JPMORGAN CHASE & CO Form 424B2 February 01, 2019

The information in this preliminary pricing supplement is not complete and may be changed. This preliminary pricing supplement is not an offer to sell nor does it seek an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

Subject to completion dated January 31, 2019

February , 2019 Registration Statement Nos. 333-222672 and 333-222672-01; Rule 424(b)(2)

JPMorgan Chase Financial Company LLC Structured Investments

.

Auto Callable Contingent Buffered Equity Notes Linked to the Least Performing of the S&P 500<sup>®</sup> Index, the Russell 2000<sup>®</sup> Index and the NASDAQ-100 Index<sup>®</sup> due February 28, 2022

Fully and Unconditionally Guaranteed by JPMorgan Chase & Co.

.

The notes are designed for investors who seek early exit prior to maturity at a premium if, on any Review Date (other  $\cdot$  than the final Review Date), the closing level of each of the S&P 500<sup>®</sup> Index, the Russell 2000<sup>®</sup> Index and the NASDAQ-100 Index<sup>®</sup>, which we refer to as the Indices, is at or above its Call Value.

The earliest date on which an automatic call may be initiated is August 27, 2019.

The notes are also designed for investors who seek uncapped, unleveraged exposure to any appreciation of the least performing of the Indices at maturity, if the notes have not been automatically called.

Investors in the notes should be willing to forgo interest and dividend payments and be willing to accept the risk of losing some or all of their principal amount at maturity.

The notes are unsecured and unsubordinated obligations of JPMorgan Chase Financial Company LLC, which we refer to as JPMorgan Financial, the payment on which is fully and unconditionally guaranteed by JPMorgan Chase & Co. Any payment on the notes is subject to the credit risk of JPMorgan Financial, as issuer of the notes, and the credit risk of JPMorgan Chase & Co., as guarantor of the notes.

Payments on the notes are not linked to a basket composed of the Indices. Payments on the notes are linked to the performance of each of the Indices individually, as described below.

Minimum denominations of \$1,000 and integral multiples thereof

The notes are expected to price on or about February 25, 2019 and are expected to settle on or about February 28, 2019.

CUSIP: 48130WWA5

Investing in the notes involves a number of risks. See "Risk Factors" beginning on page PS-10 of the accompanying product supplement, "Risk Factors" beginning on page US-1 of the accompanying underlying supplement and "Selected Risk Considerations" beginning on page PS-4 of this pricing supplement.

Neither the Securities and Exchange Commission (the "SEC") nor any state securities commission has approved or disapproved of the notes or passed upon the accuracy or the adequacy of this pricing supplement or the accompanying product supplement, underlying supplement, prospectus supplement and prospectus. Any representation to the contrary is a criminal offense.

Price to Public (1) Fees and Commissions (2) Proceeds to Issuer Per note \$1,000 \$ \$ Total \$ \$ \$ (1) See "Supplemental Use of Proceeds" in this pricing supplement for information about the components of the price to public of the notes.

(2) J.P. Morgan Securities LLC, which we refer to as JPMS, acting as agent for JPMorgan Financial, will pay all of the selling commissions it receives from us to other affiliated or unaffiliated dealers. In no event will these selling commissions exceed \$30.00 per \$1,000 principal amount note. See "Plan of Distribution (Conflicts of Interest)" in the accompanying product supplement.

If the notes priced today, the estimated value of the notes would be approximately \$954.10 per \$1,000 principal amount note. The estimated value of the notes, when the terms of the notes are set, will be provided in the pricing supplement and will not be less than \$930.00 per \$1,000 principal amount note. See "The Estimated Value of the Notes" in this pricing supplement for additional information.

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

Pricing supplement to product supplement no 4-I dated April 5, 2018, underlying supplement no. 1-I dated April 5, 2018

and the prospectus and prospectus supplement, each dated April 5, 2018

#### Key Terms

Issuer: JPMorgan Chase Financial Company LLC, an indirect, wholly owned finance subsidiary of JPMorgan Chase & Co. Guarantor: JPMorgan Chase & Co.

