CITIGROUP INC Form 424B2 April 04, 2014

The information in this pricing supplement is not complete and may be changed. A registration statement relating to these securities has been filed with the Securities and Exchange Commission. This pricing supplement and the accompanying prospectus supplement and prospectus are not an offer to sell these securities, nor are they soliciting an offer to buy these securities, in any state where the offer or sale is not permitted.

SUBJECT TO COMPLETION, DATED APRIL 4, 2014

Filed Pursuant to Rule 424(b)(2) Registration No. 333-192302

PRICING SUPPLEMENT NO. 2014—CMTNG0108 DATED APRIL , 2014 (TO PROSPECTUS SUPPLEMENT AND PROSPECTUS EACH DATED NOVEMBER 13, 2013) MEDIUM-TERM SENIOR NOTES, SERIES G

#### CITIGROUP INC.

Upturn Securities Based on the Citi Volatility Balanced Beta (VIBE) Equity US Price Return Index Due May , 2018 \$1,000 per Security

Unlike ordinary debt securities, the Upturn Securities Based on the Citi Volatility Balanced Beta (VIBE) Equity US Price Return Index Due May , 2018 (the "securities") do not pay interest and do not guarantee the return of any of the stated principal amount at maturity. At maturity, you will receive, for each \$1,000 stated principal amount of the securities that you then hold, an amount in cash that will vary depending upon the closing level of the Citi Volatility Balanced Beta (VIBE) Equity US Price Return Index (the "index") on the valuation date and which may be significantly less than the stated principal amount of the securities and possibly zero. The securities are senior unsecured debt securities issued by Citigroup Inc. All payments on the securities are subject to the credit risk of Citigroup Inc. The securities provide leveraged upside and full downside exposure to the index, in exchange for (i) taking approximately four-year credit risk of Citigroup Inc. without being paid interest and (ii) not receiving any dividends on any of the stocks constituting the index.

- The stated principal amount and the issue price of each security is \$1,000.
- We will not pay interest on the securities.
- The "maturity date" will be May , 2018 (expected to be May 3, 2018).

At maturity, you will receive, for each \$1,000 stated principal amount of securities that you then hold, an amount in cash equal to:

°If the final index level is greater than or equal to the initial index level: \$1,000 plus the leveraged return amount; or ° If the final index level is less than the initial index level: \$1,000 multiplied by the index performance factor.

If the final index level is less than the initial index level, your payment at maturity will be less, and possibly significantly less, than the \$1,000 stated principal amount per security. You should not invest in the securities unless you are willing and able to bear the risk of losing up to all of your investment.

The "leveraged return amount" will be equal to the product of (i) \$1,000 multiplied by (ii) the index percent increase multiplied by (iii) the leverage factor.

The "index percent increase" will be (i) the final index level minus the initial index level divided by (ii) the initial index level.

- The "index performance factor" will be the final index level divided by the initial index level.
- The "leverage factor" will be % (to be determined on the pricing date and expected to be 127% to 132%).
- The "initial index level" will equal , the closing level of the index on the pricing date.
- The "final index level" will equal the closing level of the index on the valuation date.
- The "pricing date" will be April , 2014 (expected to be April 30, 2014).

The "valuation date" will be April , 2018 (expected to be April 30, 2018), subject to postponement for non-index business days.

The securities will not be listed on any securities exchange and, accordingly, may have limited or no liquidity. You should not invest in the securities unless you are willing to hold them to maturity.

The CUSIP for the securities is 1730T0N47. The ISIN for the securities is US1730T0N477.

You should read the more detailed description of the securities in this pricing supplement. In particular, you should review and understand the descriptions in "Description of the Securities."

The securities are riskier than ordinary debt securities. See "Risk Factors" beginning on page PS-2.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of the securities or determined that this pricing supplement and accompanying prospectus supplement and prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

	Issue price(1)	Underwriting fee(2)	Proceeds to issuer
Per security	\$1,000	\$15	\$985
Total	\$	\$	\$

- (1) Citigroup Inc. currently expects that the estimated value of the securities on the pricing date will be between \$932.00 and \$948.00 per security, which will be less than the issue price. The estimated value of the securities is based on Citigroup Global Markets Inc.'s ("CGMI") proprietary pricing models and our internal funding rate. It is not an indication of actual profit to CGMI or other of our affiliates, nor is it an indication of the price, if any, at which CGMI or any other person may be willing to buy the securities from you at any time after issuance. See "Valuation of the Securities" in this pricing supplement.
- (2) CGMI, an affiliate of Citigroup Inc. and the underwriter of the sale of the securities, is acting as principal and will receive an underwriting fee of \$15 for each \$1,000 security sold in this offering.CGMI will pay the registered representatives of CGMI a fixed sales commission of \$15 from this underwriting fee for each security they sell. Additionally, it is possible that CGMI and its affiliates may profit from expected hedging activity related to this offering, even if the value of the securities declines. You should refer to "Risk Factors" and "Plan of Distribution; Conflicts of Interest" in this pricing supplement for more information.

CGMI expects to deliver the securities to purchasers on or about May 5, 2014.

Investment Products Not FDIC insured May Lose Value No Bank Guarantee

The securities are not bank deposits and are not insured or guaranteed by the Federal Deposit Insurance Corporation or any other governmental agency, nor are they obligations of, or guaranteed by, a bank.

#### SUMMARY DESCRIPTION OF THE INDEX

The Citi Volatility Balanced Beta (VIBE) Equity US Price Return Index (the "index") is an equity-linked index that reflects the weighted performance of the stocks included in the S&P 100® Index (except for "excluded stocks," as defined in "Description of the Index" below). We refer to each of the stocks included in the index as a "constituent." The weights of the constituents in the index are assigned based on the rules-based methodology described under "Description of the Index" below (the "methodology") rather than on the basis of market capitalization. The objective of the methodology is to assign these weights so that each constituent will contribute equally to the overall volatility of the index. We refer to each of the stocks included in the S&P 100® Index as the "eligible constituents" and to the S&P 100® Index as the "eligible universe index." The index was developed by Citigroup Global Markets Limited (the "index sponsor"), an affiliate of Citigroup Inc., and was launched on June 10, 2011 with a start date of January 7, 2000. The index has no actual performance prior to June 10, 2011. You should refer to "Risk Factors—Risk Factors Relating to the Index—The index has limited historical information" below.

To calculate the level of the index, the index replicates notional positions in the constituents. There is no actual portfolio of assets in which any investor in the securities has any ownership or other interest. The index is a price return index, with no notional reinvestment of any regular dividends paid on the constituents.

The index sponsor has appointed S&P Dow Jones Indices, LLC ("S&P Dow Jones") as the "index calculation agent" but may, in its sole discretion and without notice, appoint an alternative index calculation agent at any time (which may be the index sponsor or one of its affiliates). The level of the index will be calculated and published daily on each index business day (as defined in "Description of the Index" below) under the Bloomberg page CIISRLUP <Index>.

You should carefully review the sections "Description of the Index" and "Risk Factors—Risk Factors Relating to the Index" in this pricing supplement for more information about the index and for a discussion of important risks relating to the index.

#### RISK FACTORS

The securities are not secured debt, are riskier than ordinary debt securities, do not pay any interest and do not guarantee any return of principal at maturity. Investing in the securities is not equivalent to investing in the index or the constituents. You should carefully consider whether the securities are suited to your particular circumstances before you decide to invest. Certain terms used in this section have their meanings set forth in "Description of the Index" below.

Risk Factors Relating to the Securities

The securities do not pay interest or guarantee return of principal

The terms of the securities differ from those of ordinary debt securities in that the securities do not pay interest and do not guarantee the return of any of the stated principal amount at maturity. If the final index level is less than the initial index level, the payment at maturity will be an amount in cash that is less than the \$1,000 stated principal amount of each security by an amount proportionate to the decrease in the final index level from the initial index level. There is no minimum payment at maturity on the securities, and, accordingly, you could lose your entire investment.

You will not receive any dividends paid on the constituents

As an investor in the securities, you will not receive any dividends paid on the constituents. Further, as the payment at maturity on the securities will be based on the level of the index on the valuation date, the payment at maturity on the securities will not reflect the value of any dividends paid on the constituents over the term of the securities except to the extent such dividends reduce the level of the index. Over the term of the securities, this forgone dividend yield may cause an investment in the securities to significantly underperform a direct investment in the constituents. You should not invest in the securities unless you are willing to forgo dividends in respect of the constituents.

The securities are subject to the credit risk of Citigroup Inc., and any actual or anticipated changes to its credit ratings and credit spreads may adversely affect the value of the securities

You are subject to the credit risk of Citigroup Inc. If we default on our obligations under the securities, your investment would be at risk and you could lose some or all of your investment. As a result, the value of the securities prior to maturity will be affected by changes in the market's view of our creditworthiness. Any decline, or anticipated decline, in our credit ratings or increase, or anticipated increase, in the credit spreads charged by the market for taking our credit risk is likely to adversely affect the value of the securities.

The securities will not be listed on any securities exchange and you may not be able to sell your securities prior to maturity

The securities will not be listed on any securities exchange. Therefore, there may be little or no secondary market for the securities. CGMI currently intends to make a secondary market in relation to the securities and to provide an indicative bid price for the securities on a daily basis. Any indicative bid price for the securities provided by CGMI will be determined in CGMI's sole discretion, taking into account prevailing market conditions and other relevant factors, and will not be a representation by CGMI that the securities can be sold at that price, or at all. CGMI may suspend or terminate making a market and providing indicative bid prices without notice, at any time and for any reason. If CGMI suspends or terminates making a market, there may be no secondary market at all for the securities because it is likely that CGMI will be the only broker-dealer that is willing to buy your securities prior to maturity. Accordingly, an investor must be prepared to hold the securities until maturity.

The estimated value of the securities on the pricing date, based on CGMI's proprietary pricing models and our internal funding rate, will be less than the issue price

The difference is attributable to certain costs associated with selling, structuring and hedging the securities that are included in the issue price. These costs include (i) the selling concessions paid in connection with the offering of the securities, (ii) hedging and other costs incurred by us and our affiliates in connection with the offering of the securities and (iii) the expected profit (which may be more or less than actual profit) to CGMI or other of our affiliates in connection with hedging our obligations under the securities. These costs adversely affect the economic terms of the securities because, if they were lower, the economic terms of the securities would be more favorable to you. The economic terms of the securities are also likely to be adversely affected by the use of our internal funding rate, rather than our secondary market rate, to price the securities. See "The estimated value of the securities would be lower if it were calculated based on our secondary market rate" below.

The estimated value of the securities was determined for us by our affiliate using proprietary pricing models

CGMI derived the estimated value disclosed on the cover page of this pricing supplement from its proprietary pricing models. In doing so, it may have made discretionary judgments about the inputs to its models, such as the volatility of the index, dividend yields on the constituents and interest rates. CGMI's views on these inputs may differ from your or

others' views, and as an underwriter in this offering, CGMI's interests may conflict with yours. Both the models and the inputs to the models may prove to be wrong and therefore not an accurate reflection of the value of the securities. Moreover, the estimated value of the securities set forth on the cover page of this pricing supplement may differ from the value that we or our affiliates may determine for the securities for other purposes, including for accounting purposes. You should not invest in the securities because of the estimated value of the securities. Instead, you should be willing to hold the securities to maturity irrespective of the initial estimated value.

The estimated value of the securities would be lower if it were calculated based on our secondary market rate

The estimated value of the securities included in this pricing supplement is calculated based on our internal funding rate, which is the rate at which we are willing to borrow funds through the issuance of the securities. Our internal funding rate is generally lower than the market rate implied by traded instruments referencing our debt obligations in the secondary market for those debt obligations, which we refer to as our secondary market rate. If the estimated value included in this pricing supplement were based on our secondary market rate, rather than our internal funding rate, it would likely be lower. We determine our internal funding rate based on factors such as the costs associated with the securities, which are generally higher than the costs associated with conventional debt securities, and our liquidity needs and preferences. Our internal funding rate is not an interest rate that we will pay to investors in the securities, which do not bear interest.

The estimated value of the securities is not an indication of the price, if any, at which CGMI or any other person may be willing to buy the securities from you in the secondary market

Any such secondary market price will fluctuate over the term of the securities based on the market and other factors described in the next risk factor. Moreover, unlike the estimated value included in this pricing supplement, any value of the securities determined for purposes of a secondary market transaction will be based on our secondary market rate, which will likely result in a lower value for the securities than if our internal funding rate were used. In addition, any secondary market price for the securities will be reduced by a bid-ask spread, which may vary depending on the aggregate stated principal amount of the securities to be purchased in the secondary market transaction, and the expected cost of unwinding related hedging transactions. As a result, it is likely that any secondary market price for the securities will be less than the issue price.

The value of the securities will be influenced by many unpredictable factors

Several factors will influence the value of the securities and the price, if any, at which CGMI may be willing to purchase the securities in any secondary market that may develop, including: the level and volatility of the index, the dividend yields on the constituents, U.S. interest and yield rates generally, time remaining to maturity of the securities and any actual or anticipated changes in the creditworthiness of Citigroup Inc., as reflected in our secondary market rate. You may receive less, and possibly significantly less, than the stated principal amount of the securities if you try to sell your securities prior to maturity. The level of the index may be, and has recently been, extremely volatile, and we can give you no assurance that the volatility will lessen. See "Description of the Index—Hypothetical Back-tested and Historical Information on the Index Levels" below. You may receive less, and possibly significantly less, than the stated principal amount of the securities if you try to sell your securities prior to maturity.

Immediately following issuance, any secondary market bid price provided by CGMI, and the value that will be indicated on any brokerage account statements prepared by CGMI or its affiliates, will reflect a temporary upward adjustment

The amount of this temporary upward adjustment will steadily decline to zero over the temporary adjustment period. See "Valuation of the Securities" in this pricing supplement.

Our offering of the securities does not constitute a recommendation of the index

Although the index sponsor is an affiliate of ours, you should not take our offering of the securities as an expression of our views about how the index will perform in the future or as a recommendation to invest in the index, including through an investment in the securities. As we are part of a global financial institution, our affiliates (including the index sponsor) may have positions (including short positions) that conflict with an investment in the index, including

positions in the constituents or instruments related to the index or the constituents. You should undertake an independent determination of whether an investment in the securities is suitable for you in light of your specific investment objectives, risk tolerance and financial resources.

Our affiliates may have published research, expressed opinions or provided recommendations that are inconsistent with investing in the securities and may do so in the future, and any such research, opinions or recommendations could adversely affect the level the index

CGMI and other of our affiliates may publish research from time to time relating to the financial markets, the index or any constituent included in the index. Any research, opinions or recommendations provided by CGMI may influence the level of the index and the value of the securities, and they may be inconsistent with purchasing or holding the securities. CGMI and other of our affiliates may have published or may publish research or other opinions that call into question the investment view implicit in an investment in the securities. Any research, opinions or recommendations expressed by such affiliates of ours may not be consistent with each other and may be modified from time to time without notice. Investors should make their own independent investigation of the index and the merits of investing in the securities.

We and our affiliates may have economic interests that are adverse to those of the holders of the securities as a result of our affiliates' business activities

Our affiliates may currently or from time to time engage in business with the issuer of any constituents (each, a "relevant issuer"). These activities may include extending loans to, making equity investments in or providing advisory services to a relevant issuer, including merger and acquisition advisory services. In the course of this business, we or our affiliates may acquire non-public information about a relevant issuer and we will not disclose any such information to you. Any prospective purchaser of the securities should undertake an independent investigation of any relevant issuer as in its judgment is appropriate to make an informed decision with respect to an investment in the securities. We do not make any representation or warranty to any purchaser of the securities with respect to any matters whatsoever relating to our affiliates' business with any relevant issuer.

If any of our affiliates is or becomes a creditor of a relevant issuer or otherwise enters into any transaction with a relevant issuer in the course of its business, such affiliate may exercise remedies against that issuer without regard to the impact on your interests as a holder of the securities.

Additionally, we or one of our affiliates may serve as issuer, agent or underwriter for issuances of other securities or financial instruments with returns linked or related to changes in the level of the index. To the extent that we or one of our affiliates does so, our or their interests with respect to these products may be adverse to those of the holders of the securities. By introducing competing products into the marketplace in this manner, we or one or more of our affiliates could adversely affect the value of the securities.

Investing in the securities is not equivalent to investing in the index

Investing in the securities is not equivalent to investing in the index. In addition to forgoing dividends, investors in the securities will not have voting rights with respect to any constituents.

Your payment at maturity is based on the level of the index on a single day

The payment at maturity of the securities is based on the level of the index on the valuation date. As a result, you are subject to the risk that the level of the index may be lower, and possibly significantly lower, on the valuation date than on one or more other dates during the term of the securities, including other dates near the valuation date. If you had invested directly in the index, or in another instrument linked to the index that you could liquidate for full value at a time selected by you, you might have achieved better returns.

The index sponsor is an affiliate of ours and, in its role as sponsor of the index, may have economic interests that are adverse to yours as an investor in the securities

The index sponsor is an affiliate of ours. The index sponsor will be responsible for making many determinations in connection with the index. These determinations include appointing an alternative index calculation agent and, in certain circumstances, determining whether to discontinue and cancel the index. These determinations may have an impact, positive or negative, on the level of the index and the value of the securities. In making these determinations, the index sponsor, as an affiliate of ours, is not acting as an advisor to you as an investor in the securities, is under no obligation to consider your interests as an investor in the securities and may have economic interests that are adverse to yours as an investor in the securities.

The calculation agent for the securities, which is an affiliate of ours, will make determinations with respect to the securities

CGMI, the calculation agent for the securities, is an affiliate of ours. As calculation agent for the securities, CGMI will determine, among other things, the initial index level, the final index level and the index percent increase or index performance factor, as applicable, and will calculate the amount of cash, if any, you will receive at maturity. Determinations made by CGMI, in its capacity as calculation agent for the securities, including with respect to the occurrence or non-occurrence of market disruption events and the selection of a successor index or calculation of the final index level in the event of a market disruption event, or discontinuance of the index, may adversely affect the payment, if any, to you at maturity.

The index calculation agent has no obligation to take your interests into account in performing its duties

S&P Dow Jones is the index calculation agent for the index. In that capacity, S&P Dow Jones will make many determinations with respect to the calculation of the index, including determinations that may require discretionary judgments in certain cases. In making these judgments, S&P Dow Jones will have no obligation to consider your interests as a holder of the securities. S&P Dow Jones is also the sponsor of the eligible universe index. In that role, S&P Dow Jones may make changes to the eligible universe index, and it will have no obligation to avoid any such changes that may adversely affect the performance of the index. Furthermore, the index sponsor may replace S&P Dow Jones as index calculation agent at any time, including with an affiliate of ours.

Hedging and trading activity by our affiliates could potentially affect the value of the securities

One or more of our affiliates expect to hedge our obligations under the securities and will carry out hedging activities related to the securities (and other instruments linked to the index and/or the constituents), including trading in the constituents and/or in instruments, such as options, swaps or futures related to the index and/or the constituents. Our affiliates also trade in the constituents and these instruments on a regular basis as part of their general broker-dealer, proprietary trading and other businesses. Any of these hedging or trading activities on or prior to the pricing date could potentially increase the initial index level and, as a result, could increase the value at which the index must close on the valuation date before an investor receives a payment at maturity that exceeds the issue price of the securities. Additionally, such hedging or trading activities during the term of the securities, including on the valuation date, could adversely affect the value of the index on the valuation date and, accordingly, the amount of cash, if any, an investor will receive at maturity.

The U.S. federal tax consequences of an investment in the securities are unclear

There is no direct legal authority regarding the proper U.S. federal tax treatment of the securities, and we do not plan to request a ruling from the Internal Revenue Service (the "IRS"). Consequently, significant aspects of the tax treatment of the securities are uncertain, and the IRS or a court might not agree with the treatment of the securities as prepaid forward contracts. If the IRS were successful in asserting an alternative treatment of the securities, the tax consequences of the ownership and disposition of the securities might be materially and adversely affected. As described below under "United States Federal Tax Considerations," in 2007, the U.S. Treasury Department and the IRS released a notice requesting comments on various issues regarding the U.S. federal income tax treatment of "prepaid forward contracts" and similar instruments. Any Treasury regulations or other guidance promulgated after consideration of these issues could materially and adversely affect the tax consequences of an investment in the securities, including the character and timing of income or loss and the degree, if any, to which income realized by non-U.S. persons should be subject to withholding tax, possibly with retroactive effect. You should read carefully the discussion under "United States Federal Tax Considerations" in this pricing supplement. You should also consult your tax adviser regarding the U.S. federal tax consequences of an investment in the securities, as well as tax consequences

arising under the laws of any state, local or non-U.S. taxing jurisdiction.

#### Risk Factors Relating to the Index

The methodology does not mean that the index is less risky than the S&P 100® Index or any other equity index, and the index may decline

The methodology assigns weights to the constituents in a manner intended to cause each constituent to contribute equally to the overall volatility of the index. This does not mean that the index will be less volatile or less likely to decline than the eligible universe index or any other equity index. As with any equity index, the Index Level may decline, possibly significantly, and you may lose money on the securities. Additionally, as described below under "—The index differs fundamentally from other widely used benchmarks of U.S. equity market performance and may not be representative of the performance of the U.S. equity market in general," the Index Level may decline even when the level of the eligible universe index or any other benchmark index increases.

The index is not intended to limit volatility as compared to the S&P 100® Index or otherwise

The index is not intended to limit volatility. Instead, the methodology assigns weights to the constituents in a manner intended to cause each constituent to contribute equally to the overall volatility of the index, without regard to whether the resulting overall volatility of the index is higher or lower than the eligible universe index, or high or low generally. The index may be more or less volatile than the eligible universe index or any other traditional benchmark index. Investors seeking to limit volatility as compared to the eligible universe index or generally should not seek exposure to the index.

The index is a price return index, not a total return index

The index is a price return index, not a total return index. A price return index reflects the returns from the increase or decrease in the prices of the stocks that are included in such index. By contrast, a total return index, in addition to reflecting those returns, also reflects notional reinvestment of any regular dividends paid on the stocks that are included in such index.

The index may significantly underperform the S&P 100® Index

Although the index is composed of stocks that constitute the eligible universe index (other than "excluded stocks" as defined in "Description of the Index" below), the index weights its constituents differently from the eligible universe index, and this may result in the index underperforming the eligible universe index, perhaps significantly. Whereas the eligible universe index weights its constituent stocks according to market capitalization, the index weights its constituents according to the methodology. The index is not designed to outperform the eligible universe index or any other index, and there can be no assurance that the methodology the index utilizes will result in greater returns, risk-adjusted or otherwise, than the eligible universe index or any other index over any given period of time.

Specifically, we expect the index will underperform the eligible universe index under the following scenarios:

- § during a period when stocks with larger market capitalizations have better returns than stocks with smaller market capitalizations, because stocks with larger market capitalizations will likely have greater weights in the eligible universe index than in the index; or
- §during a period when stocks with higher volatility have better returns than stocks with lower volatility, because stocks with higher volatility may have greater weights in the eligible universe index than in the index.

The index differs fundamentally from other widely used benchmarks of U.S. equity market performance and may not be representative of the performance of the U.S. equity market in general

Although the index is composed of stocks that are included in the eligible universe index and are also commonly included in certain other widely used benchmarks of U.S. equity market performance, the index is fundamentally different from the eligible universe index and those other benchmark indices because of the manner in which it assigns weights to the constituents. By assigning weights based on the methodology, rather than on a market capitalization or equal-weight basis, the index will generate returns that may differ significantly from the returns on the eligible universe index and those other benchmark indices. It is possible for the eligible universe index and other benchmark indices to increase over any given period while the index declines over the same period. The eligible universe index and certain other benchmark indices that include the constituents are widely considered to be indicators of the performance of the U.S. equity market in general. You should be aware that, to the extent that the performance of the index differs from the performance of the eligible universe index and those other benchmark indices, the index may not be considered to be representative of the performance of the U.S. equity market in general.

In addition, at any given time the index will be composed of no more than 100 stocks (and likely fewer, taking into account excluded stocks). The broader U.S. equity market contains many more than 100 stocks, and other benchmark indices that include more stocks may provide better indications of the performance of the U.S. equity market in general for the simple reason that they cover a larger portion of the U.S. equity market.

Accordingly, the index may not be appropriate for an investor seeking exposure to the U.S. equity market in general.

The index may not be successful in equalizing the volatility contributions of the constituents

There are a number of reasons why the index may not be successful in its aim of equalizing the contributions of the constituents to the overall volatility of the index.

First, the index is rebalanced in a manner intended to equalize the volatility contributions of the constituents only on each quarterly "rebalancing date" (as defined in "Description of the Index" below). Between rebalancing dates, the volatility contributions of the constituents will fluctuate with fluctuations in the price and volatility of each constituent and each constituent's correlation with the other constituents. The more time that has passed since the latest rebalancing date, the more unequal the volatility contributions of the constituents are likely to be. Moreover, even on a given rebalancing date, the volatility contributions of the constituents will likely not be equal because the weights given effect on the rebalancing date are based on covariances of the constituents measured as of the Selection Day (as defined in "Description of the Index" below) occurring three index business days prior to the rebalancing date.

Second, over the period between rebalancing dates, whether the index will come close to achieving its aim of equal volatility contributions will depend on whether the particular measures of covariance used by the index prove to be accurate indicators of the constituents' future covariance. This may not be the case. The index assigns weights to the constituents based on a blend of two different approaches to measuring covariance. Each measure has significant limitations, some of which are described under "— There are significant limitations inherent in the way the index measures the contribution of each constituent to the overall volatility of the index" below. Any given constituent's covariance with the other constituents may change rapidly and may differ significantly from its historical levels or from the levels calculated by the methodology.

Third, there is no single correct way to measure either the contribution of a constituent to the volatility of the index or the volatility of a constituent. The measures used by the index reflect many specific choices made in the design of the index, such as the use of 159 index business days in the case of the historical measure of covariance and 120 index business days for the implied measure of covariance, and not a shorter or longer period; the use of the particular

measure of implied volatility used by the index and not an alternative measure; the use of the exponential moving average of returns and not the daily returns in the historical measure of covariance; and the use of a blend of the historical and implied measures of covariance and not one or the other measure or a different measure entirely.

On each point, different choices could reasonably have been made, and those different choices might have resulted in significantly different index performance. Accordingly, even on a rebalancing date, the constituents may not be weighted in a manner that would cause them to have equal contributions to the overall volatility of the index using other measures of volatility contribution and volatility. An alternative index based on such other measures might perform better than the index.

Fourth, the index will not assign a weight to any constituent that would result in that constituent having a "percentage weight" (as defined in "Description of the Index" below) greater than 10%. If, but for this rule, the methodology would have resulted in one or more constituents having a percentage weight greater than 10%, the constituents will not contribute equally to the overall volatility of the index, even on the relevant rebalancing date.

Fifth, the optimization algorithm that the index uses to determine the percentage weights that would equalize the volatility contributions of the constituents is complex, can only be performed by a computer and is highly sensitive to the precision of its inputs (i.e., the covariance calculations performed pursuant to the methodology). The precision of the inputs to the optimization algorithm may vary depending on the rounding conventions used in the financial market for the primary data used in the calculations performed pursuant to the methodology as well as the rounding conventions determined to be appropriate by the index calculation agent.

Accordingly, the index may less accurately reflect the equal volatility contribution approach to index weighting than alternative indices that may rebalance more often than quarterly, that use alternative measures of volatility contribution, that do not apply a 10% cap or that use a different optimization algorithm to determine the percentage weights.

Sudden changes in the volatility and/or correlation of the constituents could have a significant negative effect on the index

If any given constituent has historically had, or the market expected it to have, low volatility and low correlation with the other constituents, that constituent would likely have a relatively large weight in the index. Consequently, if that constituent suddenly became significantly more volatile and/or became more highly correlated with the other constituents, there would be a significant impact on the volatility of the index. Moreover, when there are changes in the actual volatilities and correlations of the constituents, there may be a significant period of time before those changes are reflected in the weights, both because there is a time lag inherent in the formulas by which covariance is determined (which generally look back over a 120 or 159 index business day period) and because the index is rebalanced only once per quarter. As a result of this time lag, the overall volatility of the index may be influenced disproportionately by a relatively small number of newly volatile constituents for a significant period of time.

The index could become concentrated in a limited number of stocks

The methodology assigns weights to the constituents in a manner intended to cause each constituent to contribute equally to the overall volatility of the index. This does not mean that the constituents will have equal weights in the index. In fact, given the 10% limit on the percentage weighting of any constituent on a rebalancing date, the index could potentially concentrate substantially all of its exposure in only 10 constituents. Accordingly, the index may be less diversified, and by that measure more risky, than the eligible universe index. If the index becomes concentrated in a limited number of stocks, the index may decline significantly if those stocks decline in value.

Certain stocks that are included in the eligible universe index will be excluded from the index without notice

At any given time, the index will generally consist of each of the stocks included in the eligible universe index, excluding, among other stocks, the stock of Citigroup Inc. and any stocks on the index sponsor's "restricted list." The "restricted list" is an internal list of stocks that the index sponsor and/or any of its affiliates are not permitted to hold, buy, sell or otherwise deal in for a particular period of time due to laws, regulations or internal policies. For example, if an affiliate of the index sponsor were to act as an advisor to the issuer of a constituent with respect to an announced merger, that stock would appear on the restricted list. It is not possible at the present time to predict which or how many of the stocks included in the eligible universe index will be included on the restricted list at any given time in the future, and the identity of the stocks on the restricted list at any given time will not be made public. Moreover, the index sponsor and its affiliates will decide whether a stock is included on the restricted list without regard to any effect on the index or the securities. Over any given period of time, it is possible that the stock of Citigroup Inc. or the stocks on the restricted list during that period will appreciate significantly in value. Any appreciation in the price of the stock of Citigroup Inc. or the stocks on the restricted list will not be reflected in the Index Level.

There are significant limitations inherent in the way the index measures the contribution of each constituent to the overall volatility of the index

The index assigns weights to the constituents based on a measure of each constituent's marginal contribution to the overall volatility of the index. The index measures each constituent's marginal contribution to the overall volatility of the index based on two distinct measures of the covariance of that constituent's returns with the returns of each other constituent. In general, we refer to one approach to measuring covariance as a historical measure and to the other as an implied measure (although the implied measure incorporates historical elements). The historical measure is based on fluctuations in the 40-day exponential moving average of returns of the constituents over a look-back period of 120 index business days. This measure is premised on the notion that the constituents' historical covariance, as reflected in fluctuations in their respective exponential moving average of returns, may be used as an indicator of their future covariance. However, as discussed above, any constituent's volatility and correlation may change rapidly and differ significantly from its historical levels at any time, causing its covariance with each other constituent to change. Moreover, because the historical measure uses a look-back period of 120 index business days, there will be a time lag before any change in the constituent's actual covariance with the other constituents is fully reflected in this measure.

