEARS NO LIABILITY WITH RESPECT TO THE NOTES.

The Tokyo Stock Exchange

The TSE is one of the world’s largest securities exchanges in terms of market capitalization. Trading hours are currently from 9:00 a.m. to 11:00 a.m. and from 12:30 p.m. to 3:00 p.m., Tokyo time, Monday through Friday.

Due to the time zone difference, on any normal trading day the TSE will close prior to the opening of business in New York City on the same calendar day. Therefore, the closing level of the TOPIX® Index on a trading day will generally be available in the United States by the opening of business on the same calendar day.

The TSE has adopted certain measures, including daily price floors and ceilings on individual stocks, intended to prevent any extreme short-term price fluctuations resulting from order imbalances. In general, any stock listed on the TSE cannot be traded at a price lower than the applicable price floor or higher than the applicable price ceiling. These price floors and ceilings are expressed in absolute Japanese yen, rather than percentage limits based on the closing price of the stock on the previous trading day. In addition, when there is a major order imbalance in a listed stock, the TSE posts a “special bid quote” or a “special asked quote” for that stock at a specified higher or lower price level than the stock’s last sale price in order to solicit counter-orders and balance supply and demand for the stock. Prospective investors should also be aware that the TSE may suspend the trading of individual stocks in certain limited and extraordinary circumstances, including, for example, unusual trading activity in that stock. As a result, changes in the TOPIX® Index may be limited by price limitations or special quotes, or by suspension of trading, on individual stocks that make up the TOPIX® Index, and these limitations, in turn, may adversely affect the value of the notes.

COMMODITY INDEX DESCRIPTIONS

THE BLOOMBERG COMMODITY INDICES

General

We have derived all information contained in this underlying supplement regarding the Bloomberg Commodity IndexSM, its single-commodity sub-indices or the forward-month version of the Bloomberg Commodity IndexSM or its single-commodity sub-indices (each a “Bloomberg Commodity Index” and collectively, the “Bloomberg Commodity Indices”), including, without limitation, their make-up, methods of calculation and changes in their components, from publicly available information. UBS and Bloomberg are not involved in the offer of the notes in any way and have no obligation to consider your interests as a holder of the notes. UBS and Bloomberg have no obligation to continue to publish the Bloomberg Commodity Indices, and may discontinue publication of the Bloomberg Commodity Indices at any time in their sole discretion.

On July 1, 2014, Bloomberg Finance L.P. (“Bloomberg”) became responsible for the governance, calculation, distribution and licensing of the Bloomberg Commodity Indices. The Dow Jones-UBS Commodity IndexSM was renamed to the Bloomberg Commodity IndexSM and the ticker changed from “DJUBS” to “BCOM.” UBS has maintained its ownership, but will have no role in any aspect of index governance or calculation. Currently, Bloomberg does not expect to make any material alteration to the calculation methodology of the Bloomberg Commodity Indices.

Overview

The Bloomberg Commodity IndexSM was introduced in July of 1998 to provide a unique, diversified, economically rational and liquid benchmark for commodities as an asset class. The Bloomberg Commodity IndexSM currently is composed of the prices of twenty-two exchange-traded futures contracts on physical commodities. A futures contract is a bilateral agreement providing for the purchase and sale of a specified type and quantity of a commodity or financial instrument during a stated delivery month for a fixed price. For a general description of the commodity futures markets, please see “The Commodity Futures Markets” below. The commodities included in the Bloomberg Commodity IndexSM for 2015 and 2014 are as follows: aluminum, coffee, copper, corn, cotton, crude oil (WTI and Brent), gold, heating oil, lean hogs, live cattle, natural gas, nickel, silver, soybeans, soybean meal, soybean oil, sugar, unleaded gasoline, wheat (Soft and Hard Red Winter) and zinc. The Bloomberg Commodity IndexSM tracks futures contracts that trade on the Chicago Board of Trade (“CBOT”), New York Board of Trade (“NYBOT”), Commodities Exchange division of the New York Mercantile Exchange (“COMEX”), New York Mercantile Exchange (“NYMEX”), the Kansas City Board of Trade (“KCBOT”), the London Metals Exchange (“LME”) and ICE Futures Europe.

The Bloomberg Commodity IndexSM is a proprietary index that AIG International, Inc. developed and that Bloomberg calculates. The methodology for determining the composition and weighting of the Bloomberg Commodity IndexSM and for calculating its value is subject to modification by Bloomberg at any time.

The Bloomberg Commodity IndexSM is composed of exchange-traded futures contracts on physical commodities and is designed to be a highly liquid and diversified benchmark for commodities as an asset class. Its component weightings are determined primarily based on liquidity data, which is the relative amount of trading activity of a particular commodity. The Bloomberg Commodity IndexSM is published by Bloomberg L.P. under the ticker symbols “BCOM” for the excess return version and “BCOMTR” for the total return version.

The single-commodity sub-indices of the Bloomberg Commodity IndexSM follow the methodology of the Bloomberg Commodity IndexSM, except that the calculation of each single-commodity sub-index utilizes the prices of the relevant futures contracts (listed under “— Designated Contracts for Each Commodity”) and the relevant Commodity Index Multiplier (determined as described under “— Commodity Index Multipliers”). The single-commodity sub-indices of the Bloomberg Commodity IndexSM are published by Bloomberg L.P. If the notes are linked in whole or in part to a single-commodity sub-index of the Bloomberg Commodity IndexSM, the ticker symbol will be provided in the relevant terms supplement.

Bloomberg also publishes forward-month versions of the Bloomberg Commodity IndexSM and its single-commodity sub-indices that trades longer-dated commodity futures contracts. The Bloomberg Commodity Index 3 Month ForwardSM follows the methodology of the Bloomberg Commodity IndexSM, except that the futures contracts used for calculating the Bloomberg Commodity Index 3 Month ForwardSM are advanced, as compared to the Bloomberg Commodity IndexSM, such that the delivery months for the reference contracts are later than those of the corresponding reference contracts used for the Bloomberg Commodity IndexSM. The Bloomberg Commodity Index 3 Month ForwardSM is published by Bloomberg L.P. under the ticker symbols “BCOMF3” for the excess return version and “BCOMF3T” for the total return version.

The forward-month single-commodity sub-indices of the Bloomberg Commodity IndexSM follow the methodology of the Bloomberg Commodity IndexSM, except that the calculation of each forward-month single-commodity sub-index utilizes the prices of the relevant futures contracts (as listed under “— Designated Contracts for Each Commodity”) and the relevant Commodity Index Multiplier (determined as described under “— Commodity Index Multipliers”). In addition, the futures contracts used for calculating the forward-month single-commodity sub-indices are advanced, as compared to the futures contracts included in the Bloomberg Commodity IndexSM, such that the delivery months for the reference contracts are later than those of the corresponding reference contracts used for the single-commodity sub-indices. The forward-month single-commodity sub-indices of the Bloomberg Commodity IndexSM are published by Bloomberg L.P. If the notes are linked in whole or in part to a forward-month single-commodity sub-index of the Bloomberg Commodity IndexSM, the ticker symbol will be provided in the relevant terms supplement.

Bloomberg publishes both a total return version and excess return version of each of the Bloomberg Commodity Indices. The total return version of each Bloomberg Commodity Index reflects the returns on a fully collateralized investment in the excess return version of such Bloomberg Commodity Index. Accordingly, the total return version of each Bloomberg Commodity Index combines the returns of the relevant excess return version with returns on cash collateral invested in Treasury Bills. The cash collateral returns are calculated using the most recent weekly auction high rate for 13-week (3 Month) U.S. Treasury Bills, as reported on the website www.publicdebt.treas.gov/AI/OFBills under the column heading “Discount Rate %,” published by the Bureau of the Public Debt of the U.S. Treasury (or any successor source). Information contained in the Bureau of the Public Debt of the U.S. Treasury website is not incorporated by reference in, and should not be considered a part of, this underlying supplement or the relevant terms supplement. Weekly auction high rates are generally published once each week on Monday. The notes may be linked to the excess return or the total return version of the Bloomberg Commodity Indices.

UBS and its affiliates actively trade futures contracts and options on futures contracts on the commodities that underlie the Bloomberg Commodity IndexSM, as well as commodities, including commodities included in the Bloomberg Commodity IndexSM. For information about how this trading may affect the value of the Bloomberg Commodity Indices, see “Risk Factors — For notes linked to a Bloomberg Commodity Index, trading and other transactions by UBS and its affiliates in

the futures contracts constituting the Bloomberg Commodity Indices and the underlying commodities may affect the level of the Bloomberg Commodity Indices.”

The Bloomberg Commodity Index Oversight Committee and Index Advisory Committee

Bloomberg will establish a two-tier oversight structure composed of the Bloomberg Commodity Index Oversight Committee (the “Oversight Committee”) and the Bloomberg Commodity Index Advisory Committee (the “Advisory Committee”). The Oversight Committee will consist of senior representatives from various Bloomberg business units, and will discuss, review and challenge all aspects of the benchmark process, given any advice and recommendations of the Advisory Committee. The Advisory Committee will convene to provide Bloomberg with guidance and feedback from the investment community on index products and processes. Both the Oversight and Advisory Committees meet annually to consider any changes to be made to the Bloomberg Commodity IndexSM for the coming year. These committees may also meet at such other times as may be necessary for purposes of their respective responsibilities in connection with the oversight of the Bloomberg Commodity IndexSM.

Four Main Principles Guiding the Creation of the Bloomberg Commodity IndexSM

The Bloomberg Commodity IndexSM was created using the following four main principles:

- **ECONOMIC SIGNIFICANCE.** A commodity index should fairly represent the importance of a diversified group of commodities to the world economy. To achieve a fair representation, the Bloomberg Commodity IndexSM uses both liquidity data and dollar-weighted production data in determining the relative quantities of included commodities. The Bloomberg Commodity IndexSM primarily relies on liquidity data, or the relative amount of trading activity of a particular commodity, as an important indicator of the value placed on that commodity by financial and physical market participants. The Bloomberg Commodity IndexSM also relies on production data as a useful measure of the importance of a commodity to the world economy. Production data alone, however, may underestimate the economic significance of storable commodities (e.g., gold) relative to non-storable commodities (e.g., live cattle). Production data alone also may underestimate the investment value that financial market participants place on certain commodities, and/or the amount of commercial activity that is centered around various commodities. Accordingly, production statistics alone do not necessarily provide as accurate a blueprint of economic importance as the markets themselves. The Bloomberg Commodity IndexSM thus relies on data that is both endogenous to the futures market (liquidity) and exogenous to the futures market (production) in determining relative weightings.
- **DIVERSIFICATION.** A second major goal of the Bloomberg Commodity IndexSM is to provide diversified exposure to commodities as an asset class. Disproportionate weighting of any particular commodity or sector increases volatility and negates the concept of a broad-based commodity index. Instead of diversified commodities exposure, the investor is unduly subjected to micro-economic shocks in one commodity or sector. As described further below, diversification rules have been established and are applied annually. Additionally, the Bloomberg Commodity IndexSM is re-balanced annually on a price-percentage basis in order to maintain diversified commodities exposure over time.
- **CONTINUITY.** The third goal of the Bloomberg Commodity IndexSM is to be responsive to the changing nature of commodity markets in a manner that does not completely reshape the character of the Bloomberg Commodity IndexSM from year to year. The Bloomberg Commodity IndexSM is intended to provide a stable benchmark so that end-users may be reasonably confident that historical performance data (including such diverse measures as

correlation, spot yield, roll yield and volatility) is based on a structure that bears some resemblance to both the current and future composition of the Bloomberg Commodity IndexSM.

- **LIQUIDITY.** Another goal of the Bloomberg Commodity IndexSM is to provide a highly liquid index. The explicit inclusion of liquidity as a weighting factor helps to ensure that the Bloomberg Commodity IndexSM can accommodate substantial investment flows. The liquidity of an index affects transaction costs associated with current investments. It also may affect the reliability of historical price performance data.

These four principles represent goals of the Bloomberg Commodity IndexSM and its creators, and there can be no assurance that these goals will be reached by Bloomberg.

Composition of the Bloomberg Commodity IndexSM — Commodities Available for Inclusion

Commodities have been selected that are believed to be both sufficiently significant to the world economy to merit consideration for inclusion in the Bloomberg Commodity IndexSM and tradable through a qualifying related futures contract. With the exception of several metals contracts (aluminum, lead, tin, nickel and zinc) that trade on the LME and contracts for Brent crude, which trade on ICE Futures Europe, each of the potential commodities is currently the subject of at least one futures contract that trades on a U.S. exchange.

As of the date of this underlying supplement, the 24 commodities available for inclusion in the Bloomberg Commodity IndexSM were aluminum, cocoa, coffee, copper, corn, cotton, crude oil (WTI and Brent), gold, heating oil, lead, lean hogs, live cattle, natural gas, nickel, platinum, silver, soybean meal, soybean oil, soybeans, sugar, tin, unleaded gasoline, wheat (soft (Chicago) and hard red winter (Kansas City)) and zinc.

The 20 Index Commodities for 2015 and 2014 are as follows: aluminum, coffee, copper, corn, cotton, crude oil (WTI and Brent), gold, heating oil, lean hogs, live cattle, natural gas, nickel, silver, soybean meal, soybean oil, soybeans, sugar, unleaded gasoline, wheat (soft and hard red winter) and zinc.

Designated Contracts for Each Commodity

One or more futures contracts known as a “Designated Contract” is selected by Bloomberg for each commodity available for inclusion in the Bloomberg Commodity IndexSM. Historically, through and including the composition of the Bloomberg Commodity IndexSM for 2015 and 2014, Bloomberg has chosen for each Commodity one Designated Contract that is traded in North America and denominated in U.S. dollars (with the exception of several LME contracts, which are traded in London, and with the exception of crude oil, for which two Designated Contracts have been selected starting in 2012, and wheat, for which two Designated Contracts that are traded in North America have been selected starting in 2013).

Bloomberg may in the future select more than one Designated Contract for additional commodities or may select Designated Contracts that are traded outside of the United States or in currencies other than the U.S. dollar. For example, in the event that changes in regulations concerning position limits materially affect the ability of market participants to replicate the Bloomberg Commodity IndexSM in the underlying futures markets, it may become appropriate to include multiple Designated Contracts for more commodities (in addition to crude oil and wheat) in order to enhance liquidity.

The termination or replacement of a futures contract on an established exchange occurs infrequently; if a Designated Contract were to be terminated or replaced, a comparable futures contract, if available, would be selected to replace that Designated Contract. Please see “Risk

Factors — S&P or Bloomberg may be required to replace a contract underlying an S&P GSCI Index or a Bloomberg Commodity Index, if the existing futures contract is terminated or replaced.”

As of the date of this underlying supplement, the 2015 and 2014 Designated Contracts for the commodities underlying the Bloomberg Commodity IndexSM are set forth in the table below:

Commodity	Designated Contract	Exchange	Units	Price quote
Aluminum	High Grade Primary Aluminum	LME	25 metric tons	USD/metric ton
Coffee	Coffee “C”	NYBOT	37,500 lbs	U.S. cents/pound
Copper*	Copper	COMEX	25,000 lbs	U.S. cents/pound
Corn	Corn	CBOT	5,000 bushels	U.S. cents/bushel
Cotton	Cotton	NYBOT	50,000 lbs	U.S. cents/pound
Crude (WTI)	Light, Sweet Crude Oil	NYMEX	1,000 barrels	USD/barrel
Crude (Brent)	Brent Crude Oil	ICE Futures Europe	1,000 barrels	USD/barrel
Gold	Gold	COMEX	100 troy oz.	USD/troy oz.
Heating Oil	Heating Oil	NYMEX	42,000 gallons	U.S. cents/gallon
Lean Hogs	Lean Hogs	CME	40,000 lbs	U.S. cents/pound
Live Cattle	Live Cattle	CME	40,000 lbs	U.S. cents/pound
Natural Gas	Henry Hub Natural Gas	NYMEX	10,000 mmbtu	USD/mmbtu
Nickel	Primary Nickel	LME	6 metric tons	USD/metric ton
Silver	Silver	COMEX	5,000 troy oz.	U.S. cents/troy oz.
Soybeans	Soybeans	CBOT	5,000 bushels	U.S. cents/bushel
Soybean Meal	Soybean Meal	CBOT	100 short tons	USD/short ton
Soybean Oil	Soybean Oil	CBOT	60,000 lbs	U.S. cents/pound
Sugar	World Sugar No. 11	NYBOT	112,000 lbs	U.S. cents/pound
Unleaded Gasoline (RBOB)	Reformulated Gasoline Blendstock for Oxygen Blending	NYMEX	42,000 gal	U.S. cents/gallon
Wheat (Chicago)	Soft Wheat	CBOT	5,000 bushels	U.S. cents/bushel
Wheat (Kansas)	Hard Red Winter Wheat	KCBOT	5,000 bushels	U.S. cents/ bushel
Zinc	Special High Grade Zinc	LME	25 metric tons	USD/metric ton

* The Bloomberg Commodity IndexSM uses the High Grade Copper contract traded on the COMEX division of the New York Mercantile Exchange for copper contract prices and LME volume data in determining the weighting for the Bloomberg Commodity IndexSM.

In addition to the commodities set forth in the above table, cocoa, lead, platinum, tin, gas oil, orange juice and feeder cattle also are considered annually for inclusion in the Bloomberg Commodity IndexSM.

Commodity Groups

For purposes of applying the diversification rules discussed above and below, the commodities available for inclusion in the Bloomberg Commodity IndexSM are assigned to Commodity Groups. The Commodity Groups, and the commodities currently included in each Commodity Group, are as follows:

Commodity Group:	Commodities:	Commodity Group:	Commodities:
Energy	Crude Oil (WTI and Brent) Heating Oil Natural Gas Unleaded Gasoline (RBOB)	Livestock	Lean Hogs Live Cattle
Precious Metals	Gold Silver Platinum	Grains	Corn Soybeans Soybean Meal Soybean Oil Wheat (Chicago and Kansas)
Industrial Metals	Aluminum Copper Lead Nickel Tin Zinc	Softs	Cocoa Coffee Cotton Sugar

Bloomberg Commodity IndexSM Breakdown by Commodity Group

The Commodity Group Breakdown set forth below is based on the weightings and composition of the Bloomberg Commodity IndexSM set forth under "The Bloomberg Commodity IndexSM 2015 Commodity Index Target Weights" below.

Energy	31.193523%
Precious Metals	16.180197 %
Industrial Metals	16.654266 %
Livestock	5.267154 %
Grains	22.984033 %
Softs	7.720828 %

In addition, the Commodity Group Breakdown set forth below is based on the weightings and composition of the Bloomberg Commodity IndexSM set forth under "The Bloomberg Commodity IndexSM 2014 Commodity Index Target Weights" below.

Energy	31.781080%
Precious Metals	15.674419%
Industrial Metals	16.597299%
Livestock	5.144504%
Grains	22.948536%
Softs	7.854167%

Annual Reweightings and Rebalancings of The Bloomberg Commodity IndexSM

The Bloomberg Commodity IndexSM is reweighted and rebalanced each year in January on a price-percentage basis. The annual weightings for the Bloomberg Commodity IndexSM are determined each year in the third or fourth quarter by Bloomberg under the supervision of the Oversight Committee following advice from the Advisory Committee and are published as promptly as practicable following the calculation. The annual weightings for the next calendar year are implemented the following January.

For example, the target composition of the Bloomberg Commodity IndexSM for 2015 was published on October 29, 2014. The January 2015 reweighting and rebalancing will be based on the following percentages:

The Bloomberg Commodity IndexSM 2015 Commodity Index Target Weights

Commodity	Weighting
Crude Oil	15.000000%
WTI Crude Oil:	7.8434950%
Brent Crude Oil:	7.1565050%
Gold	11.9041430%
Natural Gas	8.7397550%
Copper	7.5375780%
Corn	7.2463450%
Soybeans	5.6812590%
Aluminum	4.5931580%
Wheat	4.4981500%
Chicago:	3.3276410%
Kansas:	1.1705090%
Silver	4.2760540%
Sugar	3.9956530%
ULS Diesel*	3.7609190%
Unleaded Gasoline	3.6928490%
Live Cattle	3.3273920%
Soybean Oil	2.8129680%
Soybean Meal	2.7453110%
Zinc	2.4041340%
Coffee	2.2121760%
Nickel	2.1193960%
Lean Hogs	1.9397640%
Cotton	1.5129990%

* CME's heating oil contract on NYMEX was renamed ultra-low-sulfur-diesel ("ULS diesel") futures after the April 2013 contract.

In addition, the target composition of the Bloomberg Commodity IndexSM for 2014 was published on October 31, 2013. The January 2014 reweighting and rebalancing was based on the following percentages:

The Bloomberg Commodity IndexSM 2014 Commodity Index Target Weights

Commodity		Weighting
Crude Oil		15.000000%
WTI Crude Oil:	8.488847%	
Brent Crude Oil:	6.511153%	
Gold		11.533058%
Natural Gas		9.445978%
Copper		7.508304%
Corn		7.195820%
Soybeans		5.683943%
Aluminum		4.721660%
Wheat		4.555966%
Chicago:	3.341175%	
Kansas:	1.214791%	
Silver		4.141361%
Sugar		3.955940%
Heating Oil		3.718383%
Unleaded Gasoline		3.616719%
Live Cattle		3.272063%
Soybean Oil		2.830403%
Soybean Meal		2.682404%
Zinc		2.313815%
Coffee		2.319804%
Nickel		2.053520%
Lean Hogs		1.872441%
Cotton		1.578423%

Information concerning the Bloomberg Commodity IndexSM, including weightings and composition, may be obtained at the Bloomberg website at www.bloombergindeces.com/bloomberg-commodity-index-family. Information contained in the Bloomberg website is not incorporated by reference in, and should not be considered part of, this underlying supplement or the relevant terms supplement.

Determination of Relative Weightings

The relative weightings of the Index Commodities are determined annually according to both liquidity and dollar-adjusted production data in 2/3 and 1/3 shares, respectively. Each year, for each Designated Contract selected as a reference contract for a commodity designated for potential inclusion in the Bloomberg Commodity IndexSM, liquidity is measured by the Commodity Liquidity Percentage ("CLP") and production by the Commodity Production Percentage ("CPP"). The CLP for each Designated Contract is determined by taking a five-year average of the product of trading volume and the historical dollar value of that Designated Contract, and dividing the result by the sum of such products for all Designated Contracts. The CPP is determined for each commodity by taking a five-year average of annual world production figures, adjusted by the historical U.S. dollar value of the applicable Designated Contract, and dividing the result by the sum of such production figures for all the commodities that were designated for potential inclusion in the Bloomberg Commodity IndexSM. The CLP and the CPP are then combined (using a ratio of 2:1) to establish the Commodity Index Percentage ("CIP") for each commodity. This CIP is then adjusted in accordance with certain diversification rules in order to determine the commodities that will be included in the Bloomberg Commodity IndexSM (each an "Index Commodity," and collectively, the "Index Commodities") and their respective percentage weights.

Diversification Rules

The Bloomberg Commodity IndexSM is designed to provide diversified exposure to commodities as an asset class. To ensure that no single commodity or commodity sector dominates the Bloomberg Commodity IndexSM, the following diversification rules are applied to the annual reweighting and rebalancing of the Bloomberg Commodity IndexSM as of January of each year:

- No single commodity (e.g., natural gas or silver) may constitute more than 15% of the Bloomberg Commodity IndexSM.
- No single commodity, together with its derivatives (e.g., crude oil, together with heating oil and unleaded gasoline), may constitute more than 25% of the Bloomberg Commodity IndexSM.
- No related group of commodities designated as a "Commodity Group" (e.g., energy, precious metals, livestock or grains) may constitute more than 33% of the Bloomberg Commodity IndexSM.
- No single commodity included in the Bloomberg Commodity IndexSM may constitute less than 2% of the Bloomberg Commodity IndexSM, as liquidity allows.

Following the annual reweighting and rebalancing of the Bloomberg Commodity IndexSM in January, the percentage of any Index Commodity or Commodity Group at any time prior to the next reweighting or rebalancing will fluctuate and may exceed or be less than the percentages established in January.