**Indices:** The S&P 500<sup>®</sup> Index (Bloomberg ticker: SPX), the Russell 2000<sup>®</sup> Index (Bloomberg ticker: RTY) and the NASDAQ-100 Index<sup>®</sup> (Bloomberg ticker: NDX)

Call Premium Amount: The Call Premium Amount with respect to each Review Date is set forth below:

- first Review Date: at least  $5.00\% \times $1,000$
- second Review Date: at least  $10.00\% \times $1,000$
- third Review Date: at least  $15.00\% \times $1,000$
- fourth Review Date: at least  $20.00\% \times $1,000$

• fifth Review Date: at least  $25.00\% \times $1,000$ (in each case, to be provided in the pricing supplement)

Call Value: With respect to each Index, 100.00% of its Initial Value

Contingent Buffer Amount: 40.00%

Pricing Date: On or about February 25, 2019

Original Issue Date (Settlement Date): On or about February 28, 2019

Review Dates\*: August 27, 2019, February 26, 2020, August 26, 2020, February 23, 2021, August 26, 2021 and February 23, 2022 (final Review Date)

Call Settlement Dates\*: August 30, 2019, March 2, 2020, August 31, 2020, February 26, 2021 and August 31, 2021

Maturity Date\*: February 28, 2022

\* Subject to postponement in the event of a market disruption event and as described under "General Terms of Notes — Postponement of a Determination Date — Notes Linked to Multiple Underlyings" and "General Terms of Notes — Postponement of a Payment Date" in the accompanying product supplement

Automatic Call:

If the closing level of each Index on any Review Date (other than the final Review Date) is greater than or equal to its Call Value, the notes will be automatically called for a cash payment, for each \$1,000 principal amount note, equal to (a) \$1,000 *plus* (b) the Call Premium Amount applicable to that Review Date, payable on the applicable Call Settlement Date. No further payments will be made on the notes.

If the notes are automatically called, you will not benefit from the feature that provides you with a return at maturity equal to the Least Performing Index Return if the Final Value of each Index is greater than its Initial Value. Because this feature does not apply to the payment upon an automatic call, the payment upon an automatic call may be significantly less than the payment at maturity for the same level of appreciation in the Least Performing Index.

Payment at Maturity:

If the notes have not been automatically called and the Final Value of each Index is greater than its Initial Value, your payment at maturity per \$1,000 principal amount note will be calculated as follows:

\$1,000 + (\$1,000 × Least Performing Index Return)

If the notes have not been automatically called and (i) the Final Value of one or more Indices is greater than its Initial Value and the Final Value of the other Index or Indices is equal to its Initial Value or is less than its Initial Value by up to the Contingent Buffer Amount or (ii) the Final Value of each Index is equal to its Initial Value or is less than its Initial Val

If the notes have not been automatically called and the Final Value of any Index is less than its Initial Value by more than the Contingent Buffer Amount, your payment at maturity per \$1,000 principal amount note will be calculated as follows:

\$1,000 + (\$1,000 × Least Performing Index Return)

If the notes have not been automatically called and the Final Value of any Index is less than its Initial Value by more than the Contingent Buffer Amount, you will lose more than 40% of your principal amount at maturity and could lose all of your principal amount at maturity.

Least Performing Index: The Index with the Least Performing Index Return

Least Performing Index Return: The lowest of the Index Returns of the Indices

Index Return: With respect to each Index,

(Final Value – Initial Value) Initial Value

Initial Value: With respect to each Index, the closing level of that Index on the Pricing Date

Final Value: With respect to each Index, the closing level of that Index on the final Review Date

PS-1 | Structured Investments

Auto Callable Contingent Buffered Equity Notes Linked to the Least Performing of the S&P  $500^{\$}$  Index, the Russell  $2000^{\$}$  Index and the NASDAQ-100 Index<sup>®</sup>

How the Notes Work

Payment upon an Automatic Call

Payment at Maturity If the Notes Have Not Been Automatically Called

Call Premium Amount

The table below illustrates the hypothetical Call Premium Amount per \$1,000 principal amount note for each Review Date (other than the final Review Date) based on the minimum Call Premium Amounts set forth under "Key Terms — Call Premium Amount" above. The actual Call Premium Amounts will be provided in the pricing supplement and will not be less than the minimum Call Premium Amounts set forth under "Key Terms — Call Premium Amount."