The implied measure is based on the level of volatility implied in listed options on the S&P 500® Index on each Selection Day, each constituent's beta, which measures its sensitivity to movements in the S&P 500® Index (in other words, its tendency to move in the same direction and to the same degree as the S&P 500® Index) over a look-back period of 120 index business days, and each constituent's correlation with the other constituents over a look-back period of 120 index business days. This measure is premised on the notion that the options market is a reliable indicator of both expected and actual future volatility, as well as on the notion that a constituent's historical beta and correlation with the other constituents are accurate indicators of its future beta and correlation with the other constituents. However, market expectations may be, and in the past have been, wrong, and the market forecast of the volatility of the S&P 500® Index at any given time may prove to be incorrect for the simple reason that the market cannot predict the future. Moreover, betas and correlations may change over time as circumstances change. This measure is also premised on the notion that combining the implied volatility of the S&P 500® Index with the beta of a constituent is a reasonably accurate way to measure the market's expectations of the future volatility of that constituent. However, if the market expects a particular constituent to be more volatile in the future than it has been in the past but does not expect a change in the volatility of the S&P 500® Index as a whole, the implied volatility measurement obtained using this approach will likely diverge significantly from the market's actual expectation of future volatility of that constituent, as might be measured by reference to options on that constituent at the applicable time.

There are many different ways to measure covariance and volatility, and the particular measures the index uses may produce results that differ, perhaps significantly, from the results that would have been produced by other measures. For example, the historical measure of covariance the index uses does not look at the deviations of daily returns from the applicable average over the look-back period, as would more typically be the case, but rather looks at fluctuations in the exponential moving average of returns on each day. The implied measure used by the index measures the implied volatility of each constituent not by reference to options on the particular constituent, as would more typically be the case, but rather by reference to the implied volatility of the S&P 500® Index and that constituent's beta with respect to the S&P 500® Index. The weights that result from the particular measures of covariance and volatility used by the index will likely differ from the weights that would result from alternative measures, and that difference may result in lower Index performance.

Moreover, the methodology makes certain assumptions in calculating the two measures of covariance, such as specific time periods over which data are collected, and it may be that alternate assumptions would have resulted in better Index performance.

There may be significant daily fluctuations in the Index Level, which will affect the value of the securities

The hypothetical back-tested and historical performance of the index have been highly volatile. It is likely that the index will continue to be highly volatile in the future, with the potential for significant fluctuations in the daily performance of the index. Accordingly, the index is not designed for investors who are not willing to be exposed to potential significant fluctuations in the Index Level and, therefore, in the value of the securities.

Adjustments to the eligible universe index or Reference Vol Index could adversely affect the Index Level and the value of the securities

S&P Dow Jones may add, delete or substitute the stocks that constitute the eligible universe index and the Reference Vol Index (each as defined in "Description of the Index" below) or make other methodological changes to the eligible universe index or the Reference Vol Index that could result in an adverse effect on the index. S&P Dow Jones will not consider the interests of investors in the securities when making any such changes. In addition, S&P Dow Jones may discontinue or suspend calculation or publication of the eligible universe index or the Reference Vol Index at any time. In such an event, the index calculation agent, which is initially S&P Dow Jones, will have the sole discretion to substitute a Successor Reference Index that is comparable to the discontinued index and make adjustments to the Index Conditions as it determines appropriate to account for such change, or, in certain circumstances, suspend the calculation, publication and dissemination of the index either temporarily or permanently. The index calculation agent is not precluded from considering any Successor Reference Index (as defined in "Description of the Index" below) that is calculated and published by the index calculation agent, the index sponsor or any of their respective affiliates.

If S&P Dow Jones adds a stock to the eligible universe index, that stock will not become eligible for inclusion in the index until the next quarterly rebalancing date. Any positive performance of such stock prior to such rebalancing date will not be reflected in the performance of the index.

The index has limited historical information

The index was created on June 10, 2011, and the index sponsor has published limited information about how the index would have performed had it been calculated in the past. Because the index is of recent origin and limited historical performance data exist with respect to it, an investment in the securities may involve a greater risk than an investment in a financial product linked to one or more indices with an established record of performance. A longer history of actual performance may have been helpful in providing more reliable information on which to assess the validity of the index's proprietary methodology as the basis for an investment decision. Furthermore, any back-tested or historical

performance of the index is not an indication of how the index will perform in the future.

Historical and hypothetical back-tested performance of the index should not be taken as an indication of the future performance of the index

It is impossible to predict whether the index will rise or fall. The actual future performance of the index may bear little relation to the historical or hypothetical back-tested levels of the index, which, in most cases, have been highly volatile.

Any information regarding the performance of the index prior to June 10, 2011 is hypothetical and back-tested. Such information should not be taken as an indication of the future performance of the index. Any upward or downward trend in the hypothetical back-tested Index Levels during any period is not an indication that the index Level is more or less likely to increase or decrease in the future. Any back-tested Index Levels provided by the index sponsor are based solely on back-tested simulation and are provided for illustrative purposes only. They represent an estimate of the past performance of the index based on certain data, assumptions and estimates, not all of which may be specified herein, and which may be different from the data, assumptions and estimates that someone else might use to back-test the index. Any back-tested simulation provided by the index sponsor uses the published closing levels for the constituents for the applicable period and applies the methodology substantially as described herein, but certain assumptions have been made to simplify modelling. In particular, the back-tested Index Levels do not reflect any adjustment to the back-tested weights of the constituents described herein or any adjustment on account of Disrupted Days (as defined in "Description of the Index" below). In addition, constituents that may have been included on the index sponsor's restricted list during any back-tested period have not been excluded from the index for purposes of calculating the back-tested Index Levels. Simulation based on different assumptions or for a different historical period may produce different results.

You will not have any rights with respect to the constituents

The exposure of the index to the constituents is purely notional and will exist solely in the records maintained by or on behalf of the index calculation agent. There is no actual portfolio of assets to which any person is entitled or in which any person has any ownership interest.

An investor in the securities will not have the rights that investors in the constituents have, will not own or have any beneficial or other legal interest in, and will not be entitled to any rights with respect to, any of the constituents and will not have voting rights in, or be entitled to receive dividend payments or other distributions, if any, made on the constituents.

#### DESCRIPTION OF THE SECURITIES

You should read this pricing supplement together with the accompanying prospectus supplement and prospectus before making your decision to invest in the Securities. The description in this pricing supplement of the particular terms of the Securities supplements, and to the extent inconsistent therewith replaces, the descriptions of the general terms and provisions of the debt securities set forth in the accompanying prospectus supplement and prospectus.

You may access the prospectus supplement and prospectus on the SEC Web site at www.sec.gov as follows (or if such address has changed, by reviewing our filing for November 13, 2013 on the SEC Web site):

§ Prospectus Supplement and Prospectus each dated November 13, 2013: <a href="http://www.sec.gov/Archives/edgar/data/831001/000119312513440005/d621350d424b2.htm">http://www.sec.gov/Archives/edgar/data/831001/000119312513440005/d621350d424b2.htm</a>

#### General

The Upturn Securities Based on the Citi Volatility Balanced Beta (VIBE) Equity US Price Return Index Due May , 2018 (the "Securities") are investments linked to the performance of the Citi Volatility Balanced Beta (VIBE) Equity US Price Return Index (the "Index"). The "Maturity Date" for the Securities is May , 2018 (expected to be May 3, 2018). At maturity, you will receive, for each \$1,000 stated principal amount of Securities that you then hold, an amount in cash that will vary depending upon the Closing Level (as defined below) of the Index on the Valuation Date (as defined below) and which may be significantly less than the stated principal amount of the Securities and possibly zero. The Index is described below under "Description of the Index."

We will not make any periodic payments of interest on the Securities. You should carefully consider whether an investment that does not provide for periodic interest payments is appropriate for you.

All payments on the Securities are subject to the credit risk of Citigroup Inc. The Securities will rank equally with all other unsecured and unsubordinated debt of Citigroup Inc.

The Securities will be issued only in fully registered form and in denominations of \$1,000 per Securities and integral multiples thereof. Each Security represents a stated principal amount of \$1,000. You may transfer the Securities only in units of \$1,000 and integral multiples of \$1,000. You will not have the right to receive physical certificates evidencing your ownership except under limited circumstances. Instead, we will issue the Securities in the form of a global certificate, which will be held by The Depository Trust Company ("DTC") or its nominee. Direct and indirect participants in DTC will record beneficial ownership of the Securities by individual investors. Accountholders in the Euroclear or Clearstream Banking clearance systems may hold beneficial interests in the Securities through the accounts those systems maintain with DTC. You should refer to the section "Description of the Notes—Alternative Book-Entry Procedures and Settlement" in the accompanying prospectus supplement and the section "Description of Debt Securities—Book-Entry Procedures and Settlement" in the accompanying prospectus.

Reference is made to the accompanying prospectus for a detailed summary of additional provisions of the Securities and of the senior debt indenture under which the Securities will be issued.

#### Payment at Maturity

At maturity, you will receive for each Security you then hold a Payment at Maturity equal to:

§ If the Final Index Level is greater than or equal to the Initial Index Level:

\$1,000 + the Leveraged Return Amount

§ If the Final Index Level is less than the Initial Index Level:

 $1,000 \times$  the Index Performance Factor

In this case, you will participate on a 1-to-1 basis in any negative performance of the Index from the Pricing Date to the Valuation Date, and there will be no minimum payment at maturity. Instead, your payment at maturity will be less, and possibly significantly less, than the \$1,000 stated principal amount per Security. You should not invest in the Securities unless you are willing and able to bear the risk of losing up to all of your investment.

#### Certain Definitions

A "Business Day" means any day that is not a Saturday, a Sunday or a day on which the securities exchanges or banking institutions or trust companies in the City of New York are authorized or obligated by law or executive order to close.

The "Closing Level" on any date of determination means, subject to the terms described under "—Discontinuance of the Index; Alteration of Method of Calculation" below, the Index Level of the Index (as defined in "Description of the Index" below) on such day as published by the Index Sponsor. If a Market Disruption Event occurs with respect to any Constituent on any date of determination or if any date of determination is not an Index Business Day, the Calculation Agent for the Securities will calculate the Closing Level of the Index in respect of that date of determination in good faith in accordance with the formula for and method of calculating the Index last in effect prior to commencement of the Market Disruption Event or on the prior Index Business Day, as applicable, using:

- (i) for each Constituent with respect to which a Market Disruption Event did not occur on that date of determination, the Constituent Closing Level of such Constituent on its Exchange on that date of determination and as to which that date of determination is a Scheduled Trading Day; and
- (ii) for each Constituent with respect to which a Market Disruption Event occurs on that date of determination or as to which that date of determination is not a Scheduled Trading Day, the Constituent Closing Level of such Constituent on its Exchange on the earlier of (A) the immediately succeeding Scheduled Trading Day for such Constituent on which no Market Disruption Event occurs or is continuing with respect to such Constituent and (B) the Business Day immediately prior to the Maturity Date (the earlier of (A) and (B), the "Final Determination Date"); provided that, if a Market Disruption Event has occurred or is continuing with respect to such Constituent on such Final Determination Date or if such Final Determination Date is not a Scheduled Trading Day for such Constituent, then the Constituent Closing Level for such Constituent on such Final Determination Date will be the arithmetic mean, as determined by the Calculation Agent for the Securities, of the bid prices of the Constituent obtained from as many dealers in such Constituent (which may include CGMI or any of our other affiliates or subsidiaries), but not exceeding three such dealers, as will make such bid prices available to the Calculation Agent for the Securities; provided, further, that if no bid prices are provided by any third party dealers, the Constituent Closing Level of such Constituent on such Final Determination Date will be determined by the Calculation Agent for the Securities in its sole discretion taking into account the latest available quotation for the Constituent Closing Level of such Constituent and any other information

that in good faith it deems relevant.

The term "Constituent" has the meaning specified under "Description of the Index" below.

Except as otherwise provided in the definition of "Closing Level," the term "Constituent Closing Level" has the meaning specified under "Description of the Index" below.

The "Exchange" means, in respect of each Constituent, the primary exchange, trading system or quotation system in respect of such Constituent or any successor to such exchange, trading system or quotation system, or any substitute exchange, trading system or quotation system to which trading in such Constituent has temporarily relocated, provided that there is comparable liquidity relative to such Constituent on such temporary substitute exchange, trading system or quotation system as on the original exchange, trading system or quotation system.

An "Exchange Business Day" means, in respect of any Constituent, any Scheduled Trading Day for such Constituent on which the relevant Exchange and each relevant Related Exchange are open for trading during their respective regular trading sessions, notwithstanding such Exchange or any such Related Exchange closing prior to its Scheduled Closing Time.

The "Final Index Level" will equal the Closing Level of the Index on the Valuation Date.

An "Index Business Day" means a day that is (1) a day on which commercial banks and foreign exchange markets are open for general business (including dealings in foreign exchange and foreign exchange currency deposits) in London and New York; and (2) a Scheduled Trading Day for each Constituent.

The "Index Percent Increase" will be (i) the Final Index Level minus the Initial Index Level divided by (ii) the Initial Index Level.

The "Index Performance Factor" will be (i) the Final Index Level divided by (ii) the Initial Index Level.

The "Index Sponsor" is Citigroup Global Markets Limited.

The "Initial Index Level" equals , the Closing Level of the Index on the Pricing Date.

The "Leverage Factor" will be \$\(\) (to be determined on the Pricing Date and is expected to be 127% to 132%).

The "Leveraged Return Amount" will be equal to the product of (i) \$1,000 multiplied by (ii) the Index Percent Increase multiplied by (iii) the Leverage Factor.

A "Market Disruption Event" in respect of any Constituent means any of the events set out below:

- (a) the relevant Exchange or any relevant Related Exchange fails to open for trading during its regular trading session;
- (b) the occurrence or existence at any time during the one-hour period which ends at the relevant Valuation Time of any suspension of or limitation imposed (whether by reason of movements in price exceeding permitted limits or otherwise) on the trading on (i) the relevant Exchange of such Constituent; or (ii) any relevant Related Exchange of futures contracts or options contracts relating to such Constituent;
- (c) the occurrence or existence at any time during the one-hour period which ends at the relevant Valuation Time on such Scheduled Trading Day of any other event (other than an event described in sub-paragraph (d) or sub-paragraph (e) of this definition) that disrupts or impairs the ability of market participants in general (i) (on the relevant Exchange) to effect transactions in or to obtain market values for such Constituent; or (ii) (on any relevant Related Exchange) to effect transactions in or to obtain market values for any futures contracts or options contracts relating to such Constituent;
- (d) the closure on any Exchange Business Day of the relevant Exchange prior to its Scheduled Closing Time (unless such earlier closing time is announced by such Exchange at least one hour prior to the earlier of (i) the actual

closing time for the regular trading session on such Exchange on such Exchange Business Day; and (ii) the deadline for the submission of orders to be entered into such Exchange system for execution at the relevant Valuation Time on such Exchange Business Day); or

(e) the closure on any Exchange Business Day of any relevant Related Exchange in respect of futures contracts or options contracts relating to such Constituent prior to its Scheduled Closing Time (unless

such earlier closing time is announced by such Related Exchange at least one hour prior to the earlier of (i) the actual closing time for the regular trading session on such Related Exchange on such Exchange Business Day; and (ii) the deadline for the submission of orders to be entered into such Related Exchange system for execution at the Valuation Time on such Exchange Business Day).

The "Maturity Date" is May , 2018 (expected to be May 3, 2018). If the Maturity Date falls on a day that is not a Business Day, the payment to be made on the Maturity Date will be made on the next succeeding Business Day with the same force and effect as if made on the Maturity Date, and no interest will accrue as a result of such delayed payment.

The "Pricing Date" is April , 2014 (expected to be April 30, 2014), the date we price the Securities for initial sale to the public.

A "Related Exchange" means, in respect of each Constituent, each exchange, trading system or quotation system where trading has a material effect on the overall market for futures contracts or options contracts relating to such Constituent.

The "Scheduled Closing Time" means, in respect of any Constituent, Scheduled Trading Day and Exchange or Related Exchange (as relevant) for such Constituent, the scheduled weekday closing time on such Exchange or Related Exchange on such Scheduled Trading Day, without regard to after-hours trading or any other trading outside the hours of the regular trading session on such Exchange or Related Exchange.

A "Scheduled Trading Day" means, in respect of each Constituent, any day on which the relevant Exchange and each relevant Related Exchange is scheduled to be open for trading for its regular trading session.

The "Valuation Date" will be April , 2018 (expected to be April 30, 2018). If the originally scheduled Valuation Date is not an Index Business Day, it may be postponed by the Calculation Agent for the Securities to the earlier of (i) the next succeeding day that is an Index Business Day and (ii) the Index Business Day immediately prior to the Maturity Date.

The "Valuation Time" means, in respect of a Constituent and a Scheduled Trading Day for such Constituent, the Scheduled Closing Time on the relevant Exchange on such Scheduled Trading Day.

What You Could Receive at Maturity—Hypothetical Payment at Maturity Graph

The graph and examples below show hypothetical payments at maturity on the Securities for a range of Final Index Levels. The following graph and examples are for purposes of illustration only and would provide different results if different assumptions were applied. The actual amount you receive in respect of the Securities at maturity will depend on the actual Leverage Factor and the actual Initial Index Level, each of which will be determined on the Pricing Date, and the actual Final Index Level.

Investors in the Securities will not receive any dividends on the Constituents. The graph and examples below do not show any effect of lost dividend yield over the term of the Securities. See "Risk Factors—Risk Factors Relating to the Securities—You will not receive any dividends paid on the constituents" in this pricing supplement.

The graph and examples are based on the following terms and assumptions:

Stated Principal Amount: \$1,000 per Security

Hypothetical	Leverage Factor:	127%
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Hypothetical Initial Index Level: 230.00

Example 1—Upside Scenario. The hypothetical Final Index Level is 253.00 (a 10% increase from the hypothetical Initial Index Level), which is greater than the hypothetical Initial Index Level.

Payment at maturity per Security = \$1,000 + the Leveraged Return Amount

= \$1,000 + (\$1,000 × the Index Percent Increase × the hypothetical Leverage Factor)

 $= \$1,000 + (\$1,000 \times 10\% \times 127\%)$ 

=\$1,127

Because the Index appreciated from its hypothetical Initial Index Level to its hypothetical Final Index Level, your payment at maturity in this scenario would be equal to \$1,127 per security.

Example 2—Downside Scenario A. The hypothetical Final Index Level is 161.00 (a 30% decrease from the hypothetical Initial Index Level), which is less than the hypothetical Initial Index Level.

Payment at maturity per Security =  $\$1,000 \times$  the Index Performance Factor

 $= $1,000 \times 70\%$ 

= \$700

Because the hypothetical Final Index Level decreased from the hypothetical Initial Index Level, your payment at maturity in this scenario would reflect 1-to-1 exposure to the negative performance of the Index.

Example 3—Downside Scenario B. The hypothetical Final Index Level is 69.00 (a 70% decrease from the hypothetical Initial Index Level), which is less than the hypothetical Initial Index Level.

Payment at maturity per Security =  $$1,000 \times \text{ the Index Performance Factor}$ 

= \$1,000  $\times$  30%

= \$300

Because the hypothetical Final Index Level decreased from the hypothetical Initial Index Level, your payment at maturity in this scenario would reflect 1-to-1 exposure to the negative performance of the Index.

Discontinuance of the Index; Alteration of Method of Calculation

If the Index Sponsor (as defined in "Description of the Index" below) discontinues publication of the Index, and it or another entity (including CGMI) publishes a successor or substitute index that the Calculation Agent for the Securities determines, in its sole discretion, to be comparable to the discontinued Index, then the value of the Index will be determined by reference to the value of that index, which we refer to as a "Successor Index." In such an event, the Calculation Agent for the Securities will, in its sole discretion, make any adjustment to any value of the Index or the Successor Index used for purposes of the Securities as it may deem appropriate in order to account for the effect of the substitution.

Upon any selection by the Calculation Agent for the Securities of a Successor Index, the Calculation Agent for the Securities will cause notice to be furnished to the Trustee, us and to DTC, as holder of the Securities, within three Business Days of such selection. We expect that such notice will be made available to you, as a beneficial owner of the Securities, in accordance with the standard rules and procedures of DTC and its direct and indirect participants.

If the Index Sponsor discontinues publication of the Index prior to, and such discontinuance is continuing on, the Valuation Date or the date of acceleration and the Calculation Agent for the Securities determines, in its sole discretion, that no Successor Index is available at such time, then the Calculation Agent for the Securities will determine the Closing Level for the Index for such date. Such Closing Level will be computed by the Calculation Agent for the Securities in accordance with the formula for calculating the Index last in effect prior to such discontinuance, using only the securities included in the Index immediately prior to such discontinuance, without any rebalancing or substitution of such securities after such discontinuance. Notwithstanding these alternative arrangements, discontinuance of the publication of the Index may adversely affect the value of the Securities.

If at any time the method of calculating the Index or a Successor Index is changed in any material respect, or if the Index or any Successor Index is in any other way modified so that the value of the Index or the Successor Index does not, in the opinion of the Calculation Agent for the Securities, fairly represent the value of that index had the changes or modifications not been made, then, from and after that time, the Calculation Agent for the Securities will, as of the close of business in New York, New York, make those adjustments as, in the good faith judgment of the Calculation Agent for the Securities, may be necessary in order to arrive at a calculation of a value of an index comparable to the Index or any Successor Index as if the changes or modifications had not been made, and calculate the value of the index with reference to the Index or the Successor Index. Accordingly, if the method of calculating the Index or any Successor Index is modified so that the value of the Index or any Successor Index is a fraction or a multiple of what it would have been if it had not been modified, then the Calculation Agent for the Securities will adjust that index in order to arrive at a value of the index as if it had not been modified.

No Redemption By a Holder

The Securities are not subject to redemption at the option of any holder prior to maturity.

Events of Default and Acceleration

In case an event of default with respect to the Securities shall have occurred and be continuing, the amount declared due and payable per Security upon any acceleration of the Securities shall be determined by the Calculation Agent for the Securities and shall be an amount in cash equal to the Payment at Maturity calculated using the Closing Level of the Index as of the date of such acceleration as the Final Index Level. In case of default under the Securities, the Securities will not bear a default interest rate either before or after the Maturity Date.

If the maturity of the Securities is accelerated because of an event of default as described above, we shall, or shall cause the Calculation Agent for the Securities to, provide written notice to the Trustee at its New York office, on which notice the Trustee may conclusively rely, and to DTC of the cash amount due with respect to the Securities as promptly as possible and in no event later than two Business Days after the date of acceleration.

#### Paying Agent and Trustee

Citibank, N.A. will serve as paying agent and registrar for the Securities and will also hold the global security representing the Securities as custodian for DTC. The Bank of New York Mellon (as trustee under an indenture dated November 13, 2013) will serve as trustee for the Securities.

#### Calculation Agent

The Calculation Agent for the Securities will be CGMI. All determinations made by the Calculation Agent for the Securities will be at the sole discretion of the Calculation Agent for the Securities and will, in the absence of manifest error, be conclusive for all purposes and binding on you, the Trustee and us.

All calculations with respect to the Payment at Maturity will be rounded to the nearest one hundred-thousandth, with five one-millionths rounded upward (e.g., .876545 would be rounded to .87655); all dollar amounts related to determination of the amount of cash payable per Security will be rounded to the nearest ten-thousandth, with five one hundred-thousandths rounded upward (e.g., .76545 would be rounded up to .7655); and all dollar amounts paid on the aggregate number of Securities will be rounded to the nearest cent, with one-half cent rounded upward.

Determinations made by the Calculation Agent for the Securities, an affiliate of ours, including with respect to the occurrence or non-occurrence of Market Disruption Events and the selection of a Successor Index or calculation of the Final Index Level in the event of a Market Disruption Event, or discontinuance of the Index, may affect the Payment at Maturity. See "—Discontinuance of the Index; Alteration of Method of Calculation" and the definitions of "Closing Level" and "Market Disruption Event" above. CGMI is obligated to carry out its duties and functions as Calculation Agent in good faith and using its reasonable judgment.

#### CUSIP and ISIN

The CUSIP for the Securities is 1730T0N47. The ISIN for the Securities is US1730T0N477.

#### DESCRIPTION OF THE INDEX

#### General

The Citi Volatility Balanced Beta (VIBE) Equity US Price Return Index (the "Index") is an equity-linked index that reflects the weighted performance of the stocks included in the S&P 100® Index (with exceptions described below) (each stock included in the Index, a "Constituent"), where the weights of the Constituents in the Index are assigned pursuant to the rules-based methodology described below (the "Methodology") rather than on the basis of market capitalization. The objective of the Methodology is to assign these weights so that each Constituent will contribute equally to the overall volatility of the Index. We refer to each of the stocks included in the S&P 100® Index as the "Eligible Constituents" and to the S&P 100® Index as the "Eligible Universe Index". The Index was developed by Citigroup Global Markets Limited (the "Index Sponsor"), an affiliate of Citigroup Inc., and was launched on June 10, 2011 with a start date of January 7, 2000 (the "Index Start Date"). The Index Level (as described below) on the Index Start Date was set at 100.

To calculate the level of the Index, the Index replicates notional positions in the Constituents. There is no actual portfolio of assets in which any investor in the Securities has any ownership or other interest. The Index is a price return index, with no notional reinvestment of any regular dividends paid on the Constituents.

The Index Sponsor has initially appointed S&P Dow Jones Indices LLC ("S&P Dow Jones") as the "Index Calculation Agent" but may, in its sole discretion and without notice, appoint an alternative Index Calculation Agent at any time (which may be the Index Sponsor or one of its affiliates). The level of the Index will be calculated and published daily on each Index Business Day (as defined below) under the Bloomberg page CIISRLUP <Index>.

The Index conditions (the "Index Conditions") that set forth the specific rules governing the Index are attached as Annex A to this pricing supplement. Where this description of the Index conflicts with the Index Conditions, the Index Conditions control.

#### Objective of the Index

Although all of the stocks included in the Index are also included in the Eligible Universe Index, the Index is not the same as the Eligible Universe Index. In part, this is because the Index and the Eligible Universe Index assign weights to their constituent stocks differently. The Eligible Universe Index assigns weights to the Eligible Constituents based on market capitalization, so that stocks that have a greater market capitalization will have a higher weight compared to those with a lesser market capitalization. For example, the top 10 Eligible Constituents by market capitalization could represent a weight of 30% of the overall value of the Eligible Universe Index. This type of weight would also mean that the volatility of these more heavily weighted Eligible Constituents would likely contribute more to the overall volatility of the Eligible Universe Index. If those top 10 Eligible Constituents were extremely volatile, then the overall Eligible Universe Index likely would be more volatile than if those stocks were weighted less heavily in the Eligible Universe Index. Alternatively, if those top 10 Eligible Constituents were relatively less volatile, then the overall volatility of the Eligible Universe Index likely would be lower than if those stocks were weighted less heavily in the Eligible Universe Index.

Instead of weighting the Constituents based on market capitalization, the Methodology attempts to weight the Constituents in a manner that will result in each Constituent contributing equally to the overall volatility of the Index, subject to the constraint that the weight assigned by the Methodology to any individual Constituent will not be greater than 10%. In general, this means that Constituents that have a higher volatility relative to the other Constituents and a stronger correlation with the returns of the other Constituents will be weighted less, and that Constituents with a lower volatility relative to the other Constituents and a lower correlation with the returns of the other Constituents will be

weighted more. While the Eligible Universe Index will have an overall volatility level that is disproportionately influenced by the volatilities of the Eligible Constituents with the largest market capitalizations, the Index's objective is to have an overall volatility level that is influenced by each of the Constituents equally.

The Methodology does not mean that the Index will necessarily have a low volatility or a high volatility.

Just like a market capitalization-based index like the Eligible Universe Index, the overall volatility of the Index itself may be low or high depending on the volatilities of the individual Constituents and their correlations with each other. However, unlike a market capitalization-based index, the overall volatility level of the Index will depend less on the stocks with the largest market capitalizations. Accordingly, the Index may be used as a measure of overall market exposure to the same Eligible Constituents included in the Eligible Universe Index (with exceptions described below), but with a weighting that is more systematically designed to produce equal contributions to the Index level's overall volatility.

### Volatility Generally

Because the Methodology seeks to assign weights to the Constituents so that each Constituent contributes equally to the overall volatility of the Index, it is important for you to understand volatility and how the Index measures the contribution of each Constituent to the overall volatility of the Index. In general, the volatility of a stock or of an index is a statistical measure of the magnitude and frequency of fluctuations in that stock's price, or that index's level, over time.

The overall volatility of an index, such as the Index, that tracks multiple individual stocks will depend on (i) the volatility of each stock in the index, (ii) the relationship (or correlation) between each stock's performance and the performance of each other stock in the index and (iii) the percentage weights of the various stocks in the index. Each stock in an index will contribute to the overall volatility of the index, and the overall volatility of the index will be equal to the sum of each constituent stock's contribution to that overall volatility. There are different ways of measuring a constituent stock's contribution to the overall volatility of an index. The Index measures the contribution of each Constituent to the overall volatility of the Index by multiplying the percentage weight of that Constituent in the Index by that Constituent's marginal contribution to the overall volatility of the Index. A Constituent's marginal contribution to the overall volatility of the Index is a measure of the extent to which the overall volatility of the Index would change if there were an incremental change in the weight of the Constituent. A Constituent with a relatively high volatility and a high correlation with the returns of the other Constituents will have a relatively high marginal volatility contribution, because an increase in the weight of a Constituent with a relatively high volatility and high correlation with the returns of the other Constituents would likely result in a relatively large increase in the overall volatility of the Index. Conversely, a Constituent with a relatively low volatility and low correlation with the returns of the other Constituents will have a relatively low marginal volatility contribution. Formulaically, we can describe the contribution of a Constituent to the overall volatility of the Index as follows:

Volatility contribution = Percentage weight of Constituent × Marginal volatility contribution of Constituent

Given that the contribution of a Constituent to the overall volatility of the Index depends on its percentage weight in the Index and its marginal volatility contribution, it is possible to select a percentage weight for each Constituent that would result in the Constituents having equal volatility contributions if the marginal volatility contribution of each Constituent can be measured. There are a number of ways in which the marginal volatility contribution of a Constituent could be measured. The Index measures the marginal volatility contribution of each Constituent by determining the covariance between that Constituent and each other Constituent in the Index.

Covariance is a statistical measure of the extent to which two variables (in the case of the Index, the returns of each pairing of Constituents) fluctuate at the same time, in the same direction and to the same degree. A positive covariance means that the two variables tend to move together and in the same direction, while a negative covariance means that the variables tend to move in opposite directions. If two stocks have positive covariance, that means that those stocks tend to react to market events in a similar way, and the higher the covariance, the more likely this will be the case;

conversely, if they have negative covariance, that means that they tend to react inversely to market events, and the lower the covariance (the more highly negative), the more likely this will be the case.

In general, there are two basic methods by which the covariance of two stocks could be measured (each of which has many variations). The first method determines the covariance of two stocks based on the volatility of each stock and the correlation between their returns. The second method determines the covariance of two stocks based on deviations in the daily returns of each stock from their respective averages over a given period. Either way it is calculated, the covariance of two stocks is reflective of their respective volatilities and correlation with each other.