Commodity Index Multipliers

Following application of the diversification rules discussed above, CIPs are incorporated into the Bloomberg Commodity IndexSM by calculating the new unit weights for each Designated Contract. Near the beginning of each new calendar year, the CIPs, along with the settlement prices determined on that date for Designated Contracts included in the Bloomberg Commodity IndexSM, are used to determine a Commodity Index Multiplier ("CIM") for each Designated Contract. This CIM is used to achieve the percentage weightings of the Designated Contracts, in dollar terms, indicated by their respective CIPs. After the CIMs are calculated, they remain fixed throughout the year. As a result, the observed price percentage of each Designated Contract will float throughout the year, until the CIMs are reset the following year based on new CIPs.

Calculations

The price return version of the Bloomberg Commodity IndexSM is calculated by Bloomberg by applying the impact of the changes to the futures prices of commodities included in the Bloomberg Commodity IndexSM (based on their relative weightings). Once the CIMs are determined as discussed above, the calculation of the price return version of the Bloomberg Commodity IndexSM is a mathematical process whereby the CIMs for the Index Commodities are multiplied by the prices in U.S. dollars for the applicable Designated Contracts. These products are then summed. The percentage change in this sum is then applied to the prior Bloomberg Commodity IndexSM price return level to calculate the new Bloomberg Commodity IndexSM price return level.

The total return version of the Bloomberg Commodity IndexSM is calculated by Bloomberg by applying the impact of the changes in the level of the price return version of the Bloomberg Commodity IndexSM and adding interest that could be earned on funds committed to the trading of the underlying futures contracts. Once the level of the price return version of the Bloomberg Commodity IndexSM is determined as discussed above, the daily return on a 13-week (3-month) T-bill is added to the percentage change in the price return version of the Bloomberg Commodity IndexSM (as compared with the prior Bloomberg Commodity IndexSM price return level) to obtain the total return. The total return is then applied to the prior Bloomberg Commodity IndexSM total return level to calculate the new Bloomberg Commodity IndexSM total return level.

The Bloomberg Commodity IndexSM Is a Rolling Index

The Bloomberg Commodity IndexSM is composed of futures contracts on physical commodities. Unlike equities, which typically entitle the holder to a continuing stake in a corporation, commodity futures contracts normally specify a certain date for the delivery of the underlying commodity. In order to avoid delivering the underlying physical commodities and to maintain exposure to the underlying physical commodities, periodically futures contracts on physical commodities specifying delivery on a nearby date must be sold and futures contracts on physical commodities that have not yet reached the delivery period must be purchased. The rollover for each contract occurs over a period of five Index Business Days each month according to a pre-determined schedule. This process is known as “rolling” a futures position. The Bloomberg Commodity IndexSM is a “rolling index.”

An “Index Business Day” is a day on which the sum of the Commodity Index Percentages (as defined above in “Determination of Relative Weightings”) for the Index Commodities that are open for trading is greater than 50%. For example, based on the weighting of the Index Commodities for 2014, if the CBOT, the NYMEX and the LME are each closed for trading on the same day, an Index Business Day will not exist.

Bloomberg Commodity IndexSM Calculation Disruption Events

From time to time, disruptions can occur in trading futures contracts on various commodity exchanges. The daily calculation of the Bloomberg Commodity IndexSM will be adjusted in the event that Bloomberg determines that any of the following index calculation disruption events exists:

- (a) the termination or suspension of, or material limitation or disruption in the trading of any futures contract used in the calculation of the Bloomberg Commodity IndexSM on that day;
- (b) the settlement price of any futures contract used in the calculation of the Bloomberg Commodity IndexSM reflects the maximum permitted price change from the previous day's settlement price;
- (c) the failure of an exchange to publish official settlement prices for any futures contract used in the calculation of the Bloomberg Commodity IndexSM; or

(d) with respect to any futures contract used in the calculation of the Bloomberg Commodity IndexSM that trades on the LME, a business day on which the LME is not open for trading.

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This underlying supplement and the relevant terms supplement relate only to the notes and does not relate to the exchange-traded physical commodities underlying any of the Bloomberg Commodity IndexSM components. Purchasers of the notes should not conclude that the inclusion of a futures contract in the Bloomberg Commodity IndexSM is any form of investment recommendation of the futures contract or the underlying exchange-traded physical commodity by UBS, Bloomberg or any of their subsidiaries or affiliates. The information in this underlying supplement regarding the Bloomberg Commodity IndexSM components has been derived solely from publicly available documents. None of UBS, Bloomberg or any of their subsidiaries or affiliates has made any due diligence inquiries with respect to the Bloomberg Commodity IndexSM components in connection with the notes. None of UBS, Bloomberg or any of their subsidiaries or affiliates makes any representation that these publicly available documents or any other publicly available information regarding the Bloomberg Commodity IndexSM components, including without limitation a description of factors that affect the prices of such components, are accurate or complete.

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The Commodity Futures Markets

Futures contracts on physical commodities are traded on regulated futures exchanges, in the over-the-counter market and on various types of physical and electronic trading facilities and markets. As of the date of this underlying supplement, all of the contracts included in the Bloomberg Commodity IndexSM described in this underlying supplement are exchange-traded futures contracts. An exchange-traded futures contract provides for the purchase and sale of a specified type and quantity of a commodity or financial instrument during a stated delivery month for a fixed price. A futures contract provides for a specified settlement month in which cash settlement is made or in which the commodity or financial instrument is to be delivered by the seller (whose position is therefore described as "short") and acquired by the purchaser (whose position is therefore described as "long").

No purchase price is paid or received on the purchase or sale of a futures contract. Instead, an amount of cash or cash equivalents must be deposited with the broker as "initial margin." This amount varies based on the requirements imposed by the exchange clearing houses, but it may be lower than 5% of the notional value of the contract. This margin deposit provides collateral for the obligations of the parties to the futures contract.

By depositing margin, which may vary in form depending on the exchange, with the clearing house or broker involved, a market participant may be able to earn interest on its margin funds, thereby increasing the total return that it may realize from an investment in futures contracts.

Futures contracts are traded on organized exchanges, known as "contract markets" in the United States. At any time prior to the expiration of a futures contract, a trader may elect to close out its position by taking an opposite position on the exchange on which the trader obtained the position, subject to the availability of a liquid secondary market. This operates to terminate the position and fix the trader's profit or loss. Futures contracts are cleared through the facilities of a centralized clearing house and a brokerage firm, referred to as a "futures commission merchant," which is a member of the clearing house.

Unlike equity securities, futures contracts, by their terms, have stated expirations at a specified point in time prior to expiration. At a specific point in time prior to expiration, trading in a futures contract for the current delivery month will cease. As a result, a market participant wishing to maintain its exposure to a futures contract on a particular commodity or financial instrument with the nearest expiration must close out its position in the expiring contract and establish a new position in the contract for the next delivery month, a process referred to as "rolling." For example, a market participant with a long position in a futures contract expiring in November who wishes to maintain a position in the nearest delivery month will, as the November contract nears expiration, sell the November contract, which serves to close out the existing long position, and buy a futures contract expiring in December. This will "roll" the November position into a December position,

and, when the November contract expires, the market participant will still have a long position in the nearest delivery month.

Futures exchanges and clearing houses in the United States are subject to regulation by the Commodity Futures Trading Commission. Exchanges may adopt rules and take other actions that affect trading, including imposing speculative position limits, maximum price fluctuations and trading halts and suspensions and requiring liquidation of contracts in certain circumstances.

Futures markets outside the United States are generally subject to regulation by comparable regulatory authorities. The structure and nature of trading on non-U.S. exchanges may differ from this description.

THE S&P GSCI INDICES

We have derived all information contained in this underlying supplement regarding the S&P GSCI Indices (as defined below), including, without limitation, their make-up, method of calculation and changes in their components, from publicly available information, without independent verification. This information reflects the policies of, and is subject to change by, S&P Dow Jones Indices LLC, the publisher of the S&P GSCI Indices. The S&P GSCI Indices are determined, composed and calculated by S&P Dow Jones Indices LLC, without regard to the notes. S&P Dow Jones Indices LLC acquired the rights to the S&P GSCI Indices from Goldman, Sachs & Co. in 2007. Goldman, Sachs & Co. established and began calculating the S&P GSCI™ in May 1991. The former name of the S&P GSCI™ was the Goldman Sachs Commodity Index, or GSCI®. S&P Dow Jones Indices LLC has no obligation to continue to publish, and may discontinue publication of, any S&P GSCI Index.

In July 2012, The McGraw-Hill Companies, Inc. ("McGraw-Hill"), the owner of the S&P Indices business, and CME Group Inc. ("CME Group"), the 90% owner of the CME Group and Dow Jones & Company, Inc. joint venture that owns the Dow Jones Indexes business, formed a new joint venture, S&P Dow Jones Indices LLC, which owns the S&P Indices business and the Dow Jones Indexes business, including the S&P GSCI Indices.

The notes may be linked in whole or in part to the performance of the S&P GSCI™ Index ("S&P GSCI™"), the S&P GSCI™ Light Energy Index or certain of the S&P GSCI™'s commodity sector sub-indices: the S&P GSCI™ Agriculture Index, the S&P GSCI™ Energy Index, the S&P GSCI™ Industrial Metals Index, the S&P GSCI™ Livestock Index and the S&P GSCI™ Precious Metals Index (each a "S&P GSCI Sector Index," and together, the "S&P GSCI Sector Indices"), or the S&P GSCI™'s single commodity sub-indices (each a "S&P GSCI Single Component Index," and collectively, the "S&P GSCI Single Component Indices"). We refer to the S&P GSCI Single Component Indices and S&P GSCI Sector Indices collectively as the "S&P GSCI Component Indices," and together with the S&P GSCI™ and the S&P GSCI™ Light Energy Index, the "S&P GSCI Indices," and each, a "S&P GSCI Index." If the notes are linked to any S&P GSCI Single Component Index, any relevant disclosure for such S&P GSCI Single Component Index will be provided in the relevant terms supplement.

S&P Dow Jones Indices LLC publishes excess return and total return versions of each of the S&P GSCI Indices. The relevant terms supplement will specify whether the notes are linked to the excess return or total return version of the S&P GSCI Indices. The excess return versions of the S&P GSCI Indices is based on price levels of the futures contracts included in that S&P GSCI Index as well as the discount or premium obtained by "rolling" hypothetical positions in those contracts forward as they approach delivery. The total return versions of the S&P GSCI Indices incorporate the returns of the excess return versions, except that the total return versions also reflect interest earned on hypothetical, fully collateralized contract positions on the included commodities.

The S&P GSCI™ is an index on a world production-weighted basket of principal non-financial commodities (*i.e.*, physical commodities) that satisfy specified criteria. The S&P GSCI™ is designed to be a measure of the performance over time of the markets for these commodities. The only commodities represented in the S&P GSCI™ are those physical commodities on which active and liquid contracts are traded on trading facilities in major industrialized countries. The commodities included in the S&P GSCI™ are weighted, on a production basis, to reflect the relative significance (in the view of S&P, as described below) of such commodities to the world economy. The fluctuations in the value of the S&P GSCI™ are intended generally to correlate with changes in the prices of such physical commodities in global markets. The S&P GSCI™ has been normalized such that its hypothetical level on January 2, 1970 was 100. Futures contracts on the S&P GSCI™, and options on such futures contracts, are currently listed for trading on the Chicago Mercantile Exchange.

The S&P GSCI™ Light Energy Index is composed of the same commodity futures contracts as the S&P GSCI™ but with those weights for contracts in the energy sector having been divided by 4. Because the weights of energy-related S&P GSCI™ commodities are reduced in the S&P Light Energy Index relative to the S&P GSCI™, the relative weights of the remaining S&P GSCI™ commodities are necessarily increased. As a result, although the S&P Light Energy Index contains all of the S&P GSCI™ commodities that are included in the S&P GSCI™, they are not world-production weighted in the same manner as the S&P GSCI™ and may not serve as a benchmark for changes in inflation or other economic factors. In particular, because of the significance of energy-related commodities to the world economy, a significant reduction in the weights of these commodities in the S&P GSCI™ Light Energy Index will substantially limit the effect of changes in energy prices on the S&P GSCI™ Light Energy Index. Increases in the prices of energy commodities, therefore, will not increase the level of the S&P GSCI™ Light Energy Index to the same extent as the S&P GSCI™.

The S&P GSCI™ Agriculture Index is a world production-weighted index of certain agricultural commodities in the world economy, including Wheat, Kansas Wheat, Corn, Soybeans, Cotton, Sugar, Coffee and Cocoa. The S&P GSCI™ Energy Index is a world production-weighted index of certain energy commodities in the world economy, including Crude Oil, Brent Crude Oil, RBOB Gasoline, Heating Oil, Gasoil and Natural Gas. The S&P GSCI™ Industrial Metals Index is a world production-weighted index of certain industrial metals commodities in the world economy, including High Grade Primary Aluminum, Copper, Standard Lead, Primary Nickel and Special High Grade Zinc. The S&P GSCI™ Livestock Index is a world production-weighted index of certain livestock commodities in the world economy, including live cattle, feeder cattle and lean hogs. The S&P GSCI™ Precious Metals Index is a world production-weighted index consisting of two precious metals commodities in the world economy: Gold and Silver.

Set forth below is a summary of the methodology used to calculate the S&P GSCI Indices. Because the S&P GSCI™ is the base index of the S&P GSCI Component Indices, the methodology for compiling the S&P GSCI™ relates as well to the methodology of compiling the S&P GSCI Component Indices. Each of the S&P GSCI Component Indices is calculated in the same manner as the S&P GSCI™, except that (i) the daily contract reference price, CPWs and roll weights (each as discussed below) used in performing those calculations are limited to those of the commodities included in the relevant S&P GSCI Component Index and (ii) each S&P GSCI Component Index has a separate normalizing constant (discussed below). The methodology for determining the composition and weighting of the S&P GSCI™ and for calculating its value is subject to modification in a manner consistent with the purposes of the S&P GSCI™, as described below. S&P Dow Jones Indices LLC makes the official calculations of the S&P GSCI Indices.

The Index Committee and the Index Advisory Panel

S&P Dow Jones Indices LLC has established an index committee (the “Index Committee”) to oversee the daily management and operations of the S&P GSCI™, and is responsible for all analytical methods and calculation of the S&P GSCI Indices. The Index Committee consists of full-time professional members of S&P Dow Jones Indices LLC’s staff. At each meeting, the Index Committee reviews any issues that may affect index constituents, statistics comparing the composition of the indices to the market, commodities that are being considered as candidates for addition to an index and any significant market events. In addition, the Index Committee may revise index policy covering rules for selecting commodities or other matters.

S&P Dow Jones Indices LLC considers information about changes to its indices and related matters to be potentially market-moving and material. Therefore, all Index Committee discussions are confidential.

S&P Dow Jones Indices LLC has established an index advisory panel (the "Advisory Panel") to assist it in connection with the operation of the S&P GSCI™. The Advisory Panel meets on an annual basis and at other times at the request of the Index Committee. The principal purpose of the Advisory Panel is to advise the Index Committee with respect to, among other things, the calculation of the S&P GSCI™, the effectiveness of the S&P GSCI™ as a measure of commodity futures market performance and the need for changes in the composition or in the methodology of the S&P GSCI™. The Advisory Panel acts solely in an advisory and consultative capacity; the Index Committee makes all decisions with respect to the composition, calculation and operation of the S&P GSCI™.

Composition of the S&P GSCI™

In order to be included in the S&P GSCI™, a contract must satisfy the following eligibility criteria:

- the contract must be in respect of a physical commodity and not a financial commodity;
- the contract must have a specified expiration or term or provide in some other manner for delivery or settlement at a specified time, or within a specified period, in the future;
- the contract must, at any given point in time, be available for trading at least five months prior to its expiration or such other date or time period specified for delivery or settlement;
- the contract must be traded on an exchange, facility or other platform (referred to as a "trading facility") that allows market participants to execute spread transactions, through a single order entry, between the pairs of contract expirations included in the S&P GSCI™ that, at any given point in time, will be involved in the rolls to be effected in the next three roll periods (defined below);
- the contract must be denominated in U.S. dollars; and
- the contract must be traded on or through a trading facility that has its principal place of business or operations in a country that is a member of the Organization for Economic Cooperation and Development and that:
 - makes price quotations generally available to its members or participants (and to S&P Dow Jones Indices LLC) in a manner and with a frequency that is sufficient to provide reasonably reliable indications of the level of the relevant market at any given point in time;
 - makes reliable trading volume information available to S&P Dow Jones Indices LLC with at least the frequency required by S&P Dow Jones Indices LLC to make the monthly determinations;
 - accepts bids and offers from multiple participants or price providers; and
 - is accessible by a sufficiently broad range of participants.

The price of the relevant contract that is used as a reference or benchmark by market participants (referred to as the "daily contract reference price") generally must have been available on a continuous basis for at least two years prior to the proposed date of inclusion in the S&P GSCI™. In appropriate circumstances, S&P Dow Jones Indices LLC may determine that a shorter

time period is sufficient or that historical daily contract reference prices for such contract may be derived from daily contract reference prices for a similar or related contract. The daily contract reference price may be (but is not required to be) the price (a) used by the relevant trading facility or clearing facility to determine the margin obligations (if any) of its members or participants or margining transactions or for other purposes or (b) referred to generally as the reference, closing or settlement price of the relevant contract.

At and after the time a contract is included in the S&P GSCI™, the daily contract reference price for such contract must be published between 10:00 a.m. and 4:00 p.m., New York City time, on each business day relating to such contract by the trading facility on or through which it is traded and must generally be available to all members of, or participants in, such facility (and to S&P Dow Jones Indices LLC) on the same day from the trading facility or through a recognized third-party data vendor. Such publication must include, at all times, daily contract reference prices for at least one expiration or settlement date that is five months or more from the date the determination is made, as well as for all expiration or settlement dates during such five-month period.

For a contract to be eligible for inclusion in the S&P GSCI™, volume data with respect to such contract must be available for at least the three months immediately preceding the date on which the determination is made. The following eligibility criteria apply:

- In order to be added to the S&P GSCI™, a contract that is not included in the S&P GSCI™ at the time of determination and that is based on a commodity that is not represented in the S&P GSCI™ at such time must have an annualized total dollar value traded over the relevant period of at least U.S. \$15 billion. The total dollar value traded is the dollar value of the total quantity of the commodity underlying transactions in the relevant contract over the period for which the calculation is made, based on the average of the daily contract reference prices on the last day of each month during the period.
- In order to continue to be included in the S&P GSCI™, a contract that is already included in the S&P GSCI™ at the time of determination and that is the only contract on the relevant commodity included in the S&P GSCI™ must have an annualized total dollar value traded of at least U.S. \$5 billion over the relevant period and of at least U.S. \$10 billion during at least one of the three most recent annual periods used in making the determination.
- In order to be added to the S&P GSCI™, a contract that is not included in the S&P GSCI™ at the time of determination and that is based on a commodity on which there are one or more contracts already included in the S&P GSCI™ at such time must have an annualized total dollar value traded over the relevant period of at least U.S. \$30 billion.
- In order to continue to be included in the S&P GSCI™, a contract that is already included in the S&P GSCI™ at the time of determination and that is based on a commodity on which there are one or more contracts already included in the S&P GSCI™ at such time must have an annualized total dollar value traded, over the relevant period of at least U.S. \$10 billion over the relevant period and of at least U.S. \$20 billion during at least one of the three most recent annual periods used in making the determination.

In addition to the volume requirements described above, a contract must have a minimum reference percentage dollar weight:

- In order to continue to be included in the S&P GSCI™, a contract that is already included in the S&P GSCI™ at the time of determination must have a reference percentage dollar weight of at least 0.10%. The reference percentage dollar weight of a contract is

determined by multiplying the CPW (defined below) of a contract by the average of its daily contract reference prices on the last day of each month during the relevant period. These amounts are summed for all contracts included in the S&P GSCI™ and each contract's percentage of the total is then determined.

- In order to be added to the S&P GSCI™, a contract that is not included in the S&P GSCI™ at the time of determination must have a reference percentage dollar weight of at least 1.00% at the time of determination.

In the event that two or more contracts on the same commodity satisfy the eligibility criteria, such contracts are included in the S&P GSCI™ in the order of their respective total quantity traded during the relevant period (determined as the total quantity of the commodity underlying transactions in the relevant contract), with the contract having the highest total quantity traded being included first. No further contracts are included if such inclusion results in the portion of the S&P GSCI™ attributable to such commodity exceeding a particular level.

If under the procedure set forth in the preceding paragraph, additional contracts could be included with respect to several commodities at the same time, the procedure is first applied to the commodity that has the smallest portion of the S&P GSCI™ attributable to it at the time of determination. Subject to the other eligibility criteria, the contract with the highest total quantity traded on such commodity is included. Before any additional contracts on any commodity are included, the portion of the S&P GSCI™ attributable to all commodities is recalculated. The selection procedure described above is then repeated with respect to the contracts on the commodity that then has the smallest portion of the S&P GSCI™ attributable to it.

The contracts currently included in the S&P GSCI™ are all futures contracts traded on the New York Mercantile Exchange, Inc. ("NYMEX"), ICE Futures Europe ("ICE-Europe"), ICE Futures U.S. ("ICE-US"), the Chicago Mercantile Exchange ("CME"), the Chicago Board of Trade ("CBOT"), the Kansas City Board of Trade ("KBT"), the Commodities Exchange Inc. ("CMX") and the London Metal Exchange ("LME").

The quantity of each of the contracts included in the S&P GSCI™ is determined on the basis of a five-year average (referred to as the "world production average") of the production quantity of the underlying commodity from sources determined by S&P Dow Jones Indices LLC to be reasonably accurate and reliable, such as the United Nations Industrial Commodity Statistics Yearbook. However, if a commodity is primarily a regional commodity, based on its production, use, pricing, transportation or other factors, S&P Dow Jones Indices LLC may calculate the weight of such commodity based on regional, rather than world, production data. At present, natural gas is the only commodity the weight of which is calculated on the basis of regional production data, with the relevant region being North America.

The five-year moving average is updated annually for each commodity included in the S&P GSCI™, based on the most recent five-year period (ending approximately two years prior to the date of calculation and moving backwards) for which complete data for all commodities is available. The contract production weights (the "CPWs") used in calculating the S&P GSCI™ are derived from world or regional production averages, as applicable, of the relevant commodities, and are calculated based on the total quantity traded for the relevant contract and the world or regional production average, as applicable, of the underlying commodity. However, if the volume of trading in the relevant contract, as a multiple of the production levels of the commodity, is below specified thresholds, the CPW of the contract is reduced until the threshold is satisfied. This is designed to ensure that trading in each such contract is sufficiently liquid relative to the production of the commodity.

In addition, S&P Dow Jones Indices LLC performs this calculation on a monthly basis and, if the multiple of any contract is below the prescribed threshold, the composition of the S&P GSCI™ is reevaluated, based on the criteria and weighting procedure described above. This procedure is undertaken to allow the S&P GSCI™ to shift from contracts that have lost substantial liquidity into more liquid contracts, during the course of a given year. As a result, it is possible that the composition or weighting of the S&P GSCI™ will change on one or more of these monthly evaluation dates. In addition, regardless of whether any changes have occurred during the year, S&P Dow Jones Indices LLC reevaluates the composition of the S&P GSCI™ at the conclusion of each year, based on the above criteria. Other commodities that satisfy such criteria, if any, will be added to the S&P GSCI™. Commodities included in the S&P GSCI™ that no longer satisfy such criteria, if any, will be deleted.

S&P Dow Jones Indices LLC also determines whether modifications in the selection criteria or the methodology for determining the composition and weights of and for calculating the S&P GSCI™ are necessary or appropriate in order to assure that the S&P GSCI™ represents a measure of commodity market performance. S&P Dow Jones Indices LLC has the discretion to make any such modifications.

Contract Expirations

Because the S&P GSCI™ comprises actively traded contracts with scheduled expirations, it can only be calculated by reference to the prices of contracts for specified expiration, delivery or settlement periods, referred to as “contract expirations.” The contract expirations included in the S&P GSCI™ for each commodity during a given year are designated by S&P Dow Jones Indices LLC, *provided* that each such contract must be an “active contract.” An “active contract” for this purpose is a liquid, actively traded contract expiration, as defined or identified by the relevant trading facility or, if no such definition or identification is provided by the relevant trading facility, as defined by standard custom and practice in the industry.