Review Date	Call Premium Amount
First	\$50.00
Second	\$100.00
Third	\$150.00
Fourth	\$200.00

PS-2 | Structured Investments

Auto Callable Contingent Buffered Equity Notes Linked to the Least Performing of the S&P 500<sup>®</sup> Index, the Russell 2000<sup>®</sup> Index and the NASDAQ-100 Index<sup>®</sup>

Review Date Call Premium Amount Fifth \$250.00

Payment at Maturity If the Notes Have Not Been Automatically Called

.

.

The following table illustrates the hypothetical total return and payment at maturity on the notes linked to three hypothetical indices. The "total return" as used in this pricing supplement is the number, expressed as a percentage, that results from comparing the payment at maturity per \$1,000 principal amount note to \$1,000. The hypothetical total returns and payments set forth below assume the following:

the notes have not been automatically called;

an Initial Value for the Least Performing Index of 100.00; and

a Contingent Buffer Amount of 40.00%.

The hypothetical Initial Value of the Least Performing Index of 100.00 has been chosen for illustrative purposes only and may not represent a likely actual Initial Value of any Index. The actual Initial Value of each Index will be the closing level of that Index on the Pricing Date and will be provided in the pricing supplement. For historical data regarding the actual closing levels of each Index, please see the historical information set forth under "The Indices" in this pricing supplement.

Each hypothetical total return or hypothetical payment at maturity set forth below is for illustrative purposes only and may not be the actual total return or payment at maturity applicable to a purchaser of the notes. The numbers appearing in the following table have been rounded for ease of analysis.

Final Value of the Least Performing	Least Performing Index	Total Return on the	Payment at
Index	Return	Notes	Maturity
165.00	65.00%	65.00%	\$1,650.00
150.00	50.00%	50.00%	\$1,500.00
140.00	40.00%	40.00%	\$1,400.00
130.00	30.00%	30.00%	\$1,300.00
120.00	20.00%	20.00%	\$1,200.00
110.00	10.00%	10.00%	\$1,100.00
105.00	5.00%	5.00%	\$1,050.00
101.00	1.00%	1.00%	\$1,010.00
100.00	0.00%	0.00%	\$1,000.00
95.00	-5.00%	0.00%	\$1,000.00
90.00	-10.00%	0.00%	\$1,000.00

85.00	-15.00%	0.00%	\$1,000.00
80.00	-20.00%	0.00%	\$1,000.00
70.00	-30.00%	0.00%	\$1,000.00
60.00	-40.00%	0.00%	\$1,000.00
59.99	-40.01%	-40.01%	\$599.90
50.00	-50.00%	-50.00%	\$500.00
40.00	-60.00%	-60.00%	\$400.00
30.00	-70.00%	-70.00%	\$300.00
20.00	-80.00%	-80.00%	\$200.00
10.00	-90.00%	-90.00%	\$100.00
0.00	-100.00%	-100.00%	\$0.00
PS-3   Structured Investm	ients		

Auto Callable Contingent Buffered Equity Notes Linked to the Least Performing of the S&P 500<sup>®</sup> Index, the Russell 2000<sup>®</sup> Index and the NASDAQ-100 Index<sup>®</sup>

Note Payout Scenarios

Upside Scenario If Automatic Call:

If the closing level of each Index on any Review Date (other than the final Review Date) is greater than or equal to its Call Value, the notes will be automatically called and investors will receive on the applicable Call Settlement Date the \$1,000 principal amount *plus* the Call Premium Amount, applicable to that Review Date. No further payments will be made on the notes.

Assuming a hypothetical Call Premium Amount of \$50.00 for the first Review Date, if the closing level of the Least •Performing Index increases 10.00% as of that Review Date, the notes will be automatically called and investors will receive a 5.00% return, or \$1,050.00 per \$1,000 principal amount note.

Assuming a hypothetical Call Premium Amount of \$250.00 for the fifth Review Date, if the notes have not been previously automatically called and the closing level of the Least Performing Index increases 65.00% as of that Review Date, the notes will be automatically called and investors will receive a 25.00% return, or \$1,250.00 per \$1,000 principal amount note.