The Index measures each Constituent's marginal contribution to the overall volatility of the Index (i.e., its covariance with each other Constituent) in two ways, each of which uses one of these methods for measuring covariance. The first way uses the "implied volatility" of each Constituent and the correlation of the returns of each Constituent with those of each other Constituent to determine the covariance of each Constituent with each other Constituent. Implied volatility is a measure of volatility assumed in the price of certain types of financial instruments, such as options or other derivatives, and serves as a forward-looking measure of the market's expectations of future volatility at any given time. The second way uses the "exponential moving average" of historical returns of each Constituent and determines the covariance of each Constituent with each other Constituent based on deviations in the daily value of this exponential moving average for each Constituent from the average value of the exponential moving average for each Constituent over the applicable period. An exponential moving average is a measure of average returns that gives greater weight to more recent returns in computing the average. The Index measures the marginal volatility contribution of each Constituent in both of these ways and uses both measures for purposes of determining the Percentage Weights (as defined below) of the Constituents. Each approach has a number of shortcomings. For example, implied volatility is especially sensitive to current market prices and is subject to the weaknesses inherent in any prediction of future events, and historical measures suffer from a time lag in adjusting to new market conditions or events. The Methodology uses both approaches, in part, to attempt to mitigate potential biases each particular approach may have. See "Risk Factors Relating to the Index—The index may not be successful in equalizing the volatility contributions of the Constituents" and "—There are significant limitations inherent in the way the index measures the contribution of each Constituent to the overall volatility of the index" in this pricing supplement for a discussion of these and other limitations inherent in using these approaches to measuring each Constituent's contribution to the overall volatility of the Index.

You should note that there are many different ways in which the contribution of a Constituent to the overall volatility of the Index could be measured. The Methodology uses a blend of the two specific approaches described above and in more detail below. If different approaches were used, or even if only one of these two approaches were used, the Percentage Weights of each Constituent, and, consequently, the performance of the Index, would be different.

#### Construction of the Index

The Index tracks the performance of a notional portfolio consisting of the Constituents, each having a weight determined pursuant to the Methodology. This notional portfolio is constructed in three stages, each explained in more detail below: (1) selection of the Constituents; (2) determination of the Percentage Weights; and (3) determination of the Weights (as defined below).

#### Selection of the Constituents

The Constituents are selected quarterly on the first Index Business Day of each January, April, July and October (each, a "Selection Day"), subject to postponement as described below under "—Consequences of Disrupted Days". On each Selection Day, the Index includes all of the Eligible Constituents, except for any Excluded Stocks. An "Excluded Stock" is any stock (i) issued by the Index Sponsor or its affiliates, including Citigroup Inc., (ii) for which, as of the relevant Selection Day, there are insufficient historical market data to perform the covariance calculations in accordance with the Methodology described below or (iii) that, as of the relevant Selection Day, is included in the Index Sponsor's restricted list, which is a list of stocks that the Index Sponsor and/or any of its affiliates are not permitted to hold, buy,

sell or otherwise deal in for a particular period of time due to laws, regulations or internal policies. Therefore, at any given time, the Index may not (and most likely will not) include all 100 of the Eligible Constituents. See "Risk Factors Relating to the Index—Certain stocks that are included in the Eligible Universe Index will be excluded from the index without notice".

Between Rebalancing Dates (as defined below), Constituents may be removed from the Index in certain situations as described below under "—Constituent Corporate Actions and Extraordinary Events" and "—Additional Rebalancing Events" and in more detail in the Index Conditions. If a stock is removed from the Eligible Universe Index between Rebalancing Dates, that stock will be removed from the Index and the Percentage Weights and Weights of each of the other Constituents will be scaled up proportionally. If a stock is added to the Eligible Universe Index between Rebalancing Dates, that stock will not be added to the Index until the next Rebalancing Date.

#### Determination of the Percentage Weights

On each Selection Day, the Methodology will determine the percentage weight (the "Percentage Weight") to be assigned to each Constituent. The Percentage Weights will take effect and apply for purposes of calculating the Index on the third Index Business Day immediately following the relevant Selection Day (the "Rebalancing Date"), subject to postponement as described below under "—Consequences of Disrupted Days". The Percentage Weight will be expressed as the value of each Constituent relative to the overall value of the Index, and, based on that Percentage Weight, the Weight of each Constituent—which may be thought of as representing the number of shares of that Constituent included in the Index for calculation purposes—will be determined. Because the Percentage Weight will not be rebalanced every day, once the number of shares of each Constituent is fixed, the percentage value of that Constituent relative to the overall value of the Index may change as Constituent and Index levels fluctuate.

To determine the Percentage Weights, the Methodology applies a four-step process:

- (1) determine each Constituent's marginal contribution to the overall volatility of the Index using a measure of covariance based on the "implied volatility" of each Constituent on the Selection Day and the correlation of the returns of each Constituent with the returns of each other Constituent over the preceding 120 Index Business Days;
- (2) determine each Constituent's marginal contribution to the overall volatility of the Index using a measure of covariance based on the 40-day "exponential moving average" of historical returns of each Constituent on each of the preceding 120 Index Business Days;
- (3) apply an optimization algorithm to the results obtained in each of the first two steps and, for each measure of covariance, determine the interim percentage weight for each Constituent that would result in each Constituent contributing equally to the overall volatility of the Index;
- (4) average the two interim percentage weights for each Constituent determined in step (3), normalize the results so that the final Percentage Weights across all Constituents will sum to 100% and apply any Percentage Weight Caps (as described below) to determine the final Percentage Weights.

We describe each of the steps outlined above in more detail below. In the summary above and the more detailed description of the Methodology below, we describe the Methodology in more conceptual terms. However, it is important to note that these sections do not describe the mathematical terms of the Index, and as a result are more general than the precise mathematical formulation underlying each aspect of the Index. The mathematical terms of the Index are described in the Index Conditions. The Index will be governed by and calculated in accordance with the mathematical and other terms set forth in the Index Conditions, and not this description of the Index.

## Step 1: Determine Covariance Based on Implied Volatility and Correlation of Each Constituent

On each Selection Day, the Index Calculation Agent will measure the covariance of each Constituent with each other Constituent using the implied volatility of each Constituent as of the Selection Day and the correlation between the

returns of each Constituent and each other Constituent over the preceding 120 Index Business Days. The Index Calculation Agent will determine the implied volatility of each Constituent by first determining the implied volatility of the S&P 500® Index (the "Reference Vol Index") on the applicable Selection Day by reference to the price of 3-month, at-the-money, listed options on the Reference Vol Index, as published on Bloomberg. Then the Index Calculation Agent will derive an implied volatility for each Constituent by comparing the returns of that Constituent and the returns of the Reference Vol Index over the preceding 120 Index Business Days and determining that Constituent's "beta". A Constituent's beta is a measure of the tendency of that Constituent's returns to move in the same direction and to the same degree as the Reference Vol Index's returns over the applicable period. For

example, if the level of the Reference Vol Index were to move by 1% on a given day, the price of a Constituent with a beta of 1.5 would generally be expected to move in the same direction as the Reference Vol Index by 1.5%. Once a Constituent's beta is determined, its value is multiplied by the implied volatility of the Reference Vol Index and the result, expressed in positive terms, is that Constituent's implied volatility. Thus, for example, if a Constituent's beta is 1.5 and the Reference Vol Index's implied volatility is 20%, then the implied volatility of the Constituent would be 30%.

This method of calculating the implied volatility of each Constituent differs from other methods that might have been used. One alternative method would simply determine the implied volatility of a Constituent by reference to the volatility level assumed in the price of listed options on that Constituent. Such an alternative method would be solely forward looking, in that it would reflect the market's expectation of the future volatility of the Constituent on the Selection Day without reference to any historical measure of volatility. By contrast, because the Methodology derives the implied volatility of each Constituent from both the implied volatility of the Reference Vol Index and the beta of each Constituent with respect to the Reference Vol Index, this approach to determining implied volatility incorporates both forward-looking (implied volatility of the Reference Vol Index) and historical (beta) elements. Consequently, the measure of the implied volatilities of the Constituents used by the Index may differ from other measures of implied volatilities of the Constituents. You should refer to "Risk Factors Relating to the Index— There are significant limitations inherent in the way the index measures the contribution of each Constituent to the overall volatility of the index" for a discussion of certain assumptions on which the calculation of the Index is based.

After the implied volatility of each Constituent as of the applicable Selection Day is determined, the covariance of each Constituent with each other Constituent is determined by reference to the implied volatilities of each pairing of Constituents and the correlation between the returns of the applicable Constituents over the preceding 120 Index Business Days. The covariances so determined are then used to create a covariance matrix. This covariance matrix is essentially a grid, where all of the Constituents are arranged in both rows and columns and points of intersection in the grid reflect the covariances of each possible pairing of Constituents (as measured for purposes of this Step 1). This covariance matrix then becomes an input into the optimization algorithm described in Step 3 below.

## Step 2: Determine Covariance Based on Exponential Moving Average of Historical Returns of Each Constituent

On each Selection Day, the Index Calculation Agent will determine the 40-day exponential moving average of historical returns of each Constituent for each of the 120 Index Business Days ending on that Selection Day. That is, for each of those 120 Index Business Days, the Index Calculation Agent will determine the exponential moving average daily return of each Constituent for the 40 Index Business Days preceding that Index Business Day. A moving average is a concept in which an average value is obtained for an asset, typically on a daily basis, over a specific look-back period during a specific measurement period (in this case, over the 40 Index Business Days preceding each Index Business Day in the applicable 120 Index Business Day period). An exponential moving average is a type of moving average that, when calculating the moving average on each day in the measurement period, gives greater effect to more recent values and diminishes the effect of older values. For example, the exponential moving average daily return of any Constituent on any Index Business Day will weight the most recent Index Business Day in the look-back period more heavily than the oldest Index Business Day in the look-back period. A "decay factor," described in more detail in the Index Conditions, determines the rate at which the weights on past observations decrease as they become more distant. This measure of covariance is, therefore, based solely on historical performance.

After the exponential moving average daily return of each Constituent is determined for each Index Business Day in the 120 Index Business Days ending on the applicable Selection Day, the covariance of each Constituent's exponential moving average during that period with that of each other Constituent is measured. This measure of covariance is based on the daily deviations of each Constituent's exponential moving average from the average exponential moving average of that Constituent over the 120 Index Business Day period.

This method of calculating covariance based on deviations in the daily exponential moving average of returns from the average exponential moving average of returns differs from other comparable methods of calculating covariance based on deviations in daily historical returns from the average. One alternative method would simply determine the covariance between each pairing of Constituents using deviations in daily returns, rather than the daily

exponential moving average of returns, from the average on each day. The method used by the Index may or may not be a better method than that or any other alternative method of calculating the marginal contribution of each Constituent to the volatility of the Index. You should refer to "Risk Factors Relating to the Index—There are significant limitations inherent in the way the index measures the contribution of each Constituent to the overall volatility of the index" for a discussion of certain assumptions on which the calculation of the Index is based.

The covariances determined pursuant to this Step 2 are then used to create a covariance matrix. This covariance matrix reflects the covariance of each Constituent with each other Constituent (as measured for purposes of this Step 2). This covariance matrix then becomes an input into the optimization algorithm described in Step 3 below.

### Step 3: Apply an Optimization Algorithm to Determine Interim Percentage Weights

After the calculations from Steps 1 and 2 above (as more fully described in the Index Conditions) are made, the Methodology applies an optimization algorithm to the results of each of Steps 1 and 2. This algorithm, for each of the two measures of covariance, solves for the interim percentage weight for each Constituent that would result in each Constituent contributing equally to the volatility of the Index (as volatility contributions are measured for purposes of the Index). Because of the large number of combinations of possible interim percentage weights that exist for the large number of Constituents, this calculation can only be solved by an optimization program run on a computer. The results from this process are then used in Step 4 to determine the final Percentage Weights.

# Step 4: Determine the Percentage Weights

In the final step, the two percentage weights computed in Step 3 for each Constituent are averaged, such that each Constituent has a single composite percentage weight. The composite percentage weights for all Constituents are then normalized so that the sum of all composite percentage weights for the Constituents equals 100%.

Once normalized, the Constituent percentage weights are subjected to an individual percentage weight cap (the "Percentage Weight Cap") of 10%. The excess percentage weight (the aggregate percentage weight in excess of 10% for any Constituent) is distributed among the remaining uncapped Constituents in a ratio proportional to their uncapped percentage weights, subject to the same Percentage Weight Cap of 10%.

The resulting percentage weights are the "Percentage Weights" of the Constituents that will be applied in respect of the Index on the Rebalancing Date following the Selection Day on which these Percentage Weights are determined.

### Determination of the Weights

After the close of business on each Rebalancing Date following a Selection Day, the Index Calculation Agent will determine the weight of each Constituent in the Index (the "Weight"). The Weight of a Constituent after the close of business on any Rebalancing Date will equal (A)(i) the Percentage Weight of that Constituent on that date (as determined on the immediately preceding Selection Day), multiplied by (ii) the Index Level on that date, determined using the Weights of the Constituents prior to the rebalancing (which provides the proportion of the Index attributable to the Constituent), divided by (B) the Constituent Closing Level (as defined below) for that Constituent on that date. The Weight of each Constituent will be determined after the close of business on the applicable Rebalancing Date, subject to postponement as described under "—Consequences of Disrupted Days" below, and will be given effect in determining the Index Level on the Index Business Day immediately following the applicable Rebalancing Date. The Weight of a Constituent is subject to adjustment in the event of extraordinary dividends, stock splits, rights issues, other adjustment events and Additional Rebalancing Events, as described below and in more detail in the Index Conditions.

Percentage Weight and Weight are related but distinct concepts. If the Index were thought of as reflecting the returns on a notional investment portfolio consisting of notional positions in each of the Constituents, the Weight of any Constituent would be the number of shares of that Constituent held in such portfolio, and the Percentage Weight would be the percentage of the overall value of the portfolio represented by that Constituent. The

Methodology determines the Percentage Weights to be applied on each Rebalancing Date. These Percentage Weights are achieved by making any necessary adjustments in the Weights such that the Weight of any Constituent multiplied by its Constituent Closing Level is equal to a number whose proportion to the overall Index Level on the Rebalancing Date is equal to the Percentage Weight. After a Rebalancing Date, the Percentage Weight of any Constituent will fluctuate with changes in its Constituent Closing Level, but the Weight will not change until the next Rebalancing Date (except pursuant to an adjustment as described below). While the Index can be thought of as representing a notional investment portfolio, the Index is only a mathematical calculation and there is no actual portfolio of assets to which any investor in the Securities has any ownership or other interest.

#### Calculation of the Index Level

The Index Calculation Agent calculates the level of the Index (the "Index Level") as of 11:00 p.m. London time on each Index Business Day (or such later time that the Index Calculation Agent may determine with the consent of the Index Sponsor). Subject to the occurrence of Disrupted Days, as described under "—Consequences of Disrupted Days" below and in more detail in the Index Conditions, the Index Level on any Index Business Day will equal the sum of the products of the Constituent Closing Level of each Constituent on that Index Business Day and its Weight as of the immediately preceding Rebalancing Date, subject to adjustment as described below.

The "Constituent Closing Level" for each Constituent on any Index Business Day that is not a Disrupted Day in respect of that Constituent will be the official closing price of that Constituent on that date, as displayed on (1) such Bloomberg or Reuters page or other widely recognized source of financial data as the Index Calculation Agent may determine appropriate, (2) any successor electronic page or source that has been designated by either (a) the sponsor of the original electronic page or source or (b) the relevant information vendor or provider of the original electronic page or source or (3) any alternative electronic page or source of financial data that may be designated by the Index Calculation Agent, provided that such page or source is widely recognized by participants in the relevant market.

"Index Business Day" means each day that is (1) a day on which commercial banks and foreign exchange markets are open for general business (including dealings in foreign exchange and foreign exchange currency deposits) in London and New York; and (2) a Scheduled Trading Day for each Constituent.

"Scheduled Trading Day" means, in respect of each Constituent, any day on which the relevant Exchange and each relevant Related Exchange is scheduled to be open for trading for its regular trading session.

"Exchange" means, in respect of each Constituent, the primary exchange, trading system or quotation system in respect of such Constituent or any successor to such exchange, trading system or quotation system, or any substitute exchange, trading system or quotation system to which trading in such Constituent has temporarily relocated, provided that there is comparable liquidity relative to such Constituent on such temporary substitute exchange, trading system or quotation system as on the original exchange, trading system or quotation system.

"Related Exchange" means, in respect of each Constituent, each exchange, trading system or quotation system where trading has a material effect on the overall market for futures contracts or options contracts relating to such Constituent.

### Consequences of Disrupted Days

If any Index Business Day is a Disrupted Day (as defined below) in respect of one or more Constituents (each, an "Affected Constituent"), the Index Calculation Agent will calculate the Index Level in respect of such Index Business Day by reference to (i) in respect of each Constituent which is not an Affected Constituent, the Constituent Closing Level of the relevant Constituent on such Index Business Day and (ii) in respect of each Affected Constituent, the

Constituent Closing Level of such Affected Constituent on the immediately preceding Scheduled Trading Day in respect of such Affected Constituent which is not a Disrupted Day for such Affected Constituent. If any Index Business Day is a Disrupted Day for any Constituent, the Index Calculation Agent may, in its sole discretion, suspend the calculation, publication and dissemination of the Index and the Index Level until the first succeeding Index Business Day which is not a Disrupted Day for any Constituent.

If any scheduled Selection Day is a Disrupted Day in respect of one or more Constituents, then such Selection Day will be postponed to the earlier of (i) the first following Index Business Day which is not a Disrupted Day for any Constituent and (ii) the fifth Scheduled Trading Day for all Constituents immediately following the scheduled Selection Day.

If any Rebalancing Date is a Disrupted Day in respect of one or more Constituents, then (i) for each Constituent that is not an Affected Constituent, the Weight of that Constituent will be determined with respect to such Rebalancing Date by reference to the Constituent Closing Level of that Constituent on such Rebalancing Date and (ii) for each Constituent that is an Affected Constituent, the Weight of that Constituent will be determined with respect to such Rebalancing Date by reference to the Constituent Closing Level of that Constituent on the immediately following Scheduled Trading Day in respect of that Constituent that is not a Disrupted Day for that Constituent, unless each of the five Scheduled Trading Days immediately following the Rebalancing Date is a Disrupted Day for that Constituent, in which case the Index Calculation Agent will determine the Constituent Closing Level of that Constituent on such fifth Scheduled Trading Day using its good faith estimate of the value for that Constituent as of the Scheduled Closing Time (as defined below) on that fifth Scheduled Trading Day. In each case, the Weight of each Constituent so determined will be given effect in the Index on the Index Business Day immediately following the date on which the applicable Weight is determined. The Weight of each Affected Constituent in effect on the Rebalancing Date (prior to the close of business on the Rebalancing Date) will continue to be used for purposes of calculating the Index Level (and any new Constituent that is to be added to the Index on the Rebalancing Date will not be given a Weight in the Index) until the Weight for that Constituent with respect to such Rebalancing Date has been determined as provided in this paragraph. Regardless of the date on which the Weight of any Constituent is determined, the Index Level used for purposes of calculating the applicable Weight will be the Index Level on the Rebalancing Date, determined pursuant to the first paragraph under "—Consequences of Disrupted Days" above.

"Disrupted Day" means, in respect of any Constituent, any Scheduled Trading Day for such Constituent on which any of the events set out below occurs:

- (a) the relevant Exchange or any relevant Related Exchange fails to open for trading during its regular trading session;
- (b) the occurrence or existence at any time during the one-hour period which ends at the relevant Valuation Time of any suspension of or limitation imposed (whether by reason of movements in price exceeding permitted limits or otherwise) on the trading on (i) the relevant Exchange of such Constituent; or (ii) any relevant Related Exchange of futures contracts or options contracts relating to such Constituent;
- (c) the occurrence or existence at any time during the one-hour period which ends at the relevant Valuation Time of any other event (other than an event described in sub-paragraph (d) or sub-paragraph (e) of this definition) that disrupts or impairs the ability of market participants in general (i) (on the relevant Exchange) to effect transactions in or to obtain market values for such Constituent; or (ii) (on any relevant Related Exchange) to effect transactions in or to obtain market values for any futures contracts or options contracts relating to such Constituent;
- (d) the closure on any Exchange Business Day of the relevant Exchange prior to its Scheduled Closing Time (unless such earlier closing time is announced by such Exchange at least one hour prior to the earlier of (i) the actual closing time for the regular trading session on such Exchange on such Exchange Business Day; and (ii) the deadline for the submission of orders to be entered into such Exchange system for execution at the relevant Valuation Time on such Exchange Business Day); or
- (e) the closure on any Exchange Business Day of any relevant Related Exchange in respect of futures contracts or options contracts relating to such Constituent prior to its Scheduled Closing Time (unless such earlier closing time is announced by such Related Exchange at least one hour prior to the earlier of (i) the actual closing time for the

regular trading session on such Related Exchange on such Exchange Business Day; and (ii) the deadline for the submission of orders to be entered into such Related Exchange system for execution at the Valuation Time on such Exchange Business Day).

"Exchange Business Day" means, in respect of any Constituent, any Scheduled Trading Day for such Constituent on which the relevant Exchange and each relevant Related Exchange are open for trading during their respective regular trading sessions, notwithstanding such Exchange or any such Related Exchange closing prior to its Scheduled Closing Time.

"Scheduled Closing Time" means, in respect of any Constituent, Scheduled Trading Day and Exchange or Related Exchange (as relevant) for such Constituent, the scheduled weekday closing time on such Exchange or Related Exchange on such Scheduled Trading Day, without regard to after-hours trading or any other trading outside the hours of the regular trading session on such Exchange or Related Exchange.

"Valuation Time" means, in respect of a Constituent and a Scheduled Trading Day for such Constituent, the Scheduled Closing Time on the relevant Exchange on such Scheduled Trading Day.

Constituent Corporate Actions and Extraordinary Events

In the event of any extraordinary dividend (whether in cash or stock) in respect of a Constituent, the Index Calculation Agent will increase the Weight of the applicable Constituent to reflect a notional reinvestment of such extraordinary dividend in that Constituent. In the event of any stock split or combination, rights issue or similar corporate action in respect of a Constituent, the Index Calculation Agent will make appropriate adjustment to the Weight of the affected Constituent to account for the dilutive effect of that action, as described in more detail in the Index Conditions.

Upon the occurrence of certain other extraordinary events in respect of a Constituent, including certain mergers, tender offers, delistings, nationalizations, events relating to insolvency or bankruptcy and other events that may have a dilutive or concentrative effect on the value of the shares of the relevant Constituent, the Index Calculation Agent will as soon as reasonably practicable adjust the Weight of the affected Constituent and make such other adjustments to the calculation of the Index as it deems appropriate. Alternatively, if the Index Calculation Agent determines that no change it could make to the Weight of the affected Constituent would produce a commercially reasonable result, the Index Calculation Agent will as soon as reasonably practicable remove the affected Constituent from the Index, and the proportion of the Index which is attributable to the removed Constituent will be deemed to be notionally uninvested until the following Rebalancing Date. The foregoing adjustments and adjustment events are described in more detail in the Index Conditions.

# Additional Rebalancing Events

In addition to the corporate actions and extraordinary events described above, certain other events occurring between Rebalancing Dates may require a modification to the Constituent Weights.

If any of the following occurs (each, an "Additional Rebalancing Event"):

- (a) a Constituent is removed from the Eligible Universe Index;
- (b) the Index Sponsor or any of its affiliates is required (or there is a reasonable likelihood that, within the next 30 Index Business Days, it will be required) by any applicable law or regulation or policy to unwind positions in a stock which is a Constituent, or is not permitted (or there is a reasonable likelihood that, within the next 30 Index Business Days, it will not be permitted) to establish or increase positions in such a stock; or
- (c) due to any applicable law or regulation or policy, the Index Sponsor or the Index Calculation Agent is not permitted (or there is a reasonable likelihood that, within the next 30 Index Business Days, it will not be permitted) to continue to sponsor or calculate, as applicable, an index comprising a stock which is a Constituent,

then the applicable Constituent will be removed from the Index on the same day (in the case of clause (a)) or on a date designated by the Index Calculation Agent or the Index Sponsor (in the case of clauses (b) and (c)) and the

Percentage Weights and Weights of the remaining Constituents will be scaled up such that the Percentage Weight of the removed Constituent is proportionally redistributed to the remaining Constituents. The reweighting process is described in more detail in the Index Conditions.

Discontinuance or Modification of the Eligible Universe Index, the Reference Vol Index or the Index

If either the Eligible Universe Index or the Reference Vol Index (each, a "Reference Index") is (i) not calculated and announced by S&P Dow Jones but is calculated and announced by a successor sponsor acceptable to the Index Calculation Agent, or (ii) replaced by a successor index using, in the determination of the Index Calculation Agent, the same or a substantially similar formula for and method of calculation as used in the calculation of the relevant Reference Index, then in each case that index (the "Successor Reference Index") will be deemed to be the relevant Reference Index with effect from the date determined by the Index Calculation Agent, which may make such adjustment(s) to the Index Conditions as it determines appropriate to account for such change.

If (i) S&P Dow Jones announces that it will make a material change in the formula for or method of calculating a Reference Index or in any other way materially modifies a Reference Index (other than a modification prescribed in the formula or method to maintain the relevant Reference Index in the event of changes in constituent stock and capitalization and other routine events) or permanently cancels a Reference Index and no Successor Reference Index exists or (ii) in respect of a Reference Index, a license granted to the Index Sponsor and/or the Index Calculation Agent and/or any of their respective affiliates to use such Reference Index in connection with the Index is terminated, or any such entity's right to use such Reference Index in connection with calculating the Index is otherwise disputed, impaired or ceases for any reason, then:

- (a) the Index Calculation Agent may suspend the calculation, publication and dissemination of the Index and the Index Level until the first succeeding Index Business Day on which such event does not occur or continue to occur; and/or
- (b) the Index Calculation Agent may select a replacement index that has substantially similar characteristics to the Reference Index that is being replaced, having regard to the manner in which such Reference Index is used in the calculation of the Index, in which case the Index Calculation Agent will (a) determine the effective date of such replacement, and (b) make such adjustment(s) to the Index Conditions as it determines appropriate to account for the effect on the Index of such replacement; and/or
- (c) the Index Sponsor may discontinue and cancel the Index.

The Index Sponsor will make available relevant details as described under "Calculations, Determinations and Corrections" below as soon as practicable following the occurrence of an event described in this section.

**Index Calculation Agent** 

S&P Dow Jones will serve as the Index Calculation Agent. The Index Calculation Agent will employ the Methodology to calculate the Index Level and will make all calculations, determinations, rebalancings and adjustments in respect of the Index. The Index Sponsor may, in its sole discretion and without notice, appoint an alternative Index Calculation Agent at any time, which may be the Index Sponsor or any of its affiliates.

#### Calculations, Determinations and Corrections

The Index Calculation Agent will make all calculations, determinations, rebalancings and adjustments in respect of the Index. Neither the Index Calculation Agent nor the Index Sponsor shall have any responsibility for good faith errors or omissions in calculations, determinations, rebalancings and adjustments as provided herein or in the Index Conditions. The calculations, determinations, rebalancings and adjustments of the Index Calculation Agent shall be made by it as described herein and in the Index Conditions, in its sole, absolute and unfettered discretion, but in good faith and in a commercially reasonable manner (having regard in each case to the criteria stipulated herein and therein and (where relevant) on the basis of information provided to or obtained by employees or officers of the Index Calculation Agent responsible for making the relevant calculation, determination, rebalancing or adjustment). All calculations, determinations, rebalancings and adjustments shall, in the absence of manifest error, be final, conclusive and binding on any holder of the Securities.

Although the Index Conditions are intended to be comprehensive, it is possible that ambiguities, errors and omissions may arise in certain circumstances. The Index Sponsor will resolve, acting in good faith and in a commercially reasonable manner, any such ambiguity, error or omission, and may amend the Index Conditions to reflect the resolution of such ambiguity, error or omission in a manner which is consistent with the commercial objective of the Index.

Notwithstanding that certain calculations, determinations, rebalancings and adjustments described herein may be expressed to be "on" a certain date or "at" a certain time, the Index Calculation Agent may make such calculations, determinations, rebalancings and adjustments in respect of that date or time "as of" such date or time on a date or time after that date or time, as determined by it in its discretion.

In performing any calculation, determination, rebalancing, adjustment or other action in connection with the Index Conditions, each of the Index Calculation Agent and the Index Sponsor will act as principal and not as agent of any other person. Neither the Index Calculation Agent nor the Index Sponsor owes any duty of care or any fiduciary duty to any investor in the Securities or to any other person. Each calculation, determination, rebalancing, adjustment and other action performed in connection with the Index Conditions by the Index Calculation Agent or the Index Sponsor is performed in reliance on this provision and is subject to this provision.

If through performing any such calculation, determination, rebalancing, adjustment or other action the Index Calculation Agent or the Index Sponsor is rendered an agent or fiduciary of another person under applicable law, then (at the option of the Index Calculation Agent or the Index Sponsor, as relevant) the rights and obligations of the Index Calculation Agent or the Index Sponsor to perform such calculation, determination, rebalancing, adjustment or other action may be suspended (or, if already performed, the application of such calculation, determination, rebalancing, adjustment or other action may be suspended) until such time when such calculation, determination, rebalancing, adjustment or other action can be performed either by the Index Calculation Agent or the Index Sponsor as principal and not as an agent or fiduciary or by an appropriate third party who is both willing and able to perform such calculation, determination, rebalancing, adjustment or other action.

If, in respect of a Reference Index, any level, price, rate or value (as applicable) in respect of such Reference Index or any related derivative or other related instrument, for any time on any day, which is announced by or on behalf of the person or entity responsible for such publication or announcement and which is used for any calculation or determination in respect of the Index, is subsequently corrected, and such correction (the "Corrected Level") is published by or on behalf of such person or entity within two Index Business Days after the original publication, then such Corrected Level shall be deemed to be the level, price, rate or value (as applicable) for such Reference Index, related derivative or other related instrument (as the case may be) for the relevant time on the relevant day and the Index Calculation Agent may, but shall not be obligated to, make appropriate adjustments to the Index and the Index

Level for the relevant Index Business Day(s).

Hypothetical Back-tested and Historical Data on the Index Levels

The following graphs set forth the hypothetical back-tested daily Index Levels for the period from January 2, 2008 to June 9, 2011 (the "Back-test Period") and the daily Index Levels for the period from June 10, 2011 to April 3, 2014. The Index was not published during the Back-test Period, but the historical published closing levels of the Constituents on each Index Business Day within the Back-test Period were used to calculate the hypothetical back-tested Index Levels using the assumptions described below.