If a trading facility deletes one or more contract expirations, the S&P GSCI™ will be calculated during the remainder of the year in which such deletion occurs based on the remaining contract expirations designated by S&P Dow Jones Indices LLC. If a trading facility ceases trading in all contract expirations relating to a particular contract, S&P Dow Jones Indices LLC may designate an eligible replacement contract on the commodity. To the extent practicable, the replacement will be in effect during the next monthly review of the composition of the S&P GSCI™. If that timing is not practicable, S&P Dow Jones Indices LLC will determine the date of the replacement and will consider a number of factors, including the differences between the existing contract and the replacement contract specifications and contract expirations.

Value of the S&P GSCI™

The value of the S&P GSCI™ on any given day is equal to the total dollar weight of the S&P GSCI™ divided by a normalizing constant that assures the continuity of the S&P GSCI™ over time. The total dollar weight of the S&P GSCI™ is the sum of the dollar weight of each of the underlying commodities.

The dollar weight of each such commodity on any given day is equal to:

- the “daily contract reference price” (discussed below),
- multiplied by the appropriate CPWs, and
- during a roll period, the appropriate “roll weights” (discussed below).

The daily contract reference price used in calculating the dollar weight of each commodity on any given day is the most recent daily contract reference price made available by the relevant trading facility, except that the daily contract reference price for the most recent prior day will be used if the exchange is closed or otherwise fails to publish a daily contract reference price on that day. In addition, if the trading facility fails to make a daily contract reference price available or publishes a daily contract reference price that, in the reasonable judgment of S&P Dow Jones Indices LLC, reflects manifest error, the relevant calculation will be delayed until the price is made available or corrected; *provided* that, if the price is not made available or corrected by 4:00 p.m., New York City time, S&P Dow Jones Indices LLC may, if it deems such action to be appropriate under the circumstances, determine the appropriate daily contract reference price for the applicable futures contract in its reasonable judgment for purposes of the relevant S&P GSCI™ calculation.

The “roll weight” of each commodity reflects the fact that the positions in contracts must be liquidated or rolled forward into more distant contract expirations as they approach expiration. If actual positions in the relevant markets were rolled forward, the roll would likely need to take place over a period of days. Since the S&P GSCI™ is designed to replicate the performance of actual investments in the underlying contracts, the rolling process incorporated in the S&P GSCI™ also takes place over a period of days at the beginning of each month (referred to as the “roll period”). On each day of the roll period, the “roll weights” of the first nearby contract expiration on a particular commodity and the more distant contract expiration into which it is rolled are adjusted, so that the hypothetical position in the contract on the commodity that is included in the S&P GSCI™ is gradually shifted from the first nearby contract expiration to the more distant contract expiration.

If on any day during a roll period any of the following conditions exists, the portion of the roll that would have taken place on that day is deferred until the next day on which such conditions do not exist:

- no daily contract reference price is available for a given contract expiration;
- any such price represents the maximum or minimum price for such contract month, based on exchange price limits (referred to as a “Limit Price”);
- the daily contract reference price published by the relevant trading facility reflects manifest error, or such price is not published by 4:00 p.m., New York City time. In that event, S&P Dow Jones Indices LLC may, but is not required to, determine a daily contract reference price and complete the relevant portion of the roll based on such price; *provided*, that, if the trading facility publishes a price before the opening of trading on the next day, S&P Dow Jones Indices LLC will revise the portion of the roll accordingly; or
- trading in the relevant contract terminates prior to its scheduled closing time.

If any of these conditions exist throughout the roll period, the roll with respect to the affected contract will be effected in its entirety on the next day on which such conditions no longer exist.

Contract Daily Return

The contract daily return on any given day is equal to the sum, for each of the commodities included in the S&P GSCI™, of the applicable daily contract reference price on the relevant contract multiplied by the appropriate CPW and the appropriate “roll weight,” divided by the total dollar weight of the S&P GSCI™ on the preceding day, minus one.

Calculation of the S&P GSCI Indices

Excess return S&P GSCI Indices

The value of any excess return version of a S&P GSCI Index on any day on which the S&P GSCI™ is calculated (an "S&P GSCI™ Business Day") is equal to the product of:

- the value of the applicable S&P GSCI Index on the immediately preceding S&P GSCI™ Business Day; and
- one plus the contract daily return of the applicable S&P GSCI Index on the S&P GSCI™ Business Day on which the calculation is made.

Total Return S&P GSCI Indices

The value of any total return version of a S&P GSCI Index on any S&P GSCI™ Business Day reflects the value of an investment in the excess return version of that S&P GSCI Index together with a Treasury bill return and is equal to the product of:

- the value of the applicable S&P GSCI Index on the immediately preceding S&P GSCI™ Business Day;
- one plus the sum of the contract daily return and the Treasury Bill return on the S&P GSCI™ Business Day on which the calculation is made; and
- one plus the Treasury Bill return for each non-S&P GSCI™ Business Day since the immediately preceding S&P GSCI™ Business Day.

The Treasury Bill return is the return on a hypothetical investment in the applicable S&P GSCI Index at a rate equal to the interest rate on a specified U.S. Treasury Bill.

Information

All information contained herein relating to the S&P GSCI™ and each of the S&P GSCI Indices, including their make-up, method of calculation, changes in their components and historical performance, has been derived from publicly available information, without independent verification.

The information contained herein with respect to each of the S&P GSCI Indices and the S&P GSCI™ reflects the policies of, and is subject to change by, S&P Dow Jones Indices LLC.

Current information regarding the market values of the S&P GSCI Indices is available from S&P Dow Jones Indices LLC and from numerous public information sources.

License Agreement with S&P Dow Jones Indices LLC

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The Commodity Futures Markets

Futures contracts on physical commodities are traded on regulated futures exchanges, in the over-the-counter market and on various types of physical and electronic trading facilities and markets. As of the date of this underlying supplement, all of the contracts included in the S&P GSCI Indices are exchange-traded futures contracts. An exchange-traded futures contract provides for the purchase and sale of a specified type and quantity of a commodity or financial instrument during a stated delivery month for a fixed price. A futures contract provides for a specified settlement month in which cash settlement is made or in which the commodity or financial instrument is to be delivered by the seller (whose position is therefore described as "short") and acquired by the purchaser (whose position is therefore described as "long").

No purchase price is paid or received on the purchase or sale of a futures contract. Instead, an amount of cash or cash equivalents must be deposited with the broker as "initial margin." This amount varies based on the requirements imposed by the exchange clearing houses, but it may be lower than 5% of the notional value of the contract. This margin deposit provides collateral for the obligations of the parties to the futures contract.

By depositing margin, which may vary in form depending on the exchange, with the clearing house or broker involved, a market participant may be able to earn interest on its margin funds, thereby increasing the total return that it may realize from an investment in futures contracts.

Futures contracts are traded on organized exchanges, known as "contract markets" in the United States. At any time prior to the expiration of a futures contract, a trader may elect to close out its position by taking an opposite position on the exchange on which the trader obtained the position, subject to the availability of a liquid secondary market. This operates to terminate the position and fix the trader's profit or loss. Futures contracts are cleared through the facilities of a centralized clearing house and a brokerage firm, referred to as a "futures commission merchant," which is a member of the clearing house.

Unlike equity securities, futures contracts, by their terms, have stated expirations at a specified point in time prior to expiration. At a specific point in time prior to expiration, trading in a futures contract for the current delivery month will cease. As a result, a market participant wishing to maintain its exposure to a futures contract on a particular commodity or financial instrument with the nearest expiration must close out its position in the expiring contract and establish a new position in the contract for the next delivery month, a process referred to as "rolling." For example, a market participant with a long position in a futures contract expiring in November who wishes to maintain a position in the nearest delivery month will, as the November contract nears expiration, sell the November contract, which serves to close out the existing long position, and buy a futures contract expiring in December. This will "roll" the November position into a December position, and, when the November contract expires, the market participant will still have a long position in the nearest delivery month.

Futures exchanges and clearing houses in the United States are subject to regulation by the Commodity Futures Trading Commission. Exchanges may adopt rules and take other actions that affect trading, including imposing speculative position limits, maximum price fluctuations and trading halts and suspensions and requiring liquidation of contracts in certain circumstances.

Futures markets outside the United States are generally subject to regulation by comparable regulatory authorities. The structure and nature of trading on non-U.S. exchanges may differ from this description. From their inception to the present, the S&P GSCI Indices have been composed exclusively of futures contracts traded on regulated exchanges.

FUND DESCRIPTIONS

THE FINANCIAL SELECT SECTOR SPDR® FUND

We have derived all information contained in this underlying supplement regarding the Financial Select Sector SPDR® Fund from publicly available information, without independent verification. This information reflects the policies of, and is subject to change by the Select Sector SPDR® Trust (the "Select Sector Trust") and SSgA Funds Management, Inc. ("SSgA FM"). The Financial Select Sector SPDR® Fund is an investment portfolio managed by SSgA FM, the investment adviser to the Financial Select Sector SPDR® Fund. The Financial Select Sector SPDR® Fund is an exchange-traded fund ("ETF") that trades on the NYSE Arca, Inc. ("NYSE Arca") under the ticker symbol "XLF."

The Select Sector Trust is a registered investment company that consists of nine separate investment portfolios (each, a "Select Sector SPDR® Fund"), including the Financial Select Sector SPDR® Fund. Each Select Sector SPDR® Fund is an index fund that invests in a particular sector or group of industries represented by a specified Select Sector Index. The companies included in each Select Sector Index are selected on the basis of general industry classifications from a universe of companies defined by the S&P 500® Index. The Select Sector Indices (each, a "Select Sector Index") upon which the Select Sector SPDR® Funds are based together comprise all of the companies in the S&P 500® Index. The investment objective of each Select Sector SPDR® Fund is to provide investment results that, before expenses, correspond generally to the price and yield performance of publicly traded equity securities of companies in a particular sector or group of industries, as represented by a specified market sector index.

Information provided to or filed with the SEC by the Select Sector Trust pursuant to the Securities Act of 1933, as amended, and the Investment Company Act of 1940, as amended, can be located by reference to SEC file numbers 333-57791 and 811-08837, respectively, through the SEC's website at <http://www.sec.gov>. For additional information regarding the Select Sector Trust or the Financial Select Sector SPDR® Fund, please see the Financial Select Sector SPDR® Fund's prospectus. In addition, information about the Select Sector Trust, SSgA FM and the Financial Select Sector SPDR® Fund may be obtained from other sources including, but not limited to, press releases, newspaper articles and other publicly disseminated documents and the Select Sector Trust website at <http://www.sectorspdrs.com>. Information contained in the Select Sector Trust website is not incorporated by reference in, and should not be considered a part of, this underlying supplement or the relevant terms supplement.

Investment Objective

The Financial Select Sector SPDR® Fund seeks to provide investment results that, before expenses, correspond generally to the price and yield performance of publicly traded equity securities of companies in the financial services sector, as represented by the Financial Select Sector Index. For more information about the Financial Select Sector Index, please see "Equity Index Descriptions — The Select Sector Indices" in this underlying supplement.

Investment Strategy — Replication

The Financial Select Sector SPDR® Fund employs a replication strategy in seeking to track the performance of the Financial Select Sector Index. This means that the Financial Select Sector SPDR® Fund typically invests in substantially all of the securities represented in the Financial Select Sector Index in approximately the same proportions as the Financial Select Sector Index. SSgA FM may sell securities that are represented in the Financial Select Sector Index, or purchase securities that are not yet represented in the Financial Select Sector Index, in anticipation of their removal from or addition to the Financial Select Sector Index. Further, SSgA FM may choose to overweight securities in the Financial Select Sector Index, purchase or sell securities not included in the Financial Select Sector Index or utilize various combinations of other available techniques in seeking to track the

Financial Select Sector Index. The Financial Select Sector SPDR® Fund will normally invest at least 95% of its total assets in common stocks that comprise the Financial Select Sector Index. The Financial Select Sector SPDR® Fund may invest its remaining assets in cash and cash equivalents or money market instruments, such as repurchase agreements and money market funds. Swaps, options and futures contracts, convertible securities and structured notes may be used by the Financial Select Sector SPDR® Fund in seeking performance that corresponds to the Financial Select Sector Index and in managing cash flows. SSgA FM anticipates that, under normal circumstances, it may take several business days for additions and deletions to the Financial Select Sector Index to be reflected in the portfolio composition of the Financial Select Sector SPDR® Fund. The Board of Trustees of the Select Sector Trust may change the Financial Select Sector SPDR® Fund's investment strategy and other policies without shareholder approval.

There may, however, be instances where SSgA FM intends to employ a sampling strategy in managing the Financial Select Sector SPDR® Fund. Sampling means that SSgA FM will use quantitative analysis to select securities, including securities in the relevant index, outside of the index and derivatives, that have a similar investment profile as the relevant index in terms of key risk factors, performance attributes and other characteristics. These include industry weightings, market capitalization, and other financial characteristics of securities.

Correlation

The Financial Select Sector Index is a theoretical financial calculation, while the Financial Select Sector SPDR® Fund is an actual investment portfolio. The performance of the Financial Select Sector SPDR® Fund's return may not match or achieve a high degree of correlation with the return of the Financial Select Sector Index due to operating expenses, transaction costs, cash flows, regulatory requirements and operational inefficiencies.

Holdings Information

As of October 31, 2014, the Financial Select Sector SPDR® Fund included 87 securities. The Financial Select Sector SPDR® Fund's three largest holdings are Berkshire Hathaway Inc. Class B, Wells Fargo & Company and JPMorgan Chase & Co. The following table summarizes the Financial Select Sector SPDR® Fund's top holdings in individual securities as of that date.

Top holdings in individual securities as of October 31, 2014

Security	Percentage of Total Holdings
Berkshire Hathaway Inc. Class B	8.74%
Wells Fargo & Company	8.56%
JPMorgan Chase & Co.	7.67%
Bank of America Corporation	6.15%
Citigroup Inc.	5.53%
American Express Company	2.74%
The Goldman Sachs Group, Inc.	2.63%
U.S. Bancorp	2.61%
American International Group, Inc.	2.59%
MetLife, Inc.	2.05%

The information above was compiled from the Select Sector Trust website, without independent verification. Information contained in the Select Sector Trust website is not incorporated by reference in, and should not be considered a part of, this underlying supplement or the relevant terms supplement.

Historical Performance of the Financial Select Sector SPDR® Fund

We will provide historical price information with respect to the shares of the Financial Select Sector SPDR® Fund in the relevant terms supplement. You should not take any such historical prices as an indication of future performance.

THE iSHARES® 20+ YEAR TREASURY BOND ETF

We have derived all information contained in this underlying supplement regarding the iShares® 20+ Year Treasury Bond ETF (the “20+ Treasury Fund”) from publicly available information, without independent verification. This information reflects the policies of, and is subject to change by, iShares® Trust, BlackRock Institutional Trust Company, N.A. (“BTC”) and BlackRock Fund Advisors (“BFA”). The 20+ Treasury Fund is an investment portfolio maintained and managed by iShares® Trust. BFA is currently the investment adviser to the 20+ Treasury Fund. The 20+ Treasury Fund is an exchange-traded fund (“ETF”) that trades on the NYSE Arca, Inc. (“NYSE Arca”) under the ticker symbol “TLT.”

iShares® Trust is a registered investment company that consists of numerous separate investment portfolios, including the 20+ Treasury Fund. Information provided to or filed with the SEC by iShares® Trust pursuant to the Securities Act of 1933, as amended, and the Investment Company Act of 1940, as amended, can be located by reference to SEC file numbers 333-92935 and 811-09729, respectively, through the SEC’s website at <http://www.sec.gov>. For additional information regarding iShares® Trust, BFA and the 20+ Treasury Fund, please see the 20+ Treasury Fund’s prospectus. In addition, information about iShares® Trust and the 20+ Treasury Fund may be obtained from other sources including, but not limited to, press releases, newspaper articles and other publicly disseminated documents and the iShares® website at www.ishares.com. Information contained in the iShares® website is not incorporated by reference in, and should not be considered a part of, this underlying supplement or the relevant terms supplement.

Investment Objective and Strategy

The 20+ Treasury Fund seeks to track the investment results of an index composed of U.S. Treasury bonds with remaining maturities greater than twenty years, which is currently the Barclays U.S. 20+ Year Treasury Bond Index (the “20+ Treasury Index”).

The 20+ Treasury Fund may or may not hold all of the securities in the 20+ Treasury Index. The 20+ Treasury Fund generally invests at least 90% of its assets in the bonds included in the 20+ Treasury Index and at least 95% of its assets in U.S. government bonds. The 20+ Treasury Fund may invest up to 10% of its assets in U.S. government bonds not included in the 20+ Treasury Index, but which BFA believes will help the 20+ Treasury Fund track the 20+ Treasury Index. The 20+ Treasury Fund also may invest up to 5% of its assets in repurchase agreements collateralized by U.S. government obligations and in cash and cash equivalents, including shares of money market funds advised by BFA or its affiliates. The 20+ Treasury Fund may lend securities representing up to one-third of the value of the 20+ Treasury Fund’s total assets (including the value of the collateral received).

Representative Sampling

The 20+ Treasury Fund pursues a “representative sampling” indexing strategy in attempting to track the performance of the 20+ Treasury Index. The 20+ Treasury Fund invests in a representative sample of securities that collectively has an investment profile similar to that of the 20+ Treasury Index. The securities selected are expected to have, in the aggregate, investment characteristics (based on factors such as market capitalization and industry weightings), fundamental characteristics (such as return variability, duration, maturity or credit ratings and yield) and liquidity measures similar to those of the 20+ Treasury Index.

Correlation

The 20+ Treasury Index is a theoretical financial calculation while the 20+ Treasury Fund is an actual investment portfolio. The performance of the 20+ Treasury Fund and the 20+ Treasury Index may vary due to transaction costs, non-U.S. currency valuation, asset valuations, corporate actions (such as mergers and spin-offs), timing variances and differences between the 20+ Treasury Fund's portfolio and the 20+ Treasury Index resulting from legal restrictions (such as diversification requirements) that apply to the 20+ Treasury Fund but not to the 20+ Treasury Index or to the use of representative sampling. "Tracking error" is the difference between the performance (return) of the portfolio of the 20+ Treasury Fund and that of the 20+ Treasury Index. BFA expects that, over time, the 20+ Treasury Fund's tracking error will not exceed 5%. Because the 20+ Treasury Fund uses a representative sampling indexing strategy, it can be expected to have a greater tracking error than if it used a replication indexing strategy. "Replication" is an indexing strategy in which a fund invests in substantially all of the securities in its underlying index in approximately the same proportions as in the underlying index.

Industry Concentration Policy

The 20+ Treasury Fund will concentrate its investments (*i.e.*, hold 25% or more of its total assets) in a particular industry or group of industries to approximately the same extent that the 20+ Treasury Index is concentrated. For purposes of this limitation, securities of the U.S. government (including its agencies and instrumentalities), repurchase agreements collateralized by U.S. government securities and securities of state or municipal governments and their political subdivisions are not considered to be issued by members of any industry.

Holdings Information

The holding information for the 20+ Treasury Fund is updated on a daily basis. As of October 31, 2014, 98.50% of the 20+ Treasury Fund's holdings consisted of bonds and 1.50% was in other assets, including dividends booked but not yet received. The following tables summarize the top 10 holdings of the 20+ Treasury Fund as of that date.

Top 10 Holdings as of October 31, 2014

Security	Percentage of Total Holdings
U.S. Treasury Bonds, 02/15/2043, 3.13%	13.43%
U.S. Treasury Bonds, 08/15/2043, 3.63%	9.33%
U.S. Treasury Bonds, 08/15/2041, 3.75%	7.64%
U.S. Treasury Bonds, 02/15/2044, 3.63%	6.34%
U.S. Treasury Bonds, 08/15/2042, 2.75%	6.11%
U.S. Treasury Bonds, 05/15/2040, 4.38%	5.86%
U.S. Treasury Bonds, 11/15/2040, 4.25%	5.36%
U.S. Treasury Bonds, 02/15/2040, 4.63%	4.99%
U.S. Treasury Bonds, 05/15/2044, 3.38%	4.93%
U.S. Treasury Bonds, 11/15/2043, 3.75%	4.23%

The information above was compiled from the iShares® website, without independent verification. Information contained in the iShares® website is not incorporated by reference in, and should not be considered a part of, this underlying supplement or the relevant terms supplement.

Historical Performance of the 20+ Treasury Fund

We will provide historical price information with respect to the shares of the 20+ Treasury Fund in the relevant terms supplement. You should not take any such historical prices as an indication of future performance.

The Barclays U.S. 20+ Year Treasury Bond Index

We have derived all information contained in this underlying supplement regarding the Barclays U.S. 20+ Year Treasury Bond Index, including, without limitation, its make-up, method of calculation and changes in its components, from publicly available information, without independent verification. This information reflects the policies of, and is subject to change by, Barclays Capital Inc. ("BCI"). The Barclays U.S. 20+ Year Treasury Bond Index is calculated, maintained and published by BCI. BCI is under no obligation to continue to publish, and may discontinue publication of, the Barclays U.S. 20+ Year Treasury Bond Index.

The Barclays U.S. 20+ Year Treasury Bond Index measures the performance of public obligations of the U.S. Treasury. The Barclays U.S. 20+ Year Treasury Bond Index is market capitalization weighted, includes all publicly issued U.S. Treasury securities that meet the criteria for inclusion and is rebalanced once a month on the last calendar day of the month. The U.S. Treasury securities included in the Barclays U.S. 20+ Year Treasury Bond Index must have a remaining maturity of greater than 20 years, are rated investment grade (at least Baa3 by Moody's Investors Service, Inc. or BBB- by Standard and Poor's Financial Services, LLC) and have \$250 million or more of outstanding face value. In addition, the securities must be denominated in U.S. dollars and must be fixed-rate and non-convertible. Certain special issuances, such as state and local government series bonds ("SLGs") and coupon issues that have been stripped from assets already included, are excluded from the Barclays U.S. 20+ Year Treasury Bond Index.

THE iSHARES® U.S. REAL ESTATE ETF

We have derived all information contained in this underlying supplement regarding the iShares® U.S. Real Estate ETF (the “Real Estate Fund”) from publicly available information, without independent verification. This information reflects the policies of, and is subject to change by iShares® Trust, BlackRock Institutional Trust Company, N.A. (“BTC”) and BlackRock Fund Advisors (“BFA”). The Real Estate Fund is an investment portfolio maintained and managed by iShares® Trust. BFA is currently the investment adviser to the Real Estate Fund. The Real Estate Fund is an exchange-traded fund (“ETF”) that trades on the NYSE Arca, Inc. (“NYSE Arca”) under the ticker symbol “IYR.”

iShares® Trust is a registered investment company that consists of numerous separate investment portfolios, including the Real Estate Fund. Information provided to or filed with the SEC by iShares® Trust pursuant to the Securities Act of 1933, as amended, and the Investment Company Act of 1940, as amended, can be located by reference to SEC file numbers 333-92935 and 811-09729, respectively, through the SEC’s website at <http://www.sec.gov>. For additional information regarding iShares® Trust, BFA and the Real Estate Fund, please see the Real Estate Fund’s prospectus. In addition, information about iShares® Trust and the Real Estate Fund may be obtained from other sources including, but not limited to, press releases, newspaper articles and other publicly disseminated documents and the iShares® website at www.ishares.com. Information contained in the iShares® website is not incorporated by reference in, and should not be considered a part of, this underlying supplement or the relevant terms supplement.

Investment Objective and Strategy

The Real Estate Fund seeks to track the investment results, before fees and expenses, of an index composed of U.S. equities in the real estate sector, which is currently the Dow Jones U.S. Real Estate Index (the “Real Estate Index”).

The Real Estate Fund may or may not hold all of the securities in the Real Estate Index. The Real Estate Fund generally invests at least 90% of its assets in the securities of the Real Estate Index and in depositary receipts representing securities of the Real Estate Index. The Real Estate Fund may invest the remainder of its assets in securities not included in the Real Estate Index, but which BFA believes will help the Real Estate Fund track the Real Estate Index, and in futures contracts, options on futures contracts, other types of options and swaps related to the Real Estate Index, including shares of money market funds advised by BFA or its affiliates.

