

BRUSH ENGINEERED MATERIALS INC
 Form 4
 October 18, 2006

FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION
 Washington, D.C. 20549

OMB APPROVAL

OMB Number: 3235-0287
 Expires: January 31, 2005
 Estimated average burden hours per response... 0.5

Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP OF SECURITIES

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934, Section 17(a) of the Public Utility Holding Company Act of 1935 or Section 30(h) of the Investment Company Act of 1940

(Print or Type Responses)

1. Name and Address of Reporting Person *
KEITHLEY JOSEPH P

2. Issuer Name and Ticker or Trading Symbol
BRUSH ENGINEERED MATERIALS INC [BW]

5. Relationship of Reporting Person(s) to Issuer

(Check all applicable)

(Last) (First) (Middle)
 17876 ST. CLAIR AVE.
 (Street)

3. Date of Earliest Transaction (Month/Day/Year)
 10/17/2006

Director 10% Owner
 Officer (give title below) Other (specify below)

CLEVELAND, OH 44110
 (City) (State) (Zip)

4. If Amendment, Date Original Filed(Month/Day/Year)

6. Individual or Joint/Group Filing(Check Applicable Line)
 Form filed by One Reporting Person
 Form filed by More than One Reporting Person

Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned

1. Title of Security (Instr. 3)	2. Transaction Date (Month/Day/Year)	2A. Deemed Execution Date, if any (Month/Day/Year)	3. Transaction Code (Instr. 8)	4. Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)	5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4)	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Ownership (Instr. 4)	
				(A) or (D) Price				
Brush Engineered Materials Inc.	10/17/2006		A	468.532	A \$ 29.35	11,480.532	I	See footnote (1)
Brush Engineered Materials Inc.					1,873		D	

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

Persons who respond to the collection of information contained in this form are not

SEC 1474 (9-02)

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Principal at Risk Securities

As a finance subsidiary, MSFL has no independent operations and will have no independent assets. As a finance subsidiary, MSFL has no independent operations beyond the issuance and administration of its securities and will have no independent assets available for distributions to holders of MSFL securities if they make claims in respect of such securities in a bankruptcy, resolution or similar proceeding. Accordingly, any recoveries by such holders will be limited to those available under the related guarantee by Morgan Stanley and that guarantee will rank § *pari passu* with all other unsecured, unsubordinated obligations of Morgan Stanley. Holders will have recourse only to a single claim against Morgan Stanley and its assets under the guarantee. Holders of securities issued by MSFL should accordingly assume that in any such proceedings they would not have any priority over and should be treated *pari passu* with the claims of other unsecured, unsubordinated creditors of Morgan Stanley, including holders of Morgan Stanley-issued securities.

The Trigger PLUS are linked to the Russell 2000® Index and are subject to risks associated with small-capitalization companies. As the Russell 2000® Index is one of the underlying indices, and the Russell 2000® Index consists of stocks issued by companies with relatively small market capitalization, the Trigger PLUS are linked to the value of small-capitalization companies. These companies often have greater stock price volatility, lower trading volume and less liquidity than large-capitalization companies and therefore the Russell 2000® Index may be more volatile than indices that consist of stocks issued by large-capitalization companies. Stock prices of § small-capitalization companies are also more vulnerable than those of large-capitalization companies to adverse business and economic developments, and the stocks of small-capitalization companies may be thinly traded. In addition, small capitalization companies are typically less well-established and less stable financially than large-capitalization companies and may depend on a small number of key personnel, making them more vulnerable to loss of personnel. Such companies tend to have smaller revenues, less diverse product lines, smaller shares of their product or service markets, fewer financial resources and less competitive strengths than large-capitalization companies and are more susceptible to adverse developments related to their products.

The amount payable on the Trigger PLUS is not linked to the values of the underlying indices at any time other than the valuation date. The final index value of each underlying index will be based on the index closing value of such index on the valuation date, subject to adjustment for non-index business days and certain market disruption events. Even if both underlying indices appreciate prior to the valuation date but the value of **either** § underlying index drops by the valuation date to below its respective trigger level, the payment at maturity will be significantly less than it would have been had the payment at maturity been linked to the values of the underlying indices prior to such drop. Although the actual values of the underlying indices on the stated maturity date or at other times during the term of the Trigger PLUS may be higher than their respective trigger levels, the payment at maturity will be based solely on the index closing values on the valuation date.