Upside Scenario If No Automatic Call:

If the notes have not been automatically called and the Final Value of each Index is greater than its Initial Value, investors will receive at maturity the \$1,000 principal amount note *plus* a return equal to the Least Performing Index Return.

If the notes have not been automatically called and the closing level of the Least Performing Index increases 10.00%, investors will receive at maturity a 10.00% return, or \$1,100.00 per \$1,000 principal amount note.

Par Scenario:

If the notes have not been automatically called and (i) the Final Value of one or more Indices is greater than its Initial Value and the Final Value of the other Index or Indices is equal to its Initial Value or is less than its Initial Value by up to the Contingent Buffer Amount of 40.00% or (ii) the Final Value of each Index is equal to its Initial Value or is less than its Initial Value by up to the Contingent Buffer Amount of 40.00%, investors will receive at maturity the principal amount of their notes.

If the notes have not been automatically called and the Final Value of any Index is less than its Initial Value by more than the Contingent Buffer Amount of 40.00%, investors will lose 1% of the principal amount of their notes for every 1% that the Final Value of the Least Performing Index is less than its Initial Value.

For example, if the notes have not been automatically called and the closing level of the Least Performing Index ·declines 60.00%, investors will lose 60.00% of their principal amount and receive \$400.00 per \$1,000 principal amount note at maturity.

The hypothetical returns and hypothetical payments on the notes shown above apply **only if you hold the notes for their entire term or until automatically called.** These hypotheticals do not reflect the fees or expenses that would be associated with any sale in the secondary market. If these fees and expenses were included, the hypothetical returns and hypothetical payments shown above would likely be lower.

#### Selected Risk Considerations

An investment in the notes involves significant risks. These risks are explained in more detail in the "Risk Factors" sections of the accompanying product supplement and underlying supplement.

#### YOUR INVESTMENT IN THE NOTES MAY RESULT IN A LOSS —

The notes do not guarantee any return of principal. If the notes have not been automatically called and the Final Value of any Index is less than its Initial Value by more than 40.00%, you will lose 1% of the principal amount of your notes for every 1% that the Final Value of the Least Performing Index is less than its Initial Value. Accordingly, under these circumstances, you will lose more than 40.00% of your principal amount at maturity and could lose all of your principal amount at maturity.

#### CREDIT RISKS OF JPMORGAN FINANCIAL AND JPMORGAN CHASE & CO. —

Investors are dependent on our and JPMorgan Chase & Co.'s ability to pay all amounts due on the notes. Any actual or potential change in our or JPMorgan Chase & Co.'s creditworthiness or credit spreads, as determined by the market for taking that credit risk, is likely to adversely affect the value of the notes. If we and JPMorgan Chase & Co. were to default on our payment obligations, you may not receive any amounts owed to you under the notes and you could lose your entire investment.

PS-4 | Structured Investments

•

Auto Callable Contingent Buffered Equity Notes Linked to the Least Performing of the S&P  $500^{\$}$  Index, the Russell  $2000^{\$}$  Index and the NASDAQ-100 Index<sup>®</sup>

### AS A FINANCE SUBSIDIARY, JPMORGAN FINANCIAL HAS NO INDEPENDENT OPERATIONS AND HAS LIMITED ASSETS —

As a finance subsidiary of JPMorgan Chase & Co., we have no independent operations beyond the issuance and administration of our securities. Aside from the initial capital contribution from JPMorgan Chase & Co., substantially all of our assets relate to obligations of our affiliates to make payments under loans made by us or other intercompany agreements. As a result, we are dependent upon payments from our affiliates to meet our obligations under the notes. If these affiliates do not make payments to us and we fail to make payments on the notes, you may have to seek payment under the related guarantee by JPMorgan Chase & Co., and that guarantee will rank *pari passu* with all other unsecured and unsubordinated obligations of JPMorgan Chase & Co.