Representative Sampling

The Real Estate Fund pursues a “representative sampling” indexing strategy in attempting to track the performance of the Real Estate Index. The Real Estate Fund invests in a representative sample of securities that collectively has an investment profile similar to the Real Estate Index. The securities selected are expected to have, in the aggregate, investment characteristics (based on factors such as market capitalization and industry weightings), fundamental characteristics (such as return variability and yield) and liquidity measures similar to those of the Real Estate Index. The Real Estate Fund may or may not hold all of the securities that are included in the Real Estate Index.

Correlation

The Real Estate Index is a theoretical financial calculation, while the Real Estate Fund is an actual investment portfolio. The performance of the Real Estate Fund and the Real Estate Index may vary due to transaction costs, non-U.S. currency valuation, asset valuations, corporate actions (such as mergers and spin-offs), timing variances and differences between the Real Estate Fund’s portfolio and the Real Estate Index resulting from legal restrictions (such as diversification requirements) that apply to the Real Estate Fund but not to the Real Estate Index or the use of

representative sampling. “Tracking error” is the divergence of the performance (return) of a fund’s portfolio from that of its underlying index. BFA expects that, over time, the Real Estate Fund’s tracking error will not exceed 5%. Because the Real Estate Fund uses a representative sampling indexing strategy, it can be expected to have a greater tracking error than if it used a replication indexing strategy. “Replication” is an indexing strategy in which a fund invests in substantially all of the securities in its underlying index in approximately the same proportions as in the underlying index.

Industry Concentration Policy

The Real Estate Fund will concentrate its investments (*i.e.*, hold 25% or more of its total assets) in a particular industry or group of industries to approximately the same extent that the Real Estate Index is concentrated. For purposes of this limitation, securities of the U.S. government (including its agencies and instrumentalities) and repurchase agreements collateralized by U.S. government securities are not considered to be issued by members of any industry.

Holdings Information

The following tables summarize the Real Estate Fund’s top holdings in individual securities as of October 31, 2014.

Top holdings in individual securities as of October 31, 2014

Security	Percentage of Total Holdings
Simon Property Group, Inc.	7.06%
American Tower Corporation	5.03%
Crown Castle International Corp.	3.57%
Public Storage	3.35%
Equity Residential	3.16%
Health Care REIT, Inc.	2.92%
Prologis, Inc.	2.64%
Ventas, Inc.	2.61%
AvalonBay Communities, Inc.	2.59%
HCP, Inc.	2.57%

The information above was compiled from the iShares® website, without independent verification. Information contained in the iShares® website is not incorporated by reference in, and should not be considered a part of, this underlying supplement or the relevant terms supplement.

Historical Performance of the Real Estate Fund

We will provide historical price information with respect to the shares of the Real Estate Fund in the relevant terms supplement. You should not take any such historical prices as an indication of future performance.

The Dow Jones U.S. Real Estate Index

We have derived all information contained in this underlying supplement regarding the Dow Jones U.S. Real Estate Index, including, without limitation, its make-up, method of calculation and changes in its components, from publicly available information, without independent verification. This information reflects the policies of, and is subject to change by, S&P Dow Jones Indices LLC. The Dow Jones U.S. Real Estate Index is calculated, maintained and published by S&P Dow Jones

Indices LLC. S&P Dow Jones Indices LLC is under no obligation to continue to publish, and may discontinue publication of, the Dow Jones U.S. Real Estate Index.

Dow Jones U.S. Real Estate Index Composition and Maintenance

The Dow Jones U.S. Real Estate Index measures the performance of the real estate sector of the United States equity market. Component companies include those that invest directly or indirectly in real estate through development, investment or ownership; companies that provide services to real estate companies but do not own the properties themselves (agencies, brokers, leasing companies, management companies and advisory services); and real estate investment trusts or corporations ("REITs") or listed property trusts ("LPTs") that invest in office, industrial, retail, residential, specialty (e.g., health care), hotel, lodging and other properties or that are directly involved in lending money to real estate owners and operators or indirectly through the purchase of mortgages or mortgage-backed securities. REITs are passive investment vehicles that invest primarily in income producing real estate or real estate-related loans and interests.

The Dow Jones U.S. Real Estate Index is one of the 19 supersector indices that make up the Dow Jones U.S. Index. The Dow Jones U.S. Real Estate Index is a subset of the Dow Jones U.S. Financials Index, which in turn is a subset of the Dow Jones U.S. Index. The Dow Jones U.S. Index is part of the Dow Jones Global IndexSM family, which is a benchmark family that represents approximately 95% of the float-adjusted market capitalization of countries that are open to foreign investors. The Dow Jones Global IndexSM family represents 46 countries. The Dow Jones U.S. Real Estate Index is weighted by float-adjusted market capitalization, rather than full market capitalization, to reflect the actual number of shares available to investors.

To establish the investable universe, index component candidates are filtered through screens for share class and liquidity. For share class, index component candidates must be common shares or other securities that have the characteristics of common equities. All classes of common shares, both fully and partially paid, are eligible. Fixed-dividend shares and securities such as convertible notes, warrants, rights, mutual funds, unit investment trusts, closed-end fund shares, shares in limited partnerships and business development companies are not eligible. Temporary issues arising from corporate actions, such as "when-issued shares," are considered on a case-by-case basis when necessary to maintain continuity in a company's index membership. REITs, LPTs and similar real-property-owning pass-through structures taxed as REITs by their domiciles are also eligible. Multiple classes of shares are included if each issue, on its own merit, meets the other eligibility criteria. For liquidity, securities that have had more than ten non-trading days during the past quarter are excluded.

Stocks in the investable universe are sorted by float-adjusted market capitalization. Stocks in the top 95% of the index universe by float-adjusted market capitalization (as of December 1998) are selected as components of the Dow Jones U.S. Index, excluding stocks that fall within the bottom 1% of the universe by float-adjusted market capitalization (as currently measured) and within the bottom 0.01% of the universe by turnover (as currently measured).

Stocks selected as components of the Dow Jones U.S. Index are then classified into Subsectors based on their primary source of revenue. The Subsectors are rolled up into Sectors, which in turn are rolled up into Supersectors and finally into Industries. Subsectors, Sectors, Supersectors and Industries are defined by a proprietary classification system used by S&P Dow Jones Indices LLC. The Dow Jones U.S. Real Estate Index is a Supersector that is a subset of the Dow Jones Financials Index.

The Dow Jones U.S. Real Estate Index is reviewed by S&P Dow Jones Indices LLC on a quarterly basis. Shares outstanding totals for component stocks are updated during the quarterly review. However, if the number of float-adjusted shares outstanding for an index component changes by more than 5% due to a corporate action, the shares total will be adjusted immediately after the close of trading on the date of the event. Whenever possible, S&P Dow Jones Indices LLC will

announce the change at least two business days prior to its implementation. Changes in shares outstanding due to stock dividends, splits and other corporate actions also are adjusted immediately after the close of trading on the day they become effective. Quarterly reviews are implemented during March, June, September and December. Both component changes and share changes become effective at the opening on the first Monday after the third Friday of the review month. Changes to the Dow Jones U.S. Real Estate Index are implemented after the official closing values have been established. All adjustments are made before the start of the next trading day. Constituent changes that result from the periodic review will be announced on the second Friday of the third month of each quarter (e.g., March, June, September and December).

In addition to the scheduled quarterly review, the Dow Jones U.S. Real Estate Index is reviewed on an ongoing basis. Changes in index composition and related weight adjustments are necessary whenever there are extraordinary events such as delistings, bankruptcies, mergers or takeovers involving index components. In these cases, each event will be taken into account as soon as it is effective. Whenever possible, the changes in the index components will be announced at least two business days prior to their implementation date. In the event that a component no longer meets the eligibility requirements, it will be removed from the Dow Jones U.S. Real Estate Index.

THE iSHARES® MSCI BRAZIL CAPPED ETF

We have derived all information contained in this underlying supplement regarding the iShares® MSCI Brazil Capped ETF (the “EWZ Fund”) from publicly available information, without independent verification. This information reflects the policies of, and is subject to change by, iShares®, Inc., BlackRock Institutional Trust Company, N.A. (“BTC”) and BlackRock Fund Advisors (“BFA”). The EWZ Fund is an investment portfolio maintained and managed by iShares®, Inc. BFA is currently the investment adviser to the EWZ Fund. The EWZ Fund is an exchange-traded fund (“ETF”) that trades on the NYSE Arca, Inc. (“NYSE Arca”) under the ticker symbol “EWZ.”

iShares®, Inc. is a registered investment company that consists of numerous separate investment portfolios, including the EWZ Fund. Information provided to or filed with the SEC by iShares®, Inc. pursuant to the Securities Act of 1933, as amended, and the Investment Company Act of 1940, as amended, can be located by reference to SEC file numbers 033-97598 and 811-09102, respectively, through the SEC’s website at <http://www.sec.gov>. For additional information regarding iShares®, Inc., BFA and the EWZ Fund, please see the EWZ Fund’s prospectus. In addition, information about iShares® and the EWZ Fund may be obtained from other sources including, but not limited to, press releases, newspaper articles and other publicly disseminated documents and the iShares® website at www.ishares.com. Information contained in the iShares® website is not incorporated by reference in, and should not be considered a part of, this underlying supplement or the relevant terms supplement.

Investment Objective and Strategy

The EWZ Fund seeks to track the investment results, before fees and expenses, of an index composed of Brazilian equities, which is currently the MSCI Brazil 25/50 Index. For more information about the MSCI 25/50 Brazil Index, please see “Equity Index Descriptions — The MSCI 25/50 Indices” in this underlying supplement.

As of October 31, 2014, the EWZ Fund’s three largest equity securities were Itaú Unibanco Holding S.A. Preferred, Banco Bradesco S.A. and Ambev S.A.; and its three largest sectors were financials, consumer staples and energy.

The EWZ Fund uses a representative sampling indexing strategy (as described below under “Representative Sampling”) to try to track the MSCI Brazil 25/50 Index. The EWZ Fund generally invests at least 95% of its assets in the securities of the MSCI Brazil 25/50 Index or in depositary receipts representing securities included in the MSCI Brazil 25/50 Index. The EWZ Fund will at all times invest at least 80% of its assets in the securities of the MSCI Brazil 25/50 Index or in depositary receipts representing securities included in the MSCI Brazil 25/50 Index. The EWZ Fund may invest the remainder of its assets in securities not included in the MSCI Brazil 25/50 Index, but which BFA believes will help the EWZ Fund track the MSCI Brazil 25/50 Index, and in futures contracts, options on futures contracts, other types of options and swaps related to the MSCI Brazil 25/50 Index, as well as cash and cash equivalents, including shares of money market funds advised by BFA or its affiliates.

Representative Sampling

The EWZ Fund uses a “representative sampling” indexing strategy in attempting to track to track the performance of the MSCI Brazil 25/50 Index. The EWZ Fund Invests in a representative sample of securities that collectively has an investment profile similar to the MSCI Brazil 25/50 Index. Securities selected are expected to have, in the aggregate, investment characteristics (based on factors such as market capitalization and industry weightings), fundamental characteristics (such as return variability and yield) and liquidity measures similar to those of the MSCI Brazil 25/50 Index. The EWZ Fund may or may not hold all of the securities in the MSCI Brazil 25/50 Index.

Correlation

The MSCI Brazil 25/50 Index is a theoretical financial calculation, while the EWZ Fund is an actual investment portfolio. The performance of the EWZ Fund and the MSCI Brazil 25/50 Index may vary due to transaction costs, non-U.S. currency valuation, asset valuations, corporate actions (such as mergers and spin-offs), timing variances and differences between the EWZ Fund's portfolio and the MSCI Brazil 25/50 Index resulting from legal restrictions (such as diversification requirements) that apply to the EWZ Fund but not to the MSCI Brazil 25/50 Index or to the use of representative sampling. "Tracking error" is the divergence of the performance (return) of a fund's portfolio from that of its underlying index. BFA expects that, over time, the EWZ Fund's tracking error will not exceed 5%. Because the EWZ Fund uses a representative sampling indexing strategy, it can be expected to have a greater tracking error than if it used a replication indexing strategy. "Replication" is an indexing strategy in which a fund invests in substantially all of the securities in its underlying index in approximately the same proportions as in the underlying index.

Industry Concentration Policy

The EWZ Fund will concentrate its investments (*i.e.*, hold 25% or more of its total assets) in a particular industry or group of industries to approximately the same extent that the MSCI Brazil 25/50 Index is concentrated. For purposes of this limitation, securities of the U.S. government (including its agencies and instrumentalities) and repurchase agreements collateralized by U.S. government securities are not considered to be issued by members of any industry.

Holdings Information

The following tables summarize the EWZ Fund's top holdings in individual securities and by sector as of October 31, 2014.

Top holdings in individual securities as of October 31, 2014

Security	Percentage of Total Holdings
Itaú Unibanco Holding S.A. Preferred	9.21%
Banco Bradesco S.A.	6.93%
Ambev S.A.	6.77%
Petroleo Brasileiro S.A. Preferred	5.75%
BRF S.A.	4.40%
Petroleo Brasileiro S.A.	3.70%
Vale S.A. Preferred	3.43%
Cielo S.A.	3.02%
Kroton Educational S.A.	2.52%
Vale S.A.	2.48%

Top holdings by sector as of October 31, 2014

Sector	Percentage of Total Holdings
Financials	30.45%
Consumer Staples	17.09%
Energy	12.06%
Materials	11.71%
Consumer Discretionary	7.12%
Utilities	5.98%
Industrials	5.83%
Information Technology	3.58%
Telecommunication Services	3.43%
Other/Undefined	1.93%
Health Care	0.78%

The information above was compiled from the iShares® website, without independent verification. Information contained in the iShares® website is not incorporated by reference in, and should not be considered a part of, this underlying supplement or the relevant terms supplement.

Historical Performance of the EWZ Fund

We will provide historical price information with respect to the shares of the EWZ Fund in the relevant terms supplement. You should not take any such historical prices as an indication of future performance.

THE iSHARES® MSCI EMERGING MARKETS ETF

We have derived all information contained in this underlying supplement regarding the iShares® MSCI Emerging Markets ETF (the “EEM Fund”) from publicly available information, without independent verification. This information reflects the policies of, and is subject to change by, iShares®, Inc., BlackRock Institutional Trust Company, N.A. (“BTC”) and BlackRock Fund Advisors (“BFA”). The EEM Fund is an investment portfolio maintained and managed by iShares®, Inc. BFA is currently the investment adviser to the EEM Fund. The EEM Fund is an exchange-traded fund (“ETF”) that trades on the NYSE Arca, Inc. (“NYSE Arca”) under the ticker symbol “EEM.”

iShares®, Inc. is a registered investment company that consists of numerous separate investment portfolios, including the EEM Fund. Information provided to or filed with the SEC by iShares®, Inc. pursuant to the Securities Act of 1933, as amended, and the Investment Company Act of 1940, as amended, can be located by reference to SEC file numbers 033-97598 and 811-09102, respectively, through the SEC’s website at <http://www.sec.gov>. For additional information regarding iShares®, Inc., BFA and the EEM Fund, please see the EEM Fund’s prospectus. In addition, information about iShares® and the EEM Fund may be obtained from other sources including, but not limited to, press releases, newspaper articles and other publicly disseminated documents and the iShares® website at www.ishares.com. Information contained in the iShares® website is not incorporated by reference in, and should not be considered a part of, this underlying supplement or the relevant terms supplement.

Investment Objective and Strategy

The EEM Fund seeks to track the investment results, before fees and expenses, of an index composed of large- and mid-cap emerging market equities, which is currently the MSCI Emerging Markets Index. For more information about the MSCI Emerging Markets Index, please see “Equity Index Descriptions — The MSCI Indices” in this underlying supplement.

As of October 31, 2014, the EEM Fund holdings by country consisted of the following 23 countries: Brazil, Chile, China, Colombia, Czech Republic, Egypt, Greece, Hong Kong, Hungary, India, Indonesia, Malaysia, Mexico, Peru, Philippines, Poland, Russia, South Africa, South Korea, Taiwan, Thailand, Turkey and the United Arab Emirates. In addition, as of October 31, 2014, the EEM Fund’s three largest holdings by country were China, South Korea and Taiwan; its three largest equity securities were Samsung Electronics Co., Ltd., Taiwan Semiconductor Manufacturing Company, Limited and Tencent Holdings Ltd.; and its three largest sectors were financials, information technology and energy.

The EEM Fund uses a representative sampling indexing strategy (as described below under “Representative Sampling”) to try to track the MSCI Emerging Markets Index. The EEM Fund generally invests at least 90% of its assets in securities of the MSCI Emerging Markets Index and depository receipts representing securities in the MSCI Emerging Markets Index. In addition, the EEM Fund may invest the remainder of its assets in securities not included in the MSCI Emerging Markets Index, but which BFA believes will help the EEM Fund track the MSCI Emerging Markets Index and in futures contracts, options on futures contracts, other types of options and swaps related to the MSCI Emerging Markets Index, as well as cash and cash equivalents, including shares of money market funds advised by BFA or its affiliates.

Representative Sampling

The EEM Fund pursues a “representative sampling” indexing strategy in attempting to track the performance of the MSCI Emerging Markets Index, and generally does not hold all of the equity securities included in the MSCI Emerging Markets Index. The EEM Fund invests in a representative sample of securities that collectively has an investment profile similar to the MSCI Emerging Markets Index. Securities selected are expected to have, in the aggregate, investment characteristics (based on factors such as market capitalization and industry weightings), fundamental characteristics (such as return variability and yield) and liquidity measures similar to those of the MSCI Emerging Markets Index.

Correlation

The MSCI Emerging Markets Index is a theoretical financial calculation, while the EEM Fund is an actual investment portfolio. The performance of the EEM Fund and the MSCI Emerging Markets Index may vary due to transaction costs, non-U.S. currency valuation, asset valuations, corporate actions (such as mergers and spin-offs), timing variances and differences between the EEM Fund's portfolio and the MSCI Emerging Markets Index resulting from legal restrictions (such as diversification requirements) that apply to the EEM Fund but not to the MSCI Emerging Markets Index or to the use of representative sampling. "Tracking error" is the divergence of the performance (return) of a fund's portfolio from that of its underlying index. BFA expects that, over time, the EEM Fund's tracking error will not exceed 5%. Because the EEM Fund uses a representative sampling indexing strategy, it can be expected to have a greater tracking error than if it used a replication indexing strategy. "Replication" is an indexing strategy in which a fund invests in substantially all of the securities in its underlying index in approximately the same proportions as in the underlying index.

Industry Concentration Policy

The EEM Fund will concentrate its investments (*i.e.*, hold 25% or more of its total assets) in a particular industry or group of industries to approximately the same extent that the MSCI Emerging Markets Index is concentrated. For purposes of this limitation, securities of the U.S. government (including its agencies and instrumentalities) and repurchase agreements collateralized by U.S. government securities are not considered to be issued by members of any industry.

Holdings Information

The following tables summarize the EEM Fund's top holdings in individual securities and by sector as of October 31, 2014.

Top holdings in individual securities as of October 31, 2014

Security	Percentage of Total Holdings
Samsung Electronics Co., Ltd.	2.57%
Taiwan Semiconductor Manufacturing Company, Limited	1.92%
Tencent Holdings Ltd.	1.65%
China Mobile Limited	1.42%
China Construction Bank Corporation	1.39%
Naspers Ltd	1.34%
Industrial and Commercial Bank of China Ltd.	1.37%
Itaú Unibanco Holding S.A. Preferred	0.99%
América Móvil	0.97%
Hon Hai Precision Industry Co., Ltd.	0.97%

Top holdings by sector as of October 31, 2014

Sector	Percentage of Total Holdings
Financials	27.68%
Information Technology	16.95%
Energy	9.28%
Consumer Discretionary	8.97%
Consumer Staples	8.33%
Materials	7.93%
Telecommunication Services	7.77%
Industrials	6.43%
Utilities	3.58%
Health Care	2.09%

The information above was compiled from the iShares® website, without independent verification. Information contained in the iShares® website is not incorporated by reference in, and should not be considered a part of, this underlying supplement or the relevant terms supplement.

Historical Performance of the EEM Fund

We will provide historical price information with respect to the shares of the EEM Fund in the relevant terms supplement. You should not take any such historical prices as an indication of future performance.

THE iSHARES® MSCI EAFE ETF

We have derived all information contained in this underlying supplement regarding the iShares® MSCI EAFE ETF (the “EFA Fund”) from publicly available information, without independent verification. This information reflects the policies of, and is subject to change by, iShares® Trust, BlackRock Institutional Trust Company, N.A. (“BTC”) and BlackRock Fund Advisors (“BFA”). The EFA Fund is an investment portfolio maintained and managed by iShares® Trust. BFA is currently the investment adviser to the EFA Fund. The EFA Fund is an exchange-traded fund (“ETF”) that trades on the NYSE Arca, Inc. (“NYSE Arca”) under the ticker symbol “EFA.”

iShares® Trust is a registered investment company that consists of numerous separate investment portfolios, including the EFA Fund. Information provided to or filed with the SEC by iShares® Trust pursuant to the Securities Act of 1933, as amended, and the Investment Company Act of 1940, as amended, can be located by reference to SEC file numbers 333-92935 and 811-09729, respectively, through the SEC’s website at <http://www.sec.gov>. For additional information regarding iShares® Trust, BFA and the EFA Fund, please see the EFA Fund’s prospectus. In addition, information about iShares® Trust and the EFA Fund may be obtained from other sources including, but not limited to, press releases, newspaper articles and other publicly disseminated documents and the iShares® website at www.ishares.com. Information contained in the iShares® website is not incorporated by reference in, and should not be considered a part of, this underlying supplement or the relevant terms supplement.

Investment Objective and Strategy

The EFA Fund seeks to track the investment results, before fees and expenses, of an index composed of large- and mid-capitalization developed market equities, excluding the U.S. and Canada, which is currently the MSCI EAFE® Index. For more information about the MSCI EAFE® Index, please see “Equity Index Descriptions —The MSCI Indices” in this underlying supplement.

As of October 31, 2014, the EFA Fund holdings by country consisted of the following 32 countries: Australia, Austria, Brazil, Chile, China, Denmark, Finland, France, Germany, Hong Kong, Ireland, Israel, Italy, Japan, Luxembourg, Macau, Mali, Malta, Mexico, the Netherlands, New Zealand, Norway, the Philippines, Poland, Portugal, Singapore, Spain, Sweden, Switzerland, the United Arab Emirates, the United Kingdom and the United States. In addition, as of October 31, 2014, the EFA Fund’s three largest holdings by country were Japan, the United Kingdom and Switzerland; its three largest equity securities were Nestle S.A., Novartis AG and Roche Holding AG; and its three largest sectors were financials, industrials and consumer discretionary.

The EFA Fund uses a representative sampling indexing strategy (as described below under “Representative Sampling”) to try to track the MSCI EAFE® Index. The EFA Fund generally invests at least 90% of its assets in the securities of the MSCI EAFE® Index and in depository receipts representing securities in the MSCI EAFE® Index. In addition, the EFA Fund may invest the remainder of its assets in securities not included in the MSCI EAFE® Index but which BFA believes will help the EFA Fund track the MSCI EAFE® Index and in futures contracts, options on futures contracts, other types of options and swaps related to the MSCI EAFE® Index, as well as cash and cash equivalents, including shares of money market funds advised by BFA or its affiliates.

Representative Sampling

The EFA Fund pursues a “representative sampling” indexing strategy in attempting to track the performance of the MSCI EAFE® Index. The EFA Fund invests in a representative sample of securities that collectively has an investment profile similar to the MSCI EAFE® Index. The securities selected are expected to have, in the aggregate, investment characteristics (based on factors such as market capitalization and industry weightings), fundamental characteristics (such as return variability and

yield) and liquidity measures similar to those of the MSCI EAFE® Index. The EFA Fund may or may not hold all of the securities that are included in the MSCI EAFE® Index.