§ Investing in the Trigger PLUS is not equivalent to investing in either underlying index. Investing in the Trigger PLUS is not equivalent to investing in either underlying index or the component stocks of either underlying index.

Explanation of Responses:

Investors in the Trigger PLUS will not have voting rights or rights to receive dividends or other distributions or any other rights with respect to stocks that constitute either underlying index.

Adjustments to the underlying indices could adversely affect the value of the Trigger PLUS. The publisher of either underlying index may add, delete or substitute the stocks constituting such underlying index or make other methodological changes that could change the value of such underlying index. The publisher of either underlying § index may discontinue or suspend calculation or publication of such underlying index at any time. In these circumstances, the calculation agent will have the sole discretion to substitute a successor index that is comparable to the discontinued underlying index and will be permitted to consider indices that are calculated and published by the calculation agent or any of its affiliates.

The rate we are willing to pay for securities of this type, maturity and issuance size is likely to be lower than the rate implied by our secondary market credit spreads and advantageous to us. Both the lower rate and the inclusion of costs associated with issuing, selling, structuring and hedging the Trigger PLUS in the original § issue price reduce the economic terms of the Trigger PLUS, cause the estimated value of the Trigger PLUS to be less than the original issue price and will adversely affect secondary market prices. Assuming no change in market conditions or any other relevant factors, the prices, if any, at which dealers, including MS & Co., may be willing

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to purchase the Trigger PLUS in secondary market transactions will likely be significantly lower than the original issue price, because secondary market prices will exclude the issuing, selling, structuring and hedging-related costs that are included in the original issue price and borne by you and because the secondary market prices will reflect our secondary market credit spreads and the bid-offer spread that any dealer would charge in a secondary market transaction of this type as well as other factors.

The inclusion of the costs of issuing, selling, structuring and hedging the Trigger PLUS in the original issue price and the lower rate we are willing to pay as issuer make the economic terms of the Trigger PLUS less favorable to you than they otherwise would be.

However, because the costs associated with issuing, selling, structuring and hedging the Trigger PLUS are not fully deducted upon issuance, for a period of up to 6 months following the issue date, to the extent that MS & Co. may buy or sell the Trigger PLUS in the secondary market, absent changes in market conditions, including those related to the underlying index, and to our secondary market credit spreads, it would do so based on values higher than the estimated value, and we expect that those higher values will also be reflected in your brokerage account statements.

The estimated value of the Trigger PLUS is determined by reference to our pricing and valuation models, which may differ from those of other dealers and is not a maximum or minimum secondary market price. These pricing and valuation models are proprietary and rely in part on subjective views of certain market inputs and certain assumptions about future events, which may prove to be incorrect. As a result, because there is no market-standard way to value these types of securities, our models may yield a higher estimated value of the Trigger PLUS than those generated by others, including other dealers in the market, if they attempted to value the Trigger PLUS. In addition, the estimated value on the pricing date does not represent a minimum or maximum price at which dealers, including MS & Co., would be willing to purchase your Trigger PLUS in the secondary market (if any exists) at any time. The value of your Trigger PLUS at any time after the date of this document will vary based on many factors that cannot be predicted with accuracy, including our creditworthiness and changes in market conditions. See also “The market price will be influenced by many unpredictable factors” above.

§ **The Trigger PLUS will not be listed on any securities exchange and secondary trading may be limited.** The Trigger PLUS will not be listed on any securities exchange. Therefore, there may be little or no secondary market for the Trigger PLUS. MS & Co. may, but is not obligated to, make a market in the Trigger PLUS and, if it once chooses to make a market, may cease doing so at any time. When it does make a market, it will generally do so for transactions of routine secondary market size at prices based on

its estimate of the current value of the Trigger PLUS, taking into account its bid/offer spread, our credit spreads, market volatility, the notional size of the proposed sale, the cost of unwinding any related hedging positions, the time remaining to maturity and the likelihood that it will be able to resell the Trigger PLUS. Even if there is a secondary market, it may not provide enough liquidity to allow you to trade or sell the Trigger PLUS easily. Since other broker-dealers may not participate significantly in the secondary market for the Trigger PLUS, the price at which you may be able to trade your Trigger PLUS is likely to depend on the price, if any, at which MS & Co. is willing to transact. If, at any time, MS & Co. were to cease making a market in the Trigger PLUS, it is likely that there would be no secondary market for the Trigger PLUS. Accordingly, you should be willing to hold your Trigger PLUS to maturity.