Hypothetical Backtested Index Levels January 2, 2008 to June 9, 2011

The hypothetical back-tested Index Levels set forth in the graph above should not be taken as an indication of the future performance of the Index. Any upward or downward trend in the hypothetical back-tested Index Levels during any period shown above is not an indication that the Index Level is more or less likely to increase or decrease in the future. All Index Levels indicated above for the Back-test Period are based solely on back-tested simulation and are provided for illustrative purposes only. They represent an estimate of the past performance of the Index based on certain data, assumptions and estimates, not all of which may be specified herein, and which may be different from the data, assumptions and estimates that someone else might use to back-test the Index. The back-tested simulation uses the published closing levels for the Constituents during the Back-test Period and applies the Methodology substantially as described above, but certain assumptions have been made to simplify modelling. In particular, the back-tested Index Levels do not reflect any adjustments to the back-tested Weights of the Constituents specified under "—Constituent Corporate Actions and Extraordinary Events" or "—Additional Rebalancing Events" above or adjustments for any Disrupted Days that may have occurred during the Back-test Period. In addition, Constituents that may have been included on the Index Sponsor's restricted list during the Back-test Period have not been excluded from the Index for purposes of calculating the back-tested Index Levels. Simulation based on different assumptions or for a different historical period may produce different results.

Historical Daily Index Levels June 10, 2011 to April 3, 2014

You should not take the hypothetical back-tested or historical Index Levels as an indication of future performance, and no assurance can be given as to the Index Level on the Valuation Date. The Final Index Level may be less than the Initial Index Level so that the Payment at Maturity will be less than the stated principal amount of the Securities and may be zero.

The Eligible Universe Index and the Reference Vol Index

Unless otherwise stated, we have derived all information regarding the Eligible Universe Index and the Reference Vol Index provided in this pricing supplement, including their composition, method of calculation and changes in components, from publicly available sources. Such information reflects the policies of, and is subject to change by, S&P Dow Jones. S&P Dow Jones is under no obligation to continue to publish, and may discontinue or suspend the publication of, the Eligible Universe Index and/or the Reference Vol Index at any time. We have not independently verified this information and you, as an investor in the Securities, should make your own investigation into the Eligible Universe Index and the Reference Vol Index.

General Information on the Eligible Universe Index

The Eligible Universe Index is calculated, maintained and published by S&P Dow Jones. The Eligible Universe Index is a subset of the Reference Vol Index and comprises 100 leading U.S. stocks with exchange-listed options. Constituents of the Eligible Universe Index are selected by S&P Dow Jones for sector balance. The calculation of the value of the Eligible Universe Index is based on the relative value of the aggregate Market Value (as defined below) of the issuers of the 100 Eligible Constituents as of a particular time as compared to the aggregate average Market Value of 100 similar companies during the base period. The "Market Value" of the issuer of any Constituent is the product of the market price per share and the number of then outstanding shares of such Eligible Constituent.

### Selection of the Eligible Constituents

S&P Dow Jones's U.S. Index Committee, which oversees the Reference Vol Index and other S&P Dow Jones equity indices, maintains the Eligible Universe Index. Because the Eligible Universe Index is derived from the Reference Vol Index, the Eligible Universe Index stocks are also subject to the published Reference Vol Index criteria for additions and deletions. In addition, only companies included in the Reference Vol Index are eligible for inclusion in the Eligible Universe Index. All stocks added to the Eligible Universe Index must maintain exchange-listed options. Stocks included in the Eligible Universe Index must also meet the S&P Dow Jones U.S. Index Committee's guidelines for sector representation. The sector composition of the Eligible Universe Index has remained comparable to the sector composition of the Reference Vol Index. The S&P Dow Jones U.S. Index Committee may remove a company from the Eligible Universe Index if the company does not meet the inclusion qualifications or if the Index becomes unbalanced in its sector representation. The S&P Dow Jones U.S. Index Committee may also remove any company that violates any of the Reference Vol Index criteria.

#### General Information on the S&P 500® Index

The S&P 500® Index is published by S&P Dow Jones and is intended to provide a performance benchmark for the large capitalization segment of the U.S. equity markets. The calculation of the value is based on the relative aggregate market value of the common stocks of 500 companies at a particular time 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. The weight and composition of the index components are updated periodically so that the S&P 500® Index reflects the performance of the U.S. equity markets.

As of March 31, 2014, the aggregate market value of the 500 companies included in the S&P 500® Index represented approximately 80% of the U.S. equities market. S&P Dow Jones chooses companies for inclusion in the S&P 500® Index with the aim of achieving a distribution by broad industry groupings that approximates the distribution of these groupings in the common stock composition of the New York Stock Exchange, which S&P Dow Jones uses as an assumed model for the composition of the total market. Relevant criteria employed by S&P Dow Jones 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 market price of that company's common stock is generally responsive to changes in the affairs of the respective industry and the market value and trading activity of the common stock of that company.

As of March 31, 2014, the 500 companies included in the S&P 500® Index were divided into 10 Global Industry Classification Sectors. The Global Industry Classification Sectors included (with the percentage of companies currently included in such sectors indicated in parentheses): Information Technology (18.6%), Financials (16.4%), Health Care (13.4%), Consumer Discretionary (12.1%), Industrials (10.7%), Energy (10.1%), Consumer Staples (9.7%), Materials (3.5%), Utilities (3.1%) and Telecommunication Services (2.5%). S&P Dow Jones 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.

# Computation of the S&P 500® Index

On March 21, 2005, S&P began to calculate the S&P 500® Index based on a half float-adjusted formula, and on September 16, 2005, S&P completed the full float adjustment of the S&P 500® Index. S&P's criteria for selecting stocks for the S&P 500® Index were not changed by the shift to float adjustment. However, the adjustment affects each company's weight in the S&P 500® Index (i.e., its market value).

Under float adjustment, the share counts used in calculating the S&P 500® Index reflect only those shares that are available to investors and not all of a company's outstanding shares. S&P Dow Jones defines three groups of

shareholders whose holdings are subject to float adjustment:

- •holdings by other publicly traded corporations, venture capital firms, private equity firms, strategic partners, or leveraged buyout groups;
- •holdings by governmental 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.

However, treasury stock, stock options, restricted shares, equity participation units, warrants, preferred stock, convertible stock, and rights are not part of the float. In cases where holdings in a group exceed 10% 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 500® Index calculation. Mutual funds, investment advisory firms, pension funds, or foundations not associated with the company and investment funds in insurance companies, shares of a United States company traded in Canada as "exchangeable shares," shares that trust beneficiaries may buy or sell without difficulty or significant additional expense beyond typical brokerage fees, and, if a company has multiple classes of stock outstanding, shares in an unlisted or non-traded class if such shares are convertible by shareholders without undue delay and cost, are also 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 10% of the outstanding shares, by the total shares outstanding. The float-adjusted index will then be 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 Dow Jones will calculate the weighted average IWF for each stock using the proportion of the total company market capitalization of each share class as weights.

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 S&P 500® 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 500® Index 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 500® 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 spinoffs.

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. 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.

#### S&P Dow Jones Disclaimer

The Securities are not sponsored, endorsed, sold or promoted by S&P Dow Jones, its affiliates or its third party licensors. Neither S&P Dow Jones, its affiliates nor their third party licensors make any representation or warranty, express or implied, to the owners of the Securities or any member of the public regarding the advisability of investing in securities generally or in the Securities particularly or the ability of the Index to track general stock market performance. S&P Dow Jones' and its third party licensor's only relationship to the Index Sponsor is the licensing of certain trademarks, service marks and trade names of S&P Dow Jones and/or its third party licensors and for the providing of calculation and maintenance services related to the Index. Neither S&P Dow Jones, its affiliates nor their third party licensors is responsible for and has not participated in the determination of the prices and amount of the Securities or the timing of the issuance or sale of the Securities or in the determination or calculation of the equation by which the Securities are to be converted into cash. S&P Dow Jones has no obligation or liability in connection with the administration, marketing or trading of the Securities.

NEITHER S&P DOW JONES, ITS AFFILIATES NOR THEIR THIRD PARTY LICENSORS GUARANTEE THE ADEQUACY, ACCURACY, TIMELINESS OR COMPLETENESS OF THE INDEX OR ANY DATA INCLUDED THEREIN OR ANY COMMUNICATIONS, INCLUDING BUT NOT LIMITED TO, ORAL OR WRITTEN COMMUNICATIONS (INCLUDING ELECTRONIC COMMUNICATIONS) WITH RESPECT THERETO. S&P DOW JONES, ITS AFFILIATES AND THEIR THIRD PARTY LICENSORS SHALL NOT BE SUBJECT TO ANY DAMAGES OR LIABILITY FOR ANY ERRORS, OMISSIONS OR DELAYS THEREIN. S&P DOW JONES MAKES NO EXPRESS OR IMPLIED WARRANTIES, AND EXPRESSLY DISCLAIMS ALL WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE WITH RESPECT TO ITS TRADEMARKS, THE INDEX OR ANY DATA INCLUDED THEREIN. WITHOUT LIMITING ANY OF THE FOREGOING, IN NO EVENT WHATSOEVER SHALL S&P DOW JONES, ITS AFFILIATES OR THEIR THIRD PARTY LICENSORS BE LIABLE FOR ANY INDIRECT, SPECIAL, INCIDENTAL, PUNITIVE OR CONSEQUENTIAL DAMAGES, INCLUDING, BUT NOT LIMITED TO, LOSS OF PROFITS, TRADING LOSSES, LOST TIME OR GOODWILL, EVEN IF THEY HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, WHETHER IN CONTRACT, TORT, STRICT LIABILITY OR OTHERWISE.

S&P® is a registered trademark of S&P Dow Jones Indices LLC.

All disclosures contained in this pricing supplement regarding the S&P 100® Index and the S&P 500® Index, including their makeup, method of calculation and changes in their components, are derived from publicly available information prepared by S&P Dow Jones.

#### UNITED STATES FEDERAL TAX CONSIDERATIONS

Prospective investors should note that the discussion under the section called "United States Federal Tax Considerations" in the accompanying prospectus supplement does not apply to the Securities issued under this pricing supplement and is superseded by the following discussion.

The following is a discussion of the material U.S. federal income and certain estate tax consequences of the ownership and disposition of the Securities. It applies to you only if you purchase a Security for cash in the initial offering at the "issue price," which is the first price at which a substantial amount of the Securities is sold to the public, and hold the Security as a capital asset within the meaning of Section 1221 of the Internal Revenue Code of 1986, as amended (the "Code"). It does not address all of the tax consequences that may be relevant to you in light of your particular circumstances or if you are a holder subject to special rules, such as:

- a financial institution;
- a "regulated investment company";
- a tax-exempt entity, including an "individual retirement account" or "Roth IRA";
- a dealer or trader in securities subject to a mark-to-market method of tax accounting with respect to the Securities;
- a person holding a Security as part of a "straddle" or conversion transaction or who has entered into a "constructive sale" with respect to a Security;
  - a U.S. Holder (as defined below) whose functional currency is not the U.S. dollar; or
    - an entity classified as a partnership for U.S. federal income tax purposes.

If an entity that is classified as a partnership for U.S. federal income tax purposes holds the Securities, the U.S. federal income tax treatment of a partner will generally depend on the status of the partner and the activities of the partnership. If you are a partnership holding the Securities or a partner in such a partnership, you should consult your tax adviser as to the particular U.S. federal tax consequences of holding and disposing of the Securities to you.

We will not attempt to ascertain whether any of the issuers of the Constituents should be treated as a "U.S. real property holding corporation" ("USRPHC") within the meaning of Section 897 of the Code. If any issuer of the Constituents were so treated, certain adverse U.S. federal income tax consequences might apply to a Non-U.S. Holder (as defined below) upon the sale, exchange or other disposition of the Securities. Non-U.S. Holders considering an investment in the Securities should refer to information filed with the Securities and Exchange Commission or another governmental authority by the issuers of the Constituents and consult their tax advisers regarding the possible consequences to them if any issuer of the Constituents is or becomes a USRPHC.

This discussion is based on the Code, administrative pronouncements, judicial decisions and final, temporary and proposed Treasury regulations, all as of the date of this pricing supplement, changes to any of which subsequent to the date of this pricing supplement may affect the tax consequences described herein, possibly with retroactive effect. This discussion does not address the effects of any applicable state, local or foreign tax laws or the potential application of the Medicare tax on investment income. You should consult your tax adviser concerning the application of U.S. federal income and estate tax laws to your particular situation (including the possibility of alternative treatments of the Securities), as well as any tax consequences arising under the laws of any state, local or foreign jurisdiction.

#### Tax Treatment of the Securities

In the opinion of our counsel, Davis Polk & Wardwell LLP, which is based on current market conditions, a Security should be treated as a prepaid forward contract for U.S. federal income tax purposes. By purchasing a Security, you agree (in the absence of an administrative determination or judicial ruling to the contrary) to this treatment.

Due to the absence of statutory, judicial or administrative authorities that directly address the U.S. federal tax treatment of the Securities or similar instruments, significant aspects of the treatment of an investment in the Securities are uncertain. We do not plan to request a ruling from the IRS, and the IRS or a court might not agree with the treatment described below. Accordingly, you should consult your tax adviser regarding all aspects of the U.S. federal income and estate tax consequences of an investment in the Securities and with respect to any tax consequences arising under the laws of any state, local or foreign taxing jurisdiction. Unless otherwise indicated, the following discussion is based on the treatment of the Securities as prepaid forward contracts.

### Tax Consequences to U.S. Holders

This section applies only to U.S. Holders. You are a "U.S. Holder" if you are a beneficial owner of a Security that is, for U.S. federal income tax purposes:

- a citizen or individual resident of the United States:
- a corporation, or other entity taxable as a corporation, created or organized in or under the laws of the United States, any state therein or the District of Columbia; or
  - an estate or trust the income of which is subject to U.S. federal income taxation regardless of its source.

Tax Treatment Prior to Maturity. You should not be required to recognize income over the term of the Securities prior to maturity, other than pursuant to a sale, exchange or retirement as described below.

Sale, Exchange or Retirement of the Securities. Upon a sale, exchange or retirement of the Securities, you should recognize gain or loss equal to the difference between the amount realized on the sale, exchange or retirement and your tax basis in the Securities. Your tax basis in the Securities should equal the amount you paid to acquire them. This gain or loss should be long-term capital gain or loss if at the time of the sale, exchange or retirement you held the Securities for more than one year, and short-term capital gain or loss otherwise. Long-term capital gains recognized by non-corporate U.S. Holders are generally subject to taxation at reduced rates. The deductibility of capital losses is subject to certain limitations.

## Possible Alternative Tax Treatments of an Investment in the Securities

Alternative U.S. federal income tax treatments of the Securities are possible that, if applied, could materially and adversely affect the timing and/or character of income, gain or loss with respect to them. It is possible, for example, that the Securities could be treated as debt instruments issued by us. Under this treatment, the Securities would be governed by Treasury regulations relating to the taxation of contingent payment debt instruments. In this case, regardless of your method of tax accounting for U.S. federal income tax purposes, you would be required to accrue income based on our comparable yield for similar non-contingent debt, determined as of the time of issuance of the Securities, in each year that you held the Securities, even though we are not required to make any payment with respect to the Securities prior to maturity. In addition, any gain on the sale, exchange or retirement of the Securities would be treated as ordinary income.

Other possible U.S. federal income tax treatments of the Securities could also affect the timing and character of income or loss with respect to the Securities. For example, the IRS could treat a rebalancing of the Index or a modification of the Methodology as giving rise to taxable gain to a U.S. Holder. In 2007, the U.S. Treasury Department and the IRS released a notice requesting comments on the U.S. federal income tax treatment of "prepaid forward contracts" and similar instruments. The notice focuses in particular on whether to require holders of these instruments to accrue income over the term of their investment. It also asks for comments on a number of related topics, including the character of income or loss with respect to these instruments; whether short-term instruments should be subject to any such accrual regime; the relevance of factors such as the exchange-traded status of the instruments and the nature of the underlying property to which the instruments are linked; and whether these instruments are or should be subject to the "constructive ownership" regime, which very generally can operate to recharacterize certain long-term capital gain as ordinary income and impose a notional interest charge. While the notice requests comments on appropriate transition rules and effective dates, any Treasury regulations or other guidance promulgated after consideration of these issues could materially and adversely affect the tax consequences of an investment in the Securities, possibly with retroactive effect. You should consult your tax adviser regarding the U.S. federal income tax consequences of an investment in the Securities, including possible alternative treatments and the issues presented by this notice.

### Tax Consequences to Non-U.S. Holders

This section applies only to Non-U.S. Holders. You are a "Non-U.S. Holder" if you are a beneficial owner of a Security that is, for U.S. federal income tax purposes:

- an individual who is classified as a nonresident alien;
  - a foreign corporation; or
  - a foreign estate or trust.

You are not a Non-U.S. Holder for purposes of this discussion if you are (i) an individual who is present in the United States for 183 days or more in the taxable year of disposition and not otherwise a resident of the United States for U.S. federal income tax purposes or (ii) a former citizen or resident of the United States. If you are such a holder or may become such a holder during the period in which you hold a Security, you should consult your tax adviser regarding the U.S. federal tax consequences of an investment in the Securities.

Sale, Exchange or Retirement of the Securities. Subject to the discussion above regarding the possible application of Section 897 of the Code, you generally should not be subject to U.S. federal withholding or income tax in respect of amounts paid to you, provided that income in respect of the Securities is not effectively connected with your conduct of a trade or business in the United States.

If you are engaged in a U.S. trade or business, and if income from the Securities is effectively connected with the conduct of that trade or business, you generally will be subject to regular U.S. federal income tax with respect to that income in the same manner as if you were a U.S. Holder, unless an applicable income tax treaty provides otherwise. If you are such a holder and you are a corporation, you should also consider the potential application of a 30% (or lower treaty rate) branch profits tax.

Tax Consequences Under Possible Alternative Treatments. If all or any portion of a Security were recharacterized as a debt instrument, any payment made to you with respect to the Security generally would not be subject to U.S. federal withholding or income tax, provided that: (i) income or gain in respect of the Security is not effectively connected with your conduct of a trade or business in the United States, and (ii) you provide an appropriate IRS Form

W-8 certifying under penalties of perjury that you are not a United States person.

Other U.S. federal income tax treatments of the Securities are also possible. In 2007, the U.S. Treasury Department and the IRS released a notice requesting comments on the U.S. federal income tax treatment of "prepaid forward contracts" and similar instruments. Among the issues addressed in the notice is the degree, if any, to which any income with respect to instruments such as the Securities should be subject to U.S. withholding tax. While the notice requests comments on appropriate transition rules and effective dates, it is possible that any Treasury regulations or other guidance promulgated after consideration of these issues might materially and adversely affect the withholding tax consequences of an investment in the Securities, possibly with retroactive effect. If withholding applies to the Securities, we will not be required to pay any additional amounts with respect to amounts withheld. Accordingly, you should consult your tax adviser regarding the issues presented by the notice.

#### U.S. Federal Estate Tax

If you are an individual Non-U.S. Holder or an entity the property of which is potentially includible in such an individual's gross estate for U.S. federal estate tax purposes (for example, a trust funded by such an individual and with respect to which the individual has retained certain interests or powers), you should note that, absent an applicable treaty exemption, a Security may be treated as U.S. situs property subject to U.S. federal estate tax. If you are such an individual or entity, you should consult your tax adviser regarding the U.S. federal estate tax consequences of investing in the Securities.

### Information Reporting and Backup Withholding

Amounts paid on the Securities, and the proceeds of a sale, exchange or other disposition of the Securities, may be subject to information reporting and, if you fail to provide certain identifying information (such as an accurate taxpayer identification number if you are a U.S. Holder) or meet certain other conditions, may also be subject to backup withholding at the rate specified in the Code. If you are a Non-U.S. Holder that provides an appropriate IRS Form W-8, you will generally establish an exemption from backup withholding. Amounts withheld under the backup withholding rules are not additional taxes and may be refunded or credited against your U.S. federal income tax liability, provided the relevant information is timely furnished to the IRS.

Prospective investors in the Securities should consult their tax advisers regarding all aspects of the U.S. federal income and estate tax consequences of an investment in the Securities and any tax consequences arising under the laws of any state, local or foreign taxing jurisdiction.

#### PLAN OF DISTRIBUTION; CONFLICTS OF INTEREST

The terms and conditions set forth in the Global Selling Agency Agreement dated November 13, 2013 among Citigroup Inc. and the Agents listed on Schedule I thereto, including CGMI, govern the sale and purchase of the Securities.

CGMI, acting as principal, has agreed to purchase from Citigroup Inc., and Citigroup Inc. has agreed to sell to CGMI, \$ aggregate stated principal amount of Securities (Securities) for \$985 per Security. CGMI proposes to offer the Securities to selected dealers at the public offering price less a fixed selling concession as described in this paragraph. CGMI will pay the registered representatives of CGMI a fixed selling concession of \$15 for each \$1,000 Security they sell. If all of the Securities are not sold at the initial offering price, CGMI may change the public offering price and other selling terms.

In order to hedge its obligations under the Securities, Citigroup Inc. expects to enter into one or more swaps or other derivatives transactions with one or more of its affiliates. You should refer to the section "Risk Factors Relating to the Securities—The Estimated Value of the Securities on the Pricing Date, Based on CGMI's Proprietary Pricing Models and Our Internal Funding Rate, Will Be Less than the Issue Price" in this pricing supplement and the section "Use of Proceeds and Hedging" in the accompanying prospectus.

The Securities will not be listed on any exchange.

CGMI is an affiliate of Citigroup Inc. Accordingly, the offering will conform to the requirements set forth in Rule 5121 of the Conduct Rules of the Financial Industry Regulatory Authority, Inc. Client accounts over which Citigroup Inc., its subsidiaries or affiliates of its subsidiaries have investment discretion are not permitted to purchase the Securities, either directly or indirectly, without the prior written consent of the client.

#### BENEFIT PLAN INVESTOR CONSIDERATIONS

A fiduciary of a pension, profit-sharing or other employee benefit plan subject to the Employee Retirement Income Security Act of 1974, as amended ("ERISA"), including entities such as collective investment funds, partnerships and separate accounts whose underlying assets include the assets of such plans (collectively, "ERISA Plans") should consider the fiduciary standards of ERISA in the context of the ERISA Plan's particular circumstances before authorizing an investment in the Securities. Among other factors, the fiduciary should consider whether the investment would satisfy the prudence and diversification requirements of ERISA and would be consistent with the documents and instruments governing the ERISA Plan.

Section 406 of ERISA and Section 4975 of the Internal Revenue Code of 1986, as amended, (the "Code") prohibit ERISA Plans, as well as plans (including individual retirement accounts and Keogh plans) subject to Section 4975 of the Code (together with ERISA Plans, "Plans"), from engaging in certain transactions involving the "plan's assets" with persons who are "parties in interest" under ERISA or "disqualified persons" under Section 4975 of the Code (in either case, "Parties in Interest") with respect to such Plans. As a result of our business, we, and our current and future affiliates, may be Parties in Interest with respect to many Plans. Where we (or our affiliate) are a Party in Interest with respect to a Plan (either directly or by reason of our ownership interests in our directly or indirectly owned subsidiaries), the purchase and holding of the Securities by or on behalf of the Plan could be a prohibited transaction under Section 406 of ERISA and/or Section 4975 of the Code, unless exemptive relief were available under an applicable exemption (as described below).

Certain prohibited transaction class exemptions ("PTCEs") issued by the U.S. Department of Labor may provide exemptive relief for direct or indirect prohibited transactions resulting from the purchase or holding of the Securities. Those class exemptions are PTCE 96-23 (for certain transactions determined by in-house asset managers), PTCE 95-60 (for certain transactions involving insurance company general accounts), PTCE 91-38 (for certain transactions involving bank collective investment funds), PTCE 90-1 (for certain transactions involving insurance company separate accounts) and PTCE 84-14 (for certain transactions determined by independent qualified asset managers). In addition, ERISA Section 408(b)(17) and Section 4975(d)(20) of the Code may provide a limited exemption for the purchase and sale of the Securities and related lending transactions, provided that neither the issuer of the Securities nor any of its affiliates have or exercise any discretionary authority or control or render any investment advice with respect to the assets of the Plan involved in the transaction and provided further that the Plan pays no more, and receives no less than, adequate consideration in connection with the transaction (the so-called "service provider exemption"). There can be no assurance that any of these statutory or class exemptions will be available with respect to transactions involving the Securities and assets of a Plan.

Accordingly, the Securities may not be purchased or held by any Plan, any entity whose underlying assets include "plan assets" by reason of any Plan's investment in the entity (a "Plan Asset Entity") or any person investing "plan assets" of any Plan, unless such purchaser or holder is eligible for the exemptive relief available under PTCE 96-23, 95-60, 91-38, 90-1 or 84-14 or the service-provider exemption or there is some other basis on which the purchase and holding of the Securities will not constitute a non-exempt prohibited transaction under ERISA or Section 4975 of the Code. Each purchaser or holder of the Securities or any interest therein will be deemed to have represented by its purchase or holding of the Securities that (a) it is not a Plan and its purchase and holding of the Securities is not made on behalf of or with "plan assets" of any Plan or (b) its purchase and holding of the Securities will not result in a non-exempt prohibited transaction under Section 406 of ERISA or Section 4975 of the Code.

Certain governmental plans (as defined in Section 3(32) of ERISA), church plans (as defined in Section 3(33) of ERISA) and non-U.S. plans (as described in Section 4(b)(4) of ERISA) ("Non-ERISA Arrangements") are not subject to these "prohibited transaction" rules of ERISA or Section 4975 of the Code, but may be subject to similar rules under other applicable laws or regulations ("Similar Laws"). Accordingly, each such purchaser or holder of the Securities shall

be required to represent (and deemed to have represented by its purchase of the Securities) that such purchase and holding is not prohibited under applicable Similar Laws.

Due to the complexity of these rules, it is particularly important that fiduciaries or other persons considering purchasing the Securities on behalf of or with "plan assets" of any Plan consult with their counsel regarding the relevant provisions of ERISA, the Code or any Similar Laws and the availability of exemptive relief under PTCE 96-23, 95-60, 91-38,

90-1, 84-14, the service provider exemption or some other basis on which the acquisition and holding will not constitute a non-exempt prohibited transaction under ERISA or Section 4975 of the Code or a violation of any applicable Similar Laws.

The Securities are contractual financial instruments. The financial exposure provided by the Securities is not a substitute or proxy for, and is not intended as a substitute or proxy for, individualized investment management or advice for the benefit of any purchaser or holder of the Securities. The Securities have not been designed and will not be administered in a manner intended to reflect the individualized needs and objectives of any purchaser or holder of the Securities.

Each purchaser or holder of any Securities acknowledges and agrees that:

- (i) the purchaser or holder or its fiduciary has made and shall make all investment decisions for the purchaser or holder and the purchaser or holder has not relied and shall not rely in any way upon us or our affiliates to act as a fiduciary or adviser of the purchaser or holder with respect to (A) the design and terms of the Securities, (B) the purchaser or holder's investment in the Securities, or (C) the exercise of or failure to exercise any rights we have under or with respect to the Securities;
- (ii) we and our affiliates have acted and will act solely for our own account in connection with (A) all transactions relating to the Securities and (B) all hedging transactions in connection with our obligations under the Securities;
- (iii) any and all assets and positions relating to hedging transactions by us or our affiliates are assets and positions of those entities and are not assets and positions held for the benefit of the purchaser or holder;
- (iv) our interests are adverse to the interests of the purchaser or holder; and
- (v) neither we nor any of our affiliates is a fiduciary or adviser of the purchaser or holder in connection with any such assets, positions or transactions, and any information that we or any of our affiliates may provide is not intended to be impartial investment advice.

Each purchaser and holder of the Securities has exclusive responsibility for ensuring that its purchase, holding and subsequent disposition of the Securities does not violate the fiduciary or prohibited transaction rules of ERISA, the Code or any applicable Similar Laws. The sale of any Securities to any Plan is in no respect a representation by us or any of our affiliates or representatives that such an investment meets all relevant legal requirements with respect to investments by Plans or Non-ERISA Arrangements generally or any particular Plan or Non-ERISA Arrangement, or that such an investment is appropriate for Plans or Non-ERISA Arrangements generally or any particular Plan or Non-ERISA Arrangement.

#### VALUATION OF THE SECURITIES

CGMI calculated the estimated value of the Securities set forth on the cover page of this pricing supplement based on proprietary pricing models. CGMI's proprietary pricing models generated an estimated value for the Securities by estimating the value of a hypothetical package of financial instruments that would replicate the payout on the Securities, which consists of a fixed-income bond (the "bond component") and one or more derivative instruments underlying the economic terms of the Securities (the "derivative component"). CGMI calculated the estimated value of the bond component using a discount rate based on our internal funding rate. CGMI calculated the estimated value of the derivative component based on a proprietary derivative-pricing model, which generated a theoretical price for the instruments that constitute the derivative component based on various inputs, including the factors described under "Risk Factors—Risk Factors Relating to the Securities—The value of the securities will be influenced by many unpredictable factors" in this pricing supplement, but not including our creditworthiness. These inputs may be market-observable or may be based on assumptions made by CGMI in its discretionary judgment.

The estimated value of the Securities is a function of the terms of the Securities and the inputs to CGMI's proprietary pricing models. The range for the estimated value of the Securities set forth on the cover page of this preliminary pricing supplement reflects terms of the Securities that have not yet been fixed as well as uncertainty on the date of this preliminary pricing supplement about the inputs to CGMI's proprietary pricing models on the pricing date.

For a period of approximately four months following issuance of the Securities, the price, if any, at which CGMI would be willing to buy the Securities from investors, and the value that will be indicated for the Securities on any brokerage account statements prepared by CGMI or its affiliates (which value CGMI may also publish through one or more financial information vendors), will reflect a temporary upward adjustment from the price or value that would otherwise be determined. This temporary upward adjustment represents a portion of the hedging profit expected to be realized by CGMI or its affiliates over the term of the Securities. The amount of this temporary upward adjustment will decline to zero on a straight-line basis over the four-month temporary adjustment period.

EX A	
Citi Volatility Balanced Beta (VIBE) Equity U Price Return Inde Index Methodolog	ex
Citi Investment Strategie	es

## Citi Investment Strategies Citi Volatility Balanced Beta (VIBE) Equity US Price Return Index Index Methodology

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Part A: Introduction			

Citi Investment Strategies Citi Volatility Balanced Beta (VIBE) Equity US Price Return Index Index Methodology

#### Introduction

This document constitutes the "Index Methodology" in respect of the Index (as defined below) and is made available by Citigroup Global Markets Limited in its capacity as the Index Sponsor.

This Index Methodology and the Index General Conditions dated 18 November 2011 (as amended from time to time, the "Index General Conditions") together comprise the Index Conditions applicable to the Index and must be read together. In the case of any inconsistency between this Index Methodology and the Index General Conditions, this Index Methodology shall prevail in respect of the Index.

Full information in respect of the Index is only available on the basis of the combination of this Index Methodology and the Index General Conditions.

Full information in respect of any Index Linked Product is only available on the basis of the combination of this Index Methodology and the Index General Conditions and the confirmation, prospectus or offering document (however described) in respect of such Index Linked Product.

This Index Methodology may be amended from time to time without notice, and will be available from the Index Sponsor. See Section E (Miscellaneous) of the Index General Conditions for a description of the circumstances in which a change to this Index Methodology may be required.