Correlation

The MSCI EAFE® Index is a theoretical financial calculation, while the EFA Fund is an actual investment portfolio. The performance of the EFA Fund and the MSCI EAFE® Index will vary due to transaction costs, foreign currency valuation, asset valuations, corporate actions (such as mergers and spin-offs), timing variances, and differences between the EFA Fund's portfolio and the MSCI EAFE® Index resulting from legal restrictions (such as diversification requirements) that apply to the EFA Fund but not to the MSCI EAFE® Index or the use of representative sampling. "Tracking error" is the divergence of the performance (return) of a fund's portfolio from that of its underlying index. BFA expects that, over time, the EFA Fund's tracking error will not exceed 5%. Because the EFA Fund uses a representative sampling indexing strategy, it can be expected to have a greater tracking error than if it used a replication indexing strategy. "Replication" is an indexing strategy in which a fund invests in substantially all of the securities in its underlying index in approximately the same proportions as in the underlying index.

Industry Concentration Policy

The EFA Fund will concentrate its investments (*i.e.*, hold 25% or more of its total assets) in a particular industry or group of industries to approximately the same extent that the MSCI EAFE® Index is concentrated. For purposes of this limitation, securities of the U.S. government (including its agencies and instrumentalities) and repurchase agreements collateralized by U.S. government securities are not considered to be issued by members of any industry.

Holdings Information

The following tables summarize the EFA Fund's top holdings in individual securities and by sector as of October 31, 2014.

Top holdings in individual securities as of October 31, 2014

Security	Percentage of Total Holdings
Nestle S.A.	1.85%
Novartis AG	1.68%
Roche Holding AG	1.63%
HSBC Holdings plc	1.53%
Toyota Motor Corporation	1.25%
Royal Dutch Shell plc Class A	1.10%
BP plc	1.04%
Total S.A.	1.00%
Bayer AG	0.92%
Commonwealth Bank of Australia	0.90%

Top holdings by sector as of October 31, 2014

Sector	Percentage of Total Holdings
Financials	26.04%
Industrials	12.39%
Consumer Discretionary	11.44%
Consumer Staples	9.83%
Health Care	9.59%
Materials	7.51%
Energy	6.22%
Telecommunication Services	4.58%
Information Technology	4.54%
Other/Undefined	4.01%
Utilities	3.85%

The information above was compiled from the iShares® website, without independent verification. Information contained in the iShares® website is not incorporated by reference in, and should not be considered a part of, this underlying supplement or the relevant terms supplement.

Historical Performance of the EFA Fund

We will provide historical price information with respect to the shares of the EFA Fund in the relevant terms supplement. You should not take any such historical prices as an indication of future performance.

THE iSHARES® MSCI MEXICO CAPPED ETF

We have derived all information contained in this underlying supplement regarding the iShares® MSCI Mexico Capped ETF (the “EWW Fund”) from publicly available information, without independent verification. This information reflects the policies of, and is subject to change by, iShares®, Inc., BlackRock Institutional Trust Company, N.A. (“BTC”) and BlackRock Fund Advisors (“BFA”). The EWW Fund is an investment portfolio maintained and managed by iShares®, Inc. BFA is currently the investment adviser to the EWW Fund. The EWW Fund is an exchange-traded fund (“ETF”) that trades on the NYSE Arca, Inc. (“NYSE Arca”) under the ticker symbol “EWW.”

iShares®, Inc. is a registered investment company that consists of numerous separate investment portfolios, including the EWW Fund. Information provided to or filed with the SEC by iShares®, Inc. pursuant to the Securities Act of 1933, as amended, and the Investment Company Act of 1940, as amended, can be located by reference to SEC file numbers 033-97598 and 811-09102, respectively, through the SEC’s website at <http://www.sec.gov>. For additional information regarding iShares®, Inc., BFA and the EWW Fund, please see the EWW Fund’s prospectus. In addition, information about iShares® and the EWW Fund may be obtained from other sources including, but not limited to, press releases, newspaper articles and other publicly disseminated documents and the iShares® website at www.ishares.com. Information contained in the iShares® website is not incorporated by reference in, and should not be considered a part of, this underlying supplement or the relevant terms supplement.

Investment Objective and Strategy

The EWW Fund seeks to track the investment results, before fees and expenses, of an index composed of Mexican equities, which is currently the MSCI Mexico Investable Market (IMI) 25/50 Index. For more information about the MSCI Mexico IMI 25/50 Index, please see “Equity Index Descriptions — The MSCI 25/50 Indices” in this underlying supplement.

As of October 31, 2014, the EWW Fund’s three largest equity securities were América Móvil, S.A.B. de C.V. (Series L); Fomento Económico Mexicano, S.A.B. de C.V. (UBDs) and Grupo Televisa, S.A.B. (CPOs); and its three largest sectors were financials, consumer staples and telecommunication services.

The EWW Fund uses a representative sampling indexing strategy (as described below under “Representative Sampling”) to try to track the MSCI Mexico IMI 25/50 Index. The EWW Fund will at all times invest at least 80% of its assets in the securities of the MSCI Mexico IMI 25/50 Index or in depositary receipts representing securities included in the MSCI Mexico IMI 25/50 Index. The EWW Fund may invest the remainder of its assets in other securities, including securities not included in the MSCI Mexico IMI 25/50 Index, but which BFA believes will help the EWW Fund track the MSCI Mexico IMI 25/50 Index, and in other investments, including futures contracts, options on futures contracts, other types of options and swaps related to the MSCI Mexico IMI 25/50 Index, as well as cash and cash equivalents, including shares of money market funds advised by BFA or its affiliates.

Representative Sampling

The EWW Fund uses a “representative sampling” indexing strategy in attempting to track to track the performance of the MSCI Mexico IMI 25/50 Index. The EWW Fund invests in a representative sample of securities that collectively has an investment profile similar to the MSCI Mexico IMI 25/50 Index. The securities selected are expected to have, in the aggregate, investment characteristics (based on factors such as market capitalization and industry weightings), fundamental characteristics (such as return variability and yield) and liquidity measures similar to those of the MSCI Mexico IMI 25/50 Index. The EWW Fund may or may not hold all of the securities in the MSCI Mexico IMI 25/50 Index.

Correlation

The MSCI Mexico IMI 25/50 Index is a theoretical financial calculation, while the EWW Fund is an actual investment portfolio. The performance of the EWW Fund and the MSCI Mexico IMI 25/50 Index may vary due to transaction costs, non-U.S. currency valuations, asset valuations, corporate actions (such as mergers and spin-offs), timing variances and differences between the EWW Fund's portfolio and the MSCI Mexico IMI 25/50 Index resulting from legal restrictions (such as diversification requirements) that apply to the EWW Fund but not to the MSCI Mexico IMI 25/50 Index or to the use of representative sampling. "Tracking error" is the divergence of the performance (return) of a fund's portfolio from that of its underlying index. BFA expects that, over time, the EWW Fund's tracking error will not exceed 5%. Because the EWW Fund uses a representative sampling indexing strategy, it can be expected to have a greater tracking error than if it used a replication indexing strategy. "Replication" is an indexing strategy in which a fund invests in substantially all of the securities in its underlying index in approximately the same proportions as in the underlying index.

Industry Concentration Policy

The EWW Fund will concentrate its investments (*i.e.*, hold 25% or more of its total assets) in a particular industry or group of industries to approximately the same extent that the MSCI Mexico IMI 25/50 Index is concentrated. For purposes of this limitation, securities of the U.S. government (including its agencies and instrumentalities) and repurchase agreements collateralized by U.S. government securities are not considered to be issued by members of any industry.

Holdings Information

The following tables summarize the EWW Fund's top holdings in individual securities and by sector as of October 31, 2014.

Top holdings in individual securities as of October 31, 2014

Security	Percentage of Total Holdings
América Móvil, S.A.B. de C.V. (Series L)	17.26%
Fomento Económico Mexicano, S.A.B. de C.V. (UBDs)	7.45%
Grupo Televisa, S.A.B. (CPOs)	7.41%
Grupo Financiero Banorte, S.A.B. de C.V. (Series O)	6.33%
CEMEX, S.A.B. de C.V. (CPOs)	5.86%
Grupo México, S.A.B. de C.V. (Series B)	4.50%
Wal-Mart de México, S.A.B. de C.V. (Series V)	4.10%
Alfa S.A.B de C.V. (Series A)	4.03%
Fibra Una Administracion, S.A. de C.V.	3.59%
Grupo Financiero Inbursa, S.A.B. de C.V.	3.17%

Top holdings by sector as of October 31, 2014

Sector	Percentage of Total Holdings
Financials	21.14%
Consumer Staples	20.75%
Telecommunication Services	17.45%
Materials	15.26%
Industrials	12.46%
Consumer Discretionary	10.52%
Other/Undefined	1.44%
Health Care	0.99%

The information above was compiled from the iShares® website, without independent verification. Information contained in the iShares® website is not incorporated by reference in, and should not be considered a part of, this underlying supplement or the relevant terms supplement.

Historical Performance of the EWW Fund

We will provide historical price information with respect to the shares of the EWW Fund in the relevant terms supplement. You should not take any such historical prices as an indication of future performance.

THE ISHARES® RUSSELL 2000 ETF

We have derived all information contained in this underlying supplement regarding the iShares® Russell 2000 ETF from publicly available information, without independent verification. This information reflects the policies of, and is subject to change by, iShares® Trust, BlackRock Institutional Trust Company, N.A. (“BTC”) and BlackRock Fund Advisors (“BFA”). The iShares® Russell 2000 ETF is an investment portfolio maintained and managed by iShares® Trust. BFA is currently the investment adviser to the iShares® Russell 2000 ETF. The iShares® Russell 2000 ETF is an exchange-traded fund (“ETF”) that trades on the NYSE Arca, Inc. (“NYSE Arca”) under the ticker symbol “IWM.”

iShares® Trust is a registered investment company that consists of numerous separate investment portfolios, including the iShares® Russell 2000 ETF. Information provided to or filed with the SEC by iShares® Trust pursuant to the Securities Act of 1933, as amended, and the Investment Company Act of 1940, as amended, can be located by reference to SEC file numbers 333-92935 and 811-09729, respectively, through the SEC’s website at <http://www.sec.gov>. For additional information regarding iShares® Trust, BFA and the iShares® Russell 2000 ETF, please see the iShares® Russell 2000 ETF’s prospectus. In addition, information about iShares® Trust and the iShares® Russell 2000 ETF may be obtained from other sources including, but not limited to, press releases, newspaper articles and other publicly disseminated documents and the iShares® website at www.ishares.com. Information contained in the iShares® website is not incorporated by reference in, and should not be considered a part of, this underlying supplement or the relevant terms supplement.

Investment Objective and Strategy

The iShares® Russell 2000 ETF seeks to track the investment results, before fees and expenses, of an index composed of small-capitalization U.S. equities, which is currently the Russell 2000® Index. For more information about the Russell 2000® Index, please see “Equity Index Descriptions —The Russell Indices” in this underlying supplement.

As of October 31, 2014, the iShares® Russell 2000 ETF’s three largest holdings were Puma Biotechnology, Inc., Isis Pharmaceuticals, Inc. and WEX Inc.; and its three largest sectors were financial services, technology and health care.

The iShares® Russell 2000 ETF uses a representative sampling indexing strategy (as described below under “Representative Sampling”) to try to track the Russell 2000® Index. The iShares® Russell 2000 ETF generally invests at least 90% of its assets in the securities of the Russell 2000® Index and in depositary receipts representing securities of the Russell 2000® Index. In addition, the iShares® Russell 2000 ETF may invest the remainder of its assets in securities not included in the Russell 2000® Index, but which BFA believes will help the iShares® Russell 2000 ETF track the Russell 2000® Index, and in futures contracts, options on futures contracts, other types of options and swaps related to the Russell 2000®, as well as cash and cash equivalents, including shares of money market funds advised by BFA or its affiliates.

Representative Sampling

The iShares® Russell 2000 ETF pursues a “representative sampling” indexing strategy in attempting to track the performance of the Russell 2000® Index. The iShares® Russell 2000 ETF invests in a representative sample of securities that collectively has an investment profile similar to that of the Russell 2000® Index. The securities selected are expected to have, in the aggregate, investment characteristics (based on factors such as market capitalization and industry weightings), fundamental characteristics (such as return variability and yield) and liquidity measures similar to those of the Russell 2000® Index. The iShares® Russell 2000 ETF may or may not hold all of the securities that are included in the Russell 2000® Index.

Correlation

The Russell 2000® Index is a theoretical financial calculation, while the iShares® Russell 2000 ETF is an actual investment portfolio. The performance of the iShares® Russell 2000 ETF and the Russell 2000® Index may vary due to transaction costs, non-U.S. currency valuation, asset valuations, corporate actions (such as mergers and spin-offs), timing variances and differences between the iShares® Russell 2000 ETF's portfolio and the Russell 2000® Index resulting from legal restrictions (such as diversification requirements) that apply to the iShares® Russell 2000 ETF but not to the Russell 2000® Index or to the use of representative sampling. "Tracking error" is the divergence of the performance (return) of a fund's portfolio from that of its underlying index. BFA expects that, over time, the iShares® Russell 2000 ETF's tracking error will not exceed 5%. Because the iShares® Russell 2000 ETF uses a representative sampling indexing strategy, it can be expected to have a greater tracking error than if it used a replication indexing strategy. "Replication" is an indexing strategy in which a fund invests in substantially all of the securities in its underlying index in approximately the same proportions as in the underlying index.

Industry Concentration Policy

The iShares® Russell 2000 ETF will concentrate its investments (*i.e.*, hold 25% or more of its total assets) in a particular industry or group of industries to approximately the same extent that the Russell 2000® Index is concentrated. For purposes of this limitation, securities of the U.S. government (including its agencies and instrumentalities) and repurchase agreements collateralized by U.S. government securities are not considered to be issued by members of any industry.

Holdings Information

The following tables summarize the iShares® Russell 2000 ETF's top holdings in individual securities and by sector as of October 31, 2014.

Top holdings in individual securities as of October 31, 2014

Security	Percentage of Total Holdings
Puma Biotechnology, Inc.	0.34%
Isis Pharmaceuticals, Inc.	0.31%
WEX Inc.	0.26%
Team Health Holdings, Inc.	0.26%
Brunswick Corporation	0.25%
The Ultimate Software Group, Inc.	0.25%
RLJ Lodging Trust	0.24%
Prosperity Bancshares, Inc.	0.24%
LaSalle Hotel Properties	0.24%
Graphic Packaging Holding Company	0.23%

Top holdings by sector as of October 31, 2014

Sector	Percentage of Total Holdings
Financial Services	25.30%
Technology	14.52%
Health Care	14.01%
Consumer Discretionary	13.98%
Producer Durables	13.59%
Materials & Processing	6.71%
Utilities	4.47%
Energy	4.43%
Consumer Staples	2.81%

The information above was compiled from the iShares® website, without independent verification. Information contained in the iShares® website is not incorporated by reference in, and should not be considered a part of, this underlying supplement or the relevant terms supplement.

Historical Performance of the iShares® Russell 2000 ETF

We will provide historical price information with respect to the shares of the iShares® Russell 2000 ETF in the relevant terms supplement. You should not take any such historical prices as an indication of future performance.

THE MARKET VECTORS GOLD MINERS ETF

We have derived all information contained in this underlying supplement regarding the Market Vectors Gold Miners ETF (the "GDX Fund") from publicly available information, without independent verification. This information reflects the policies of, and is subject to change by, Market Vectors ETF Trust and Van Eck Associates Corporation ("Van Eck"). The GDX Fund is an investment portfolio of the Market Vectors ETF Trust (the "Trust"). Van Eck is currently the investment adviser to the GDX Fund. The GDX Fund is an exchange-traded fund that trades on the NYSE Arca, Inc. ("NYSE Arca") under the ticker symbol "GDX."

The Trust is a registered investment company that consists of numerous separate investment portfolios, including the GDX Fund. Information provided to or filed with the SEC by the Trust pursuant to the Securities Act of 1933, as amended, and the Investment Company Act of 1940, as amended, can be located by reference to SEC file numbers 333-123257 and 811-10325, respectively, through the SEC's website at <http://www.sec.gov>. For additional information regarding the Trust, Van Eck and the GDX Fund, please see the GDX Fund's prospectus. In addition, information about the Trust and the GDX Fund may be obtained from other sources including, but not limited to, press releases, newspaper articles and other publicly disseminated documents and the Van Eck website at www.vaneck.com. Information contained in the Van Eck website is not incorporated by reference in, and should not be considered a part of, this underlying supplement.

Investment Objective and Strategy

The GDX Fund seeks to replicate as closely as possible, before fees and expenses, the price and yield performance of the NYSE Arca Gold Miners Index (the "Gold Miners Index"). For more information about the Gold Miners Index, please see "The NYSE Arca Gold Miners Index" below.

As of October 31, 2014, the GDX Fund's three largest holdings were Goldcorp Inc., Barrick Gold Corporation and Newmont Mining Corporation; and its three largest countries by holding were Canada, the United States and South Africa.

Indexing Investment Approach

The GDX Fund uses a "passive" or indexing investment approach to attempt to approximate the investment performance of the Gold Miners Index. The GDX Fund will normally invest at least 80% of its total assets in companies that are involved in the gold mining industry. These companies may include small- and medium-capitalization companies and foreign issuers. The GDX Fund normally invests at least 80% of its total assets in securities that comprise the Gold Miners Index. The GDX Fund may or may not hold all of the securities that are included in the Gold Miners Index.

Correlation

The Gold Miners Index is a theoretical financial calculation, while the GDX Fund is an actual investment portfolio. The performance of the GDX Fund and the Gold Miners Index may vary somewhat due to operating expenses, transaction costs, and differences between the GDX Fund's portfolio and the Gold Miners Index resulting from legal restrictions that apply to the GDX Fund but not to the Gold Miners Index or lack of liquidity. Van Eck expects that, over time, the correlation between the GDX Fund's performance and that of the Gold Miners Index before fees and expenses will be 95% or better. A figure of 100% would indicate perfect correlation.

Industry Concentration Policy

The GDX Fund may concentrate its investments in a particular industry or group of industries to the extent that the Gold Miners Index concentrates in an industry or group of industries.

Holdings Information

As of October 31, 2014, 99.91% of the GDX Fund's holdings consisted of equity securities and 0.09% consisted of cash and other assets. The following tables summarize the GDX Fund's top holdings in individual securities and by country as of that date.

Top holdings in individual securities as of October 31, 2014

Security	Percentage of Total Holdings
Goldcorp Inc.	14.06%
Barrick Gold Corporation	13.22%
Newmont Mining Corporation	8.00%
Franco-Nevada Corporation	
Silver Wheaton Corp.	5.34%
Newcrest Mining Limited	4.80%
Randgold Resources Limited	4.72%
Agnico Eagle Mines Limited	4.64%
Eldorado Gold Corporation	4.57%
Royal Gold, Inc.	4.29%

Top holdings by country as of October 31, 2014

Country	Percentage of Total Holdings
Canada	63.40%
United States	13.50%
South Africa	8.10%
Australia	5.30%
United Kingdom	4.50%

The information above was compiled from the Van Eck website, without independent verification. Information contained in the Van Eck website is not incorporated by reference in, and should not be considered a part of, this underlying supplement.

Historical Performance of the GDX Fund

We will provide historical price information with respect to the shares of the GDX Fund in the relevant terms supplement. You should not take any such historical prices as an indication of future performance.

The NYSE Arca Gold Miners Index

We have derived all information contained in this underlying supplement regarding the Gold Miners Index, including, without limitation, its make-up, method of calculation and changes in its components, from publicly available information and information supplied by the NYSE Arca, without independent verification. This information reflects the policies of, and is subject to change by, the NYSE Arca. The Gold Miners Index was developed by the NYSE MKT LLC (formerly the American Stock Exchange) and is calculated, maintained and published by the NYSE Arca. The NYSE Arca has no obligation to continue to publish, and may discontinue the publication of, the Gold Miners Index.

The Gold Miners Index is reported by Bloomberg L.P. under the ticker symbol "GDM."

The Gold Miners Index is a modified market capitalization weighted index composed of publicly traded companies involved primarily in the mining of gold or silver.

Eligibility Criteria for Index Components

The Gold Miners Index includes common stocks, American Depositary Receipts ("ADRs") and Global Depositary Receipts ("GDRs") of selected companies that are involved in mining for gold and silver and that are listed for trading on a major stock market that is accessible by foreign investors. Only companies with market capitalization greater than \$750 million that have an average daily trading volume of at least 50,000 shares over the past three months and an average daily value traded of at least \$1 million over the past three months are eligible for inclusion in the Gold Miners Index. For companies that were already in the Gold Miners Index prior to the September 20, 2013 rebalance, the market capitalization requirement is \$450 million, the average daily trading volume requirement is at least 30,000 shares over the past three months and the average daily value traded requirement is at least \$600,000 over the past three months. Further, the universe of companies eligible for inclusion in the Gold Miners Index will specifically include those companies that derive at least 50% of their revenues for gold mining and related activities. Companies already in the Gold Miners Index will only be removed from the Gold Miners Index in the following quarterly review if their gold mining revenues fall below the 40% level. The index will maintain an exposure, of not more than 20% of the Gold Miners Index weight, to companies with a significant revenue exposure to silver mining as well as gold mining. These are companies that either (1) have a revenue exposure to silver mining greater than 50% or (2) have a greater revenue exposure to silver mining than gold mining and have a combined gold/silver mining revenue exposure of greater than 50%.

In addition, both streaming companies and royalty companies are eligible for inclusion in the Gold Miners Index. Companies that have not yet commenced production are also eligible for inclusion in the Gold Miners Index, *provided* that they have tangible revenues that are related to the mining of either gold or silver ore. There are no restrictions imposed on the eligibility of company in how much the company has hedged in gold or silver production via futures, options or forward contracts.

Index Calculation

The Gold Miners Index is calculated using a modified market capitalization weighting methodology. The Gold Miners Index is weighted based on the market capitalization of each of the component securities, modified to conform to the following asset diversification requirements, which are applied in conjunction with the scheduled quarterly adjustments to the Gold Miners Index. The information utilized in this modification process will be taken from the close of trading on the second Friday of the rebalancing month:

- (1) the weight of any single component security may not account for more than 20% of the total value of the Gold Miners Index;
- (2) the component securities are split into two subgroups—(1) large and (2) small, which are ranked by their unadjusted market capitalization weight in the Gold Miners Index. Large stocks are defined as having a Gold Miners Index weight greater than or equal to 5%. Small securities are defined as having an Gold Miners Index weight below 5%; and
- (3) the final aggregate weight of those component securities which individually represent more than 4.5% of the total value of the Gold Miners Index may not account for more than 45% of the total Gold Miners Index value.

The Gold Miners Index is reviewed quarterly so that the Gold Miners Index components continue to represent the universe of companies involved in the gold mining industry. The NYSE Arca may at any time and from time to time change the number of securities composing the group by adding or deleting one or more securities, or replacing one or more securities contained in the group with one or more substitute securities of its choice, if in the NYSE Arca's discretion such addition, deletion or substitution is necessary or appropriate to maintain the quality and/or character of the Gold Miners Index. Changes to the Gold Miners Index compositions and/or the component share weights in the Gold Miners Index typically take effect after the close of trading on the third Friday of each calendar quarter month in connection with the quarterly index rebalance.

At the time of the quarterly rebalance, the quantities for the components stocks (taking into account expected component changes and share adjustments), are modified in accordance with the following procedures.

- **Diversification Rule 1:** If any component stock exceeds 20% of the total value of the Gold Miners Index, then all stocks greater than 20% of the Gold Miners Index are reduced to represent 20% of the value of the Gold Miners Index. The aggregate amount by which all component stocks are reduced is redistributed proportionately across the remaining stocks that represent less than 20% of the index value. After this redistribution, if any other stock then exceeds 20%, the stock is set to 20% of the index value and the redistribution is repeated. If there is no component stock over 20% of the total value of the Gold Miners Index, then Diversification Rule 1 is not executed.