Hedging and trading activity by our affiliates could potentially adversely affect the value of the Trigger PLUS. One or more of our affiliates and/or third-party dealers expect to carry out hedging activities related to the Trigger PLUS (and possibly to other instruments linked to the underlying indices or their component stocks), including trading in the stocks that constitute the underlying indices as well as in other instruments related to the underlying indices. As a result, these entities may be unwinding or adjusting hedge positions during the term of the Trigger PLUS, and the hedging strategy may involve greater and more frequent dynamic adjustments to the hedge as the valuation date approaches. Some of our affiliates also trade the stocks that constitute the underlying indices and § other financial instruments related to the underlying indices on a regular basis as part of their general broker-dealer and other businesses. Any of these hedging or trading activities on or prior to the pricing date could potentially affect the initial index value of either underlying index, and, therefore, could increase the value at or above which such underlying index must close on the valuation date so that investors do not suffer a significant loss on their initial investment in the Trigger PLUS (depending also on the performance of the other underlying index). Additionally, such hedging or trading activities during the term of the Trigger PLUS, including on the valuation date, could adversely affect the value of either

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underlying index on the valuation date, and, accordingly, the amount of cash an investor will receive at maturity, if any (depending also on the performance of the other underlying index).

The calculation agent, which is a subsidiary of Morgan Stanley and an affiliate of MSFL, will make determinations with respect to the Trigger PLUS. As calculation agent, MS & Co. will determine the initial index values, the trigger levels and the final index values, including whether any underlying index has decreased to below its respective trigger level, and will calculate the amount of cash you receive at maturity, if any. Moreover, certain determinations made by MS & Co., in its capacity as calculation agent, may require it to exercise discretion and make subjective judgments, such as 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 value in the event of a market disruption event or discontinuance of an underlying index. These potentially subjective determinations may adversely affect the payout to you at maturity, if any. For further information regarding these types of determinations, see “Description of PLUS—Postponement of Valuation Date(s),” “—Alternate Exchange Calculation in case of an Event of Default” and “—Calculation Agent and Calculations” in the accompanying product supplement. In addition, MS & Co. has determined the estimated value of the Trigger PLUS on the pricing date.

The U.S. federal income tax consequences of an investment in the Trigger PLUS are uncertain. Please read the discussion under “Additional provisions—Tax considerations” in this document and the discussion under “United States Federal Taxation” in the accompanying product supplement for PLUS (together, the “Tax Disclosure Sections”) concerning the U.S. federal income tax consequences of an investment in the Trigger PLUS. If the Internal Revenue Service (the “IRS”) were successful in asserting an alternative treatment, the timing and character of income on the Trigger PLUS might differ significantly from the tax treatment described in the Tax Disclosure Sections. For example, under one possible treatment, the IRS could seek to recharacterize the Trigger PLUS as debt instruments. In that event, U.S. Holders would be required to accrue into income original issue discount on the Trigger PLUS every year at a “comparable yield” determined at the time of issuance and recognize all income and gain in respect of the Trigger PLUS as ordinary income. Additionally, as discussed under “United States Federal Taxation—FATCA” in the accompanying product supplement for PLUS, the withholding rules commonly referred to as “FATCA” would apply to the Trigger PLUS if they were recharacterized as debt instruments. The risk that financial instruments providing for buffers, triggers or similar downside protection features, such as the Trigger PLUS, would be recharacterized as debt is greater than the risk of recharacterization for comparable financial instruments that do not have such features. We do not plan to request a ruling from the IRS regarding the tax treatment of the Trigger PLUS, and the IRS or a court may not agree with the tax treatment described in the Tax Disclosure Sections.

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; the degree, if any, to which income (including any mandated accruals) realized by non-U.S. investors should be subject to withholding tax; and whether these instruments are or should be subject to the “constructive ownership” rule, which very generally can operate to recharacterize certain long-term capital gain as ordinary income and impose an 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 Trigger PLUS, possibly with retroactive effect. Both U.S. and Non-U.S. Holders should consult their tax advisers regarding the U.S. federal income tax consequences of an investment in the Trigger PLUS, including possible alternative treatments, the issues presented by this notice and any tax consequences arising under the laws of any state, local or non-U.S. taxing jurisdiction.