### IF THE NOTES ARE AUTOMATICALLY CALLED, THE APPRECIATION POTENTIAL OF THE NOTES IS LIMITED TO ANY CALL PREMIUM AMOUNT PAID ON THE NOTES,

regardless of any appreciation of any Index, which may be significant. In addition, if the notes are automatically called, you will not benefit from the feature that provides you with a return at maturity equal to the Least Performing Index Return if the Final Value of each Index is greater than its Initial Value. Because this feature does not apply to the payment upon an automatic call, the payment upon an automatic call may be significantly less than the payment at maturity for the same level of appreciation in the Least Performing Index.

#### POTENTIAL CONFLICTS —

We and our affiliates play a variety of roles in connection with the notes. In performing these duties, our and JPMorgan Chase & Co.'s economic interests are potentially adverse to your interests as an investor in the notes. It is possible that hedging or trading activities of ours or our affiliates in connection with the notes could result in substantial returns for us or our affiliates while the value of the notes declines. Please refer to "Risk Factors — Risks Relating to Conflicts of Interest" in the accompanying product supplement.

.

### . JPMORGAN CHASE & CO. IS CURRENTLY ONE OF THE COMPANIES THAT MAKE UP THE S&P $500^{\circledast}$ . INDEX,

but JPMorgan Chase & Co. will not have any obligation to consider your interests in taking any corporate action that might affect the level of the S&P 500<sup>®</sup> Index.

#### YOU ARE EXPOSED TO THE RISK OF DECLINE IN THE LEVEL OF EACH INDEX —

Payments on the notes are not linked to a basket composed of the Indices and are contingent upon the performance of each individual Index. Poor performance by any of the Indices over the term of the notes may result in the notes not

being automatically called on a Review Date, may negatively affect your payment at maturity and will not be offset or mitigated by positive performance by the other Index.

#### · YOUR PAYMENT AT MATURITY WILL BE DETERMINED BY THE LEAST PERFORMING INDEX.

### THE BENEFIT PROVIDED BY THE CONTINGENT BUFFER AMOUNT MAY TERMINATE ON THE FINAL REVIEW DATE —

If the notes have not been automatically called and the Final Value of any Index is less than its Initial Value by more than the Contingent Buffer Amount, the benefit provided by the Contingent Buffer Amount will terminate and you will be fully exposed to any depreciation of the Least Performing Index.

#### THE AUTOMATIC CALL FEATURE MAY FORCE A POTENTIAL EARLY EXIT —

If your notes are automatically called, the term of the notes may be reduced to as short as approximately six months. There is no guarantee that you would be able to reinvest the proceeds from an investment in the notes at a comparable return for a similar level of risk. Even in cases where the notes are called before maturity, you are not entitled to any fees and commissions described on the front cover of this pricing supplement.

#### THE NOTES DO NOT PAY INTEREST.

### YOU WILL NOT RECEIVE DIVIDENDS ON THE SECURITIES INCLUDED IN ANY INDEX OR HAVE ANY RIGHTS WITH RESPECT TO THOSE SECURITIES.

PS-5 | Structured Investments

.

Auto Callable Contingent Buffered Equity Notes Linked to the Least Performing of the S&P  $500^{\$}$  Index, the Russell  $2000^{\$}$  Index and the NASDAQ-100 Index<sup>®</sup>

### AN INVESTMENT IN THE NOTES IS SUBJECT TO RISKS ASSOCIATED WITH SMALL CAPITALIZATION STOCKS WITH RESPECT TO THE RUSSELL 2000<sup>®</sup> INDEX —

Small capitalization companies may be less able to withstand adverse economic, market, trade and competitive conditions relative to larger companies. Small capitalization companies are less likely to pay dividends on their stocks, and the presence of a dividend payment could be a factor that limits downward stock price pressure under adverse market conditions.

#### NON-U.S. SECURITIES RISK WITH RESPECT TO THE NASDAQ-100 INDEX® -

Some of the equity securities included in the NASDAQ-100 Index<sup>®</sup> have been issued by non-U.S. companies. Investments in securities linked to the value of such non-U.S. equity securities involve risks associated with the home countries of the issuers of those non-U.S. equity securities.

### THE RISK OF THE CLOSING LEVEL OF AN INDEX FALLING BELOW ITS INITIAL VALUE BY MORE • THAN THE CONTINGENT BUFFER AMOUNT IS GREATER IF THE LEVEL OF THAT INDEX IS VOLATILE.