- **Diversification Rule 2:** The components are sorted into two groups, (1) large components, with a starting index weight of 5% or greater, and (2) small components, with a weight of under 5% (after any adjustments for Diversification Rule 1. If there are no components that are classified as large components after Diversification Rule 1 is run, then Diversification Rule 2 is not executed. In addition, if the starting aggregate weight of the large components after Diversification Rule 1 is run is not greater than 45% of the starting index weight, then Diversification Rule 2 is not executed. If Diversification Rule 2 is executed, then the large group and the small group will represent 45% and 55%, respectively, of the final index weight. This will be adjusted for through the following process:

- The weight of each of the large stocks will be scaled down proportionately with a floor of 5% so that the aggregate weight of the large components will be reduced to represent 45% of the Gold Miners Index. If any component stock falls below a weight equal to the product of 5% and the proportion by which the stocks were scaled down following this distribution, then the weight of the stock is set equal to the product of 5% and the proportion by which the stocks were scaled down, the components with weights greater than 5% will be reduced proportionately.
- The weight of each of the small components will be scaled up proportionately from the redistribution of the large components. If any component stock exceeds a weight equal to the product of 4.5% and the proportion by which the stocks were scaled down following this distribution, then the weight of the stock is set equal to the product of 4.5% and the proportion by which the stocks were scaled down. The redistribution of weight to the remaining stocks is repeated until the entire amount has been redistributed.

Index Maintenance

The Gold Miners Index is reviewed quarterly to ensure that at least 90% of the index weight is accounted for by index components that continue to meet the initial eligibility requirements. Components will be removed from the Gold Miners Index during the quarterly review, if either (1) the market capitalization falls below \$450 million or (2) the average daily volume traded for the previous three months was lower than 30,000 shares and the average daily value traded for the previous three months was lower than \$600,000. In conjunction with the quarterly review, the share quantities used in the calculation of the Gold Miners Index are determined based upon current shares outstanding modified, if necessary, to provide greater index diversification, as described above. An ADR or GDR ratio would be incorporated into this shares figure, so that the shares utilized in the Gold Miners Index for a depositary receipt is equal to the shares outstanding of the local share class multiplied by the depositary receipt ratio. The index components and their share quantities are determined and announced prior to taking effect. The share quantity of each component stock in the index portfolio remains fixed between quarterly reviews except in the event of certain types of corporate actions, such as stock splits, reverse stock splits, stock dividends, or similar events. The share quantities used in the index calculation are not typically adjusted for shares issued or repurchased between quarterly reviews. However, in the event of a merger between two components, the share quantity of the surviving entity may be adjusted to account for any stock issued in the acquisition. The NYSE Arca may substitute stocks or change the number of stocks included in the Gold Miners Index, based on changing conditions in the industry or in the event of certain types of corporate actions, including mergers, acquisitions, spin-offs, and reorganizations. In the event of component or share quantity changes to the index portfolio, the payment of dividends other than ordinary cash dividends, spin-offs, rights offerings, re-capitalization or other corporate actions affecting a component stock of the Gold Miners Index, the index divisor may be adjusted to ensure that there are no changes to the index level as a result of non-market forces.

THE SPDR® GOLD TRUST

We have derived all information contained in this underlying supplement regarding the SPDR® Gold Trust (the "Gold Trust"), including, without limitation, its structure, the creation and redemption of its shares and their valuation, from publicly available information, without independent verification. This information reflects the policies of, and is subject to change by, the Gold Trust and World Gold Trust Services, LLC, the sponsor of the Gold Trust. BNY Mellon Asset Servicing, a division of The Bank of New York Mellon, is the trustee of the Gold Trust, and HSBC Bank USA, N.A. is the custodian of the Gold Trust. The Gold Trust is an investment trust, formed on November 12, 2004. The Gold Trust trades under the ticker symbol "GLD" on the NYSE Arca, Inc. ("NYSE Arca").

Information provided to or filed with the Securities and Exchange Commission (the "SEC") by the Gold Trust pursuant to the Securities Act of 1933, as amended, and the Securities Exchange Act of 1934, as amended, can be located by reference to SEC file numbers 333-153150 and 001-32356, respectively, through the SEC's website at <http://www.sec.gov>. For additional information regarding the Gold Trust, please see the Gold Trust's prospectus. In addition, information about the Gold Trust may be obtained from other sources including, but not limited to, press releases, newspaper articles and other publicly disseminated documents and the public website of the Gold Trust maintained by the sponsor at <http://www.spdrgoldshares.com>. Information contained in the SPDR® Gold Trust website is not incorporated by reference in, and should not be considered a part of, this underlying supplement or the relevant terms supplement.

Investment Objective and Strategy

The investment objective of the Gold Trust is to reflect the performance of the price of gold bullion, less the Gold Trust's expenses. The Gold Trust holds gold bars. The Gold Trust issues shares in exchange for deposits of gold and distributes gold in connection with the redemption of shares. The shares of the Gold Trust are intended to offer investors an opportunity to participate in the gold market through an investment in securities. The ownership of the shares of the Gold Trust is intended to overcome certain barriers to entry in the gold market, such as the logistics of buying, storing and insuring gold.

The shares of the Gold Trust represent units of fractional undivided beneficial interest in and ownership of the Gold Trust, the primary asset of which is allocated (or secured) gold. The Gold Trust is not managed like a corporation or an active investment vehicle. The gold held by the Gold Trust will only be sold: (1) on an as-needed basis to pay the Gold Trust's expenses, (2) in the event the Gold Trust terminates and liquidates its assets, or (3) as otherwise required by law or regulation.

As a result of an amendment to the Gold Trust's agreements with the custodian effective June 1, 2011, all of the Gold Trust's gold is fully allocated at the end of each business day. From time to time, the Gold Trust's assets will also include cash, which will be used to pay expenses.

Creation and Redemption

The Gold Trust creates and redeems the shares of the Gold Trust ("Shares") from time to time, but only in one or more baskets (a "Basket" equals a block of 100,000 Shares). The creation and redemption of Baskets requires the delivery to the Gold Trust or the distribution by the Gold Trust of the amount of gold and any cash represented by the Baskets being created or redeemed, the amount of which is based on the combined net asset value of the number of Shares included in the Baskets being created or redeemed. The initial amount of gold required for deposit with the Gold Trust to create Shares for the period from the formation of the Gold Trust to the first day of trading of the Shares on the NYSE was 10,000 ounces per Basket. The number of ounces of gold required to create a Basket or to be delivered upon the redemption of a Basket gradually decreases over time, due to the accrual of the Gold Trust's expenses and the sale of the Gold Trust's gold to pay the Gold Trust's expenses. Baskets may be created or redeemed only by authorized participants, who pay a transaction fee for each order to create or redeem Baskets and may sell the Shares included in the Baskets they create to other investors.

Valuation of Gold; Computation of Net Asset Value

The Net Asset Value ("NAV") of the Gold Trust is the aggregate value of the Gold Trust's assets less its liabilities (which include estimated accrued but unpaid fees and expenses). In determining the NAV of the Gold Trust, the trustee values the gold held by the Gold Trust on the basis of the price of an ounce of gold as set by the afternoon session of the twice daily fix of the price of an ounce of gold which starts at 3:00 PM London, England time and is performed by the five members of the London gold fix. The trustee determines the NAV of the Gold Trust on each day the NYSE Arca is open for regular trading, at the earlier of the London PM Fix for the day or 12:00 PM New York time. If no London PM Fix is made on a particular evaluation day or if the London PM Fix has not been announced by 12:00 PM New York time on a particular evaluation day, the next most recent London gold price fix (AM or PM) is used in the determination of the NAV of the Gold Trust, unless the trustee, in consultation with the sponsor, determines that such price is inappropriate to use as the basis for such determination. The trustee also determines the NAV per Share, which equals the NAV of the Gold Trust, divided by the number of outstanding Shares.

Termination of the SPDR® Gold Trust

The sponsor may, and it is anticipated that the sponsor will, direct the trustee to terminate and liquidate the Gold Trust at any time after the first anniversary of the Gold Trust's formation when the NAV of the Gold Trust is less than \$350 million (as adjusted for inflation). The sponsor may also direct the trustee to terminate the Gold Trust if the Commodity Futures Trading Commission, or the CFTC, determines that the Gold Trust is a commodity pool under the Commodity Exchange Act of 1936, as amended, or the CEA. The trustee may also terminate the Gold Trust upon the agreement of shareholders owning at least 662 /3% of the outstanding Shares.

The trustee will terminate and liquidate the Gold Trust if any of the following events occur:

- the Depository Trust Company, the securities depository for the Shares, is unwilling or unable to perform its functions under the Gold Trust indenture and no suitable replacement is available;
- the Shares are de-listed from the NYSE Arca and are not listed for trading on another U.S. national securities exchange or through the NASDAQ Stock Market within five business days from the date the Shares are de-listed;
- the NAV of the Gold Trust remains less than \$50 million for a period of 50 consecutive business days;
- the sponsor resigns or is unable to perform its duties or becomes bankrupt or insolvent and the trustee has not appointed a successor and has not itself agreed to act as sponsor;
- the trustee resigns or is removed and no successor trustee is appointed within 60 days;
- the custodian resigns and no successor custodian is appointed within 60 days;
- the sale of all of the Gold Trust's assets;
- the Gold Trust fails to qualify for treatment, or ceases to be treated, for US federal income tax purposes, as a grantor trust; or
- the maximum period for which the Gold Trust is allowed to exist under New York law ends.

Upon the termination of the Gold Trust, the trustee will, within a reasonable time after the termination of the Gold Trust, sell the Gold Trust's gold bars and, after paying or making provision for the Gold Trust's liabilities, distribute the proceeds to the shareholders.

Historical Performance of the Gold Trust

We will provide historical price information with respect to the shares of the Gold Trust in the relevant terms supplement. You should not take any such historical prices as an indication of future performance.

Gold

The price of gold is primarily affected by the global demand for and supply of gold. The market for gold bullion is global, and gold prices are subject to volatile price movements over short periods of time and are affected by numerous factors, including macroeconomic factors such as the structure of and confidence in the global monetary system, expectations regarding the future rate of inflation, the relative strength of, and confidence in, the U.S. dollar (the currency in which the price of gold is usually quoted), interest rates, gold borrowing and lending rates and global or regional economic, financial, political, regulatory, judicial or other events. Gold prices may be affected by industry factors such as industrial and jewelry demand as well as lending, sales and purchases of gold by the official sector, including central banks and other governmental agencies and multilateral institutions that hold gold. Additionally, gold prices may be affected by levels of gold production, production costs and short-term changes in supply and demand due to trading activities in the gold market. From time to time, above-ground inventories of gold may also influence the market. It is not possible to predict the aggregate effect of all or any combination of these factors. The price of gold has recently been, and may continue to be, extremely volatile.

THE SPDR® S&P 500® ETF TRUST

We have derived all information contained in this underlying supplement regarding the SPDR® S&P 500® ETF Trust (the "SPY Fund") from publicly available information, without independent verification. This information reflects the policies of, and is subject to change by, State Street Bank and Trust Company, as trustee of the SPY Fund ("SSBTC"), and PDR Services LLC, as sponsor of the SPY Fund ("PDRS"). The SPY Fund is a unit investment trust that issues securities called "Trust Units" or "Units." The SPY Fund is an exchange-traded fund ("ETF") that trades on the NYSE Arca, Inc. ("NYSE Arca") under the ticker symbol "SPY."

The SPY Fund is an investment company registered under the Investment Company Act of 1940, as amended. Trust Units represent an undivided ownership interest in a portfolio of all, or substantially all, of the common stocks of the S&P 500® Index. Information provided to or filed with the SEC by the SPY Fund pursuant to the Securities Act of 1933, as amended, and the Investment Company Act of 1940, as amended, can be located by reference to SEC file numbers 033-46080 and 811-06125, respectively, through the SEC's website at <http://www.sec.gov>. For additional information regarding the SPY Fund, SSBTC and PDRS, please see the SPY Fund's prospectus. In addition, information about the SPY Fund, SSBTC and PDRS may be obtained from other sources including, but not limited to, press releases, newspaper articles and other publicly disseminated documents and the SPY Fund website at <https://www.spdrs.com>. Information contained in the SPY Fund's website is not incorporated by reference in, and should not be considered a part of, this underlying supplement or the relevant terms supplement.

Investment Objective and Strategy

The SPY Fund's objective is to provide investment results that, before expenses, generally correspond to the price and yield performance of the S&P 500® Index. For more information about the S&P 500® Index, please see "Equity Index Descriptions — The S&P 500® Index" in this underlying supplement. The Trust holds stocks and cash and is not actively managed by traditional methods, which typically seeks to outperform a benchmark index. To maintain the correspondence between the composition and weightings of the stocks held by the SPY Fund and the component stocks of the S&P 500® Index, which we refer to as "Index Securities," SSBTC adjusts the holdings of the SPY Fund from time to time to conform to periodic changes in the identity and/or relative weightings of the Index Securities. SSBTC aggregates certain of these adjustments and makes changes to the holdings of the SPY Fund at least monthly or more frequently in the case of significant changes to the S&P 500® Index.

The return of the SPY Fund may not match or achieve a high degree of correlation with the return of the S&P 500® Index because the total return generated by the SPY Fund's portfolio of stocks and cash is reduced by the expenses of the SPY Fund and transaction costs incurred in adjusting the SPY Fund's portfolio. In addition, it is possible that the SPY Fund may not always fully replicate the performance of the S&P 500® Index due to the unavailability of certain Index Securities in the secondary market or due to other extraordinary circumstances.

Holdings Information

The following tables summarize the SPY Fund's top holdings in individual securities and by sector as of October 31, 2014.

Top holdings in individual securities as of October 31, 2014

Security	Weight
Apple Inc.	3.61%
Exxon Mobil Corporation	2.30%
Microsoft Corporation	2.15%
Johnson & Johnson	1.69%
General Electric Company	1.44%
Berkshire Hathaway Inc. Class B	1.42%
Wells Fargo & Company	1.41%
The Procter & Gamble Company	1.32%
Chevron Corporation	1.27%
J.P. Morgan Chase & Co.	1.27%

Top holdings by sector as of October 31, 2014

Sector	Percentage of Total Holdings
Information Technology	19.56%
Financials	16.38%
Health Care	14.28%
Consumer Discretionary	11.66%
Consumer Staples	9.64%
Energy	9.19%
Materials	3.28%
Utilities	3.15%
Telecommunication Services	2.37%

The information above was compiled from the SPY Fund's website, without independent verification. Information contained in the SPY Fund's website is not incorporated by reference in, and should not be considered a part of, this underlying supplement or the relevant terms supplement.

Historical Performance of the SPDR® S&P 500® ETF Trust

We will provide historical price information with respect to the shares of the SPDR® S&P 500® ETF Trust in the relevant terms supplement. You should not take any such historical prices as an indication of future performance.

THE SPDR® S&P® HOMEBUILDERS ETF

We have derived all information contained in this underlying supplement regarding the SPDR® S&P® Homebuilders ETF (the “Homebuilders ETF”) from publicly available information, without independent verification. This information reflects the policies of, and is subject to change by SPDR® Series Trust and SSgA Funds Management, Inc. (“SSFM”). The Homebuilders ETF is an investment portfolio maintained and managed by SSFM. SSFM is the investment adviser to the Homebuilders ETF. The Homebuilders ETF is an exchange-traded fund (“ETF”) that trades on the NYSE Arca, Inc. (“NYSE Arca”) under the ticker symbol “XHB.” The inception date of the Homebuilders ETF is January 31, 2006. Prior to January 8, 2007, the Homebuilders ETF was known as the SPDR® Homebuilders ETF.

The SPDR® Series Trust consists of separate investment portfolios (each, a “SPDR® Series Fund”). Each SPDR® Series Fund is an index fund that invests in a particular industry or group of industries represented by one of the S&P Select Industry Indices (the “Select Industry Indices” and each, a “Select Industry Index”). The companies included in each Select Industry Index are selected on the basis of Global Industry Classification Standards (“GICS”) from a universe of companies defined by the S&P® Total Market Index (the “S&P TM Index”), a U.S. total market composite index. The investment objective of each Select Industry SPDR® Fund is to provide investment results that, before expenses, correspond generally to the price and yield performance of an index derived from a particular industry or group of industries, as represented by the relevant Select Industry Index.

SPDR® Series Trust is a registered investment company that consists of numerous separate investment portfolios, including the Homebuilders ETF. Information provided to or filed with the SEC by SPDR® Series Trust pursuant to the Securities Act of 1933 and the Investment Company Act of 1940 can be located by reference to SEC file numbers 333-57793 and 811-08839, respectively, through the SEC’s website at <http://www.sec.gov>. For additional information regarding SPDR® Series Trust, SSFM or the Homebuilders ETF, please see the SPDR® Series Trust’s prospectus. In addition, information about SPDR® Series Trust, SSFM and the Homebuilders ETF may be obtained from other sources including, but not limited to, press releases, newspaper articles and other publicly disseminated documents and the SPDR® Series Trust website at <https://www.spdrs.com>. Information contained in the SPDR® Series Trust website is not incorporated by reference in, and should not be considered a part of, this underlying supplement or the relevant terms supplement.

Investment Objective and Strategy

The Homebuilders ETF seeks to provide investment results that, before fees and expenses, correspond generally to the total return performance of the S&P® Homebuilders Select Industry™ Index (the “Homebuilders Index”). For more information about the Homebuilders Index, please see “Equity Index Descriptions — The S&P Select Industry Indices” in this underlying supplement.

Replication

In seeking to track the performance of the Homebuilders Index, the Homebuilders ETF employs a “sampling” strategy, which means that the Homebuilders ETF is not required to purchase all of the securities represented in the Homebuilders Index. Instead, the Homebuilders ETF may purchase a subset of the securities in the Homebuilders Index in an effort to hold a portfolio of securities with generally the same risk and return characteristics of the Homebuilders Index. The quantity of holdings in the Homebuilders ETF will be based on a number of factors, including asset size of the Homebuilders ETF. Based on its analysis of these factors, SSFM, the investment adviser to the Homebuilders ETF, may invest the Homebuilders ETF’s assets in a subset of securities in the Homebuilders Index or may invest the Homebuilders ETF’s assets in substantially all of the securities represented in the Homebuilders Index in approximately the same proportions as the Homebuilders Index. Under normal market conditions, the Homebuilders ETF generally invests substantially all, but at least 80%, of its total assets in the securities included in the Homebuilders Index. In addition, the Homebuilders ETF may invest in equity securities that are not included in the Homebuilders Index, cash and cash equivalents or money market instruments, such as repurchase agreements and money market funds (including money market funds advised by SSFM).

Correlation

The Homebuilders Index is a theoretical financial calculation, while the Homebuilders ETF is an actual investment portfolio. The Homebuilders ETF seeks to track the performance of the Homebuilders Index as closely as possible (*i.e.*, achieve a high degree of correlation with the Homebuilders Index). However, the performance of the Homebuilders ETF and the Homebuilders Index will vary somewhat due to operating expenses, transaction costs, cash flows, regulatory requirements and operational inefficiencies.

Holdings Information

As of October 31, 2014, the Homebuilders ETF included 37 securities. In addition, as of that date, the Homebuilders ETF's three largest holdings were Whirlpool Corporation, Leggett & Platt, Incorporated and Lennar Corporation Class A; and its three largest sub-industries were homebuilding, building products and homefurnishing retails. The following tables summarize the Homebuilders ETF's top holdings in individual securities and by sector as of that date.

Top holdings in individual securities as of October 31, 2014

Security	Percentage of Total Holdings
Whirlpool Corporation	3.51%
Leggett & Platt, Incorporated	3.48%
Lennar Corporation Class A	3.42%
Lennox International Inc.	3.42%
The Home Depot, Inc.	3.40%
A.O. Smith Corporation	3.37%
Lowe's Companies, Inc.	3.35%
NVR, Inc.	3.30%
Danaher Corporation	3.29%
Allegion Public Limited Company	3.24%

Top holdings by sub-industry as of October 31, 2014

Sub-industry	Percentage of Total Holdings
Homebuilding	31.22%
Building Products	25.70%
Homefurnishing Retail	17.74%
Home Improvement Retail	9.65%
Home Furnishings	9.34%
Household Appliances	6.35%

The information above was compiled from the SPDR® Series Trust website, without independent verification. Information contained in the SPDR® Series Trust website is not incorporated by reference in, and should not be considered a part of, this underlying supplement.

Historical Performance of the SPDR® S&P® Homebuilders ETF

We will provide historical price information with respect to the shares of the SPDR® S&P® Homebuilders ETF in the relevant terms supplement. You should not take any such historical prices as an indication of future performance.

THE SPDR® S&P® METALS & MINING ETF

We have derived all information contained in this underlying supplement regarding the SPDR® S&P® Metals & Mining ETF (the “Metals & Mining ETF”) from publicly available information, without independent verification. This information reflects the policies of, and is subject to change by SPDR® Series Trust and SSgA Funds Management, Inc. (“SSFM”). The Metals & Mining ETF is an investment portfolio maintained and managed by SSFM. SSFM is the investment adviser to the Metals & Mining ETF. The Metals & Mining ETF is an exchange-traded fund (“ETF”) that trades on the NYSE Arca, Inc. (“NYSE Arca”) under the ticker symbol “XME.” The inception date of the Metals & Mining ETF is June 19, 2006.

The SPDR® Series Trust consists of separate investment portfolios (each, a “SPDR® Series Fund”). Each SPDR® Series Fund is an index fund that invests in a particular industry or group of industries represented by one of the S&P Select Industry Indices (the “Select Industry Indices” and each, a “Select Industry Index”). The companies included in each Select Industry Index are selected on the basis of Global Industry Classification Standards (“GICS”) from a universe of companies defined by the S&P® Total Market Index (the “S&P TM Index”), a U.S. total market composite index. The investment objective of each Select Industry SPDR® Fund is to provide investment results that, before expenses, correspond generally to the price and yield performance of publicly traded equity securities of companies in a particular industry or group of industries, as represented by the relevant Select Industry Index.

SPDR® Series Trust is a registered investment company that consists of numerous separate investment portfolios, including the Metals & Mining ETF. Information provided to or filed with the SEC by SPDR® Series Trust pursuant to the Securities Act of 1933 and the Investment Company Act of 1940 can be located by reference to SEC file numbers 333-57793 and 811-08839, respectively, through the SEC’s website at <http://www.sec.gov>. For additional information regarding SPDR® Series Trust, SSFM or the Metals & Mining ETF, please see the SPDR® Series Trust’s prospectus. In addition, information about SPDR® Series Trust, SSFM and the Metals & Mining ETF may be obtained from other sources including, but not limited to, press releases, newspaper articles and other publicly disseminated documents and the SPDR® Series Trust website at <https://www.spdrs.com>. Information contained in the SPDR® Series Trust website is not incorporated by reference in, and should not be considered a part of, this underlying supplement.

Investment Objective and Strategy

The Metals & Mining ETF seeks to provide investment results that, before fees and expenses, correspond generally to the total return performance of the S&P Metals & Mining Select Industry Index (the “Metals & Mining Index”). For more information about the Metals & Mining Index, please see “Equity Index Descriptions — The S&P Select Industry Indices” in this underlying supplement.

Replication

In seeking to track the performance of the Metals & Mining Index, the Metals & Mining ETF employs a “sampling” strategy, which means that the Metals & Mining ETF is not required to purchase all of the securities represented in the Metals & Mining Index. Instead, the Metals & Mining ETF may purchase a subset of the securities in the Metals & Mining Index in an effort to hold a portfolio of securities with generally the same risk and return characteristics of the Metals & Mining Index. The quantity of holdings in the Metals & Mining ETF will be based on a number of factors, including asset size of the Metals & Mining ETF. Based on its analysis of these factors, SSFM, the investment adviser to the Metals & Mining ETF, may invest the Metals & Mining ETF’s assets in a subset of securities in the Metals & Mining Index or may invest the Metals & Mining ETF’s assets in substantially all of the securities represented in the Metals & Mining Index in approximately the same proportions as the Metals & Mining Index. Under normal market conditions, the Metals &

Mining ETF generally invests substantially all, but at least 80%, of its total assets in the securities included in the Metals & Mining Index. In addition, the Metals & Mining ETF may invest in equity securities that are not included in the Metals & Mining Index, cash and cash equivalents or money market instruments, such as repurchase agreements and money market funds (including money market funds advised by SSFM).

Correlation

The Metals & Mining Index is a theoretical financial calculation, while the Metals & Mining ETF is an actual investment portfolio. The Metals & Mining ETF seeks to track the performance of the Metals & Mining Index as closely as possible (*i.e.*, achieve a high degree of correlation with the Metals & Mining Index). However, the performance of the Metals & Mining ETF and the Metals & Mining Index will vary somewhat due to operating expenses, transaction costs, cash flows, regulatory requirements and operational inefficiencies.