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Trigger Performance Leveraged Upside SecuritiesSM

Principal at Risk Securities

S&P 500[®] Index Overview

The S&P 500[®] Index, which is calculated, maintained and published by S&P Dow Jones Indices LLC (“S&P”), consists of stocks of 500 component companies selected to provide a performance benchmark for the U.S. equity markets. The calculation of the S&P 500[®] Index is based on the relative value of the float adjusted aggregate market capitalization of the 500 component companies as of a particular time as compared to the aggregate average market capitalization of 500 similar companies during the base period of the years 1941 through 1943. For additional information about the S&P 500[®] Index, see the information set forth under “S&P 500[®] Index” in the accompanying index supplement.

Information as of market close on September 26, 2018:

Bloomberg Ticker Symbol:	SPX
Current Index Value:	2,905.97
52 Weeks Ago:	2,496.84
52 Week High (on 9/20/2018):	2,930.75
52 Week Low (on 9/26/2017):	2,496.84

The following graph sets forth the daily closing values of the SPX Index for the period from January 1, 2013 through September 26, 2018. The related table sets forth the published high and low closing values, as well as end-of-quarter closing values, of the SPX Index for each quarter in the same period. The closing value of the SPX Index on September 26, 2018 was 2,905.97. We obtained the information in the table and graph below from Bloomberg Financial Markets, without independent verification. The SPX index has at times experienced periods of high volatility, and you should not take the historical values of the SPX index as an indication of its future performance.

SPX Index Daily Closing Values
January 1, 2013 to September 26, 2018

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S&P 500® Index	High	Low	Period End
2013			
First Quarter	1,569.19	1,457.15	1,569.19
Second Quarter	1,669.16	1,541.61	1,606.28
Third Quarter	1,725.52	1,614.08	1,681.55
Fourth Quarter	1,848.36	1,655.45	1,848.36
2014			
First Quarter	1,878.04	1,741.89	1,872.34
Second Quarter	1,962.87	1,815.69	1,960.23
Third Quarter	2,011.36	1,909.57	1,972.29
Fourth Quarter	2,090.57	1,862.49	2,058.90
2015			
First Quarter	2,117.39	1,992.67	2,067.89
Second Quarter	2,130.82	2,057.64	2,063.11
Third Quarter	2,128.28	1,867.61	1,920.03
Fourth Quarter	2,109.79	1,923.82	2,043.94
2016			
First Quarter	2,063.95	1,829.08	2,059.74
Second Quarter	2,119.12	2,000.54	2,098.86
Third Quarter	2,190.15	2,088.55	2,168.27
Fourth Quarter	2,271.72	2,085.18	2,238.83
2017			
First Quarter	2,395.96	2,257.83	2,362.72
Second Quarter	2,453.46	2,328.95	2,423.41
Third Quarter	2,519.36	2,409.75	2,519.36
Fourth Quarter	2,690.16	2,529.12	2,673.61
2018			

Explanation of Responses:

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First Quarter	2,872.87	2,581.00	2,640.87
Second Quarter	2,786.85	2,581.88	2,718.37
Third Quarter (through September 26, 2018)	2,930.75	2,713.22	2,905.97

“Standard & Poor[®],” “S&P,” “S&P 500,” “Standard & Poor’s 500” and “500” are trademarks of Standard and Poor’s Financial Services LLC. See “S&P 500[®] Index” in the accompanying index supplement.

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Russell 2000® Index Overview

The Russell 2000® Index is an index calculated, published and disseminated by FTSE Russell, and measures the composite price performance of stocks of 2,000 companies incorporated in the U.S. and its territories. All 2,000 stocks are traded on a major U.S. exchange and are the 2,000 smallest securities that form the Russell 3000® Index. The Russell 3000® Index is composed of the 3,000 largest U.S. companies as determined by market capitalization and represents approximately 98% of the U.S. equity market. The Russell 2000® Index consists of the smallest 2,000 companies included in the Russell 3000® Index and represents a small portion of the total market capitalization of the Russell 3000® Index. The Russell 2000® Index is designed to track the performance of the small capitalization segment of the U.S. equity market. For additional information about the Russell 2000® Index, see the information set forth under “Russell 2000® Index” in the accompanying index supplement.