Terms used in this Index Methodology but not defined in this Index Methodology shall have the meanings given to them in the Index General Conditions.

Citi Investment Strategies Citi Volatility Balanced Beta (VIBE) Equity US Price Return Index Index Methodology

Part :	B:	Key	Information
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Citi Investment Strategies Citi Volatility Balanced Beta (VIBE) Equity US Price Return Index Index Methodology

#### **Key Information**

Index: Citi Volatility Balanced Beta (VIBE) Equity US Price Return Index (the "Index")

Summary of strategy: The Index tracks the weighted performance of 100 US-listed stocks selected

from the S&P 1001. The percentage weight of each stock within the Index is determined on a quarterly basis such that the contribution of each stock to the overall volatility of the Index is equal in accordance with the Citi Volatility Balanced Beta ("VIBE") methodology developed by Citigroup Global Markets

Limited.

A review of the Index is carried out quarterly. On each quarterly selection day, the stocks are reselected by reference to the stocks in the S&P 100 at the time

and the percentage weight of each stock to be included in the Index is

determined in accordance with the Citi VIBE methodology. These new stocks are given effect in their respective weights as of the related quarterly rebalancing

date.

Index Sponsor: Citigroup Global Markets Limited

Index Calculation Agent: S&P Dow Jones Indices LLC ("S&P Dow Jones")

Index Base Currency: US dollars (USD)

Index Launch Date: 10 June 2011

Index Start Date: 7 January 2000

Index Start Level: 100

Index Fee: Not applicable.

Frequency of calculation of the

Index Level:

Daily, on each Index Business Day.

Frequency of rebalancing: Quarterly, on each Rebalancing Date.

Index Electronic Page: Bloomberg page CIISRLUP <Index>

The Index was launched by the Index Sponsor on the Index Launch Date and has been calculated by the Index Calculation Agent for the period from the Index Start Date. Any back-testing or similar performance analysis undertaken by any person in respect of the Index for any reason must be considered illustrative only and may be based on assumptions or estimates not used by the Index Calculation Agent when determining the Index Level.

1 The Index will exclude Citigroup Inc. and potentially a limited number of other stocks in the circumstances described in this Index Methodology.

Citi Investment Strategies Citi Volatility Balanced Beta (VIBE) Equity US Price Return Index Index Methodology

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Citi Investment Strategies Citi Volatility Balanced Beta (VIBE) Equity US Price Return Index Index Methodology

Overview of the Index

### 1. GENERAL OVERVIEW

The overview set out in this Part C is a summary only of the Index Conditions, of which this Part C is a part. The Index Conditions as a whole govern the calculation of the Index and the Index Level (as defined in Part D (Calculation of the Index Level) below), and the determinations made in connection with the maintenance of the Index. In the case of any inconsistency between this Part C and the remainder of the Index Conditions, the remainder of the Index Conditions shall prevail.

The Index is a notional rules-based proprietary index developed by the Index Sponsor.

Generally, constituents of financial indices may be weighted according to different methodologies based on different theories of portfolio diversification, optimization and market representation. Market capitalization weighting, equal-weighting, and more recently, portfolio optimization weighting techniques are frequently used.

The Index assigns weights to its Constituents (as defined in Section D (Definitions) of the Index General Conditions) using the Citi Volatility Balanced Beta methodology, a proprietary risk-weighting model developed by Citigroup Global Markets Limited which is described in detail in Part D (Calculation of the Index Level) below. The Citi Volatility Balanced Beta methodology determines the Percentage Weight (as defined in Part D (Calculation of the Index Level) below) of each Constituent on a quarterly basis such that the risk contribution of each Constituent is equal. In determining the risk contribution of each Constituent, the methodology relies exclusively on market price volatility (both historic and implied) as a measure of risk. The Index does not attempt to identify or quantify any specific risks which may be relevant to a stock, sector, industry or geographic region.

The Index tracks the weighted performance of 100 US-listed stocks2 selected from the constituents of the S&P 100 (the "Eligible Universe" or the "Eligible Universe Index"). As outlined above, the Percentage Weight of each Constituent within the Index is determined on a quarterly basis such that the risk contribution of each Constituent is equal in accordance with the Citi Volatility Balanced Beta methodology. On each quarterly Selection Day (as defined in Part F (Data) below), the Constituents which will be included in the Index on the related Rebalancing Date (as defined in Part F (Data) below) are reselected by reference to the stocks in the Eligible Universe on that Selection Day and the Percentage Weight of each selected Constituent to be included in the Index is determined in accordance with the Citi Volatility Balanced Beta methodology. The Index is rebalanced to replicate notional positions in the selected Constituents in their respective Percentage Weights as of the Rebalancing Date following the relevant Selection Day.

Whenever a stock that is a Constituent of the Index is removed from the Eligible Universe, such Constituent is removed from the Index on the same day and the percentage weights of the remaining Constituents are scaled up such that the percentage weight of the removed Constituent is proportionally redistributed to the remaining Constituents. The introduction of a new stock into the Eligible Universe will not result in an adjustment to the Index until the next Rebalancing Date. Changes to the composition of the Eligible Universe are normally announced by the sponsor of the Eligible Universe in advance of the effective date of such changes.

The Citi Volatility Balanced Beta methodology is used to determine weights for the Constituents on a quarterly basis such that the risk contribution of the Constituents in the Index is equal or neutral with respect to the other Constituents

and the Index as a whole. This does not mean that

2 The Index will exclude Citigroup Inc. and potentially a limited number of other stocks in the circumstances described in this Index Methodology.

Citi Investment Strategies Citi Volatility Balanced Beta (VIBE) Equity US Price Return Index Index Methodology

the Index is risk-free. The Index is subject to equity market risks. The methodology on which the Index is based may not be successful and may not outperform any alternative strategy that might be employed in respect of the stocks in the Eligible Universe.

The Index is a price return index, with no notional reinvestment of any regular dividends and where the only adjustments in respect of dividends are made in respect of Extraordinary Dividends as defined below in Part E (Dividends, Stock Splits and Rights Issues). The Index is described as replicating notional positions in the Constituents because there is no actual portfolio of assets to which any person is entitled or in which any person has any ownership interest. The Index simply references certain investment positions the performance of which is used as a reference point for the purpose of calculating the Index Level.

#### 2. INDEX SPONSOR AND INDEX CALCULATION AGENT

The Index Sponsor is Citigroup Global Markets Limited. As at the date of this Index Methodology, the Index Sponsor has appointed S&P Dow Jones as Index Calculation Agent to calculate and publish the Index in accordance with the Index Conditions. The Index Sponsor may, in its sole discretion and without notice, appoint an alternative Index Calculation Agent at any time which may be the Index Sponsor or one of its Affiliates.

The Index Sponsor's determinations in respect of the Index shall be final. Please refer to Section E (Miscellaneous) of the Index General Conditions for further information.

#### 3. INDEX LEVEL CALCULATION

Subject to the occurrence or existence of a Disrupted Day (as defined in Section D (Definitions) of the Index General Conditions), the Index Level is calculated by the Index Calculation Agent as of the Index Valuation Time on each Index Business Day (each as defined in Part F (Data) below). The Index Level for each Index Business Day is published on the Index Electronic Page, generally on the following Index Business Day. This should be considered the official source for the Index Level and a level obtained from any other source (electronic or otherwise) must be considered unofficial. The Index Level is the closing level of the Index for the relevant Index Business Day. The Index Calculation Agent may also, but is not obliged to, calculate the level of the Index in respect of any other valuation time on any Index Business Day or any other day with the consent of the Index Sponsor.

The detailed procedures for the calculation of the Index Level in respect of each Index Business Day are set out in Part D (Calculation of the Index Level) below.

#### 4. QUARTERLY REBALANCING

The Index is rebalanced on a quarterly basis. On each Selection Day, the Index Calculation Agent will select the Constituents from the Eligible Universe that will be included in the Index with effect from the Rebalancing Date following the relevant Selection Day. The Index Calculation Agent will also perform the calculations required to determine the Percentage Weight of each Constituent according to the Citi Volatility Balanced Beta methodology. These Percentage Weights will then be applied to the current Index Level and the Constituent Closing Levels (determined in accordance with Section B (Valuations and Adjustments) of the Index General Conditions) of the Constituents on the relevant Rebalancing Date to determine their Weights (as defined in Part D (Calculation of the

Index Level) below), so that the Index Level, using the new Weights, can then be calculated in the same way as every other Index Business Day.

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#### 5. SELECTION OF CONSTITUENTS

The Constituents selected on each Selection Day, from and including the first Selection Day prior to the Index Start Date, will comprise all of the stocks in the Eligible Universe as of such date, other than (i) stocks issued by the Index Sponsor or its Affiliates (as defined in Section D (Definitions) of the Index General Conditions), including Citigroup Inc., (ii) any stocks included on the Index Sponsor's Restricted List (being a list of stocks in which the Index Sponsor or any of its Affiliates is not permitted to deal for a particular period due to laws and regulations), and (iii) any stocks for which there is insufficient publicly available historic market data in order to determine historic volatility and exponential moving average statistics in accordance with the Index methodology set out in detail in Part D (Calculation of the Index Level) below.

#### 6. CHANGES IN THE ELIGIBLE UNIVERSE

The Constituents comprising the Index will also be adjusted between Rebalancing Dates to take account of the removal of stocks from the Eligible Universe. Stocks which are introduced into the Eligible Universe between Rebalancing Dates will not be included in the Index solely as a result of such introduction, but stocks may be introduced into the Index between Rebalancing Dates in accordance with the Index Conditions as a result of certain corporate action events such as mergers.

#### 7. DETERMINATION OF PERCENTAGE WEIGHTS

On each Selection Day, the Index methodology requires the Index Calculation Agent to determine the Percentage Weights of the individual Constituents which will be included within the Index on the related Rebalancing Date. The methodology adopts a four-step process to determine these Percentage Weights.

The first two steps compute variances and correlation parameters with reference to two distinct approaches: implied volatilities (to create a notional implied risk portfolio) and exponential moving average returns (to create a notional trend-following risk portfolio). In the third step, these two notional portfolios are subject to an optimization model that computes percentage weights that aim to achieve an equal contribution to risk for each selected Constituent in each notional portfolio. The final step blends the results of the previous step to obtain an average percentage weight, and also applies a cap to the percentage weight of each selected Constituent.

In the first step, the methodology compares the 120-day implied volatility of each selected Constituent to the 120-day implied volatility of all the other selected Constituents. This process creates a covariance matrix (the "forward-looking covariance matrix"). Covariance establishes the extent to which one variable (in this case, one selected Constituent) reacts similarly to another variable or set of variables (in this case, each other selected Constituent).

In the second step, a covariance matrix comparing the historic 40-day exponential moving average of the returns of each selected Constituent to the historic 40-day exponential moving average of the returns of all other selected Constituents is established (the "trend-following covariance matrix"). The 40-day exponential moving average is observed for each of the selected Constituents on each of the 120 Index Business Days ending on the relevant Selection Day. The exponential moving average is a type of moving average in which greater emphasis is given to the more recent history. In the Index, this means that the 40-day exponential moving average applies greater weight to more recent returns of the selected Constituents than their returns at the (oldest) end of the 40-day period.

In the third step, the Index methodology applies a proprietary optimization algorithm to determine percentage weights for each selected Constituent. The optimization algorithm is applied to each covariance matrix separately. The optimization algorithm aims to find percentage weights for each selected Constituent such that each selected Constituent's contribution to index volatility is the same as every other selected Constituent's volatility contribution.

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In the final step, the optimal percentage weights obtained in the third step are added together and an average obtained, so that the forward-looking covariance matrix and the trend-following covariance matrix are equally important in the determination of the final percentage weights of the selected Constituents. The average percentage weights for all of the selected Constituents are then added together and normalized to ensure they add to 100%.

The individual selected Constituent percentage weights resulting from this step are subject to a 10% individual maximum percentage weight cap. The purpose of the cap is to avoid concentration risk within the Index, where sudden changes in the value of one Constituent can have a large impact on the Index as a whole.

Percentage weights in excess of 10% are reallocated proportionately to the remaining selected Constituents, subject to the same 10% maximum percentage weight. The result of this calculation fixes the percentage weights for each of the selected Constituents which will be applied on the relevant Rebalancing Date (and is the "Percentage Weight" used in the Index Level calculations).

#### 8. DETERMINATION OF WEIGHTS

On each Rebalancing Date following a Selection Day, the Index Calculation Agent determines the Weight of each selected Constituent within the Index.

The difference between "weight" and "percentage weight" can be understood as the difference between the notional number of stocks of a constituent in an index (the weight) and the proportion that each constituent has to the overall level of the index (the percentage weight). The weight of a constituent is determined in respect of a rebalancing date by reference to the designated percentage weight of the constituent, the level of the index and the price of the constituent on the rebalancing date. The weight of each constituent remains fixed between rebalancing dates save for adjustments as a result of extraordinary dividends, corporate actions and extraordinary events. Unlike percentage weight, which is a snapshot of the proportion that a certain stock has within the index as a whole, weight assesses the synthetic investment value of that stock within the index. Because stock prices fluctuate, the proportion that each stock contributes to the index on any day depends on the relative performance of that stock compared with the performance of the index as a whole. As such, the percentage weight of a stock in an index can vary from day to day. On the other hand, a constituent included within an index on a certain rebalancing day, and having a certain percentage weight on that day, will be represented by a weight which is fixed until the next rebalancing day.

In the Index, the Index Calculation Agent shall, as of each Rebalancing Date following the Index Start Date, determine the Current Percentage Weight (as defined in Part D (Calculation of the Index Level) below) of each selected Constituent in the Index on such Rebalancing Date. The Current Percentage Weight is the proportion that the relevant selected Constituent has in the Index as a whole prior to the rebalancing, expressed as a percentage. For the avoidance of doubt, any selected Constituent that is not an existing Constituent in the Index will have a Current Percentage Weight of zero on the Rebalancing Date.

The Weight of each selected Constituent will then be determined as a function of its Percentage Weight and the Index Level (i.e. the Index Level is split into that proportion attributable to the Percentage Weight of each selected Constituent), which is then divided by the price of the relevant selected Constituent.

The Weights of the Constituents will remain constant between Rebalancing Dates, save for adjustments to take account of the economic effect of extraordinary dividends, corporate actions and certain extraordinary events, as described in detail in Part D (Calculation of the Index Level) and Part E (Dividends, Stocks Splits and Rights Issues) of this Index Methodology, and Section B (Valuations and Adjustments) of the Index General Conditions.

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Part D: C	'alcul	ation	of t	he l	Index	Level
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#### Calculation of the Index Level

The Index Sponsor is Citigroup Global Markets Limited. As at the date of this Index Methodology, the Index Sponsor has appointed S&P Dow Jones as Index Calculation Agent to calculate and publish the Index in accordance with the Index Conditions. The Index Sponsor may, in its sole discretion and without notice, appoint an alternative Index Calculation Agent at any time which may be the Index Sponsor or one of its Affiliates.

The Index Calculation Agent's calculations of the Index Level shall be final in the absence of manifest error. Please refer to Section E (Miscellaneous) of the Index General Conditions for further information.

The Index Level is calculated by the Index Calculation Agent as of the Index Valuation Time on each Index Business Day (each as defined in Part F (Data) below). The Index Level for each Index Business Day is published on the Index Electronic Page, generally on the following Index Business Day. This should be considered the official source for the Index Level and a level obtained from any other source (electronic or otherwise) must be considered unofficial. The Index Level is the closing level of the Index for the relevant Index Business Day. The Index Calculation Agent may also, but is not obliged to, calculate the level of the Index in respect of any other valuation time on any Index Business Day or any other day with the consent of the Index Sponsor.

All of the calculations and determinations described in this Part D are the responsibility of the Index Calculation Agent. The calculations and determinations in this Part D are subject to the occurrence of, and adjustments made as a consequence of, Extraordinary Dividend Adjustment Events, Stock Split Adjustment Events and Rights Issue Adjustment Events (as described in Part E (Dividends, Stock Splits and Rights Issues) below), Disrupted Days and Adjustment Events (as described in Section B (Valuations and Adjustments) and Section F (Constituent Schedule: Share) of the Index General Conditions).

All of the calculations and determinations described in this Part D are the responsibility of the Index Calculation Agent. The calculations and determinations in this Part D are subject to the occurrence of, and adjustments made as a consequence of, Extraordinary Dividend Adjustment Events, Stock Split Adjustment Events and Rights Issue Adjustment Events (as described in Part E (Dividends, Stock Splits and Rights Issues) below), Disrupted Days and Adjustment Events (as described in Section B (Valuations and Adjustments) and Section F (Constituent Schedule: Share) of the Index General Conditions).

#### 1. DAILY INDEX CALCULATION

1.1 Index Level

The "Index Level" on the Index Start Date shall be the Index Start Level.

The "Index Level" on each Index Business Day t (following the Index Start Date) shall be an amount determined by the Index Calculation Agent in accordance with the formula set out below. The formula aggregates the product of each Constituent's Constituent Closing Level and its prevailing Weight (each as defined below).

where:

Index Level on Index Business Day t

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Constituent Closing Leveli,t = Constituent Closing Level of Constituent i on Index Business

Day t (as determined in accordance with Section B (Valuations and Adjustments) of the Index General

Conditions)

Weighti,r = Weight of Constituent i on the Rebalancing Date r (or the

Index Start Date, as applicable) immediately preceding Index

Business Day t

n = The number of Constituents included in the Index on Index

Business Day t

On Rebalancing Date r, the Index Level is calculated using the respective Weights (as determined on Rebalancing Date r-1) of each Constituent (as selected on the Selection Day immediately preceding Rebalancing Date r-1), subject to any subsequent adjustment of any Constituent's Weight as a result of any Additional Rebalancing Event, Extraordinary Dividend Adjustment Event, Stock Split Adjustment Event, Rights Issue Adjustment Event or Adjustment Event. Beginning with the first Index Business Day following Rebalancing Date r, up to and including Rebalancing Date r+1 (but prior to the rebalancing of the Index on such Rebalancing Date r+1), the Index Level is calculated using the Constituents selected on the Selection Day immediately preceding Rebalancing Date r and their respective Weights (as determined on Rebalancing Date r).

1.2 Weight

The Index Calculation Agent shall determine the Weight of each of the Selected Constituents on the Index Start Date and on each Rebalancing Date, and such Weights shall remain in effect until the end of the following Rebalancing Date, subject to the occurrence of any Additional Rebalancing Event, Extraordinary Dividend Adjustment Event, Stock Split Adjustment Event, Rights Issue Adjustment Event or Adjustment Event.

The Weight for each Selected Constituent in respect of a Rebalancing Date will be calculated by the Index Calculation Agent as the product of the Percentage Weight of the relevant Selected Constituent and the Index Level on such Rebalancing Date (giving the proportion of the Index attributable to that Selected Constituent), which is then divided by the Constituent Closing Level of that Selected Constituent on such Rebalancing Date. The calculation formula is set out in detail below.

The "Weight" of each Selected Constituent on the Index Start Date and each Rebalancing Date shall be an amount determined by the Index Calculation Agent in accordance with the formula set out below. For this purpose, the Index Start Date shall be deemed to be a Rebalancing Date.

where:

Weighti,r = Weight of Selected Constituent i on Rebalancing Date r

=

Percentage Weight of Selected Constituent i on Rebalancing Date r Percentage

Weighti,r

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Index Level = Index Level on Rebalancing Date r

Constituent Closing = Constituent Closing Level of Selected Constituent i on

Leveli,r Rebalancing Date r

### 1.3 Current Percentage Weight

The Current Percentage Weight of a Constituent on any Index Business Day is calculated as the Weight which such Constituent had in the Index from, but excluding, the immediately preceding Rebalancing Date r (or the Index Start Date, as the case may be), multiplied by its Constituent Closing Level on such Index Business Day, divided by the Index Level in respect of such Index Business Day.

On each Index Business Day t, the Index Calculation Agent shall calculate the "Current Percentage Weight" in respect of each Constituent i in accordance with the following formula:

where:

Current Percentage = Current Percentage Weight of Constituent i on

Weighti,t Index Business Day t

Weighti,r = Weight of Selected Constituent i on the

Rebalancing Date r (or the Index Start Date, as the

case may be) immediately preceding Index

Business Day t

Constituent Closing = Constituent Closing Level of Constituent i on

Leveli,t Index Business Day t

Index Level on Index Business Day t

Where Index Business Day t is itself a Rebalancing Date, Weighti,r and Constituent Closing Leveli,t are determined prior to the rebalancing taking place.

#### 2. CONSTITUENT SELECTION AND INDEX REBALANCING PROCESS

### 2.1 Selection of Constituents

On each Selection Day, the Index Calculation Agent will determine the stocks within the Eligible Universe on such day (the "Eligible Constituents"). The Index Calculation Agent shall then exclude from such list of Eligible Constituents any stocks:

(1) which are issued by the Index Sponsor or its Affiliates, including Citigroup Inc.; or

- (2) which, as at the relevant Selection Day, are included on the Index Sponsor's Restricted List (being a list of stocks which the Index Sponsor and/or any of its Affiliates are not permitted to hold, buy, sell or otherwise deal in for a particular period of time due to laws, regulations or internal policies); or
- (3) for which, as at the relevant Selection Day, there is less than 159 Index Business Days of publicly available historic market data, as required to determine the historic volatility

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and/or exponential moving average statistics in accordance with the Index methodology described below.

The stocks which remain in the list of Eligible Constituents following any such exclusions will be the "Selected Constituents" in respect of the relevant Selection Day and will become the "Constituents" of the Index after the rebalancing process on the immediately following Rebalancing Date.

### 2.2 Determination of Percentage Weights – Application of the Citi Volatility Balanced Beta methodology

The Percentage Weights of each Selected Constituent are determined by the Index Calculation Agent on each Selection Day. In order to determine the applicable Percentage Weights, the Index Calculation Agent follows a four-step process. The first two steps each create a covariance matrix, referred to below as the Forward-Looking (or Implied) Covariance Matrix and the Trend-Following (or Historic) Covariance Matrix respectively, each representing the marginal contributions of the Selected Constituents to the overall volatility of the Index.

In the third step, an optimization model is used to find an optimum percentage weight for each Selected Constituent within each covariance matrix.

The fourth step is to determine the average of the two covariance matrix percentage weights for each Selected Constituent, normalize these to a combined aggregate percentage weight of 100%, and then apply an individual maximum percentage weight of 10% to each Selected Constituent, redistributing any excess percentage weight proportionately to the remaining Selected Constituents. This will then determine the respective Percentage Weights for all the Selected Constituents.

This determination process, including the relevant formulae used by the Index Calculation Agent to determine the "Percentage Weight" of each Selected Constituent, is set out in detail below:

(1) Construction of the Forward-Looking (or Implied) Covariance Matrix ("FCov") of the Selected Constituents

The covariance matrix can be visualized as a grid in which all the Selected Constituents are represented in rows and columns. The points of intersection in this grid indicate the correlation between each Selected Constituent and every other Selected Constituent. There will be a diagonal line bisecting the grid where a row representing that Selected Constituent intersects with the column representing that same Selected Constituent, and therefore the variance of that Selected Constituent (as the covariance of a Selected Constituent with itself is its variance).

A covariance matrix typically assesses the degree to which two or more stocks covary, or move in tandem. A positive covariance means that the two variables move together (in the same direction), while a negative covariance means that the variables move in opposite directions. Two stocks with positive covariance means that those stocks react to market events in a similar way; if they have negative covariance, it means that they react inversely. The lower the covariance between a number of stocks, the more they can be said to represent diversified stocks.

In the Citi Volatility Balanced Beta model, the Forward-Looking Covariance Matrix is computed as follows:

On each Selection Day, the Index Calculation Agent determines an implied volatility value ("Implied Volatility") for each Selected Constituent, using the 3-month implied spot volatility of the Reference Vol Index and the beta of the relevant Selected Constituent with respect to the Reference Vol Index measured over the previous 120 Index Business

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Days. The Implied Volatility calculation is designed such that the Implied Volatility of a Selected Constituent will always be positive.

This can be described formulaically as follows:

W	here	

FVol i,k = The Implied Volatility of Selected Constituent i in respect of Selection Day k

IVk = The 3-month implied spot volatility of at-the-money listed options on the Reference Vol Index on Selection Day k, as observed at the Index Valuation Time on the Bloomberg page <SPX Index GV> with the <type ATM> function, or any successor or alternative screen page, as may be determined by the Index Calculation Agent

i,k = The regression coefficient between the 120 daily log-returns "Yi, s" of Selected Constituent i for the 120 Index Business Days ending on Selection Day k and the 120 daily log-returns "Bs" of the Reference Vol Index for the 120 Index Business Days ending on Selection Day k, calculated as follows:

Cov(Yi,B) = The covariance between the 120 daily log-returns "Yi, s" of Selected Constituent i for the 120 Index Business Days ending on Selection Day k and the 120 daily log-returns "Bs" of the Reference Vol Index for the 120 Index Business Days ending on Selection Day k, calculated as follows:

Var(B) = Cov(B,B)

Cov(B,B) = The covariance between the 120 daily log-returns "Bs" of the Reference Vol Index for the 120 Index Business Days ending on Selection Day k, calculated as follows:

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The arithmetic average of the N daily log-returns "Yi"

= The arithmetic average of the N daily log-returns "B"

В

Yi, t =

=

Constituent Closing Leveli,t Constituent Closing Level (determined in accordance with Section B (Valuations and Adjustments) of the Index General Conditions) of Selected Constituent i on Index Business Day t (provided that if Index Business Day t is a Disrupted Day for Selected Constituent i, then Constituent Closing Leveli,t shall be deemed to be equal to the Constituent Closing Level of Selected Constituent i on the preceding Scheduled Trading Day for Selected Constituent i that was not a Disrupted Day for Selected Constituent i)

Constituent Closing Leveli,t-1 Constituent Closing Level (determined in accordance with Section B (Valuations and Adjustments) of the Index General Conditions) of Selected Constituent i on the Index Business Day immediately preceding Index Business Day t (provided that if Index Business Day t-1 is a Disrupted Day for Selected Constituent i, then Constituent Closing Leveli,t-1 shall be deemed to be equal to the Constituent Closing Level of Selected Constituent i on the preceding Scheduled Trading Day for Selected Constituent i that was not a Disrupted Day for Selected Constituent i)

Bt =

It

Closing level of the Reference Vol Index on Index Business Day t, as published by the Reference Vol Index Sponsor. If the Reference Vol Index Sponsor does not publish, for any reason, a closing level for the Reference Vol Index on Index Business Day t, then It shall be deemed to be equal to the closing level of the Reference Vol Index on the preceding day on which a closing level for the Reference Vol Index was published by the Reference Vol Index Sponsor

It-1

Closing level of the Reference Vol Index on the Index Business Day immediately preceding Index Business Day t, as published by the Reference Vol Index Sponsor. If the Reference Vol Index Sponsor did not publish, for any reason, a closing level for the Reference Vol Index on Index Business Day t-1, then It-1 shall be deemed to be equal to the closing level of the Reference Vol Index on the preceding day on which a closing level for the Reference Vol Index was published by the Reference Vol Index Sponsor

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Reference Vol Index	=	S&P 500® Index
Reference Vol	=	S&P Dow Jones (including its successors and

Index Sponsor assigns)

s = The series of 120 Index Business Days ending on Selection Day k

Yi,s = The 120 daily log-returns of Selected Constituent i "Yi,t" for the 120 Index Business Days ending on Selection Day k

Bs = The 120 daily log-returns of the Reference Vol Index "Bt" for the 120 Index Business Days ending on Selection Day k

Yi = A vector representing the 120 daily log-returns "Yi,s" of Selected Constituent i

B = A vector representing the 120 daily log-returns "Bs" of the Reference Vol Index

N = 120

b.Calculate each element FCov(n, m) of the Forward-Looking Covariance Matrix, as follows:

### Where:

n, m	=	Each possible combination of two Selected Constituents (i.e. $n = 1,, M; m = 1,, M;$ including combinations where $n=m$ )
M	=	The number of Selected Constituents determined on Selection Day k in accordance with the methodology described in paragraph 2.1 (Selection of Constituents) above
n,m	=	The correlation coefficient between the 120 daily log-returns "Xn, s" of Selected Constituent n for the 120 Index Business Days ending on Selection Day k and the 120 daily log-returns "Xm, s" of Selected

Constituent m for the 120 Index Business Days ending on Selection Day k, calculated as follows:

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Cov(Xn,Xm)

The covariance between the 120 daily log-returns "Xn, s" of Selected Constituent n for the 120 Index Business Days ending on Selection Day k and the 120 daily log-returns "Xm, s" of Selected Constituent m for the 120 Index Business Days ending on Selection Day k, calculated as follows:

Var(Xn)= Cov(Xn, Xn)

Cov(Xn, Xn) = The covariance between the 120 daily

log-returns "Xn, s" of the Selected Constituent n for the 120 Index Business Days ending on Selection Day k, calculated as follows:

Xn

The arithmetic average of the N daily Xm

log-returns "Xn"

The arithmetic average of the N daily

log-returns "Xm"

Xn, t =

Constituent Closing Level n, t

Constituent Closing Level (determined in accordance with Section B (Valuations and Adjustments) of the Index General

Conditions) of Selected Constituent n on

Index Business Day t (provided that if Index Business Day t is a Disrupted Day for Selected Constituent n, then Constituent Closing Leveln,t shall be deemed to be equal to the Constituent Closing Level of Selected Constituent n on the preceding Scheduled Trading Day for Selected Constituent n that

was not a Disrupted Day for Selected

Constituent n)

Constituent Closing Level n,t-1 Constituent Closing Level (determined in accordance with Section B (Valuations and

Adjustments) of the Index General

Conditions) of Selected Constituent n on the Index Business Day immediately preceding

Index

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> Business Day t (provided that if Index Business Day t-1 is a Disrupted Day for Selected Constituent n, then Constituent Closing Leveln,t-1 shall be deemed to be equal to the Constituent Closing Level of Selected Constituent n on the preceding Scheduled Trading Day for Selected Constituent n that was not a Disrupted Day for Selected Constituent n)

Xm, t =

Constituent Closing Level m, t Constituent Closing Level (determined in accordance with Section B (Valuations and Adjustments) of the Index General Conditions) of Selected Constituent m on Index Business Day t (provided that if Index Business Day t is a Disrupted Day for Selected Constituent m, then Constituent Closing Levelm,t shall be deemed to be equal to the Constituent Closing Level of Selected Constituent m on the preceding Scheduled Trading Day for Selected Constituent m that was not a Disrupted Day for Selected Constituent m)

Constituent Closing Level m,t-1 Constituent Closing Level (determined in accordance with Section B (Valuations and Adjustments) of the Index General Conditions) of Selected Constituent m on the Index Business Day immediately preceding Index Business Day t (provided that if Index Business Day t-1 is a Disrupted Day for Selected Constituent m, then Constituent Closing Levelm,t-1 shall be deemed to be equal to the Constituent Closing Level of Selected Constituent m on the preceding Scheduled Trading Day for Selected Constituent m that was not a Disrupted Day for Selected Constituent m)

s = The series of 120 Index Business Days ending on Selection Day k

Xn, s =

The 120 daily log-returns of Selected Constituent n "Xn, t" for the 120 Index Business Days ending on Selection Day k

Xm, s = The 120 daily log-returns of Selected Constituent m "Xm, t" for the 120 Index Business Days ending on Selection Day k

Xn = A vector representing the 120 daily log-returns "Xn, s" of Selected Constituent n

Xm = A vector representing the 120 daily log-returns "Xm, s" of Selected Constituent m

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N = 120

FVol n, k = The Implied Volatility for Selected

Constituent n on Selection Day k, determined

in the same manner as FVoli, k above

FVol m, k = The Implied Volatility for Selected

Constituent m on Selection Day k,

determined in the same manner as FVoli, k

above

(2) Constructing the Trend-Following Covariance Matrix ("HCov") of the Selected Constituents

In this step, a second set of percentage weights is determined in respect of the Selected Constituents. As in the first step above, a covariance matrix is established to represent all of the Selected Constituents.