Holdings Information

As of October 31, 2014, the Metals & Mining ETF included 41 securities. In addition, as of that date, the Homebuilders ETF's three largest holdings were Century Aluminum Company, Alcoa Inc. and United States Steel Corporation; and its three largest sub-industries were steel, coal & consumable fuels and diversified metals & mining. The following tables summarize the Homebuilders ETF's top holdings in individual securities and by sector as of that date.

Top holdings in individual securities as of October 31, 2014

Security	Percentage of Total Holdings
Century Aluminum Company	3.80%
Alcoa Inc.	3.65%
United States Steel Corporation	3.65%
Nucor Corporation	3.58%
Steel Dynamics, Inc.	3.52%
Carpenter Technology Corporation	3.50%
Compass Minerals International, Inc.	3.47%
Reliance Steel & Aluminum Co.	3.47%
CONSOL Energy Inc.	3.42%
Commercial Metals Company	3.40%

Top holdings by sub-industry as of October 31, 2014

Sub-industry	Percentage of Total Holdings
Steel	42.56%
Coal & Consumable Fuels	17.12%
Diversified Metals & Mining	16.68%
Aluminum	10.15%
Gold	6.42%
Silver	4.25%
Precious Metals & Minerals	2.81%

The information above was compiled from the SPDR® Series Trust website, without independent verification. Information contained in the SPDR® Series Trust website is not incorporated by reference in, and should not be considered a part of, this underlying supplement.

Historical Performance of the SPDR® S&P® Metals & Mining ETF

We will provide historical price information with respect to the shares of the SPDR® S&P® Metals & Mining ETF in the relevant terms supplement. You should not take any such historical prices as an indication of future performance.

THE TECHNOLOGY SELECT SECTOR SPDR® FUND

We have derived all information contained in this underlying supplement regarding the Technology Select Sector SPDR® Fund from publicly available information, without independent verification. This information reflects the policies of, and is subject to change by the Select Sector SPDR® Trust (the "Select Sector Trust") and SSgA Funds Management, Inc. ("SSgA FM"). The Technology Select Sector SPDR® Fund is an investment portfolio managed by SSgA FM, the investment adviser to the Technology Select Sector SPDR® Fund. The Technology Select Sector SPDR® Fund is an exchange-traded fund ("ETF") that trades on the NYSE Arca, Inc. ("NYSE Arca") under the ticker symbol "XLK."

The Select Sector Trust is a registered investment company that consists of nine separate investment portfolios (each, a "Select Sector SPDR® Fund"), including the Technology Select Sector SPDR® Fund. Each Select Sector SPDR® Fund is an index fund that invests in a particular sector or group of industries represented by a specified Select Sector Index. The companies included in each Select Sector Index are selected on the basis of general industry classifications from a universe of companies defined by the S&P 500® Index. The Select Sector Indices (each, a "Select Sector Index") upon which the Select Sector SPDR® Funds are based together comprise all of the companies in the S&P 500® Index. The investment objective of each Select Sector SPDR® Fund is to provide investment results that, before expenses, correspond generally to the price and yield performance of publicly traded equity securities of companies in a particular sector or group of industries, as represented by a specified market sector index.

Information provided to or filed with the SEC by the Select Sector Trust pursuant to the Securities Act of 1933, as amended, and the Investment Company Act of 1940, as amended, can be located by reference to SEC file numbers 333-57791 and 811-08837, respectively, through the SEC's website at <http://www.sec.gov>. For additional information regarding the Select Sector Trust or the Technology Select Sector SPDR® Fund, please see the Technology Select Sector SPDR® Fund's prospectus. In addition, information about the Select Sector Trust, SSgA FM and the Technology Select Sector SPDR® Fund may be obtained from other sources including, but not limited to, press releases, newspaper articles and other publicly disseminated documents and the Select Sector Trust website at <http://www.sectorspdrs.com>. Information contained in the Select Sector Trust website is not incorporated by reference in, and should not be considered a part of, this underlying supplement or the relevant terms supplement.

Investment Objective

The Technology Select Sector SPDR® Fund seeks to provide investment results that, before expenses, correspond generally to the price and yield performance of publicly traded equity securities of companies in the technology sector, as represented by the Technology Select Sector Index. For more information about the Technology Select Sector Index, please see "Equity Index Descriptions — The Select Sector Indices" in this underlying supplement.

Investment Strategy — Replication

The Technology Select Sector SPDR® Fund employs a replication strategy in seeking to track the performance of the Technology Select Sector Index. This means that the Technology Select Sector SPDR® Fund typically invests in substantially all of the securities represented in the Technology Select Sector Index in approximately the same proportions as the Technology Select Sector Index. SSgA FM may sell securities that are represented in the Technology Select Sector Index, or purchase securities that are not yet represented in the Technology Select Sector Index, in anticipation of their removal from or addition to the Technology Select Sector Index. Further, SSgA FM may choose to overweight securities in the Technology Select Sector Index, purchase or sell securities not in the Technology Select Sector Index or utilize various combinations of other available techniques in

seeking to track the Technology Select Sector Index. Under normal market conditions, the Technology Select Sector SPDR® Fund generally invests substantially all, but at least 95%, of its total assets in the securities composing the Technology Select Sector Index. In addition, the Technology Select Sector SPDR® Fund may invest in cash and cash equivalents or money market instruments, such as repurchase agreements and money market funds (including money market funds advised by SSgA FM). Swaps, options and futures contracts, convertible securities and structured notes may be used by the Technology Select Sector SPDR® Fund in seeking performance that corresponds to the Technology Select Sector Index and in managing cash flows. SSgA FM anticipates that, under normal circumstances, it may take several business days for additions and deletions to the Technology Select Sector Index to be reflected in the portfolio composition of the Technology Select Sector SPDR® Fund. The Board of Trustees of the Select Sector Trust may change the Technology Select Sector SPDR® Fund's investment strategy and certain other policies without shareholder approval.

There may, however, be instances where SSgA FM will utilize a sampling strategy. Sampling means that SSgA FM will use quantitative analysis to select securities, including securities in the relevant index, outside of the index and derivatives, that have a similar investment profile as the relevant index in terms of key risk factors, performance attributes and other characteristics. These include industry weightings, market capitalization, and other financial characteristics of securities.

Correlation

The Technology Select Sector Index is a theoretical financial calculation, while the Technology Select Sector SPDR® Fund is an actual investment portfolio. The performance of the Technology Select Sector SPDR® Fund's return may not match or achieve a high degree of correlation with the return of the Technology Select Sector Index due to operating expenses, transaction costs, cash flows, regulatory requirements and operational inefficiencies.

Holdings Information

As of October 31, 2014, the Technology Select Sector SPDR® Fund included 73 securities. The Technology Select Sector SPDR® Fund's three largest holdings are Apple Inc., Microsoft Corporation and Verizon Communications Inc. The following table summarizes the Technology Select Sector SPDR® Fund's top holdings in individual securities as of that date.

Top Holdings in Individual Securities as of October 31, 2014

Security	Percentage of Total Holdings
Apple Inc.	16.48%
Microsoft Corporation	9.76%
Verizon Communications Inc.	5.35%
AT&T Inc.	4.60%
Google Inc. Class A	4.09%
Google Inc. Class C	4.02%
Facebook, Inc. Class A	3.97%
International Business Machines Corporation	3.92%
Intel Corporation	3.54%
QUALCOMM Incorporated	3.36%

The information above was compiled from the Select Sector Trust website, without independent verification. Information contained in the Select Sector Trust website is not incorporated by reference in, and should not be considered a part of, this underlying supplement.

Historical Performance of the Technology Select Sector SPDR® Fund

We will provide historical price information with respect to the shares of the Technology Select Sector SPDR® Fund in the relevant terms supplement. You should not take any such historical prices as an indication of future performance.

THE UNITED STATES OIL FUND, LP

We have derived all information contained in this underlying supplement regarding the United States Oil Fund, LP from publicly available information, without independent verification. This information reflects the policies of, and is subject to change by, United States Commodity Funds LLC (the "general partner of the United States Oil Fund, LP"), formerly known as Victoria Bay Asset Management, LLC. The units of the United States Oil Fund, LP (which we refer to as "shares of the United States Oil Fund, LP" for purposes of this underlying supplement) trade on the NYSE Arca, Inc. ("NYSE Arca") under the ticker symbol "USO."

Information provided to or filed with the SEC by the United States Oil Fund, LP pursuant to the Securities Act of 1933 and the Securities Exchange Act of 1934 can be located by reference to SEC file numbers 333-153310 and 001-32834, respectively, through the SEC's website at <http://www.sec.gov>. The United States Oil Fund, LP is not a mutual fund or any other type of investment company within the meaning of the Investment Company Act of 1940, as amended, and is not subject to regulation thereunder. For additional information regarding the United States Oil Fund, LP and United States Commodity Funds LLC, please see United States Oil Fund, LP's prospectus. In addition, information about the United States Oil Fund, LP may be obtained from other sources including, but not limited to, press releases, newspaper articles and other publicly disseminated documents and the United States Oil Fund, LP website at www.unitedstatesoilfund.com. Information contained in the United States Oil Fund, LP website is not incorporated by reference in, and should not be considered a part of, this underlying supplement or the relevant terms supplement.

The United States Oil Fund, LP, a Delaware limited partnership, is a commodity pool that issues units that may be purchased and sold on the NYSE Arca. The United States Oil Fund, LP was organized as a limited partnership under Delaware law on May 12, 2005. The United States Oil Fund, LP has a limited operating history and began trading shares of the United States Oil Fund, LP on April 10, 2006. The general partner of the United States Oil Fund, LP is a single member limited liability company formed in Delaware on May 10, 2005 that is registered as a commodity pool operator with the Commodity Futures Trading Commission and is a member of the National Futures Association. The general partner of the United States Oil Fund, LP is also the investment adviser to the United States Oil Fund, LP.

The investment objective of the United States Oil Fund, LP is for changes in percentage terms of the net asset value of the units of United States Oil Fund, LP to reflect the changes in percentage terms of the spot price of light, sweet crude oil delivered to Cushing, Oklahoma as measured by the daily changes in the price of the futures contract for light, sweet crude oil traded on the New York Mercantile Exchange (the "benchmark oil futures contract") that is the near month contract to expire, except when the near month contract is within two weeks of expiration, in which case it will be measured by the futures contract that is the next month contract to expire, less the United States Oil Fund, LP's expenses. The United States Oil Fund, LP seeks to achieve its investment objective by investing in futures contracts for light, sweet crude oil and other types of crude oil, diesel-heating oil, gasoline, natural gas and other petroleum-based fuels that are traded on the New York Mercantile Exchange, ICE Futures Exchange or other U.S. and foreign exchanges (collectively, "oil futures contracts") and other oil-related investments such as cash-settled options on Oil Futures Contracts, forward contracts for oil, cleared swap contracts and over-the-counter transactions that are based on the price of crude oil, heating oil, gasoline, natural gas and other petroleum-based fuels, oil futures contracts and indices based on the foregoing (collectively, "other oil interests"). The general partner believes that the daily changes in prices of the benchmark oil futures contract have historically closely tracked the daily changes in the spot price of light, sweet crude oil.

THE VANGUARD FTSE EMERGING MARKETS ETF

We have derived all information contained in this underlying supplement regarding the Vanguard FTSE Emerging Markets ETF from publicly available information, without independent verification. This information reflects the policies of, and is subject to change by Vanguard Index Funds (the "Vanguard Trust") and The Vanguard Group, Inc. ("Vanguard"). The Vanguard FTSE Emerging Markets ETF is an investment portfolio of the Vanguard Trust. Vanguard is the investment adviser to the Vanguard FTSE Emerging Markets ETF. The Vanguard FTSE Emerging Markets ETF is an exchange-traded fund that trades on the NYSE Arca, Inc. ("NYSE Arca") under the ticker symbol "VVO."

The Vanguard Trust is a registered investment company that consists of numerous separate investment portfolios, including the Vanguard FTSE Emerging Markets ETF. Information provided to or filed with the SEC by Vanguard pursuant to the Securities Act of 1933, as amended, and the Investment Company Act of 1940, as amended, can be located by reference to SEC file numbers 002-56846 and 811-02652, respectively, through the SEC's website at <http://www.sec.gov>. For additional information regarding the Vanguard Trust, Vanguard and the Vanguard FTSE Emerging Markets ETF, please see the Vanguard FTSE Emerging Markets ETF's prospectus. In addition, information about Vanguard and the Vanguard FTSE Emerging Markets ETF may be obtained from other sources including, but not limited to, press releases, newspaper articles and other publicly disseminated documents and the Vanguard website at www.vanguard.com. Information contained in the Vanguard website is not incorporated by reference in, and should not be considered a part of, this underlying supplement or the relevant terms supplement.

Investment Objective and Strategy

The Vanguard FTSE Emerging Markets ETF seeks to track the performance of a benchmark index that measures the investment return of stocks issued by companies located in emerging market countries, which is currently the FTSE Emerging Index. For more information about the FTSE Emerging Index, please see "Equity Index Descriptions — The FTSE GEIS Indices" in this underlying supplement.

Indexing Investment Approach

The Vanguard FTSE Emerging Markets ETF employs an indexing investment approach by investing substantially all (approximately 95%) of its assets in the common stocks included in the FTSE Emerging Index, while employing a form of sampling to reduce risk. The Vanguard FTSE Emerging Markets ETF is subject to index sampling risk, which is the chance that the securities selected for the Vanguard FTSE Emerging Markets ETF, in the aggregate, will not provide investment performance matching that of the FTSE Emerging Index.

To track the FTSE Emerging Index as closely as possible, the Vanguard FTSE Emerging Markets ETF attempts to remain fully invested in stocks. To help stay fully invested and to reduce transaction costs, the Vanguard FTSE Emerging Markets ETF may invest, to a limited extent, in derivatives, including stock futures. The Vanguard FTSE Emerging Markets ETF may also use derivatives, such as total return swaps, to obtain exposure to a stock, a basket of stocks or an index. The Vanguard FTSE Emerging Markets ETF will not use derivatives for speculation or for the purpose of leveraging (magnifying) investment returns. The Vanguard FTSE Emerging Markets ETF's daily cash balance may be invested in one or more money-market funds sponsored by Vanguard. The Vanguard FTSE Emerging Markets ETF may temporarily depart from its normal investment policies and strategies when the advisor believes that doing so is in the Vanguard FTSE Emerging Markets ETF's best interest, so long as the alternative is consistent with the Vanguard FTSE Emerging Markets ETF's investment objective. The Vanguard FTSE Emerging Markets ETF may substitute a different index for the index it currently tracks if the current index is discontinued, if the Vanguard FTSE Emerging Markets ETF's agreement with the sponsor of its target index is terminated, or for any other reason determined in good faith by the Vanguard FTSE Emerging Markets ETF's board of trustees. In any such instance, the substitute index would measure the same market segment as the current index.

Holdings Information

The following tables summarize the Vanguard FTSE Emerging Markets ETF's top holdings in individual securities as of September 30, 2014.

Top holdings in individual securities as of September 30, 2014

Security	Percentage of Total Holdings
Taiwan Semiconductor Manufacturing Company, Limited	2.80%
Tencent Holdings Ltd.	2.00%
China Mobile Limited	1.80%
Petroleo Brasileiro S.A.	1.70%
China Construction Bank Corporation	1.50%
Industrial & Commercial Bank of China Ltd.	1.30%
Itaú Unibanco Holding S.A.	1.20%
Hon Hai Precision Industry Co., Ltd.	1.10%
Naspers Ltd	1.10%
Gazprom OAO	1.10%

The information above was compiled from the Vanguard website, without independent verification. Information contained in the Vanguard website is not incorporated by reference in, and should not be considered a part of, this underlying supplement or the relevant terms supplement.

THE VANGUARD FTSE EUROPE ETF

We have derived all information contained in this underlying supplement regarding the Vanguard FTSE Europe ETF from publicly available information, without independent verification. This information reflects the policies of, and is subject to change by Vanguard Index Funds (the "Vanguard Trust") and The Vanguard Group, Inc. ("Vanguard"). The Vanguard FTSE Europe ETF is an investment portfolio of the Vanguard Trust. Vanguard is the investment adviser to the Vanguard FTSE Europe ETF. The Vanguard FTSE Europe ETF is an exchange-traded fund that trades on the NYSE Arca, Inc. ("NYSE Arca") under the ticker symbol "VGK."

The Vanguard Trust is a registered investment company that consists of numerous separate investment portfolios, including the Vanguard FTSE Europe ETF. Information provided to or filed with the SEC by Vanguard pursuant to the Securities Act of 1933, as amended, and the Investment Company Act of 1940, as amended, can be located by reference to SEC file numbers 002-56846 and 811-02652, respectively, through the SEC's website at <http://www.sec.gov>. For additional information regarding the Vanguard Trust, Vanguard and the Vanguard FTSE Europe ETF, please see the Vanguard FTSE Europe ETF's prospectus. In addition, information about Vanguard and the Vanguard FTSE Europe ETF may be obtained from other sources including, but not limited to, press releases, newspaper articles and other publicly disseminated documents and the Vanguard website at www.vanguard.com. Information contained in the Vanguard website is not incorporated by reference in, and should not be considered a part of, this underlying supplement or the relevant terms supplement.

Investment Objective and Strategy

The Vanguard FTSE Europe ETF seeks to track the performance of a benchmark index that measures the investment return of stocks issued by companies located in major markets of Europe, which is currently the FTSE Developed Europe Index. For more information about the FTSE Developed Europe Index, please see "Equity Index Descriptions — The FTSE GEIS Indices" in this underlying supplement.

Indexing Investment Approach

The Vanguard FTSE Europe ETF employs an indexing investment approach by investing substantially all (approximately 95%) of its assets in the common stocks included in the FTSE Developed Europe Index, while employing a form of sampling to reduce risk. The Vanguard FTSE Europe ETF is subject to index sampling risk, which is the chance that the securities selected for the Vanguard FTSE Europe ETF, in the aggregate, will not provide investment performance matching that of the FTSE Developed Europe Index.

To track the FTSE Developed Europe Index as closely as possible, the Vanguard FTSE Europe ETF attempts to remain fully invested in stocks. To help stay fully invested and to reduce transaction costs, the Vanguard FTSE Europe ETF may invest, to a limited extent, in derivatives, including stock futures. The Vanguard FTSE Europe ETF may also use derivatives, such as total return swaps, to obtain exposure to a stock, a basket of stocks or an index. The Vanguard FTSE Europe ETF will not use derivatives for speculation or for the purpose of leveraging (magnifying) investment returns. The Vanguard FTSE Europe ETF's daily cash balance may be invested in one or more money-market funds sponsored by Vanguard. The Vanguard FTSE Europe ETF may temporarily depart from its normal investment policies and strategies when the advisor believes that doing so is in the Vanguard FTSE Europe ETF's best interest, so long as the alternative is consistent with the Vanguard FTSE Europe ETF's investment objective. The Vanguard FTSE Europe ETF may substitute a different for index for the index it currently tracks if the current index is discontinued, if the Vanguard FTSE Europe ETF's agreement with the sponsor of its target index is terminated, or for any other reason determined in good faith by the Vanguard FTSE Europe ETF's board of trustees. In any such instance, the substitute index would measure the same market segment as the current index.

Holdings Information

The following tables summarize the Vanguard FTSE Europe ETF's top holdings in individual securities as of September 30, 2014.

Top holdings in individual securities as of September 30, 2014

Security	Percentage of Total Holdings
Royal Dutch Shell plc	2.90%
Nestle S.A.	2.70%
Novartis AG	2.50%
Roche Holding AG	2.40%
HSBC Holdings plc	2.20%
BP plc	1.60%
Total S.A.	1.50%
Sanofi	1.50%
Bayer AG	1.30%
Banco Santander S.A.	1.30%

The information above was compiled from the Vanguard website, without independent verification. Information contained in the Vanguard website is not incorporated by reference in, and should not be considered a part of, this underlying supplement or the relevant terms supplement.

THE VANGUARD TOTAL STOCK MARKET ETF

We have derived all information contained in this underlying supplement regarding the Vanguard Total Stock Market ETF from publicly available information, without independent verification. This information reflects the policies of, and is subject to change by Vanguard Index Funds (the "Vanguard Trust") and The Vanguard Group, Inc. ("Vanguard"). The Vanguard Total Stock Market ETF is an investment portfolio of the Vanguard Trust. Vanguard is the investment adviser to the Vanguard Total Stock Market ETF. The Vanguard Total Stock Market ETF is an exchange-traded fund that trades on the NYSE Arca, Inc. ("NYSE Arca") under the ticker symbol "VTI."

The Vanguard Trust is a registered investment company that consists of numerous separate investment portfolios, including the Vanguard Total Stock Market ETF. Information provided to or filed with the SEC by Vanguard pursuant to the Securities Act of 1933, as amended, and the Investment Company Act of 1940, as amended, can be located by reference to SEC file numbers 002-56846 and 811-02652, respectively, through the SEC's website at <http://www.sec.gov>. For additional information regarding the Vanguard Trust, Vanguard and the Vanguard Total Stock Market ETF, please see the Vanguard Total Stock Market ETF's prospectus. In addition, information about Vanguard and the Vanguard Total Stock Market ETF may be obtained from other sources including, but not limited to, press releases, newspaper articles and other publicly disseminated documents and the Vanguard website at www.vanguard.com. Information contained in the Vanguard website is not incorporated by reference in, and should not be considered a part of, this underlying supplement or the relevant terms supplement.

Investment Objective and Strategy

The Vanguard Total Stock Market ETF seeks to track the performance of a benchmark index that measures the investment return of the overall stock market, which is currently the CRSP U.S. Total Market Index. For more information about the CRSP U.S. Total Market Index, please see "The CRSP U.S. Total Market Index" below.

Indexing Investment Approach

The Vanguard Total Stock Market ETF employs an indexing investment approach designed to track the performance of the CRSP U.S. Total Market Index. The Vanguard Total Stock Market ETF uses the sampling method of indexing, meaning that it holds a broadly diversified collection of securities that, in the aggregate, approximates the full Index in terms of key characteristics. These key characteristics include industry weightings and market capitalization, as well as certain financial measures, such as price/earnings ratio and dividend yield. The Vanguard Total Stock Market ETF is subject to index sampling risk, which is the chance that the securities selected for the Vanguard Total Stock Market ETF, in the aggregate, will not provide investment performance matching that of the CRSP U.S. Total Market Index.

The Vanguard Total Stock Market ETF may invest in foreign securities to the extent necessary to carry out its investment strategy of holding a representative sample of the stocks that make up the CRSP U.S. Total Market Index. It is not expected that any Vanguard Total Stock Market ETF will invest more than 5% of its assets in foreign securities. To track the CRSP U.S. Total Market Index as closely as possible, the Vanguard Total Stock Market ETF attempts to remain fully invested in stocks. To help stay fully invested and to reduce transaction costs, the Vanguard Total Stock Market ETF may invest, to a limited extent, in derivatives, including stock futures. The Vanguard Total Stock Market ETF may also use derivatives, such as total return swaps, to obtain exposure to a stock, a basket of stocks or an index. The Vanguard Total Stock Market ETF will not use derivatives for speculation or for the purpose of leveraging (magnifying) investment returns. The Vanguard Total Stock Market ETF's daily cash balance may be invested in one or more money-market funds sponsored by Vanguard. The Vanguard Total Stock Market ETF may temporarily depart from its normal investment policies and strategies when the advisor believes that doing so is in the Vanguard Total Stock Market ETF's best interest, so long as the alternative is consistent with the Vanguard Total Stock Market ETF's investment objective.

Holdings Information

The following tables summarize the Vanguard Total Stock Market ETF's top holdings in individual securities and by sector as of September 30, 2014.

Top holdings in individual securities as of September 30, 2014

Security	Percentage of Total Holdings
Apple Inc.	2.80%
Exxon Mobil Corporation	1.90%
Microsoft Corporation	1.60%
Google Inc.	1.50%
Johnson & Johnson	1.40%
Wells Fargo & Company	1.30%
General Electric Company	1.20%
Berkshire Hathaway Inc.	1.20%
JPMorgan Chase & Co.	1.00%
The Procter & Gamble Company	1.00%

Top Holdings by Sector as of September 30, 2014

Sector	Percentage of Total Holdings
Financials	18.60%
Technology	16.00%
Consumer Services	13.00%
Health Care	12.80%
Industrials	12.60%
Consumer Goods	9.70%
Oil & Gas	8.90%
Utilities	3.20%
Basic Materials	3.00%
Telecommunications	2.20%

The information above was compiled from the Vanguard website, without independent verification. Information contained in the Vanguard website is not incorporated by reference in, and should not be considered a part of, this underlying supplement or the relevant terms supplement.