Information as of market close on September 26, 2018:

Bloomberg Ticker Symbol:	RTY
Current Index Value:	1,691.608
52 Weeks Ago:	1,456.863
52 Week High (on 8/31/2018):	1,740.753
52 Week Low (on 9/26/2017):	1,456.863

The following graph sets forth the daily closing values of the RTY index for the period from January 1, 2013 through September 26, 2018. The related table sets forth the published high and low closing values, as well as end-of-quarter closing values, of the RTY index for each quarter in the same period. The closing value of the RTY Index on September 26, 2018 was 1,691.608. We obtained the information in the table below from Bloomberg Financial Markets, without independent verification. The RTY index has at times experienced periods of high volatility, and you should not take the historical values of the RTY index as an indication of its future performance.

RTY Index Daily Closing Values
January 1, 2013 to September 26, 2018

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Russell 2000® Index	High	Low	Period End
2013			
First Quarter	953.068	849.350	951.542
Second Quarter	999.985	901.513	977.475
Third Quarter	1,078.409	989.535	1,073.786
Fourth Quarter	1,163.637	1,043.459	1,163.637
2014			
First Quarter	1,208.651	1,093.594	1,173.038
Second Quarter	1,192.964	1,095.986	1,192.964
Third Quarter	1,208.150	1,101.676	1,101.676
Fourth Quarter	1,219.109	1,049.303	1,204.696
2015			
First Quarter	1,266.373	1,154.709	1,252.772
Second Quarter	1,295.799	1,215.417	1,253.947
Third Quarter	1,273.328	1,083.907	1,100.688
Fourth Quarter	1,204.159	1,097.552	1,135.889
2016			
First Quarter	1,135.889	953.715	1,114.028
Second Quarter	1,188.954	1,089.646	1,151.923
Third Quarter	1,263.438	1,139.453	1,251.646
Fourth Quarter	1,388.073	1,156.885	1,357.130
2017			
First Quarter	1,413.635	1,345.598	1,385.920
Second Quarter	1,425.985	1,345.244	1,415.359
Third Quarter	1,490.861	1,356.905	1,490.861
Fourth Quarter	1,548.926	1,464.095	1,535.511
2018			

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First Quarter	1,610.706	1,463.793	1,529.427
Second Quarter	1,706.985	1,492.531	1,643.069
Third Quarter (through September 26, 2018)	1,740.753	1,653.132	1,691.608

The “Russell 2000® Index” is a trademark of FTSE Russell. For more information, see “Russell 2000 Index” in the accompanying index supplement.

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Additional Information About the Trigger PLUS

Please read this information in conjunction with the summary terms on the front cover of this document.

Additional Provisions:

Underlying index publishers: With respect to the SPX Index, S&P Dow Jones Indices LLC

With respect to the RTY Index, FTSE Russell

Denominations: \$1,000 per Trigger PLUS and integral multiples thereof

Postponement of maturity date: If the scheduled valuation date is not an index business day with respect to either underlying index or if a market disruption event occurs with respect to either underlying index on that day so that the valuation date is postponed and falls less than two business days prior to the scheduled maturity date, the maturity date of the Trigger PLUS will be postponed to the second business day following the latest valuation date as postponed with respect to either underlying index.

Minimum ticketing size: \$1,000 / 1 Trigger PLUS

Tax considerations: Although there is uncertainty regarding the U.S. federal income tax consequences of an investment in the Trigger PLUS due to the lack of governing authority, in the opinion of our counsel, Davis Polk & Wardwell LLP, under current law, and based on current market conditions, a Trigger PLUS should be treated as a single financial contract that is an “open transaction” for U.S. federal income tax purposes.

Assuming this treatment of the Trigger PLUS is respected and subject to the discussion in “United States Federal Taxation” in the accompanying product supplement for PLUS, the following U.S. federal income tax consequences should result based on current law:

§ A U.S. Holder should not be required to recognize taxable income over the term of the Trigger PLUS prior to settlement, other than pursuant to a sale or exchange.

Explanation of Responses:

§ Upon sale, exchange or settlement of the Trigger PLUS, a U.S. Holder should recognize gain or loss equal to the difference between the amount realized and the U.S. Holder's tax basis in the Trigger PLUS. Such gain or loss should be long-term capital gain or loss if the investor has held the Trigger PLUS for more than one year, and short-term capital gain or loss otherwise.