#### LACK OF LIQUIDITY —

The notes will not be listed on any securities exchange. Accordingly, the price at which you may be able to trade your notes is likely to depend on the price, if any, at which JPMS is willing to buy the notes. You may not be able to sell your notes. The notes are not designed to be short-term trading instruments. Accordingly, you should be able and willing to hold your notes to maturity.

### THE FINAL TERMS AND VALUATION OF THE NOTES WILL BE PROVIDED IN THE PRICING SUPPLEMENT —

•

You should consider your potential investment in the notes based on the minimums for the estimated value of the notes and the Call Premium Amounts.

### THE ESTIMATED VALUE OF THE NOTES WILL BE LOWER THAN THE ORIGINAL ISSUE PRICE (PRICE TO PUBLIC) OF THE NOTES —

The estimated value of the notes is only an estimate determined by reference to several factors. The original issue price of the notes will exceed the estimated value of the notes because costs associated with selling, structuring and hedging the notes are included in the original issue price of the notes. These costs include the selling commissions, the

projected profits, if any, that our affiliates expect to realize for assuming risks inherent in hedging our obligations under the notes and the estimated cost of hedging our obligations under the notes. See "The Estimated Value of the Notes" in this pricing supplement.

### THE ESTIMATED VALUE OF THE NOTES DOES NOT REPRESENT FUTURE VALUES OF THE NOTES AND MAY DIFFER FROM OTHERS' ESTIMATES —

See "The Estimated Value of the Notes" in this pricing supplement.

### THE ESTIMATED VALUE OF THE NOTES IS DERIVED BY REFERENCE TO AN INTERNAL FUNDING RATE —

The internal funding rate used in the determination of the estimated value of the notes is based on, among other things, our and our affiliates' view of the funding value of the notes as well as the higher issuance, operational and ongoing liability management costs of the notes in comparison to those costs for the conventional fixed-rate debt of JPMorgan Chase & Co. The use of an internal funding rate and any potential changes to that rate may have an adverse effect on the terms of the notes and any secondary market prices of the notes. See "The Estimated Value of the Notes" in this pricing supplement.

# THE VALUE OF THE NOTES AS PUBLISHED BY JPMS (AND WHICH MAY BE REFLECTED ON ·CUSTOMER ACCOUNT STATEMENTS) MAY BE HIGHER THAN THE THEN-CURRENT ESTIMATED VALUE OF THE NOTES FOR A LIMITED TIME PERIOD —

We generally expect that some of the costs included in the original issue price of the notes will be partially paid back to you in connection with any repurchases of your notes by JPMS in an amount that will decline to zero over an initial predetermined period. See "Secondary Market Prices of the Notes" in this pricing supplement for additional information relating to this initial period. Accordingly, the estimated value of your notes during this initial period may be lower than the value of the notes as published by JPMS (and which may be shown on your customer account statements).

### SECONDARY MARKET PRICES OF THE NOTES WILL LIKELY BE LOWER THAN THE ORIGINAL ISSUE PRICE OF THE NOTES —

Any secondary market prices of the notes will likely be lower than the original issue price of the notes because, among other things, secondary market prices take into account our internal secondary market funding rates for structured debt issuances and, also, because secondary market prices (a) exclude selling commissions and (b) may exclude projected hedging profits, if any, and

#### PS-6 | Structured Investments

Auto Callable Contingent Buffered Equity Notes Linked to the Least Performing of the S&P 500<sup>®</sup> Index, the Russell 2000<sup>®</sup> Index and the NASDAQ-100 Index<sup>®</sup>

estimated hedging costs that are included in the original issue price of the notes. As a result, the price, if any, at which JPMS will be willing to buy the notes from you in secondary market transactions, if at all, is likely to be lower than the original issue price. Any sale by you prior to the Maturity Date could result in a substantial loss to you.