The CRSP U.S. Total Market Index

We have derived all information contained in this underlying supplement regarding the CRSP U.S. Total Market Index, including, without limitation, its make-up, method of calculation and changes in its components, from publicly available information, without independent verification. This information reflects the policies of, and is subject to change by, the Center for Research in Security Prices ("CRSP"). The CRSP U.S. Total Market Index was developed by CRSP and is calculated, maintained and published by CRSP. CRSP has no obligation to continue to publish, and may discontinue the publication of the CRSP U.S. Total Market Index.

The CRSP U.S. Total Market Index is reported by Bloomberg L.P. under the ticker symbol "CRSPTMT."

The CRSP U.S. Total Market Index is designed to represent investable U.S. equity securities. The CRSP U.S. Total Market Index generally encompasses listed equity securities, including common stocks and real estate investment trusts ("REITs") of U.S.-incorporated or U.S.-headquartered companies traded on the New York Stock Exchange ("NYSE"), NYSE MKT, NASDAQ or NYSE Arca exchanges.

Index Composition

Eligible Universe

To be eligible for the CRSP U.S. Total Market Index, the securities must meet the following criteria:

- the securities must be listed on NYSE, NYSE MKT, NASDAQ or NYSE Arca;
- the securities must be common stock, REITs, shares of beneficial interest (excluding funds) or Berkshire Hathaway A & B shares; and
- the company issuing the securities must generally be currently incorporated or headquartered in the U.S.; however, securities of companies located in U.S. territories, tax havens and domiciles of convenience may also be considered for inclusion in the CRSP U.S. Total Market Index based on factors including the percentage of U.S. revenue and asset location, U.S. employees, the primary exchange, inclusion in domestic portfolios, market input and stated geographic business focus in company documents.

Eligibility status is reviewed quarterly at ranking. Data for the review is collected as of the previous quarter end.

Investability Screens

Once the eligible securities are identified, investability screens are applied quarterly on the ranking date (the first Friday of each of March, June, September and December) to determine the constituents of the CRSP U.S. Total Market Index as of the following reconstitution date (the third Friday of each of March, June, September and December), as follows:

- minimum total market capitalization: the company must have more than \$10 million total market capitalization;

- float shares requirement: the number of a company's float shares, those readily available for trading, must be greater than 10% of the total shares outstanding;
- minimum trading volume: the average of the adjusted trading volume over the last 125 days divided by float shares on the ranking date must be at least 0.0008; and
- consecutive trading days requirement: the securities must not have a sequence of 10 consecutive non-trading days during the previous quarter.

In addition, initial public offerings (IPOs) that have traded regular-way for at least 20 trading days, or are within the top 85% (ranked by total market capitalization) of the eligible securities, and have traded regular-way for at least 5 trading days, are included.

Index Calculation

The CRSP U.S. Total Market Index is weighted by float-adjusted market capitalization, rather than total shares outstanding, reflecting the availability of shares from the perspective of U.S. domestic investors. Float-adjusted market capitalization is equal to float shares outstanding times price. The estimate of readily available shares (free float) is calculated by subtracting the number of restricted shares (*i.e.*, insiders and inactive shareholders) from the total number of shares issued for a particular company. Restricted shares include but are not limited to shares held by board members, directors and executives (insiders), government holdings, employee-held shares, shares held by corporations not actively managing money and other unavailable shares.

Index Levels

Index level was set to 1000.00 on April 1, 2011. The level of the index is calculated by applying the return on the portfolio of the securities included in the CRSP U.S. Total Market Index since the last index calculation to the last calculated index level. The return on the portfolio ($R(I)$) is calculated as the weighted average of the returns for the individual securities in the portfolio:

$$R(I) = \sum_n w_n(I) \times r_n(I)_t$$

The CRSP U.S. Total Market Index is value-weighted. In a value-weighted portfolio, the weight ($w_n(I)$) assigned to security n 's return is its market capitalization in the CRSP U.S. Total Market Index divided by the total market capitalization of the CRSP U.S. Total Market Index. Company weight is the sum of the weights of all securities of the same company.

$$w_n(I) = \frac{p_n(I, t') \times s_n(I, t')}{M_n(I, t')}$$

Where

$w_n(I, t')$ = weight of the n th security within the CRSP U.S. Total Market Index at start-of-day t .

p_n = price of the n th security

$s_n(I, t')$ = float shares held in the CRSP U.S. Total Market Index at start-of-day t .

$M_n(I, t')$ = sum of market capitalizations of all securities within the CRSP U.S. Total Market Index at start-of-day t .

CRSP defines the market value of a security as the product of its start-of-day price and its number of float shares outstanding held in the index on the trading day. The number of float shares outstanding held for a security in an index is set based on the float shares outstanding on the ranking day, multiplied by the holdings multiplier for the security set during ranking, and adjusted by holdings rules thereafter.

Security Returns

The CRSP U.S. Total Market Index is a total return index and takes into account all distributions to shareholders and reinvesting all cash dividends. Security returns are calculated as follows:

$$r(t) = \frac{p(t) + n(t) + d(t)}{p(t')} - 1$$

For day t, let

$r(t)$ = return on purchase at t' , sale at t

$p(t)$ = end-of-day price

$d(t)$ = dividend amount for t

$n(t)$ = value of non-ordinary payments not available for start-of-day adjustment

$p(t')$ = start-of-day price on day t

Dividends are reinvested in the security on the Ex-Distribution Date.

Return is set to -66.0 if there is a valid current price, but no valid start-of-day price due to first day of trading. Return is set to -99.0 if there is no valid current price.

Start-of-day Price

Start-of-day prices are set from yesterday end-of-day prices and already known distribution values and split factors.

$$p(t') = \frac{p(t-1)}{f(t)} - v(t)$$

$p(t')$ = start-of-day price on day t

$p(t-1)$ = end-of-day price on previous trading day

$f(t)$ = split factor applicable on day t

$v(t)$ = value of non-ordinary payments available for start-of-day adjustment

Index Maintenance

Holdings of securities in an index may be changed due to shares outstanding or float changes resulting from splits and reverse splits; secondary offerings; mergers and acquisitions; rights offerings; and changes based on corporate filings.

If a corporate action or shares event is not final or known before 1:30 p.m. Central Time, it will not change holdings in the CRSP U.S. Total Market Index for the next day. However, if CRSP receives a late (after 2:30 p.m. Eastern Time) cap-neutral shares change announcement, such as a split or stock dividend, index shares changes will be effective the next business day.

Splits and Reverse Splits

Holdings are increased or decreased on the ex-date by the same ratio as the split factor, regardless of the magnitude of the split.

Secondary Offerings

Changes in index holdings resulting from primary or secondary equity offerings representing at least 5% of the security's number of shares held in the index (CRSP index holdings) are implemented as of the close of the first trading day of the new shares. Increases in the number of shares due to primary or secondary equity offerings are generally implemented as of the close of the first trading day of the new shares (2 trading days after the issue is priced) if all necessary information is available before 1:30 pm CST the day after the issue is priced and the 5% threshold is met. Otherwise, the event is implemented on the next regularly scheduled CRSP ranking day.

Mergers and Acquisitions

If an acquisition results in an increase of the shares outstanding or float shares of the acquiring company, then its holdings are increased on the effective date.

Rights Offerings

Shares outstanding and float shares are not changed directly by a rights offering, but any changes are applied as they appear in updates from CRSP's data vendors.

Changes Reported in Corporate Filings

Any shares outstanding or float shares changes not directly attributed to a single corporate action on a single day (e.g., buybacks, exercised options, rights offerings, and unreported secondary offerings) but reported in corporate filings are applied at the quarterly ranking. New shares outstanding or float shares amounts are applied at the next quarterly ranking and review process.

Exchange Delistings and Drops

Delists due to Mergers and Acquisitions. A security that delists due to an exchange of its stock as part of a merger or acquisition is removed from the CRSP U.S. Total Market Index. If the merger or acquisition event is finalized before 1:30 p.m. CT on the last day before the effective date of the action, the security is removed at the end of that day. If the merger or acquisition event is finalized after 1:30 p.m. CT on the last day before the effective date of the action, then the security is kept in indexes until the exchange confirms the security's delisting.

Delists due to halts. If the security is halted at ranking, the security is removed at the next reconstitution.

Delists due to Exchange Action. A security that delists from a major exchange due to performance reasons is removed from the CRSP U.S. Total Market Index. If notification is given of a security delisting before 1:30 p.m. CT on its last day of trading, the security is removed at the end of its last day. If there is notification of a delisting after 1:30 p.m. CT on the day prior to the delisting, the security is held in the CRSP U.S. Total Market Index until a trade occurs, which usually happen on a secondary exchange such as the Pink Sheets or the OTCBB. If a trade occurs before 1:30 p.m. CT on a day after the delisting, the security is removed at the closing price of that day. If a trade occurs after 1:30 p.m. CT on a day after delisting, the security will be held an additional trading day and removed at the close of that trading day, at either a trading price on that trading day, or if a price is not found, at a price carried forward from the day the trade occurred. If the security does not trade by the end of the 11th day after the delisting date, the security is removed at a price of zero.

Delists due to Liquidation. A security that delists due to a liquidation is removed from the CRSP U.S. Total Market Index. If a plan of liquidation is announced before 1:30 p.m. CT on a day while still trading on a major exchange, the security is removed at the end of the last day before it is delisted. If a liquidation is announced after 1:30 p.m. CT on a day when a security is still trading on

a major exchange, then the security is kept in the CRSP U.S. Total Market Index until a final valuation can be assigned to the security. If trading continues on a secondary exchange, then the security is dropped as soon as a price is found, using the same rules as for "Delisting due to Exchange Action" as described above. If trading does not continue on a secondary exchange, then the security is dropped as soon as final liquidation payments are announced, using the same rules as for "Delisting due to Merger or Acquisition" as described above. Partial liquidation payments after delisting are applied as they are paid, up through the end of the 11th day after delisting. If no final payment is paid by the 11th day, the security is dropped at a price of zero.

Bankruptcy. If a company declares bankruptcy, its securities remain in an index as long as trading is not halted and securities remain listed on an eligible exchange. Securities for bankrupt companies are evaluated at quarterly rankings on the same criteria as all other securities.

Initial Public Offerings

If the IPO's market capitalization is within top 85% market capitalization of all securities that meet the eligibility criteria described above, it is added to an index on the 6th trading day. All other IPOs that have traded for at least 20 trading days at ranking will be considered for index inclusion on the next reconstitution date. If a pre-existing company issues a new share class independent of any distributions, then the new security is treated as an IPO.

Dividends

Due to the recent industry concerns over the LIBOR rate, CRSP will temporarily suspend the practice of discounting dividends. Prices are adjusted for special dividends, which results in lower returns than would otherwise be reflected.

Index Announcement Policy

Ranking Procedure and Results

Announcements regarding ranking procedure and results are made at the start of day on ranking day to those subscribers who are engaged in direct funds management. Other classes of subscribers will get this information on an appropriately determined delay.

Two month advance notice will be given prior to changing the ranking or reconstitution date. The ranking and reconstitution calendar is published one year in advance. As much notice as possible will be given for unexpected changes.

Corporate Actions

All changes resulting from corporate actions that affect the constituents of the CRSP U.S. Total Market Index are announced when an effective date is known. Once all details for the change have been finalized, CRSP will send a confirmed announcement to its clients prior to the effective date. Should a corporate action be cancelled after it has been announced, CRSP will announce this as early as possible. Similarly, should a modification or correction be needed to an event that was previously announced as "confirmed," CRSP will announce the modification or correction as early as possible.

Exchange Closures

If the primary exchanges close or cancel trading due to unforeseen circumstances, CRSP will not produce index results for that day. The index levels will continue from the last complete day of trading. If the closing is known at least one day in advance, corporate actions originally declared effective for the closed day or days will take effect on the day when the markets reopen. Normal index notifications will occur on the trading day before the closing.

If no notice is available, the index holdings on the trading day when markets reopen will remain as originally announced. All corporate actions affecting the index securities declared to be effective on a closed day or the first day after reopening will be re-dated to the day after trading resumes. Index holdings changes will take place after the close of the reopening day.

THE WISDOMTREE JAPAN HEDGED EQUITY FUND

We have derived all information contained in this document regarding the WisdomTree Japan Hedged Equity Fund (the "DXJ ETF") from publicly available information, without independent verification. This information reflects the policies of, and is subject to change by, the WisdomTree Trust and WisdomTree Asset Management, Inc. ("WisdomTree"). The DXJ ETF is an investment portfolio managed by WisdomTree, the investment adviser to the DXJ ETF and by Mellon Capital Management Corporation ("Mellon Capital"), the sub-adviser to the DXJ ETF. The DXJ ETF is an exchange-traded fund that trades on the NYSE Arca, Inc. ("NYSE Arca") under the ticker symbol "DXJ."

The WisdomTree Trust is a registered investment company that consists of numerous separate investment portfolios. Information provided to or filed with the SEC by the WisdomTree Trust pursuant to the Securities Act of 1933, as amended, and the Investment Company Act of 1940, as amended, can be located by reference to SEC file numbers 333-132380 and 811-21864, respectively, through the SEC's website at <http://www.sec.gov>. For additional information regarding the WisdomTree Trust, WisdomTree, Mellon Capital and the DXJ ETF, please see the DXJ ETF's prospectus. In addition, information about the DXJ ETF, WisdomTree and Mellon Capital may be obtained from other sources including, but not limited to, press releases, newspaper articles and other publicly disseminated documents and the DXJ ETF's website at <http://www.wisdomtree.com/etfs>. Information contained in the DXJ ETF's website is not incorporated by reference in, and should not be considered a part of, this underlying supplement or the relevant terms supplement.

Investment Objective and Strategy

The DXJ ETF seeks investment results that generally correspond to the price and yield performance, before fees and expenses, of the WisdomTree Japan Hedged Equity Index (the "reference index"). For more information about the WisdomTree Japan Hedged Equity Index, please see "The WisdomTree Japan Hedged Equity Index" below.

The DXJ ETF employs a "passive management" — or indexing — investment approach designed to track the performance of the reference index. The DXJ ETF attempts to invest all, or substantially all, of its assets in the component securities that make up the reference index. The DXJ ETF generally uses a representative sampling strategy to achieve its investment objective, meaning it generally will invest in a sample of the component securities in the reference index whose risk, return and other characteristics closely resemble the risk, return and other characteristics of the reference index as a whole. Under normal circumstances, at least 95% of the DXJ ETF's total assets (exclusive of collateral held from securities lending) will be invested in the component securities of the reference index. WisdomTree expects that, over time, the correlation between the DXJ ETF's performance and that of the reference index, before fees and expenses, will be 95% or better. To the extent the reference index concentrates (*i.e.*, holds 25% or more of its total assets) in the securities of a particular industry or group of industries, the DXJ ETF will concentrate its investments to approximately the same extent.

To mitigate the currency risk resulting from the DXJ ETF's exposure to the Japanese yen, the DXJ ETF may enter into forward currency contracts or futures contracts. The amount of forward contracts and futures contracts in the DXJ ETF is based on the aggregate exposure of the DXJ ETF to the Japanese yen. This currency mitigation approach may not offset the actual fluctuations between the Japanese yen and the U.S. dollar and as a result, may not eliminate the currency risk resulting from the DXJ ETF's exposure to the Japanese yen. A decline in the value of the Japanese yen relative to the U.S. dollar could result in a decline in the value of the DXJ ETF and, therefore, could result in a loss in your investment in the notes.

Holdings Information

The following tables summarize the DXJ ETF's top holdings in individual securities and by sector as of October 31, 2014.

Top Holdings in Individual Securities as of October 31, 2014

Security	Weight
Toyota Motor Corp	5.42%
Mitsubishi UFJ Financial Group	4.95%
Japan Tobacco Inc	3.84%
Mizuho Financial Group Inc	3.51%
Canon Inc	3.40%
Honda Motor Co Ltd	3.24%
Nissan Motor Co Ltd	3.04%
Takeda Pharmaceutical Co Ltd	2.83%
Mitsubishi Corp	2.59%
Mitsui & Co Ltd	2.44%

Top Holdings by Sector as of October 31, 2014

Sector	Percentage of Total Holdings
Consumer Discretionary	24.76%
Industrials	22.29%
Information Technology	14.59%
Financials	11.27%
Materials	9.78%
Consumer Staples	8.82%
Health Care	8.11%

The information above was compiled from the WisdomTree Trust's website, without independent verification. Information contained in the WisdomTree Trust's website is not incorporated by reference in, and should not be considered a part of, this document or the relevant term sheet.

The WisdomTree Japan Hedged Equity Index

The WisdomTree Japan Hedged Equity Index (the “reference index”) is a stock index calculated, published and disseminated by WisdomTree Investments, Inc. (“WTI”), and is designed to provide exposure to a segment of the Japanese equity markets while at the same time attempting to mitigate exposure to fluctuations of the Japanese yen relative to the U.S. dollar. The reference index consists of dividend-paying companies incorporated in Japan and traded on the Tokyo Stock Exchange that derive less than 80% of their revenue from sources in Japan. By excluding companies that derive 80% or more of their revenue from Japan, the reference index is concentrated on dividend-paying companies with a more significant non-Japan revenue base. The companies included in the reference index typically have greater exposure to the value of global currencies and, in many cases, their business prospects historically have improved when the value of the Japanese yen has declined and have weakened when the value of the Japanese yen has increased. The reference index is a currency hedged version of the WisdomTree Japan Dividend Index (the “WJD Index”), and the selection and weighting methodology for the reference index is identical to the selection and weighting methodology used for the WJD Index.

Selection Criteria

To be eligible for inclusion in the reference index, component companies must meet the following eligibility requirements established by WTI: (i) payment of at least \$5 million in cash dividends on common shares in the annual cycle prior to the annual rebalance of the reference index; (ii) market capitalization of at least \$100 million as of the rebalance of the reference index; (iii) average daily dollar volume of at least \$100,000 for the three months preceding the rebalance of the reference index; and (iv) trading of at least 250,000 shares per month for each of the six months preceding the rebalance of the reference index.

Companies are weighted in the reference index based on annual cash dividends paid. At the time of the annual rebalance of the reference index, the maximum weight of any single security in the reference index is capped at 5% and the maximum weight of any one sector in the reference index is capped at 25%. In response to market conditions, security and sector weights may fluctuate above the specified cap between annual rebalance of the reference index dates. WTI, as index provider, currently uses Standard & Poor’s Global Industry Classification Standards (“S&P GICS”) to define companies in each sector. The following sectors are included in the reference index: consumer discretionary, consumer staples, energy, financials, health care, industrials, information technology, materials, telecommunication services, and utilities. A sector is comprised of multiple industries. For example, the energy sector is comprised of companies in, among others, the natural gas, oil and petroleum industries.

Index Calculation

The reference index is a currency hedged version of the WJD Index. The index values of the WJD Index are calculated by aggregating the sum of the product of number of stocks in the reference index for a component company, the price of such stock and the cross rate of the Japanese yen against the U.S. dollar. This value is then adjusted by a divisor. By adjusting the divisor, the index value retains its continuity before and after changes in the market capitalization of the reference index due to changes in composition, weighting or corporate actions.

The WJD Index is calculated whenever the New York Stock Exchange is open for trading. If trading is suspended while the exchange the component company trades on is still open, the last traded price for that stock is used for all subsequent computations of the WJD Index until trading resumes. If trading is suspended before the opening, the adjusted closing price of the stock from the previous day is used to calculate the WJD Index. Until a particular stock opens, its adjusted closing price from the previous day is used in the computation of the WJD Index.

The reference index is a currency hedged version of the WJD Index, and the reference index is designed to approximate the investable return available to U.S. based investors that attempts to mitigate currency fluctuations as a source of the international index return.

The reference index is calculated on a daily basis and it uses to a WM/Reuters 1-month forward rate to mitigate the effects of currency fluctuations. The precise calculation for the daily hedged currency index is as follows:

$$WT_Hedged_1 = WT_Hedged_0 * \left(\frac{WT_Unhedged_1}{WT_Unhedged_0} + HedgeRet_1 \right)$$

$$HedgeRet_1 = \frac{Spot\ Rate_{m0}}{Forward\ Rate_{m0}} - \frac{Spot\ Rate_{m0}}{Spot\ Rate_{md} + \left(\frac{D-d}{D} \right) * (Forward\ Rate_{md} - Spot\ Rate_{md})}$$

Where:

- Forward Rate = WM/Reuters 1-month forward rate in foreign currency per U.S. dollar
- Spot Rate = Spot Rate in foreign currency per U.S. dollar.
- For each month *m*, there are *d*= 1, 2, 3, ... *D* calendar days so "*md*" is *day d* for *month m* and "*m0*" is the *last day* of *month m-1*.
- *D* = total number of days in *month m*

Weighting

The reference index is a modified capitalization-weighted index that employs a transparent weighting formula to magnify the effect that dividends play in the total return of such index. The initial weight of a component in the reference index at the annual reconstitution is derived by multiplying the U.S. dollar value of the annual dividend per share of the company by the number of common shares outstanding for that company (the "Cash Dividend Factor"). Special dividends are not included in the computation of weights of the reference index. The Cash Dividend Factor is calculated for every component in the reference index and then summed. The weight of each component, at the International Weighting Date, is equal to its Cash Dividend Factor divided by the sum of all Cash Dividend Factors for all the components in that reference index. The International Weighting Date is the date on which component weights are set and it occurs immediately after the close of trading on the third Wednesday of June. New component weights take effect before the opening of trading on the first Monday following the third Friday of June (the "International Reconstitution Date").

The weighting of the reference index will be modified in the event of the following weighting modification events:

- (i) The maximum weight of any individual component security is capped at 5% on the annual rebalance prior to the introduction of sector caps. The weights may fluctuate above the specified caps during the year, but will be reset at each annual rebalance date.
- (ii) Where a sector achieves a weight that is greater than or equal to 25% of the reference index, weight of companies will be proportionally reduced to 25% as of the annual screening date.

- (iii) Where the collective weight of the component securities of the reference index whose individual current weights are greater than or equal to 5.0% of the reference index is greater than or equal to 50.0% of the reference index, the weightings in those component securities will be reduced so that their collective weight equals 40.0% of the reference index at the close of the current calendar quarter. All other components in the reference index will also be rebalanced to reflect their relative weights before the adjustment.

Dividend Treatment

Normal dividend payments are reinvested and accounted for in the calculation of the index value of the reference index. However, special dividends that are not reinvested in the reference index require index divisor adjustments.

Maintenance of the reference index

Index maintenance includes monitoring and implementing the adjustments for company deletions, stock splits, stock dividends, spins-offs, or other corporate actions. Some corporate actions, such as stock splits, stock dividends, and rights offerings require changes in the number of stocks of such constituent included in the reference index and the stock prices of the component companies in the reference index. Some corporate actions, such as stock issuances, stock buybacks, warrant issuances, increases or decreases in dividend per share between reconstitutions, do not require changes in the number of stocks of such constituent included in the reference index or in the stock prices of the component companies in the reference index. Other corporate actions, such as special dividends and entitlements, may require index divisor adjustments. Any corporate action, whether it requires index divisor adjustments or not, will be implemented after the close of trading on the day prior to the ex-date of such corporate actions. Whenever possible, changes to the components of the reference index, such as deletions as a result of corporate actions, will be announced at least two business days prior to their implementation date.

Index Divisor Adjustments

Changes in the market capitalization of the reference index due to changes in composition, weighting or corporate actions result in a divisor change to maintain the continuity of the reference index. Corporate actions that require divisor adjustments will be implemented prior to the opening of trading on the effective date. In certain instances where information is incomplete, or the completion of an event is announced too late to be implemented prior to the ex-date, the implementation will occur as of the close of the following day or as soon as practicable thereafter. For corporate actions not described herein, or combinations of different types of corporate events and other exceptional cases, WisdomTree reserves the right to determine the appropriate implementation method.