In 2007, the U.S. Treasury Department and the Internal Revenue Service (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; the degree, if any, to which income (including any mandated accruals) realized by non-U.S. investors should be subject to withholding tax; and whether these instruments are or should be subject to the "constructive ownership" rule, which very generally can operate to recharacterize certain long-term capital gain as ordinary income and impose an 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

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Trigger PLUS, possibly with retroactive effect.

As discussed in the accompanying product supplement for PLUS, Section 871(m) of the Internal Revenue Code of 1986, as amended, and Treasury regulations promulgated thereunder (“Section 871(m)”) generally impose a 30% (or a lower applicable treaty rate) withholding tax on dividend equivalents paid or deemed paid to Non-U.S. Holders with respect to certain financial instruments linked to U.S. equities or indices that include U.S. equities (each, an “Underlying Security”). Subject to certain exceptions, Section 871(m) generally applies to securities that substantially replicate the economic performance of one or more Underlying Securities, as determined based on tests set forth in the applicable Treasury regulations (a “Specified Security”). However, pursuant to an IRS notice, Section 871(m) will not apply to securities issued before January 1, 2021 that do not have a delta of one with respect to any Underlying Security. Based on our determination that the Trigger PLUS do not have a delta of one with respect to any Underlying Security, our counsel is of the opinion that the Trigger PLUS should not be Specified Securities and, therefore, should not be subject to Section 871(m).

Our determination is not binding on the IRS, and the IRS may disagree with this determination. Section 871(m) is complex and its application may depend on your particular circumstances, including whether you enter into other transactions with respect to an Underlying Security. If withholding is required, we will not be required to pay any additional amounts with respect to the amounts so withheld. You should consult your tax adviser regarding the potential application of Section 871(m) to the Trigger PLUS.

Both U.S. and non-U.S. investors considering an investment in the Trigger PLUS should read the discussion under “Risk Factors” in this document and the discussion under “United States Federal Taxation” in the accompanying product supplement for PLUS and consult their tax advisers regarding all aspects of the U.S. federal income tax consequences of an investment in the Trigger PLUS, including possible alternative treatments, the issues presented by the aforementioned notice and any tax consequences arising under the laws of any state, local or non-U.S. taxing jurisdiction.

The discussion in the preceding paragraphs under “Tax considerations” and the discussion

contained in the section entitled “United States Federal Taxation” in the accompanying product supplement for PLUS, insofar as they purport to describe provisions of U.S. federal income tax laws or legal conclusions with respect thereto, constitute the full opinion of Davis Polk & Wardwell LLP regarding the material U.S. federal tax consequences of an investment in the Trigger PLUS.

Trustee: The Bank of New York Mellon

Calculation agent: MS & Co.

The proceeds from the sale of the Trigger PLUS will be used by us for general corporate purposes. We will receive, in aggregate, \$1,000 per Trigger PLUS issued, because, when we enter into hedging transactions in order to meet our obligations under the Trigger PLUS, our hedging counterparty will reimburse the cost of the agent’s commissions. The costs of the Trigger PLUS borne by you and described on page 2 above comprise the agent’s commissions and the cost of issuing, structuring and hedging the Trigger PLUS.

Use of proceeds and hedging:

On or prior to the pricing date, we will hedge our anticipated exposure in connection with the Trigger PLUS by entering into hedging transactions with our affiliates and/or third party dealers. We expect our hedging counterparties to take positions in stocks of the underlying indices, futures and/or options contracts on the

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underlying indices, any component stocks of the underlying indices listed on major securities markets or positions in any other available securities or instruments that they may wish to use in connection with such hedging. Such purchase activity could potentially increase the value of either underlying index on the pricing date, and therefore could increase the value at or above which such underlying index must close on the valuation date so that investors do not suffer a significant loss on their initial investment in the Trigger PLUS (depending also on the performance of the other underlying index). In addition, through our affiliates, we are likely to modify our hedge position throughout the term of the Trigger PLUS, including on the valuation date, by purchasing and selling the stocks constituting the underlying indices, futures or options contracts on the underlying indices or its component stocks listed on major securities markets or positions in any other available securities or instruments that we may wish to use in connection with such hedging activities. As a result, these entities may be unwinding or adjusting hedge positions during the term of the Trigger PLUS, and the hedging strategy may involve greater and more frequent dynamic adjustments to the hedge as the valuation date approaches. We cannot give any assurance that our hedging activities will not affect the value of either underlying index, and, therefore, adversely affect the value of the Trigger PLUS or the payment you will receive at maturity, if any (depending also on the performance of the other underlying index). For further information on our use of proceeds and hedging, see “Use of Proceeds and Hedging” in the accompanying product supplement for PLUS.