In order to compute the Trend-Following Covariance Matrix, instead of creating a covariance matrix based on the correlation and variance of the Selected Constituents with respect to historic volatility, a covariance matrix comparing the historic 40-day exponential moving average of the return of each Selected Constituent to the historic 40-day exponential moving average of the returns of all other Selected Constituents is established. The 40-day exponential moving average is observed for each of the Selected Constituents on each of the 120 Index Business Days ending on the relevant Selection Day.

The exponential moving average ("EMA") is a type of moving average in which greater emphasis is given to the more recent history. Moving average itself is a concept in which an average value is obtained for a value observed at a specific frequency during a specific period (in this case the daily return of a Selected Constituent over the preceding 40 Index Business Days), and this average "moves" every day to record the average daily return of a Selected Constituent for the most recent 40 Index Business Days. In the calculations below, the "Decay Factor" is applied to the moving average, which results in the daily returns from more recent Index Business Days affecting the EMA to a greater extent than the daily returns from earlier Index Business Days (i.e. recent data are given more weight than older data). The EMA for a Selected Constituent will react more quickly to recent changes in daily returns than a simple moving average.

a. The Covariance Matrix for the Trend-Following Covariance Matrix is calculated as follows:

On each Selection Day k, the Index Calculation Agent determines for each Selected Constituent i an historic exponential moving average return ("Exponential Moving Average Return") for each of the 159 Index Business Days ending on Selection Day k, in accordance with the following formula:

Where:

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EMAi, t-1

The Exponential Moving Average Return of Selected Constituent i on the Index Business Day immediately preceding Index Business Day t

EMAi, t-H+1

The first Exponential Moving Average Return in the series for Selected Constituent i (i.e., EMAi, t-H+1) shall be equal to the log-return Xi, ,t-H+1

2/(K+1)

K 40 (the "Decay Factor")

Xi, t

Constituent Closing Level i,

t

Constituent Closing Level (determined in accordance with Section B (Valuations and Adjustments) of the Index General Conditions) of Selected Constituent i on Index Business Day t (provided that if Index Business Day t is a Disrupted Day for Selected Constituent i, then Constituent Closing Leveli,t shall be deemed to be equal to the Constituent Closing Level of Selected Constituent i on the preceding Scheduled Trading Day for Selected Constituent i that was not a Disrupted Day for Selected Constituent i)

Constituent Closing Level i, t-1

Constituent Closing Level (determined in accordance with Section B (Valuations and Adjustments) of the Index General Conditions) of Selected Constituent i on the Index Business Day immediately preceding Index Business Day t (provided that if Index Business Day t-1 is a Disrupted Day for Selected Constituent i, then Constituent Closing Leveli,t-1 shall be deemed to be equal to the Constituent Closing Level of Selected Constituent i on the preceding Scheduled Trading Day for Selected Constituent i that was not a Disrupted Day for Selected Constituent i)

H = 159

b. Calculate each element HCov(n, m) of the Trend-Following Covariance Matrix, as follows:

Where the Exponential Moving Average Returns for each of the 120 Index Business Days preceding the relevant Selection Day are used in the Trend-Following Covariance Matrix:

n, m = Each possible combination of two Selected Constituents (i.e. n = 1, ..., M; m = 1, ..., M; including combinations where n=m)

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M	=	The number of Selected Constituents determined on Selection Day k in accordance with the methodology described in paragraph 2.1 (Selection of Constituents) above
cov(EMA n,EMA m)	=	The covariance between the 120 Exponential Moving Average Returns "EMAn, s" of Selected Constituent n for each of the 120 Index Business Days ending on Selection Day k and the 120 Exponential Moving Average Returns "EMAm, s" of Selected Constituent m for each of the 120 Index Business Days ending on Selection Day k, calculated as follows:
		where t=k and N=120
EMAn, s	=	The 120 Exponential Moving Average Returns of Selected Constituent n "EMAn, t" for the 120 Index Business Days ending on Selection Day k
EMAm, s	=	The 120 Exponential Moving Average Returns of Selected Constituent m "EMAm, t" for the 120 Index Business Days ending on Selection Day k
EMAn	=	The arithmetic average of the N Exponential Moving Average Returns "EMAn, s"
EMAm	=	The arithmetic average of the N Exponential Moving Average Returns "EMAm, s"
N	=	120
S	=	The series of 120 Index Business Days ending on Selection Day k

(3) Optimization routine to find Equal-Contribution Weights of the Selected Constituents

Once the covariance matrices are populated in accordance with the formulae in Steps 1 and 2 above, a vector of percentage weights is determined for each covariance matrix, using an optimization model.

The optimization model is used to find the combination of percentage weights for the Selected Constituents that results in the risk contribution of each Selected Constituent being equal.

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Within the optimization model, the risk contribution of a Selected Constituent is defined as the sensitivity of the volatility of the Selected Constituents collectively to a change in the relative value of the Percentage Weight of the individual Selected Constituent.

To equalize the risk contribution of the Selected Constituents, the model compares the change in the risk contribution of the portfolio of Selected Constituents to a relative change in the Percentage Weight of a Selected Constituent (the "Constituent Risk Sensitivity") with the Constituent Risk Sensitivity of each other Selected Constituent, on a pair by pair basis. For example, if there are three Selected Constituents A, B and C, this means there are three pairs: A paired with B, A paired with C and B paired with C. The model finds Percentage Weights for the Selected Constituents in which the pair by pair comparison for all of the Selected Constituents delivers a result in which the Constituent Risk Sensitivity of each Selected Constituent is equal to the Constituent Risk Sensitivity of each other Selected Constituent.

Each vector of weights "w" (and in relation to each covariance matrix, w1 and w2) is computed by the same optimization routine, which aims at solving the following non-linear optimization problem under constraints:

where n and m represent the elements (n,m) of Selected Constituent i in the relevant covariance matrix.

The first set of percentage weights w1 is computed using the Forward-Looking (or Implied) Covariance Matrix in the optimization problem.

The second set of percentage weights w2 is computed using the Trend-Following (or Historic) Covariance Matrix in the optimization problem.

The percentage weights determined according to this process are carried to step four below

(4) Blending the two sets of percentage weights: determination of the Selected Constituent Percentage Weights

The final Percentage Weights for each Selected Constituent (vector W) is determined as follows:

a. computation of the uncapped percentage weights (WUi)

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The percentage weights computed for each Selected Constituent as part of the Forward-Looking Covariance Matrix and the Trend-Following Covariance Matrix are then combined and divided by two in accordance with the following formula, so that each Selected Constituent has a blended (average) uncapped percentage weight (WUi):

b. computation of the normalized uncapped percentage weights (WUNi)

Although the sum of the percentage weights calculated in respect of each covariance matrix should individually equal 100%, the percentage weights attributed to each Selected Constituent may mean that when they are combined and the average calculated as described above, the sum of the average percentage weights may deviate slightly from 100%. A further calculation is therefore made to normalize the uncapped percentage weights. This is achieved by calculating the percentage weight of each Selected Constituent as the quotient of each Selected Constituent's uncapped percentage weight divided by the sum of the uncapped percentage weights for all of the Selected Constituents.

c. determination of capped percentage weights – the Selected Constituent Percentage Weights (Wi)

Once normalized, the Selected Constituent percentage weights are subjected to an individual percentage weight cap of 10%. The excess percentage weight (the aggregate percentage weight in excess of 10% for all the Selected Constituents) is distributed among the remaining uncapped Selected Constituents in a ratio proportional to their uncapped percentage weights, subject to the same individual percentage weight cap of 10%.

The resulting percentage weights are the Percentage Weights of the Selected Constituents (a vector "W") that will be applied in respect of the Index on the Rebalancing Date following the Selection Day on which these Percentage Weights are determined.

The normalized and uncapped percentage weights are ranked in decreasing percentage weight order, then the following rules are applied to each such percentage weight (for Selected Constituents i=1,... M where M is the number of Selected Constituents in respect of the relevant Selection Day) starting from the highest ranked such percentage weight (i=1, where E0=0):

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and Ei = Max(Ei-1 - (Wi - WUNi); 0)

Where:

3.1

Wi = The Percentage Weight of Selected Constituent

WUNi = The normalized uncapped percentage weight of

Selected Constituent i

= The normalized uncapped percentage weight of WUNi

> Selected Constituent j, where Selected Constituent j is a member of the subset of Selected Constituents for which Wi has not yet been determined and WUNi is less than the individual weight cap of 10%. For example, if M=100, i=40 (being the Selected Constituent which is ranked 40th by normalized uncapped percentage weight, in decreasing order) and WUN40 < 10%, then j is each Selected

Constituent i (where i=40,...M)

Ei = The excess percentage weight in respect of

Selected Constituent i

= The proportionate rate to distribute the excess percentage weight to Selected Constituent i

= The number of Selected Constituents M determined on Selection Day k in accordance

with the methodology described in paragraph

2.1 (Selection of Constituents) above

Max = Followed by a series of amounts separated by a semi-colon inside a set of brackets, means the

greater of such amounts

Min = Followed by a series of amounts separated by a

semi-colon inside a set of brackets, means the

lesser of such amounts

#### 3. ADDITIONAL REBALANCING EVENTS

Eligible Universe Removals

If a stock which is a Constituent of the Index is removed from the Eligible Universe (an "Eligible Universe Removal Event"), then such Constituent (a "Removed Constituent") will be removed from the Index on the same day (an "Additional Rebalancing Date").

The Percentage Weights of the remaining Constituents will be determined by the Index Calculation Agent in accordance with paragraph 3.3 (Determining the Percentage Weights of the remaining Constituents) below.

3.2 Regulatory Events

If either:

(a) the Index Sponsor or any of its Affiliates is required (or there is a reasonable likelihood that, within the next 30 Index Business Days, it will be required) by any applicable law or regulation or policy to unwind positions in a stock which is a Constituent of the Index, or is

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not permitted (or there is a reasonable likelihood that, within the next 30 Index Business Days, it will not be permitted) to establish or increase positions in such a stock; and/or

(b) due to any applicable law or regulation or policy, the Index Sponsor or the Index Calculation Agent is not permitted (or there is a reasonable likelihood that, within the next 30 Index Business Days, it will not be permitted) to continue to sponsor or calculate, as applicable, an index comprising a stock which is a Constituent of the Index,

(each, a "Regulatory Event" and together with an Eligible Universe Removal Event, each an "Additional Rebalancing Event"), then such Constituent (a "Removed Constituent") will be removed from the Index on the date (an "Additional Rebalancing Date") designated by the Index Calculation Agent or the Index Sponsor (in which case the Index Sponsor will notify the relevant date to the Index Calculation Agent).

The Percentage Weights of the remaining Constituents will be determined by the Index Calculation Agent in accordance with paragraph 3.3 (Determining the Percentage Weights of the remaining Constituents) below.

### 3.3 Determining the Percentage Weights of the remaining Constituents

Upon the removal of one or more Removed Constituents from the Index on an Additional Rebalancing Date, the Percentage Weights of the remaining Constituents are scaled up such that the Percentage Weight of the Removed Constituent(s) is proportionally redistributed to the remaining Constituents in accordance with the following formula:

where:

Wi,rA = The Percentage Weight of remaining Constituent i which is applied upon the removal of the relevant Removed Constituent(s) on Additional Rebalancing Date rA;
 CPWi,rA = The Current Percentage Weight of remaining Constituent i in the Index on Additional Rebalancing Date rA prior to the removal of the Removed Constituent(s); and
 n = The number of Constituents remaining in the Index after the removal of the relevant Removed Constituent(s),

provided however that the Percentage Weight applied to a remaining Constituent i on an Additional Rebalancing Date shall not be greater than 10%. In the event that any such Percentage Weight determined in accordance with the formula above would be greater than 10%, then the Index Calculation Agent shall determine the Percentage Weights to be applied to each remaining Constituent i upon the removal of the relevant Removed Constituent(s) on Additional Rebalancing Date rA, in accordance with the formula set out in paragraph 2.2(4)c.(determination of capped percentage weights – the Selected Constituent Percentage Weights (Wi)) of this Part D that is used in the final step of determining the capped Percentage Weights of Selected Constituents on each Selection Day, as if the relevant Additional Rebalancing Date was a Selection Day and the remaining Constituents i were ranked in decreasing Current Percentage

Weighti,rA order.

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### 4. REFERENCE INDEX ADJUSTMENTS

### 4.1 Successor Reference Index and Successor Reference Index Sponsor

If a Reference Index is (i) not calculated and announced by the relevant Reference Index Sponsor but is calculated and announced by a successor sponsor acceptable to the Index Calculation Agent, or (ii) replaced by a successor index using, in the determination of the Index Calculation Agent, the same or a substantially similar formula for and method of calculation as used in the calculation of that Reference Index, then in each case that index (the "Successor Reference Index") will be deemed to be the relevant Reference Index with effect from the date determined by the Index Calculation Agent who may make such adjustment(s) to the Index Conditions as it determines appropriate to account for such change.

### 4.2 Reference Index Modification and Reference Index Cancellation

If a Reference Index Sponsor announces that it will make a material change in the formula for or method of calculating a Reference Index or in any other way materially modifies that Reference Index (other than a modification prescribed in that formula or method to maintain that Reference Index in the event of changes in constituent stock and capitalization and other routine events) (a "Reference Index Modification") or permanently cancels that Reference Index and no Successor Reference Index exists (a "Reference Index Cancellation" and, together with a Reference Index Modification, each a "Reference Index Adjustment Event"), then:

- (i) the Index Calculation Agent may suspend the calculation, publication and dissemination of the Index and the Index Level until the first succeeding Index Business Day on which such event does not occur or continue to occur; and/or
- (ii) the Index Calculation Agent may select a replacement Reference Index that has substantially similar characteristics to the Reference Index that is being replaced, having regard to the manner in which such Reference Index is used in the calculation of the Index, in which case the Index Calculation Agent will (a) determine the effective date of such replacement, and (b) make such adjustment(s) to the Index Conditions as it determines appropriate to account for the effect on the Index of such replacement; and/or
  - (iii) the Index Sponsor may discontinue and cancel the Index.

### 4.3 Cancellation of Reference Index license

If, in respect of a Reference Index, a license granted (if required) to the Index Sponsor and/or the Index Calculation Agent and/or any of their respective Affiliates, to use such Reference Index in connection with the Index is terminated, or any such entity's right to use such Reference Index in connection with calculating the Index is otherwise disputed, impaired or ceases for any reason, then:

(i) the Index Calculation Agent may suspend the calculation, publication and dissemination of the Index and the Index Level until the first succeeding Index Business Day on which such event does not occur or continue to occur; and/or

(ii) the Index Calculation Agent may select a replacement Reference Index that has substantially similar characteristics to the Reference Index that is being replaced, having regard to the manner in which such Reference Index is used in the calculation of the Index, in which case the Index Calculation Agent will (a) determine the effective date of such replacement, and (b)

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make such adjustment(s) to the Index Conditions as it determines appropriate to account for the effect on the Index of such replacement; and/or

(iii) the Index Sponsor may discontinue and cancel the Index.

### 4.4 Corrections of published levels, prices, rates or values in respect of a Reference Index

If, in respect of a Reference Index, any level, price, rate or value (as applicable) in respect of such Reference Index or any related derivative or other related instrument, for any time on any day, which is announced by or on behalf of the person or entity responsible for such publication or announcement and which is used for any calculation or determination in respect of the Index, is subsequently corrected, and such correction (the "Corrected Level") is published by or on behalf of such person or entity within two Index Business Days after the original publication, then such Corrected Level shall be deemed to be the level, price, rate or value (as applicable) for such Reference Index, related derivative or other related instrument (as the case may be) for the relevant time on the relevant day and the Index Calculation Agent may, but shall not be obliged to, make appropriate adjustments to the Index and the Index Level for the relevant Index Business Day(s).

4.5 Reference Index Definitions

"Reference Index" means each of the Eligible Universe Index and the Reference Vol Index.

"Reference Index Sponsor" means, in respect of a Reference Index, the corporation or other entity which (a) is responsible for setting and reviewing the rules and procedures and the methods of calculation and adjustments, if any, related to such Reference Index and (b) announces (directly or through an agent) the level of such Reference Index.

Citi Investment Strategies Citi Volatility Balanced Beta (VIBE) Equity US Price Return Index Index Methodology

Part E: Dividends, S	Stock Splits	and Rights	Issues
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Citi Investment Strategies Citi Volatility Balanced Beta (VIBE) Equity US Price Return Index Index Methodology

Dividends, Stock Splits and Rights Issues

Upon the occurrence of an Extraordinary Dividend Adjustment Event, a Stock Split Adjustment Event or a Rights Issue Adjustment Event (each as defined below), the Index Calculation Agent will make the appropriate adjustments to the composition of the Index including, in particular, the Weights of the Constituents, in accordance with the methodology set out in this Part E (Dividends, Stock Splits and Rights Issues).

For the avoidance of doubt, Extraordinary Dividend Adjustment Events, Stock Split Adjustment Events and Rights Issue Adjustment Events shall be treated in the manner described in this Part E (Dividends, Stock Splits and Rights Issues) and shall not constitute Adjustment Events (as described in Section B (Valuations and Adjustments) and Section F (Constituent Schedule: Share) of the Index General Conditions) for the purpose of the Index Conditions.

### 1. NO DIVIDEND ADJUSTMENTS (REGULAR DIVIDENDS: CASH AND/OR STOCK DIVIDENDS)

For the avoidance of doubt, any regular dividend (in the form of a cash dividend and/or a scrip (stock) dividend) in respect of any Constituent declared by the issuer of such Constituent for which the Ex-Dividend Date falls on any day after the Index Start Date (excluding any Extraordinary Dividend) shall have no effect on the calculation of the Index nor shall the declaration of such regular dividend result in any adjustment of the Index at any time.

"Ex-Dividend Date" means, in respect of a stock and a dividend payment which has been announced by the issuer of such stock, the first day on which a purchaser of such stock will not be entitled to receive the relevant dividend payment, as fixed by the issuer of such stock and/or the primary exchange on which such stock is traded.

### 2. EXTRAORDINARY DIVIDEND ADJUSTMENTS (EXTRAORDINARY DIVIDENDS, BONUS SHARES)

Following the declaration by the issuer of any Constituent of an Extraordinary Dividend (as defined below) (an "Extraordinary Dividend Adjustment Event"), the Index Calculation Agent shall adjust the Weight of such Constituent on the Ex-Dividend Date (as defined below) in relation to such Extraordinary Dividend in accordance with the formula set out below. If such Ex-Dividend Date is not an Index Business Day, the adjustment shall be made on the next following Index Business Day.

The Weight of the relevant Constituent shall be adjusted such that:

where:

Weighti,ex

Weight of Constituent i on the applicable
 Ex-Dividend Date (or, if such day is not an Index
 Business Day, on the immediately following Index
 Business Day).

Citi Investment Strategies Citi Volatility Balanced Beta (VIBE) Equity US Price Return Index Index Methodology

Weighti,ex-1 = Weight of Constituent i on the Index Business Day

immediately preceding the applicable Ex-Dividend

Date.

Dividend = The applicable Dividend Percentage (as defined

Percentagei below)

Extra Dividend = The applicable Extraordinary Dividend Amount (as

Amounti defined below).

Constituent = Constituent Closing Level of Constituent i on the Closing Index Business Day immediately preceding the

Leveli,ex-1 applicable Ex-Dividend Date.

"Extraordinary Dividend" means (i) an "Extraordinary Dividend", as such term is defined in the Index General Conditions and will generally include any dividend (in the form of a cash dividend and/or a scrip (stock) dividend) which is described as "special", "extra", "irregular" or a "return of capital"; or (ii) a free distribution or dividend of stock of such Constituent to existing holders by way of bonus, capitalization or similar issue, for which in each case the applicable Ex-Dividend Date falls on any day after the Index Start Date.

"Extraordinary Dividend Amount" means, in respect of an Extraordinary Dividend:

- (1) if such Extraordinary Dividend is a cash dividend, 100% of the gross cash dividend per one stock as declared by the issuer of the relevant Constituent, before the withholding or deduction of taxes at source by or on behalf of any applicable authority having power to tax in respect of such a dividend (an "Applicable Authority"), and shall exclude (a) any imputation or other credits, refunds or deductions granted by an Applicable Authority (together, the "Credits"), and (b) any taxes, credits, refunds or benefits imposed, withheld, assessed or levied on the Credits referred to in (a) above (converted, if necessary, at the applicable FX Rate for the conversion of the currency in which the relevant Extraordinary Dividend Amount is denominated into the currency in which the Constituent Closing Level of the relevant Constituent is published).
- (2) if such Extraordinary Dividend is a non-cash dividend, an amount per one stock equal to the cash value declared by the issuer of the relevant Constituent (whether or not such non-cash dividend includes stock that are the Constituent) or, if no cash value is declared by the issuer of the relevant Constituent, the cash value of such non-cash dividend as determined by the Index Calculation Agent, calculated by reference, where available, to the closing price of any stocks or the Constituent Closing Level (as the case may be) comprising such non-cash dividend on the last trading day immediately preceding the relevant Ex-Dividend Date, taking into account (where such non-cash dividend consists of the stock of the Constituent) any diluting effect on the theoretical value of the Constituent stock resulting from such non-cash dividend. The cash value of a non-cash dividend shall be converted, if necessary, at the applicable FX Rate for the conversion of the currency in which the relevant Extraordinary Dividend Amount is denominated into the currency in which the Constituent Closing Level of the relevant Constituent is published.

<sup>&</sup>quot;Dividend Percentage" means, in respect of an Extraordinary Dividend Amount, 100%.

"Ex-Dividend Date" means, in respect of a stock and an Extraordinary Dividend, the first day on which a purchaser of such stock will not be entitled to receive the relevant Extraordinary Dividend

Citi Investment Strategies Citi Volatility Balanced Beta (VIBE) Equity US Price Return Index Index Methodology

Amount, as fixed by the issuer of such stock and/or the primary exchange on which such stock is traded.

"FX Rate" means, in respect of the notional exchange of one currency to another currency, the applicable WM/Reuters "Closing Spot Rate" as published by The World Markets Company plc in conjunction with Reuters at approximately 4.00 p.m. (London time) on the Ex-Dividend Date or, if such rate is discontinued or unavailable on the relevant day for any reason, such other exchange rate for the relevant currency conversion as the Index Calculation Agent shall determine appropriate by reference to an alternative foreign exchange rate service.

#### 3. DIVIDEND RECOVERY

If, in respect of an Extraordinary Dividend, (a) the gross cash or non-cash dividend declared or estimated by the issuer of the relevant Constituent (a "Declared Dividend") to holders of record of the stock in the Constituent is not equal to the gross amount deemed to be paid by the issuer of such Constituent (notwithstanding that such payment is made to either any relevant taxing authority or holders of record) in respect of such Extraordinary Dividend (a "Dividend Mismatch Event") or (b) the issuer of the relevant Constituent fails to make any payment or delivery in respect of that Declared Dividend by the third Index Business Day following the relevant due date, then in either case the Index Calculation Agent may (but shall not be obliged to) determine:

(i) any appropriate adjustment to be made to the Index, including the Weight of any Constituent, to account for that Dividend Mismatch Event or non-payment or non-delivery, as the case may be; and

(ii) the effective date of any such adjustment.

In the event that an issuer of a Constituent makes a payment or delivery in respect of an Extraordinary Dividend that has already been the subject of an adjustment in accordance with this paragraph 3 (Dividend Recovery), the Index Calculation Agent shall determine any appropriate adjustment(s) to be made in respect of the Index in order to account for the economic effect of such subsequent payment or delivery.

#### STOCK SPLIT ADJUSTMENTS 4.

Following the declaration by the issuer of a Constituent of a Stock Split (as defined below) (a "Stock Split Adjustment Event"), the Index Calculation Agent shall adjust the Weight of such Constituent on the Ex-Date (as defined below) in relation to such Stock Split in accordance with the formula set out below. If such Ex-Date is not an Index Business Day, the adjustment shall be made on the next following Index Business Day.

The Weight of the relevant Constituent shall be adjusted such that:

where:

Weighti,ex

Weight of Constituent i on the applicable Ex-Date (or, if such day is not an Index Business Day, on the immediately following Index Business Day).

Weighti,ex-1

Weight of Constituent i on the Index Business Day immediately preceding the applicable Ex-Date.

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Split Ratioi In respect of the applicable Stock Split, the ratio of

> the new total number of shares (B) for the old total number of shares (A) (e.g., split ratio=B/A) in

respect of the Constituent i.

"Ex- Date" means, in respect of a Stock Split in respect of a Constituent, the effective date of such Stock Split, as fixed by the issuer of such Constituent and/or the primary exchange on which such Constituent is traded.

"Stock Split" means, in respect of a Constituent, a stock split, subdivision, reverse stock split, consolidation or similar reclassification of the stock of such Constituent, for which the Ex-Date falls on any day after the Index Start Date.

#### 5. RIGHTS ISSUE ADJUSTMENTS

Following the declaration by the issuer of a Constituent of a Rights Issue (as defined below) (a "Rights Issue Adjustment Event"), the Index Calculation Agent shall adjust the Weight of such Constituent on the Ex-Rights Date (as defined below) in relation to such Rights Issue in accordance with the formula set out below. If such Ex-Rights Date is not an Index Business Day, the adjustment shall be made on the following Index Business Day.

The Weight of the relevant Constituent shall be adjusted such that:

where:

Weighti, ex Weight of Constituent i on the applicable Ex-Rights Date

(or, if such day is not an Index Business Day, on the

immediately following Index Business Day).

Weighti, ex-1 Weight of Constituent i on the Index Business Day =

immediately preceding the applicable Ex-Rights Date.

Ni In respect of the applicable Rights Issue, the rights ratio in

> respect of such Rights Issue of Constituent i, N = B/A where A is the number of existing stocks and B is the

number of new stocks entitlement.

Si In respect of the applicable Rights Issue, the subscription

price per stock in Constituent i.

Constituent Closing Level of Constituent i on the Index Constituent

Closing Business Day for Constituent i immediately preceding the

Leveli.ex-1 Ex-Rights Date.

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"Ex-Rights Date" means, in respect of a Rights Issue in respect of a Constituent, the first day on which a purchaser of such stock would not be entitled to participate in such Rights Issue, as fixed by the issuer of such Constituent and/or the primary exchange on which such Constituent is traded.

"Rights Issue" means, in respect of a Constituent, a distribution to existing holders of such Constituent of any rights or warrants to purchase shares of such Constituent, in any case for payment (whether in cash or otherwise) at less than their prevailing market price or any other similar event as determined by the Index Calculation Agent and for which the Ex-Rights Date falls on any day after the Index Start Date.

Citi Investment Strategies Citi Volatility Balanced Beta (VIBE) Equity US Price Return Index Index Methodology

Part F: Data

Citi Investment Strategies Citi Volatility Balanced Beta (VIBE) Equity US Price Return Index Index Methodology

Data

(As at the Index Launch Date)

The Index shall operate with reference to an Eligible Universe. This Part F sets out the classification and particulars of each Eligible Constituent.

1. Eligible Universe

Eligible Universe	Bloomberg Ticker	Eligible Universe Sponsor
S&P 100	OEX <index></index>	S&P Dow Jones

2. Eligible Constituents

Eligible Constituents Classification

Each constituent of the Eligible Universe from time to time (subject to paragraph 2.1 (Selection of Constituents) in Part D (Calculation of the Index Level) above)

Share

3. Particulars in respect of each Eligible Constituent

Exchange(s)	Related Exchange(s)	Constituent Schedule
As defined in Section F (Constituent Schedule: Share) of the Index General Conditions	All Exchanges	Share

4. Additional Data

Maximum Percentage Weight (as at each Selection Day)	Notional Replication Cost	Notional Spread
10%	Not Applicable	Not Applicable

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#### 5. **Adjustment Elections**

	Scheduled Valuation Date		
	Rebalancing Date	Selection Day	Other
Adjustments (Scheduled Trading Days: "holidays"):	Move In Block	Move In Block	Move In Block
Adjustments (Disrupted Days):	Value What You Can	Move In Block	Look Back
Valuation Roll (Disrupted Days):	5	5	5

In cases where a scheduled Selection Day is postponed due to the occurrence or existence of a Disrupted Day, an Index Level for the day which was originally scheduled to be the Selection Day will be determined in accordance with the methodology set out in the column headed "Other".

6.	Defined Tern	ns
6.	Defined Tern	n

Index Business Day: Each day which is (1) a day on which commercial

banks and foreign exchange markets are open for general business (including dealings in foreign exchange and foreign exchange currency deposits) in London and the principal financial centre of the Index Base Currency; and (2) a Scheduled Trading Day for

each Constituent.

**Index Valuation Time:** In respect of an Index Business Day, 11.00 p.m.

> (London time) on such Index Business Day, or such later time that the Index Calculation Agent may determine with the consent of the Index Sponsor.

Rebalancing Date: The third Index Business Day following each Selection

Day, subject to adjustment in accordance with section 5

(Adjustment Elections) above.

Selection Day: The first Index Business Day of each January, April,

> July and October, commencing on the first Index Business Day of January 2000, subject to adjustment in accordance with section 5 (Adjustment Elections)

above.

Scheduled Valuation Date: Each Index Business Day.

Citi Investment Strategies Citi Volatility Balanced Beta (VIBE) Equity US Price Return Index Index Methodology

Part G: Specific Risks

Citi Investment Strategies Citi Volatility Balanced Beta (VIBE) Equity US Price Return Index Index Methodology

Specific Risks

This Part G does not describe all of the risks arising in respect of the Index. Please refer to Section C (General Risks) of the Index General Conditions for a discussion of further risks arising in respect of the Index.

### STRATEGY RISK

The Citi Volatility Balanced Beta methodology used by the Index employs a quantitative risk-weighting strategy that determines the percentage weights of the Constituents on a quarterly basis such that the risk contribution of each Constituent is equal. This strategy is designed with the aim of providing diversification among the selected Constituents, with lower volatility, when compared to an equivalent equal-weighted or market capitalization-weighted index. However, there is no guarantee that this will be the case, especially over short periods. In particular, the benefits of the Index strategy may only become apparent over a long period and may underperform market capitalization-weighted indices during an upward trend in the investment cycle.

Investors in Index Linked Products should be aware of this limitation in considering their investment decision.

### **VOLATILITY AS A MEASURE FOR RISK**

In determining the risk contribution of each Constituent, the methodology used by the Index relies exclusively on market price volatility as a measure of risk. Although market prices may in theory reflect all available public information, this may not always be the case. Furthermore, there are many types of risk inherent in an equity investment. The Index does not attempt to identify or quantify any specific risks which may be relevant to a stock, sector, industry, country or region, such as commercial, operational, credit, financing, macro, political, regulatory or legal risks. The reliance of the Index solely on volatility as a measure of risk may fail to accurately identify and account for specific risks or fail to adjust for overall risk in line with the objectives of the Index.

### INDEX METHODOLOGY LIMITATIONS

The performance of the Index is dependent on the pre-defined rules-based methodology set out in the Index Conditions. There is no assurance that other methodologies for calculating equal risk-contribution would not result in better performance than the Citi Volatility Balanced Beta methodology.

The Index weights assigned to the Constituents are equally dependent on the percentage weights which the optimization model used by the Index determines would achieve (a) an equal implied risk contribution for each Constituent, and (b) an equal trend-following risk contribution for each Constituent. There can be no assurance that this particular blend of implied and historic volatilities and correlations will be successful over any particular period of time.

### CONCENTRATION RISK

The Citi Volatility Balanced Beta methodology used by the Index to identify weights for the Constituents on a quarterly basis will not necessarily result in a less concentrated equity market exposure that the Eligible Universe Index. The Index may be more or less concentrated than the Eligible Universe Index or any benchmark equity index.

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The Index methodology limits the maximum weight of each Constituent to 10%, with a resulting reallocation to the other Constituents in the event that the Citi Volatility Balanced Beta methodology would allocate a weight in excess of 10% for any Constituent. While this individual weight constraint is designed to limit a concentration of exposures, it remains possible that a number of Constituents could all be assigned a weight of 10%.

### PERFORMANCE RISK

The Index may underperform other indices with the same constituents, where those other indices employ a different weighting scheme. The Citi Volatility Balanced Beta methodology uses a risk-contribution weighting methodology with the aim of improving risk-adjusted returns. The methodology does not seek to outperform the Eligible Universe Index or any other equity benchmark in absolute terms.

### REBALANCING FREQUENCY LIMITATIONS

The frequency of rebalancing of the Index is quarterly. The Citi Volatility Balanced Beta optimization model only evaluates the Constituents on the quarterly Selection Days which precede the Rebalancing Dates, which means that new weights are only determined on these days.

As the Constituent Closing Level, historic volatility and exponential moving average of each Constituent and the Index Level itself all move daily, the equal contribution to risk that is determined on a Selection Day may no longer be accurate or valid on any other Index Business Day. As a result, the weights of the Constituents between Rebalancing Dates may deviate significantly from the weights which would be required for the Constituents to contribute equally to risk on an ongoing basis. In particular, the Index may not achieve its objectives during periods of significant change in the volatilities of individual stocks and/or the correlations between stocks. For example, (i) if a group of Constituents which have historically exhibited lower than average volatilities (and have therefore been assigned relatively higher weights by the Index methodology) undergo a sudden increase in volatility; or (ii) if a group of Constituents which have historically exhibited a lower than average correlation with other Constituents (and have therefore been assigned relatively higher weights by the Index methodology) undergo a sudden increase in correlation, the Index may deviate substantially from the theoretical equal risk-contribution weighting scheme.

### FIXED ALGORITHMIC MODEL PARAMETERS

In common with all algorithmic strategies, the Index uses a rules-based methodology which contains fixed parameters. For example, (i) implied volatilities are calculated by reference to 120 daily log-return observations of the Constituents and the 3-month implied spot volatility of a benchmark equity index, and (ii) historic volatilities are calculated by reference to 120 daily exponential moving average observations where each exponential moving average is calculated for a period of 40 Index Business Days. The Index methodology assumes that these observation periods and other fixed parameters are reasonable in the context of the Index, however, alternative parameters could have a positive effect on the performance of the Index.

### OPTIMIZATION MODEL PRECISION

The Citi Volatility Balanced Beta methodology employs an optimization algorithm to determine the weights to be applied to the Constituents on each Rebalancing Date. The optimization algorithm is a complex calculation model

which is sensitive to the precision of both the original inputs and the interim calculations. Each of these are in turn dependent on the rounding conventions used in the financial market for the primary data and the rounding conventions determined appropriate by the Index Calculation Agent at each stage of the calculation process.

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### LIMITED OPERATING HISTORY

The Index was launched by the Index Sponsor on the specified Index Launch Date and has been calculated by the Index Calculation Agent for the period from the specified Index Start Date. Any back-testing or similar performance analysis performed by any person in respect of the Index must be considered illustrative only and may be based on estimates or assumptions not used by the Index Calculation Agent when determining the Index Level.

This list of risk factors is not intended to be exhaustive. All persons should seek such advice as they consider necessary from their professional advisors, investment, legal, tax or otherwise, without reliance on the Index Sponsor, the Index Calculation Agent, any of their respective Affiliates or any of their respective directors, officers, employees, representatives, delegates and agents.

Citi Investment Strategies Citi Volatility Balanced Beta (VIBE) Equity US Price Return Index Index Methodology

Part H: Index Specific Disclaimers

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**Index Specific Disclaimers** 

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18 November 2011

## Citi Investment Strategies Citi Volatility Balanced Beta (VIBE) Equity US Price Return Index Index General Conditions

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Citi Investment Strategies Citi Volatility Balanced Beta (VIBE) Equity US Price Return Index Index General Conditions

Citi Investment Strategies
Citi Volatility Balanced Beta (VIBE) Equity US Price
Return Index
Index General Conditions

#### Introduction

This document constitutes the Index General Conditions applicable to each index (each, an "Index") for which the applicable Index Methodology states that these Index General Conditions are to be applicable to it.

These Index General Conditions are made available by Citigroup Global Markets Limited in its capacity as the Index Sponsor.

These Index General Conditions may be amended from time to time without notice, and will be available from the Index Sponsor. See Section E (Miscellaneous) for a description of the circumstances in which a change to these Index General Conditions may be required.

#### **RISKS**

Any investment exposure to an Index created by an Index Linked Product gives rise to a number of risks. Please refer to Section C (General Risks) and to the applicable Index Methodology for a discussion of some of the risks to which such an investment exposure to the Index gives rise. The Index Conditions in respect of such Index do not describe all of the risks to which an investment in such Index Linked Product gives rise; please refer to the associated prospectus or offering document (however described) in respect of such Index Linked Product for a discussion of these risks.

#### **PUBLICATION**

The Index and the Index Level shall be announced and published as specified in the Index Methodology.

#### BASIC SCHEME OF THE INDEX CONDITIONS OF AN INDEX

The Index Conditions of an Index comprise these Index General Conditions and the applicable Index Methodology, which must be read together. Full information in respect of an Index is only available on the basis of the combination of these Index General Conditions and the applicable Index Methodology (each as amended from time to time).

In the case of any inconsistency between the applicable Index Methodology and these Index General Conditions, such applicable Index Methodology shall prevail.

The following paragraphs of this Section A are provided for information only, and in the case of any discrepancy between any such paragraph and any other provision of the Index Conditions, such other provision shall prevail.

The Index is a notional rules-based proprietary index which is made up of two or more Constituents. These Constituents are specified in the applicable Index Methodology. The Constituents comprising the Index from time to time may also be selected from an Eligible Universe, if an Eligible Universe is specified for the Index, in accordance with the rules set out in the applicable Index Methodology. The classification of each Constituent is also specified in the applicable Index Methodology, together with any other data necessary to calculate the Index Level of the Index from time to time.

The Index Level of the Index from time to time is calculated by the Index Calculation Agent with reference to the formulae and rules set out in the applicable Index Methodology. The applicable Index Methodology also contains a description of the strategy to which the Index is intended to give effect. The Index Level of the Index is calculated with reference to either the closing levels, prices, rates or values (as applicable) of each Constituent

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(i.e. Constituent Closing Levels), or intraday levels, prices, rates or values (as applicable) of each Constituent (i.e. Constituent Levels).

Standard detailed rules govern "valuation", that is, how the Constituent Closing Level and the Constituent Level of each classification of Constituent are determined, broadly with reference to the levels, prices, rates or values (as applicable) in the relevant markets for that Constituent or for futures contracts and options contracts relating to such Constituent (such markets together, the "relevant markets"). Other standard rules apply to Constituents which are themselves indices. These standard rules are set out in the various Constituent Schedules which are included in these Index General Conditions as necessary.

Although the Index Level of the Index on a particular day for which a valuation is required (i.e. a Scheduled Valuation Date) should reflect the Constituent Closing Level or the Constituent Level (as applicable) on that day of each Constituent contained in the Index, the relevant markets on that day may not be open or may be disrupted (or other difficulties may arise in respect of Constituents which are themselves indices, affecting the publication of the levels of these indices). The Constituent Schedule applicable to a Constituent defines the circumstances when the relevant markets for that Constituent are closed or disrupted.

Therefore it may not be possible to determine the Index Level of the Index on a Scheduled Valuation Date using Constituent Closing Levels or Constituent Levels (as applicable) for that day. Section B (Valuations and Adjustments) contains detailed rules which govern which particular Constituent Closing Levels or Constituent Levels (as applicable) are instead used, whether those for a preceding day or a succeeding day. Different rules require either looking back to the Constituent Closing Level or Constituent Level (as applicable) of a previous day, or postponing valuation to a day when the relevant markets are open or not disrupted. The applicable Index Methodology specifies which particular rules apply to the Index.

Certain events and circumstances may affect a Constituent, resulting in a change in that Constituent or the disappearance of that Constituent (i.e. Adjustment Events). The Constituent Schedule applicable to a Constituent defines these events and circumstances. Section B (Valuations and Adjustments) contains detailed rules which govern the adjustment of the Index to account for the effect on the Index of the occurrence of an Adjustment Event, or (if such an adjustment would not produce a commercially reasonable result) the replacement of the affected Constituent in the Index. Although any such adjustment or replacement is intended to account for the effect on the Index of the occurrence of the relevant Adjustment Event, any such adjustment or replacement may have an unforeseen effect on the Index and may have an adverse effect on the value of an Index Linked Product. Please see Section C (General Risks) for a discussion of the effect of these rules.

The terms and conditions of any Index Linked Product may contain provisions as to the consequences of certain events and circumstances. These events and circumstances may include any adjustment made to the Index or any replacement effected of any Constituent. These consequences may include the early termination of such Index Linked Product and the payment of an amount to reflect the valuation of such Index Linked Product at the time of such early termination. Depending on the terms and conditions of such Index Linked Product, an investor may receive back on such early termination less than the amount of the original investment. The Index Conditions do not include any such terms and conditions of such Index Linked Product. Please refer to the terms and conditions of such Index Linked Product.

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Section B: Valuations and Adjustments

Citi Investment Strategies
Citi Volatility Balanced Beta (VIBE) Equity US Price
Return Index
Index General Conditions

Valuations and Adjustments

#### 1. CONSTITUENT CLOSING LEVEL OR CONSTITUENT LEVEL

The Constituent Closing Level or the Constituent Level (as applicable) of a Constituent on a Valuation Date shall be determined as specified in the Constituent Schedule applicable to such Constituent.

#### 2. ADJUSTMENTS TO VALUATION DATES (SCHEDULED TRADING DAYS: "HOLIDAYS")

(a) "Look Back"

If "Look Back" is specified in the applicable Index Methodology and a Scheduled Valuation Date is not a Scheduled Trading Day for any Constituent, then:

- (i) the Valuation Date for each Constituent for which such Scheduled Valuation Date is a Scheduled Trading Day shall be such Scheduled Valuation Date; and
- (ii) the Valuation Date for each Constituent for which such Scheduled Valuation Date is not a Scheduled Trading Day shall be the first day immediately preceding such Scheduled Valuation Date which is a Scheduled Trading Day and not a Disrupted Day for such Constituent.

(b) "Move In Block"

If "Move In Block" is specified in the applicable Index Methodology and a Scheduled Valuation Date is not a Scheduled Trading Day for any Constituent, then such Valuation Date shall be the first day immediately following such Scheduled Valuation Date which is a Scheduled Trading Day for all Constituents.

(c) "Value What You Can"

If "Value What You Can" is specified in the applicable Index Methodology and a Scheduled Valuation Date is not a Scheduled Trading Day for any Constituent, then:

- (i) the Valuation Date for each Constituent for which such Scheduled Valuation Date is a Scheduled Trading Day shall be such Scheduled Valuation Date; and
- (ii) the Valuation Date for each Constituent for which such Scheduled Valuation Date is not a Scheduled Trading Day shall be the first day immediately following such Scheduled Valuation Date which is a Scheduled Trading Day for such Constituent.

(d) Not postponing to a Disrupted Day

If any day to which a Scheduled Valuation Date is postponed under paragraph 2(b) or 2(c) above is a Disrupted Day for the relevant Constituent, then paragraph 3 below shall apply.

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#### 3. ADJUSTMENTS TO VALUATION DATES (DISRUPTED DAYS)

(a) "Look Back"

If "Look Back" is specified in the applicable Index Methodology and a Scheduled Valuation Date is a Disrupted Day for any Constituent, then:

- (i) the Valuation Date for each Constituent for which such Scheduled Valuation Date is not a Disrupted Day shall be such Scheduled Valuation Date; and
- (ii) the Valuation Date for each Constituent for which such Scheduled Valuation Date is a Disrupted Day shall be the first day immediately preceding such Scheduled Valuation Date which is a Scheduled Trading Day and not a Disrupted Day for such Constituent.

(b) "Move In Block"

If "Move in Block" is specified in the applicable Index Methodology and a Scheduled Valuation Date is a Disrupted Day for any Constituent, then such Valuation Date shall be the earlier of (A) the first day immediately following such Scheduled Valuation Date which is a Scheduled Trading Day for all Constituents and not a Disrupted Day for any Constituent; and (B) the Scheduled Trading Day for all Constituents which is the Valuation Roll number of Scheduled Trading Days for all Constituents immediately following such Scheduled Valuation Date.

(c) "Value What You Can"

If "Value What You Can" is specified in the applicable Index Methodology and a Scheduled Valuation Date is a Disrupted Day for any Constituent, then:

- (i) the Valuation Date for each Constituent for which such Scheduled Valuation Date is not a Disrupted Day shall be such Scheduled Valuation Date; and
- (ii) the Valuation Date for each Constituent for which such Scheduled Valuation Date is a Disrupted Day shall be the earlier of (A) the first day immediately following such Scheduled Valuation Date which is a Scheduled Trading Day and not a Disrupted Day for such Constituent; and (B) the Scheduled Trading Day for such Constituent which is the Valuation Roll number of Scheduled Trading Days for such Constituent immediately following such Scheduled Valuation Date.

(d) Postponing to a Disrupted Day

If any day to which a Scheduled Valuation Date is postponed under paragraph 3(b) or 3(c) above is a Disrupted Day for the relevant Constituent, then (unless otherwise specified in the Constituent Schedule applicable to such Constituent) the Index Calculation Agent shall determine the Constituent Closing Level of such Constituent on such Valuation Date using its good faith estimate of the Constituent Closing Level of such Constituent at the Valuation Time (where relevant) on or for such day.

## 4. CORRECTIONS OF PUBLISHED OR ANNOUNCED LEVELS, PRICES, RATES OR VALUES

If a Correction Period is specified in respect of a Constituent, and in the event that the level,

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price, rate or value (as applicable) of such Constituent for any time on any day which is announced by or on behalf of the person or entity responsible for such publication or announcement and which is used for any calculation or determination in respect of the Index is subsequently corrected, and such correction (the "Corrected Level") is published by or on behalf of such person or entity within such Correction Period for such Constituent after the original publication, then such Corrected Level shall be deemed to be the level, price, rate or value (as applicable) for such Constituent for the relevant time on the relevant day and the Index Calculation Agent may, but shall not be obliged to, revise the Index Level for such day.

Corrections published after the Correction Period after the original publication shall be disregarded.

For the avoidance of doubt, if a Correction Period is not specified in respect of a Constituent, then the preceding two paragraphs shall not apply in respect of such Constituent.

#### 5. ADJUSTMENT EVENTS

Subject as provided in the applicable Index Methodology, if an Adjustment Event occurs in respect of any Constituent (the "Affected Constituent"), then the consequences of such Adjustment Event shall be as follows.

- (a) The Index Calculation Agent will effect as soon as reasonably practicable a Reweighting in respect of such Affected Constituent.
- (b) If the Index Calculation Agent determines that no such Reweighting it can make will produce a commercially reasonable result, then the Index Calculation Agent will effect as soon as reasonably practicable a Replacement of such Affected Constituent.
- "Replacement" shall mean that the Index Calculation Agent will remove the Affected Constituent from the Index and either:
- (a) (if the Index is specified in the applicable Index Methodology to operate with reference to an Eligible Universe) replace the Affected Constituent with an Eligible Constituent selected in accordance with the relevant rules set out in the applicable Index Methodology; or
- (b) (if the Index is not specified in the applicable Index Methodology to operate with reference to an Eligible Universe) replace the Affected Constituent with a replacement Constituent selected in accordance with the Replacement Criteria specified in respect of such Constituent in the Constituent Schedule applicable to the Affected Constituent; or
- (c) (if either (i) the Index is not specified in the applicable Index Methodology to operate with reference to an Eligible Universe; or (ii) no Replacement Criteria are specified; or (iii) no such replacement can be made under sub-paragraph (a) or sub-paragraph (b) above; or (iv) the Index Calculation Agent determines that no such replacement it can make will produce a commercially reasonable result) replace the Affected Constituent with either (1) a notional exposure in accordance with the relevant rules specified in the applicable Index Methodology; or (2) (if no such rules are so specified) a replacement constituent (which shall be deemed to be a Constituent) which shall confer no investment exposure.

"Reweighting" shall mean that the Index Calculation Agent will revise the Weight attributed to the Affected Constituent to account for the economic effect on the Index of the relevant

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Adjustment Event. For the avoidance of doubt, the Weight attributed to the Affected Constituent may be zero.

In the case of either a Replacement or a Reweighting, the Index Calculation Agent will (a) make such adjustment to the calculation of the Index and the Index Level as it determines appropriate to account for the effect on the Index of any such Replacement or Reweighting (as applicable) that is made (including without limitation rebalancing the Index); and (b) determine the effective date of any such Replacement or Reweighting that is made.

#### 6. SUSPENSION AND CANCELLATION

- (a) If any Index Business Day is a Disrupted Day for any Constituent, the Index Calculation Agent may suspend the calculation, publication and dissemination of the Index and the Index Level until the first succeeding Index Business Day which is not a Disrupted Day for any Constituent.
- (b) The Index Sponsor may discontinue and cancel the Index at any time and is under no obligation to continue, or procure the continuation of, the calculation, publication and dissemination of the Index Level.

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General Risks

#### 1. INTRODUCTION

The Index Level may go down as well as up, depending on the performance of the Constituents and their effect on the strategy that the Index has been developed to reflect. There can be no assurance as to the future performance of the Index, and the Index Level on any day may not reflect either its past performance or its future performance. The strategy that the Index has been developed to reflect may not be successful, and other strategies using the Constituents or the Eligible Universe (as relevant) may perform better than the Index.

The Index represents the weighted value of its Constituents. The Index has been developed to be "investable", but the methodology set out in the Index Conditions is quantitative, which means that the Index Level is determined according to the rules and the processes set out in the Index Conditions on a purely notional basis, without reference to any actual investment in the Index or any of its Constituents. The result of any such actual investment may be different to the performance of the Index. In particular, any notional fees or costs deducted in the calculation of the Index Level, and any proportionate amount included in the Index Level of any dividend, distribution or payment in respect of any Constituent, may be different from those arising in respect of any actual investment in any Constituent or any combination of Constituents.

Prospective investors in any Index Linked Product should be familiar with investments in the global financial and commodity markets, financial instruments and indices generally.

### 2. RISKS IN RESPECT OF THE CONSTITUENTS (INCLUDING MARKET RISK)

The performance of the Index is dependent on the performance of all of the Constituents contained in the Index.

Fluctuations in the level, price, rate or value (as applicable) of the Constituents contained in the Index from time to time will directly affect the Index Level. The extent to which fluctuations in the Constituent Closing Level or Constituent Level (as applicable) of a particular Constituent will affect the Index Level will, amongst other things, depend on the Weight attributed to that Constituent at the relevant time. Please refer to the applicable Index Methodology for a discussion of the strategy that the Index has been developed to reflect.

Please refer to the following paragraphs for a discussion of the particular general market risks arising in respect of each classification of Constituent.

Certain events and circumstances may affect a Constituent, resulting in a change in that Constituent or the disappearance of that Constituent (i.e. Adjustment Events). The Constituent Schedule applicable to a Constituent sets out the Adjustment Events which apply to such Constituent.

Please refer to Section 2(j) below for a discussion of the process that is followed following the occurrence of an Adjustment Event.

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(a) Commodity

Prospective investors in an Index Linked Product linked to an Index containing a Commodity should be familiar with commodities generally. Movements in the price of a Commodity (which may consist of a commodity futures contract or a commodity option contract) may be subject to significant fluctuations which may not correlate with changes in interest rates, currencies or other indices.

Commodity markets (both spot and future) are highly volatile. Commodity markets are influenced by, among other things, (i) changing supply and demand; (ii) weather; (iii) governmental, agricultural, commercial and trade programs and policies introduced to influence commodity prices; (iv) global political and economic events; and (v) changes in interest rates. Moreover, investments in futures contracts and option contracts involve additional risks including, without limitation, leverage (margin is usually a percentage of the face value of the contract and exposure can be nearly unlimited).

A holder of a commodity futures contract may find the position becomes illiquid because certain commodity exchanges limit fluctuations in the price of certain commodity futures contracts during a single day by regulations referred to as "daily price fluctuation limits" or "daily limits". Under such daily limits, during a single trading day no trades may be executed at prices beyond the daily limits. Once the price of a commodity futures contract has increased or decreased by an amount equal to the daily limit, positions can be neither taken nor liquidated unless traders are willing to effect trades at or within the limit. This could prevent the holder from promptly liquidating unfavorable positions and subject the holder to substantial losses. The prices of various commodity futures contracts have occasionally exceeded the daily limit for several consecutive days with little or no trading. Similar occurrences could affect the Index Level of an Index containing a Commodity.

The trend in the Index Level of an Index containing a Commodity may not perfectly correlate with the trend in the price of the Commodity, as the use of futures contracts generally involves a rolling mechanism. This means that commodity futures contracts approaching delivery at a particular time are replaced with other commodity futures contracts which have a later delivery date, and the Index Level may not therefore fully reflect any rise or fall in the price of the Commodity.

In addition, commodity futures markets may exhibit a trend which differs significantly from that of the underlying commodity spot markets. The trend in the price of a commodity futures contract relative to the trend in the price of the underlying commodity is closely linked to the present and future level of production of the commodity or to the level of estimated natural reserves, particularly in the case of energy commodities. Moreover, the price of a commodity futures contract should not be considered an accurate prediction of a market price, since it also includes the so-called "carrying costs" (which are the costs of, for example, warehousing, insurance, transportation, etc.), which also contribute toward the determination of the price of commodity futures contracts. These factors, which directly influence commodity prices, substantially explain the imperfect correlation between commodity futures markets and underlying commodity spot markets.

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(b) Commodity Index

Prospective investors in an Index Linked Product linked to an Index containing a Commodity Index should be familiar with commodity indices generally. The level of a Commodity Index is generally based on the value of commodities and/or other securities contained in the Commodity Index, and therefore the risks discussed under the heading "Commodity" above are also relevant. Global, financial and political developments, among other things, may have a material effect on the value and performance of the commodities and/or commodity futures contracts contained in a Commodity Index.

(c) Depositary Receipt

Prospective investors in an Index Linked Product linked to an Index containing a Depositary Receipt should be familiar with depositary receipts generally. The value and price volatility of the Depositary Receipts contained in an Index and of the stocks underlying such Depositary Receipts must be considered. The value of the Depositary Receipts and the underlying stocks may go down as well as up, and the value of the Depositary Receipts and the underlying stocks on any date may not, respectively, reflect their performance in any prior period. There can be no assurance as to the future value of the Depositary Receipts or the underlying stocks, or as to the continued existence of the Depositary Receipts, the underlying stocks, the issuer of the Depositary Receipts or the issuer of the underlying stocks.

(d) ETF Share (exchange-traded fund)

Prospective investors in an Index Linked Product linked to an Index containing an ETF Share should be familiar with exchange traded funds generally. The value and price volatility of ETF Shares contained in an Index must be considered. The value of ETF Shares may go down as well as up, and the value of the ETF Shares on any date may not reflect their performance in any prior period. There can be no assurance as to the future value of the ETF Shares, or as to the continued existence of the ETF Shares.

Although ETF Shares are traded on an exchange and are therefore valued in a similar manner as a stock traded on an exchange, the Adjustment Events defined with respect to an ETF Share include certain events and circumstances which would be applicable to a fund.

(e) FX Rate

Prospective investors in an Index Linked Product linked to an Index containing an FX Rate should be familiar with currency exchange markets generally.

Movements in currency exchange rates may be subject to significant fluctuations which may not correlate with changes in interest rates or other indices.

Emerging market currencies may exhibit greater volatility and less certainty as to future levels than other currencies. Emerging market currencies are highly exposed to the risk of a currency crisis.

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Currency exchange markets may be affected by complex economic and political factors, including government action to fix or support the value of a currency, or to impose exchange controls. These economic and political factors are independent of other market forces of supply and demand.

(f) Inflation Index

Prospective investors in an Index Linked Product linked to an Index containing an Inflation Index should be familiar with inflation indices generally.

Many economic and market factors may influence an Inflation Index (and therefore the Index Level of an Index containing an Inflation Index), including: (i) general economic, financial, political or regulatory conditions and/or events; (ii) fluctuations in the prices of various assets, goods, services and energy resources (including in response to the supply of any of them and the demand for any of them); and (iii) the level of inflation in the economy of the relevant country and expectations of inflation.

In particular, the level of an Inflation Index may be affected by factors unconnected with the financial markets.

(g) Mutual Fund Interest

Prospective investors in an Index Linked Product linked to an Index containing a Mutual Fund Interest should be familiar with mutual funds generally. The value and price volatility of a Mutual Fund Interest contained in an Index must be considered. The value of a Mutual Fund Interest may go down as well as up, and the value of a Mutual Fund Interest on any date may not reflect its performance in any prior period.

A mutual fund may trade and invest in a broad range of investments such as debt and equity securities, commodities and foreign exchange, and may enter into derivative transactions, including without limitation futures contracts and options contracts. The trading strategies of a mutual fund can be opaque. The trend in the Index Level of an Index containing a Mutual Fund Interest may not correlate with the trend in any market to which the relevant mutual fund creates an investment exposure.

The value of a Mutual Fund Interest may be affected by the performance of persons providing services to the relevant mutual fund, including the investment manager or the investment adviser to the mutual fund.

(h) Share

Prospective investors in an Index Linked Product linked to an Index containing a Share should be familiar with stocks generally. The value and price volatility of the Shares contained in an Index must be considered. The value of the Shares may go down as well as up, and the value of the Shares on any date may not reflect their performance in any prior period. There can be no assurance as to the future value of the Shares, or as to the continued existence of the Shares or the issuer of the Shares.

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(i) Share Index

Prospective investors in an Index Linked Product linked to an Index containing a Share Index should be familiar with stock indices generally. The level of a Share Index is based on the value of the shares contained in that Share Index, although prospective investors should note that the level of a Share Index at any time may not reflect the reinvestment yield on the shares included in that Share Index. Global economic, financial and political developments, among other things, may have a material effect on the value of the shares included in a Share Index and/or the performance of the Share Index.

Market volatility reflects the degree of instability and expected instability of the performance of a Share Index and the shares contained in that Share Index. The level of market volatility is largely determined by the prices for financial instruments supposed to protect investors against such market volatility. The prices of these financial instruments are determined by forces of supply and demand in the futures contracts, option contracts and derivative markets generally. These forces of supply and demand are themselves affected by factors such as actual market volatility, expected volatility, economic factors and speculation.

(j) Process following the occurrence of an Adjustment Event

Following the occurrence of an Adjustment Event in respect of a Constituent, the Index Calculation Agent will attempt to revise the Weight in the Index of the affected Constituent as it determines appropriate to account for the economic effect on the Index of such Adjustment Event.

If the Index Calculation Agent determines that no reweighting it can make under the preceding paragraph will produce a commercially reasonable result, then it will attempt to replace the affected Constituent with a suitable replacement which satisfies the relevant criteria (if any) specified in the applicable Constituent Schedule. If the Index is specified in the applicable Index Methodology to operate with reference to an Eligible Universe, then the replacement Constituent will be selected from the Constituents contained in such Eligible Universe. A commercially reasonable result will only be obtained if a reweighting preserves the ability of the Index to reflect the strategy that it is intended to reflect.

If either no replacement can be made under the preceding paragraph or if the Index Calculation Agent determines that no replacement it can make under the preceding paragraph will produce a commercially reasonable result, then the Index Calculation Agent will remove the affected Constituent from the Index and replace the affected Constituent with either a notional exposure in accordance with the relevant rules (if any) specified in the applicable Index Methodology or (if no such rules are specified) a Constituent which confers no investment exposure. A commercially reasonable result will only be obtained if a replacement preserves the ability of the Index to reflect the strategy that it is intended to reflect.

At any time, either a reweighting or a replacement, as discussed in the preceding paragraphs, may have an unforeseen effect on the Index. Assumptions as to the

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inclusion in the Index of a particular Constituent will no longer be valid if that Constituent is removed from the Index, whether temporarily or permanently.

The terms and conditions of any Index Linked Product may contain provisions as to the consequences of any such replacement or reweighting of a Constituent or discontinuation of the Index.

Any such reweighting, replacement or discontinuation of the Index may have an adverse effect on the value of such Index Linked Product.

Any such reweighting, replacement or discontinuation of the Index may (depending on the terms and conditions of such Index Linked Product) result in the early termination of such Index Linked Product and the payment of an amount to reflect the valuation of such Index Linked Product at the time of such early termination. Depending on the terms and conditions of such Index Linked Product, an investor may receive back on such early termination less than the amount of the original investment.

Please refer to the terms and conditions of such Index Linked Product. In the case of a prospectus or offering document which contains provisions under the heading "Risk Factors", "Investment Considerations" or the equivalent, please refer to these provisions for a discussion of these consequences.

#### 3. NOTIONAL EXPOSURE

The Index creates a notional exposure to the Constituents and such notional exposure will only exist in the books and records of the Index Sponsor and the Index Calculation Agent.

(a) No rights

Investors in Index Linked Products (a) have no legal or beneficial ownership interest in any Constituent and therefore have no recourse to any Constituent; (b) have no right to take delivery of any Constituent; (c) have no voting rights with respect to any Constituent; (d) have no right to receive dividends, distributions or other payments with respect to any Constituent.