Benefit plan investor considerations: Each fiduciary of a pension, profit-sharing or other employee benefit plan subject to Title I of the Employee Retirement Income Security Act of 1974, as amended (“ERISA”) (a “Plan”), should consider the fiduciary standards of ERISA in the context of the Plan’s particular circumstances before authorizing an investment in the Trigger PLUS. Accordingly, 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 Plan.

In addition, we and certain of our affiliates, including MS & Co., may each be considered a “party in interest” within the meaning of ERISA, or a “disqualified person” within the meaning of the Internal Revenue Code of 1986, as amended (the “Code”), with respect to many Plans, as well as many individual retirement accounts and Keogh plans (such accounts and plans, together with other plans, accounts and arrangements subject to Section 4975 of the Code, also “Plans”). ERISA Section 406 and Section 4975 of the Code generally prohibit transactions between Plans and parties in interest or disqualified persons. Prohibited transactions within the meaning of ERISA or the Code would likely arise, for example, if the Trigger PLUS are acquired by or with the assets of a Plan with respect to which MS & Co. or any of its affiliates is a service provider or other party in interest, unless the Trigger PLUS are acquired pursuant to an exemption from the “prohibited

transaction” rules. A violation of these “prohibited transaction” rules could result in an excise tax or other liabilities under ERISA and/or Section 4975 of the Code for those persons, unless exemptive relief is available under an applicable statutory or administrative exemption.

The U.S. Department of Labor has issued five prohibited transaction class exemptions (“PTCEs”) that may provide exemptive relief for direct or indirect prohibited transactions resulting from the purchase or holding of the Trigger PLUS. 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

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involving insurance company separate accounts) and PTCE 84-14 (for certain transactions determined by independent qualified professional asset managers). In addition, ERISA Section 408(b)(17) and Section 4975(d)(20) of the Code provide an exemption for the purchase and sale of securities and the related lending transactions, provided that neither the issuer of the securities nor any of its affiliates has or exercises any discretionary authority or control or renders 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 class or statutory exemptions will be available with respect to transactions involving the Trigger PLUS.

Because we may be considered a party in interest with respect to many Plans, the Trigger PLUS may not be purchased, held or disposed of 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 purchase, holding or disposition is eligible for exemptive relief, including relief available under PTCEs 96-23, 95-60, 91-38, 90-1, 84-14 or the service provider exemption or such purchase, holding or disposition is otherwise not prohibited. Any purchaser, including any fiduciary purchasing on behalf of a Plan, transferee or holder of the Trigger PLUS will be deemed to have represented, in its corporate and its fiduciary capacity, by its purchase and holding of the Trigger PLUS that either (a) it is not a Plan or a Plan Asset Entity and is not purchasing such Trigger PLUS on behalf of or with “plan assets” of any Plan or with any assets of a governmental, non-U.S. or church plan that is subject to any federal, state, local or non-U.S. law that is substantially similar to the provisions of Section 406 of ERISA or Section 4975 of the Code (“Similar Law”) or (b) its purchase, holding and disposition of these Trigger PLUS will not constitute or result in a non-exempt prohibited transaction under Section 406 of ERISA or Section 4975 of the Code or violate any Similar Law.

Due to the complexity of these rules and the penalties that may be imposed upon persons involved in non-exempt prohibited transactions, it is particularly important that fiduciaries or other persons considering purchasing the Trigger PLUS on behalf of or with “plan assets” of any Plan consult with their counsel regarding the availability of exemptive relief.

The Trigger PLUS are contractual financial instruments. The financial exposure provided by the Trigger PLUS 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 Trigger PLUS. The Trigger PLUS 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 Trigger PLUS.