(b) No offer

Nothing in these Index General Conditions constitutes an offer to buy or to sell any Constituent or any other asset, commodity, contract or security (including without limitation any asset, contract, commodity or security included in any Constituent).

(c) Reinvestment

Whether or not the Index is a "total return index" and includes the notional reinvestment of amounts calculated by reference to any dividend, distribution or payment that would be received by a holder of a Constituent is specified in the applicable Index Methodology. If the Index is not a "total return index", it will not include any such notional reinvestment.

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#### 4. NO INVOLVEMENT OF PERSONS CONNECTED WITH ANY CONSTITUENT

The Index does not create any obligation of any person connected with any Constituent (each such person, for the purposes of this paragraph, a "Relevant Person"), including without limitation the issuer of any Constituent which is a security, the sponsor or calculation agent of any Constituent which is itself an index, and the provider of any service (such as an investment adviser or an investment manager) to any Constituent which is a fund.

No Relevant Person has participated in the preparation of the Index Conditions or in the arrangement and offer of any Index Linked Product.

#### 5. NO INVESTIGATION

Neither the Index Sponsor nor the Index Calculation Agent has made or will make any investigation or enquiry with respect to any Constituent, including with respect to any publicly-available information that is disclosed in the applicable Index Methodology with respect to any Constituent. Consequently there can be no assurance that all events have been disclosed which would affect the performance of the Index or the value of any Index Linked Product.

#### 6. EFFECT OF FEES

The Index Level may include a deduction of notional fees, as described in the applicable Index Methodology. Any such deduction of notional fees will result in the Index underperforming a hypothetical investment portfolio from which no such deduction is made.

#### 7. EFFECT OF NOTIONAL COSTS

The Index Level may include a deduction of notional costs (which may be referred to as a notional cost, charge, spread or similar term), as described in the applicable Index Methodology. Any such deduction of notional costs will result in the Index underperforming a hypothetical investment portfolio from which no such deduction is made.

#### 8. DISRUPTION TO THE INDEX

Certain events may affect the calculation of the Index and the Index Level. These events, which are described elsewhere in the Index Conditions, may have consequences including:

- (a) the Index Calculation Agent following the relevant process described in Section B (Valuations and Adjustments);
  - (b) the Index Calculation Agent exercising certain discretions conferred by the Index Conditions;
- (c) the Index Calculation Agent suspending the calculation, publication and dissemination of the Index and the Index Level;
  - (d) the Index Sponsor making a modification or change to the Index Conditions; and
    - (e) the Index Sponsor discontinuing and cancelling the Index.

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Unless otherwise stated, the Index Sponsor has no obligation to inform any person of the result of any action taken on the occurrence of such events.

The occurrence or existence of Disrupted Days may also result in the calculation, publication and dissemination of the Index being postponed to a later time than as provided in the Index Conditions or as is customary of the Index.

### 9. INDEX SPONSOR AND INDEX CALCULATION AGENT

These Index General Conditions confer on the Index Sponsor and the Index Calculation Agent a degree of discretion in making certain determinations and calculations, for example in connection with the occurrence of disruptions and adjustments. Although each of the Index Sponsor and the Index Calculation Agent will act in good faith and in a commercially reasonable manner, the exercise of any such discretion may have an adverse effect on the Index Level and therefore may have an adverse effect on the value of any Index Linked Product.

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#### **Definitions**

References to the "applicable Index Methodology" are references to the Index Methodology relating to the relevant Index which together with these Index General Conditions completes the Index Conditions for such Index.

References to a "Section" shall be references to a section of these Index General Conditions.

References to a "Part" shall be references to a part of the applicable Index Methodology.

"Adjustment Event" shall, in respect of a Constituent, have the meaning given to it in the Constituent Schedule applicable to such Constituent.

"Affected Constituent" shall have the meaning given to it in Section B (Valuations and Adjustments).

"Affiliate" shall mean, in respect of a person, any entity controlled (directly or indirectly) by such person, any entity which controls (directly or indirectly) such person or any entity (directly or indirectly) under common control with such person. For this purpose, "control" of any person or entity shall mean the ownership or a majority of the voting power of such person or entity.

"Amount" shall have the meaning given to it in Section E (Miscellaneous).

"Calculations" shall have the meaning given to it in Section E (Miscellaneous).

"Citi" shall mean Citigroup Inc. and its Affiliates.

"Classification" shall mean, in respect of a Constituent, the classification assigned to it in the applicable Index Methodology.

"Constituent" shall mean each Constituent of the Index specified as such in, or determined in accordance with, the applicable Index Methodology and the Index General Conditions. Each Constituent is assigned an identifying number denoted as "i" (and the total number of Constituents shall be denoted as "n"), unless specified otherwise.

"Constituent Closing Level" shall, in respect of a Constituent, have the meaning given to it in the Constituent Schedule applicable to such Constituent.

"Constituent Inclusion Date" shall mean, in respect of a Constituent, the date with effect from which such Constituent is included in the Index.

"Constituent Level" shall, in respect of a Constituent, have the meaning given to it in the Constituent Schedule applicable to such Constituent.

"Constituent Schedule" shall mean, in respect of a Constituent, the schedule that is specified to be applicable to such Constituent as a result of the classification of such Constituent in the applicable Index Methodology.

"Corrected Level" shall have the meaning given to it in Section B (Valuations and Adjustments).

"Correction Period" shall mean, in respect of a Constituent, the period specified as such in the Constituent Schedule applicable to such Constituent.

"Disrupted Day" shall, in respect of a Constituent, have the meaning given to it in the Constituent Schedule applicable to such Constituent.

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"Electronic Page" shall mean, in respect of a Constituent, (1) the electronic page or source specified for such Constituent in the applicable Index Methodology, or (2) if no such electronic page or source is so specified for such Constituent, such Bloomberg or Reuters page or other widely recognised source of financial data as the Index Calculation Agent may determine appropriate, or (3) in any such case, any successor electronic page or source that has been designated by either (a) the sponsor of the original electronic page or source; or (b) the relevant information vendor or provider of the original electronic page or source; or (4) any alternative electronic page or source of financial data that may be designated by the Index Calculation Agent, provided that such page or source is widely recognised by participants in the relevant market.

"Eligible Constituent" shall mean (if the Index is specified in the applicable Index Methodology to operate with reference to an Eligible Universe) each constituent eligible for inclusion as a Constituent in the Index, specified as such and classified in the applicable Index Methodology.

"Eligible Universe" shall mean (if the Index is specified in the applicable Index Methodology to operate with reference to an Eligible Universe) all of the Eligible Constituents. The rules for adding Eligible Constituents to the Index as Constituents and for removing Constituents from the Index are set out in the applicable Index Methodology.

"Index Base Currency" shall mean the currency specified as such in the applicable Index Methodology.

"Index Business Day" shall have the meaning given to it in the applicable Index Methodology.

"Index Calculation Agent" shall mean the person specified as such in the applicable Index Methodology and appointed by the Index Sponsor, any successor to such person, or any alternative calculation agent appointed by the Index Sponsor.

"Index Conditions" shall mean, in respect of the Index, these Index General Conditions together with the applicable Index Methodology.

"Index Electronic Page" shall mean (1) the electronic page or source specified as such in Part B (Key Information) of the applicable Index Methodology, or (2) any successor electronic page or source that has been designated by either (a) the sponsor of the original electronic page or source; or (b) the relevant information vendor or provider of the original electronic page or source; or (3) any alternative electronic page or source designated by the Index Sponsor.

"Index Launch Date" shall mean the date specified as such in the applicable Index Methodology.

"Index Level" shall mean, in respect of an Index Business Day, the closing level of the Index as of the Index Valuation Time on such Index Business Day.

"Index Linked Product" shall mean any security, contract or other financial product the return on which is linked to the performance of the Index.

"Index Sponsor" shall mean the person specified as such in the applicable Index Methodology or any successor to or assignee of such person.

"Index Start Date" shall mean the date specified as such in the applicable Index Methodology.

"Index Start Level" shall mean the Index Level on the Index Start Date, as specified in the applicable Index Methodology.

"Index Valuation Time" have the meaning given to it in the applicable Index Methodology.

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"Information" shall have the meaning given to it in Section E (Miscellaneous).

"Rebalancing Date" shall mean each date specified as such in, or determined in accordance with, the applicable Index Methodology.

"Replacement" shall have the meaning given to it in Section B (Valuations and Adjustments).

"Replacement Criteria" shall, in respect of a Constituent, have the meaning given to it in the Constituent Schedule applicable to such Constituent.

"Reweighting" shall have the meaning given to it in Section B (Valuations and Adjustments).

"Scheduled Valuation Date" shall mean each date specified as such in the applicable Index Methodology.

"Selection Day" shall mean each date specified as such in the applicable Index Methodology.

"Valuation Date" shall mean each Scheduled Valuation Date as adjusted in accordance with Section B (Valuations and Adjustments).

"Valuation Roll" shall mean the number specified as such in the applicable Index Methodology.

"Weight" shall have the meaning given to it in the applicable Index Methodology.

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1.

#### CALCULATIONS AND DETERMINATIONS

(a) General

The Index Calculation Agent will perform all calculations, determinations, rebalancings and adjustments (together, "Calculations") in respect of the Index. Neither the Index Calculation Agent nor the Index Sponsor will have any responsibility for errors made in good faith or omissions in Calculations or other actions as provided in the Index Conditions.

The Calculations of the Index Calculation Agent shall be performed by it in accordance with the Index Conditions, acting in its sole, absolute and unfettered discretion, but in good faith and in a commercially reasonable manner (having regard in each case to the criteria stipulated in the Index Conditions and, where relevant, on the basis of information provided to or obtained by employees or officers of the Index Calculation Agent responsible for making relevant Calculations). All Calculations shall, in the absence of manifest error, be final, conclusive and binding on any user of the Index, including any holder of, or counterparty to, an Index Linked Product.

Although the Index Conditions are intended to be comprehensive, it is possible that ambiguities, errors and omissions may arise in certain circumstances. The Index Sponsor will resolve, acting in good faith and in a commercially reasonable manner, any such ambiguity, error or omission, and may amend the Index Conditions to reflect the resolution of such ambiguity, error or omission in a manner which is consistent with the commercial objective of the Index.

(b) Rounding

Subject as provided in the applicable Index Methodology, any amount, currency amount, level, percentage, price, rate or value ("Amount") calculated by the Index Calculation Agent shall be rounded to such number of decimal points and in such manner as the Index Calculation Agent determines is appropriate, acting in a commercially reasonable manner.

(c) Use of estimates

The Index Calculation Agent will perform the Calculations described in the Index Conditions using the information, data sources or factors specified in these Index Conditions and any Amount (together, "Information") and may perform any Calculation and any action required in respect of the Index Conditions in any sequence. However, in the event that the Index Calculation Agent is not able to obtain or use any necessary Information, then (after using reasonable endeavors and after applying any fallback provision specified in the Index Conditions in respect of the relevant Calculation) the Index Calculation Agent may, but shall not be obliged to, use its estimate (made in good faith and in a commercially reasonable manner) of the relevant Information in performing such Calculation, should the Index Calculation Agent determine that such estimate is

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reasonably necessary in order to give effect to any provision or to perform any Calculation necessary under the Index Conditions.

(d) No verification of Information

Although the Index Calculation Agent will obtain Information for inclusion in the Index or for use in performing any Calculation under the Index Conditions from sources that the Index Calculation Agent considers reliable (including databases maintained by the Index Calculation Agent or its Affiliates, and public sources such as Bloomberg and Reuters), the Index Calculation Agent will not publish or independently verify such Information.

(e) Corrections

Subject as provided in the applicable Index Methodology and any Correction Period specified, if the Index Calculation Agent becomes aware that any Information used by it in connection with any Calculation under the Index Conditions has subsequently been corrected or adjusted, then the Index Calculation Agent may, but shall not be obliged to, use such corrected or adjusted Information and as a consequence make any further Calculation that it determines necessary or desirable in order to give effect to or to reflect such corrected or adjusted Information, including without limitation any redenomination, exchange or conversion of any currency into a successor currency.

(f) Reliance

In performing any Calculation under the Index Conditions, the Index Calculation Agent may rely upon the opinion of any person who appears to it as being competent to value any asset or instrument of any class, or to perform any other calculation or determination, by reason of any appropriate relevant professional qualification or experience.

(g) Not acting as fiduciary or agent

In performing any Calculation or other action in connection with the Index Conditions, each of the Index Calculation Agent and the Index Sponsor will act as principal and not as agent of any other person. Neither the Index Calculation Agent nor the Index Sponsor owes any duty of care or any fiduciary duty to any investor in any Index Linked Product or to any other person. Each Calculation and other action performed in connection with the Index Conditions by the Index Calculation Agent or the Index Sponsor is performed in reliance on this provision and is subject to this provision.

If through performing any such Calculation or other action the Index Calculation Agent or the Index Sponsor is rendered an agent or fiduciary of another person under applicable law, then (at the option of the Index Calculation Agent or the Index Sponsor, as relevant) the rights and obligations of the Index Calculation Agent or the Index Sponsor to perform such Calculation or other action may be suspended (or, if already performed, the application of such Calculation or other action may be suspended) until such time when such Calculation or other action can be performed either by the Index Calculation Agent or the Index Sponsor as principal and not as an agent or fiduciary or by an appropriate third party who is both willing and able to perform such Calculation or other action.

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(h) Dates and times of calculations

Notwithstanding that certain Calculations under the Index Conditions may be expressed to be "on" or "as at" a certain date or time, the Index Calculation Agent may in its discretion perform such Calculation in respect of such date or time after such date or time.

#### 2. CONFLICTS OF INTEREST

Citi entities perform various roles in connection with the Index and Index Linked Products, and conflicts of interest may arise for any such entity as a consequence of any role it performs in connection with the Index or any Index Linked Product or as a consequence of its activities more generally.

During the normal course of their business, the Index Sponsor, the Index Calculation Agent, any of their respective Affiliates, directors, officers, employees, representatives, delegates and agents (each, for the purposes of this Section E, a "Relevant Person") may enter into, promote, offer or sell securities or contracts (whether or not structured) linked to the Index and/or any Constituent. Any Relevant Person may at any time (a) have long or short principal positions or actively trade (whether or not through making markets to its clients) positions in or relating to the Index or any Constituent; (b) invest in or engage in transactions with or on behalf of other persons relating to the Index and/or any Constituent; (c) undertake hedging transactions (for the purposes of any security or contract) which may adversely affect the level, price or rate or other factor underlying the Index and/or any Constituent; (d) have an investment banking or commercial relationship with the issuer of any Constituent and have access to information from any such issuer; or (e) publish research in respect of any Constituent or the issuer of any Constituent. Such activity may or may not affect the Index Level, but potential investors and counterparties should be aware that a conflict of interest may arise when a person acts in more than one capacity, and such conflict of interest may affect (whether in a positive manner or a negative manner) the Index Level.

#### 3. DISCLAIMER

No Relevant Person makes any express or implied representation or warranty as to (a) the advisability of purchasing or entering into any Index Linked Product; (b) the levels of the Index at any particular date or time; (c) the results to be obtained from the use of the Index or any datum included in the Index Conditions for any purpose; or (d) any other matter. Each Relevant Person hereby expressly disclaims, to the fullest extent permitted by applicable law, all warranties of accuracy, completeness, merchantability or fitness for a particular purpose with respect to the Index and any information contained in the Index Conditions. No Relevant Person will have any liability (direct or indirect, special, punitive, consequential or otherwise) to any person even if notified of the possibility of damages.

The Index Conditions have been prepared solely for the purposes of information and nothing in the Index Conditions constitutes (a) an offer to buy or to sell any security or contract, to participate in any transaction or to adopt any investment strategy; or (b) legal, tax, regulatory, financial or accounting advice. Any decision to purchase any Index Linked Product should be based on the information contained in the associated prospectus or offering document (however

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described). In the case of a prospectus or offering document which contains provisions under the heading "Risk Factors", "Investment Considerations" or the equivalent, please refer to these provisions for a discussion of the factors that must be considered in connection with an investment in the security or contract described therein.

Neither the Index Calculation Agent nor the Index Sponsor is under any obligation to continue to calculate, publish or disseminate the Index or the Index Level.

#### 4. INTELLECTUAL PROPERTY

The Index and the Index Conditions (including for the avoidance of doubt these Index General Conditions) are the Index Sponsor's proprietary and confidential material. No person may reproduce or disseminate the information contained in the Index Conditions, the Index or the Index Level without the prior written consent of the Index Sponsor. These Index General Conditions and each Index Methodology are not intended for distribution to or use by any person in a jurisdiction where such distribution is prohibited by applicable law or regulation.

The Index is not in any way sponsored or promoted by any sponsor or issuer, as relevant, of any Constituent.

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Section F: Constituent Schedule

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Constituent Schedule

#### **SHARE**

This Constituent Schedule shall apply to each Constituent classified in the applicable Index Methodology as a "Share".

For the avoidance of doubt, defined terms used in this Constituent Schedule shall only apply in respect of an Index containing one or more Shares.

References to a "Paragraph" shall be references to a paragraph of this Constituent Schedule and references to a "Sub-paragraph" shall be references to a sub-paragraph of this Constituent Schedule.

1. VALUATION

(a) Closing valuations

"Constituent Closing Level" shall mean, in respect of a Share and a Valuation Date for such Share and unless otherwise specified in the applicable Index Methodology, the official closing price of such Share on such Valuation Date, as displayed on the applicable Electronic Page.

"Valuation Time" shall mean, in respect of a Share and a Scheduled Trading Day for such Share, the Scheduled Closing Time on the relevant Exchange on such Scheduled Trading Day.

b) Intraday valuations

"Constituent Level" shall mean, in respect of a Share and a Valuation Time on a Valuation Date for such Share, the price of such Share at such Valuation Time on such Valuation Date, as displayed on the applicable Electronic Page.

"Valuation Time" shall mean, in respect of a Share and a Scheduled Trading Day for such Share, the time when the price of such Share is being determined during such Scheduled Trading Day.

#### 2. DISRUPTION TO VALUATION

"Disrupted Day" shall mean, in respect of a Share, any Scheduled Trading Day for such Share on which any of the events set out below occurs:

- (a)any relevant Exchange or any relevant Related Exchange fails to open for trading during its regular trading session; or
- (b) the occurrence or existence at any time during the one hour period which ends at the relevant Valuation Time of any suspension of or limitation imposed (whether by reason of movements in

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price exceeding permitted limits or otherwise) on the trading on (i) any relevant Exchange of such Share; or (ii) any relevant Related Exchange of futures contracts or options contracts relating to such Share; or

- (c) the occurrence or existence at any time during the one hour period which ends at the relevant Valuation Time of any other event (other than an event described in Sub-paragraph (d) or Sub-paragraph (e) of this definition) which disrupts or impairs the ability of market participants in general (i) (on any relevant Exchange) to effect transactions in or to obtain market values for such Share; or (ii) (on any relevant Related Exchange) to effect transactions in or to obtain market values for any futures contracts or options contracts relating to such Share; or
- (d) the closure on any Exchange Business Day of any relevant Exchange prior to its Scheduled Closing Time (unless such earlier closing time is announced by such Exchange at least one hour prior to the earlier of (i) the actual closing time for the regular trading session on such Exchange on such Exchange Business Day; and (ii) the deadline for the submission of orders to be entered into such Exchange system for execution at the relevant Valuation Time on such Exchange Business Day); or
- (e) the closure on any Exchange Business Day of any relevant Related Exchange in respect of futures contracts or options contracts relating to such Share prior to its Scheduled Closing Time (unless such earlier closing time is announced by such Related Exchange at least one hour prior to the earlier of (i) the actual closing time for the regular trading session on such Related Exchange on such Exchange Business Day; and (ii) the deadline for the submission of orders to be entered into such Related Exchange system for execution at the Valuation Time on such Exchange Business Day).

#### 3. ADJUSTMENT EVENTS

"Adjustment Event" shall mean, in respect of a Share, the occurrence of any of the events set out below:

(a)	a Corporate Action; or	
(b)	a Delisting; or	
(c)	an Insolvency; or	
(d)	a Merger Event; or	
(e)	a Nationalization; or	
(f)	a Tender Offer.	
(a)	Corporate Action	

<sup>&</sup>quot;Corporate Action" shall mean, in respect of relevant Shares, any of the following events (provided that, in each case, the relevant event has a diluting or concentrative effect on the theoretical value of the relevant Shares):

 $(i) \hspace{0.5cm} a \hspace{0.1cm} subdivision, \hspace{0.1cm} consolidation \hspace{0.1cm} or \hspace{0.1cm} reclassification \hspace{0.1cm} of \hspace{0.1cm} such \hspace{0.1cm} Shares, \hspace{0.1cm} unless \hspace{0.1cm} resulting \hspace{0.1cm} in \hspace{0.1cm} a \hspace{0.1cm} Merger \hspace{0.1cm} Event; \hspace{0.1cm} or \hspace{0.1cm} a \hspace{0.1cm} a \hspace{0.1cm} subdivision, \hspace{0.1cm} consolidation \hspace{0.1cm} or \hspace{0.1cm} reclassification \hspace{0.1cm} of \hspace{0.1cm} such \hspace{0.1cm} Shares, \hspace{0.1cm} unless \hspace{0.1cm} resulting \hspace{0.1cm} in \hspace{0.1cm} a \hspace{0.1cm} Merger \hspace{0.1cm} Event; \hspace{0.1cm} or \hspace{0.1cm} a \hspace{0.1cm} subdivision, \hspace{0.1cm} consolidation \hspace{0.1cm} or \hspace{0.1cm} reclassification \hspace{0.1cm} of \hspace{0.1cm} such \hspace{0.1cm} Shares, \hspace{0.1cm} unless \hspace{0.1cm} resulting \hspace{0.1cm} in \hspace{0.1cm} a \hspace{0.1cm} Merger \hspace{0.1cm} Event; \hspace{0.1cm} or \hspace{0.1cm} such \hspace{0.1cm} s$ 

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- (ii) a free distribution or dividend of such Shares to existing holders by way of bonus, capitalization or similar issue; or
- (iii) a distribution, issue or dividend to existing holders of such Shares of (A) an additional amount of such Shares; or (B) other share capital or securities granting the right to payment of dividends and/or the proceeds of the liquidation of the relevant Share Company equally or proportionately with such payments to holders of its Shares; or (C) share capital or other securities of another issuer acquired or owned (directly or indirectly) by such Share Company as a result of a spin-off or other similar transaction; or (D) any other type of securities, rights or warrants or other assets, in any case for payment (whether in cash or otherwise) at less than their prevailing market price; or
  - (iv) an Extraordinary Dividend; or
  - (v) a call by the relevant Share Company in respect of such Shares which are not fully paid; or
- (vi) a repurchase by the relevant Share Company or any of its subsidiaries of such Shares, whether out of profits or capital, and whether the consideration for such repurchase is cash, securities or otherwise; or
- (vii) in respect of the relevant Share Company, an event which results in any shareholder rights being distributed or becoming separated from shares of common stock or other shares of the capital stock of such Share Company, pursuant to a shareholder rights plan or arrangement directed against hostile takeovers which provides (upon the occurrence of certain events) for a distribution of preferred stock, warrants, debt instruments or stock rights at a price below their market value (PROVIDED THAT any adjustment effected as a result of such an event may be readjusted upon any redemption of such rights); or
- (viii) any other event which may have a diluting or concentrative effect on the theoretical value of such Shares.

(b) Delisting

"Delisting" shall mean, in respect of relevant Shares, that any relevant Exchange announces that pursuant to the rules of such Exchange such Shares cease (or will cease) to be listed, traded or publicly quoted on such Exchange for any reason (other than a Merger Event or a Tender Offer) and are not (or will not be) immediately re-listed, re-traded or re-quoted on an exchange or quotation system located in the same country as such Exchange (or, where such Exchange is located within the European Union, in any member state of the European Union) or another exchange or quotation system (that is acceptable to the Index Calculation Agent) located in another country (that is acceptable to the Index Calculation Agent). In addition, it will also constitute a Delisting if the relevant Exchange is located in the United States and the relevant Shares are not immediately re-listed, re-traded or re-quoted on any of the New York Stock Exchange, the NASDAQ Global Select Market and the NASDAQ Global Market (or their respective successors).

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(c) Insolvency

"Insolvency" shall mean, in respect of a Share Company, that either (i) by reason of the voluntary or involuntary liquidation, bankruptcy, insolvency, dissolution or winding up of (or any analogous proceeding) affecting such Share Company (A) all the Shares of such Share Company are required to be transferred to an Insolvency Officer; or (B) holders of such Shares become legally prohibited from transferring or redeeming such Shares; or (ii) an Insolvency Event occurs in respect of such Share Company.

"Insolvency Officer" shall mean an administrator, provisional liquidator, conservator, receiver, trustee, custodian or other similar official.

"Insolvency Event" shall mean, in respect of an entity, that such entity (i) is dissolved or has a resolution passed for its dissolution, winding-up or official liquidation (other than pursuant to a consolidation, amalgamation or merger); (ii) makes a general assignment or arrangement with or for the benefit of its creditors; (iii) either (A) institutes, or has instituted against it by a Competent Official, a proceeding seeking an Insolvency Judgment, or a petition is presented for its winding-up or liquidation by it or by such Competent Official; or (B) has instituted against it a proceeding seeking an Insolvency Judgment, or a petition is presented for its winding-up or liquidation, and such proceeding or petition is instituted or presented by a person not described in (A) above and either (1) results in an Insolvency Judgment or the entry of an order for relief or the making of an order for its winding up or liquidation; or (2) is not dismissed, discharged, stayed or restrained, in each case within 15 days of the institution or presentation thereof; or (iv) seeks or becomes subject to the appointment of an Insolvency Officer of all or substantially all of its assets; or (v) has a secured party take possession of all or substantially all of its assets (and such secured party maintains possession for not less than 15 days thereafter); or (vi) has a distress, execution, attachment, sequestration or other legal process levied, enforced or sued on or against all or substantially all of its assets (and such process is not dismissed, discharged, stayed or restrained within 15 days thereafter); or (vii) the holders of securities issued by such entity become legally prohibited from transferring such securities; or (viii) causes or is subject to any event which, under the applicable laws of any jurisdiction, has an analogous effect to any of the events specified in (iv) to (vi) above. For these purposes, "Competent Official" shall mean, in respect of such entity, a regulator, supervisor or other similar official with primary insolvency, rehabilitative or regulatory jurisdiction over it in the jurisdiction of its incorporation or organization or in the jurisdiction of its head office or home office; "Insolvency Law" shall mean any bankruptcy law, insolvency law or other similar law affecting creditors' rights; and "Insolvency Judgment" shall mean any judgment of insolvency or bankruptcy or any other relief under any Insolvency Law.

(d) Merger Event

"Merger Event" shall mean, in respect of relevant Shares, any:

- (i) reclassification or change of such Shares which results in a transfer of or an irrevocable commitment to transfer all such Shares outstanding to another entity or person; or
- (ii) consolidation, amalgamation, merger or binding share exchange of the relevant Share Company with or into another entity (other than a consolidation, amalgamation, merger or

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binding share exchange in which it is the continuing entity and which does not result in a reclassification of all such Shares outstanding); or

- (iii) takeover offer, tender offer, exchange offer, solicitation, proposal or other event by any entity or person to purchase or otherwise obtain 100 per cent. of the outstanding Shares for the relevant Share Company, which results in a transfer of or an irrevocable commitment to transfer all such Shares (other than those owned or controlled by such entity or person); or
- (iv) consolidation, amalgamation, merger or binding share exchange of the relevant Share Company or its subsidiaries with or into another entity in which such Share Company is the continuing entity and which does not result in the reclassification or change of all such Shares outstanding but results in the outstanding Shares (other than those owned or controlled by such other entity) immediately prior to such event collectively representing less than 50 per cent. of the outstanding Shares immediately following such event.

(e) Nationalization

"Nationalization" shall mean, in respect of a Share Company, that all the Shares or all the assets or substantially all the assets of such Share Company are nationalized, expropriated or are otherwise required to be transferred to any governmental agency, authority, entity or instrumentality thereof.

(f) Tender Offer

"Tender Offer" shall mean, in respect of a Share Company, a takeover offer, tender offer, exchange offer, solicitation, proposal or other event by any entity or person that results in such entity or person purchasing, or otherwise obtaining or having the right to obtain, by conversion or other means, greater than 10 per cent. and less than 100 per cent. of the outstanding voting shares of such Share Company, as assessed with reference to the filings made with governmental or self-regulatory agencies or such other reasonably relevant information.

4. CORRECTIONS

"Correction Period" shall mean, in respect of a Share, two Index Business Days.

### 5. REPLACEMENT CRITERIA

"Replacement Criteria" shall mean, in respect of a Share, the criteria (if any) specified as such in the applicable Index Methodology.

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#### 6. DEFINITIONS

"Exchange" shall mean, in respect of a Share and unless otherwise specified in the applicable Index Methodology, the primary exchange, trading system or quotation system in respect of such Share or any successor to such exchange, trading system or quotation system, or any substitute exchange, trading system or quotation system to which trading in such Share has temporarily relocated (PROVIDED THAT there is comparable liquidity relative to such Share on such temporary substitute exchange, trading system or quotation system as on the original exchange, trading system or quotation system).

"Exchange Business Day" shall mean, in respect of a Share, any Scheduled Trading Day for such Share on which each relevant Exchange and each relevant Related Exchange are open for trading during their respective regular trading sessions, notwithstanding any such Exchange or any such Related Exchange closing prior to its Scheduled Closing Time.

"Extraordinary Dividend" shall mean, in respect of a Share, a dividend or a distribution or portion thereof which is determined by the Index Calculation Agent to be an extraordinary dividend relating to such Share having regard to general market consensus.

"Related Exchange" shall mean, in respect of a Share and unless otherwise specified in the applicable Index Methodology, each exchange, trading system or quotation system in respect of futures contracts or options contracts relating to such Share or any successor to such exchange, trading system or quotation system, or any substitute exchange, trading system or quotation system to which trading in such futures contracts or options contracts has temporarily relocated (PROVIDED THAT that there is comparable liquidity relative to such futures contracts or options contracts on such temporary substitute exchange, trading system or quotation system as on the original exchange, trading system or quotation system). Where "All Exchanges" is specified in the applicable Index Methodology as the applicable Related Exchange in respect of a Share, then "Related Exchange" shall mean each exchange, trading system or quotation system where trading has a material effect on the overall market for futures contracts or options contracts relating to such Share.

"Scheduled Closing Time" shall mean, in respect of a Share, a Scheduled Trading Day and an Exchange or a Related Exchange (as relevant) for such Share, the scheduled weekday closing time on such Exchange or Related Exchange on such Scheduled Trading Day, without regard to after-hours trading or any other trading outside the hours of the regular trading session on such Exchange or Related Exchange.

"Scheduled Trading Day" shall mean, in respect of a Share, any day on which each relevant Exchange and each relevant Related Exchange is scheduled to be open for trading for its regular trading session.

"Share" shall mean each Constituent classified as such in the applicable Index Methodology.

"Share Company" shall mean, in respect of a Share, the issuer of such Share.