Each purchaser or holder of any Trigger PLUS 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 Trigger PLUS, (B) the purchaser or holder's investment in the Trigger PLUS, or (C) the exercise of or failure to exercise any rights we have under or with respect to the Trigger PLUS;

(ii) we and our affiliates have acted and will act solely for our own account in connection with (A) all transactions relating to the Trigger PLUS and (B) all hedging transactions in connection with our obligations under the Trigger

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(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 Trigger PLUS has exclusive responsibility for ensuring that its purchase, holding and disposition of the Trigger PLUS do not violate the prohibited transaction rules of ERISA or the Code or any Similar Law. The sale of any Trigger PLUS to any Plan or plan subject to Similar Law 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 generally or any particular plan, or that such an investment is appropriate for plans generally or any particular plan. In this regard, neither this discussion nor anything provided in this document is or is intended to be investment advice directed at any potential Plan purchaser or at Plan purchasers generally and such purchasers of these Trigger PLUS should consult and rely on their own counsel and advisers as to whether an investment in these Trigger PLUS is suitable.

However, individual retirement accounts, individual retirement annuities and Keogh plans, as well as employee benefit plans that permit participants to direct the investment of their accounts, will not be permitted to purchase or hold the Trigger PLUS if the account, plan or annuity is for the benefit of an employee of Morgan Stanley or Morgan Stanley Wealth Management or a family member and the employee receives any compensation (such as, for

example, an addition to bonus) based on the purchase of the Trigger PLUS by the account, plan or annuity.

Additional considerations:

Client accounts over which Morgan Stanley, Morgan Stanley Wealth Management or any of their respective subsidiaries have investment discretion are not permitted to purchase the Trigger PLUS, either directly or indirectly.

MS & Co. expects to sell all of the Trigger PLUS that it purchases from us to an unaffiliated dealer at a price of \$ per Trigger PLUS, for further sale to certain fee-based advisory accounts at the price to public of \$1,000 per Trigger PLUS. MS & Co. will not receive a sales commission with respect to the Trigger PLUS.

Supplemental information regarding plan of distribution; conflicts of interest:

MS & Co. is an affiliate of MSFL and a wholly owned subsidiary of Morgan Stanley, and it and other affiliates of ours expect to make a profit by selling, structuring and, when applicable, hedging the Trigger PLUS. When MS & Co. prices this offering of Trigger PLUS, it will determine the economic terms of the Trigger PLUS, including the leverage factor, such that for each Trigger PLUS the estimated value on the pricing date will be no lower than the minimum level described in "Investment Summary" on page 2.

MS & Co. will conduct this offering in compliance with the requirements of FINRA Rule 5121 of the Financial Industry Regulatory Authority, Inc., which is commonly referred to as FINRA, regarding a FINRA member firm's distribution of the securities of an affiliate and related conflicts of interest. MS & Co. or any of our other affiliates may not make sales in this offering to any discretionary account. See "Plan of Distribution (Conflicts of Interest)" and "Use of Proceeds and Hedging" in the accompanying product supplement for PLUS.

Contact:

Morgan Stanley Wealth Management clients may contact their local Morgan

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Stanley branch office or our principal executive offices at 1585 Broadway, New York, New York 10036 (telephone number (866) 477-4776). All other clients may contact their local brokerage representative. Third-party distributors may contact Morgan Stanley Structured Investment Sales at (800) 233-1087.

Morgan Stanley and MSFL have filed a registration statement (including a prospectus, as supplemented by the product supplement for PLUS and the index supplement) with the Securities and Exchange Commission, or SEC, for the offering to which this communication relates. You should read the prospectus in that registration statement, the product supplement for PLUS, the index supplement and any other documents relating to this offering that Morgan Stanley and MSFL have filed with the SEC for more complete information about Morgan Stanley, MSFL and this offering. You may get these documents without cost by visiting EDGAR on the SEC web site at www.sec.gov. Alternatively, Morgan Stanley or MSFL will arrange to send you the product supplement for PLUS, index supplement and prospectus if you so request by calling toll-free 800-584-6837.

Where you can find more information: You may access these documents on the SEC web site at www.sec.gov as follows:

Product Supplement for PLUS dated November 16, 2017

Index Supplement dated November 16, 2017

Prospectus dated November 16, 2017

Terms used but not defined in this document are defined in the product supplement for PLUS, in the index supplement or in the prospectus.

“Performance Leveraged Upside SecuritiesSM” and “PLUSSM” are our service marks.