## SECONDARY MARKET PRICES OF THE NOTES WILL BE IMPACTED BY MANY ECONOMIC AND MARKET FACTORS —

The secondary market price of the notes during their term will be impacted by a number of economic and market factors, which may either offset or magnify each other, aside from the selling commissions, projected hedging profits, if any, estimated hedging costs and the levels of the Indices. Additionally, independent pricing vendors and/or third party broker-dealers may publish a price for the notes, which may also be reflected on customer account statements. This price may be different (higher or lower) than the price of the notes, if any, at which JPMS may be willing to purchase your notes in the secondary market. See "Risk Factors — Risks Relating to the Estimated Value and Secondary Market Prices of the Notes — Secondary market prices of the notes will be impacted by many economic and market factors" in the accompanying product supplement.

#### The Indices

The S&P 500<sup>®</sup> Index consists of stocks of 500 companies selected to provide a performance benchmark for the U.S. equity markets. For additional information about the S&P 500<sup>®</sup> Index, see "Equity Index Descriptions — The S&P U.S. Indices" in the accompanying underlying supplement.

The Russell 2000<sup>®</sup> Index consists of the middle 2,000 companies included in the Russell 3000E<sup>TM</sup> Index and, as a result of the index calculation methodology, consists of the smallest 2,000 companies included in the Russell 3000<sup>®</sup> Index. The Russell 2000<sup>®</sup> 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<sup>®</sup> Index, see "Equity Index Descriptions — The Russell Indices" in the accompanying underlying supplement.

The NASDAQ-100 Index<sup>®</sup> is a modified market capitalization-weighted index of 100 of the largest non-financial securities listed on The NASDAQ Stock Market based on market capitalization. For additional information about the NASDAQ-100 Index<sup>®</sup>, see "Equity Index Descriptions — The NASDAQ-100 Index<sup>®</sup> the accompanying underlying supplement.

#### Historical Information

The following graphs set forth the historical performance of each Index based on the weekly historical closing levels from January 3, 2014 through January 25, 2019. The closing level of the S&P 500<sup>®</sup> Index on January 30, 2019 was 2,681.05. The closing level of the Russell 2000<sup>®</sup> Index on January 30, 2019 was 1,486.942. The closing level of the

NASDAQ-100 Index<sup>®</sup> on January 30, 2019 was 6,807.909. We obtained the closing levels above and below from the Bloomberg Professional<sup>®</sup> service ("Bloomberg"), without independent verification.

The historical closing levels of each Index should not be taken as an indication of future performance, and no assurance can be given as to the closing level of any Index on the Pricing Date or any Review Date. There can be no assurance that the performance of the Indices will result in the return of any of your principal amount.

#### PS-7 | Structured Investments

Auto Callable Contingent Buffered Equity Notes Linked to the Least Performing of the S&P 500<sup>®</sup> Index, the Russell 2000<sup>®</sup> Index and the NASDAQ-100 Index<sup>®</sup>

#### Tax Treatment

You should review carefully the section entitled "Material U.S. Federal Income Tax Consequences" in the accompanying product supplement no. 4-I. The following discussion, when read in combination with that section, constitutes the full opinion of our special tax counsel, Davis Polk & Wardwell LLP, regarding the material U.S. federal income tax consequences of owning and disposing of notes.

Based on current market conditions, in the opinion of our special tax counsel it is reasonable to treat the notes as "open transactions" that are not debt instruments for U.S. federal income tax purposes, as more fully described in "Material U.S. Federal Income Tax Consequences — Tax Consequences to U.S. Holders — Notes Treated as Open Transactions That Are Not Debt Instruments" in the accompanying product supplement. Assuming this treatment is respected, the gain or loss on your notes should be treated as short-term capital gain or loss unless you hold your notes for more than a year, in which case the gain or loss should be long-term capital gain or loss, whether or not you are an initial purchaser of notes at the issue price. However, the IRS or a court may not respect this treatment, in which case the timing and character of any income or loss on the notes could be materially and adversely affected. In addition, in 2007 Treasury 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 investors in 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; the relevance of factors such as 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" regime, which very

#### PS-8 | Structured Investments

Auto Callable Contingent Buffered Equity Notes Linked to the Least Performing of the S&P 500<sup>®</sup> Index, the Russell 2000<sup>®</sup> Index and the NASDAQ-100 Index<sup>®</sup>

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 notes, possibly with retroactive effect. You should consult your tax adviser regarding the U.S. federal income tax consequences of an investment in the notes, including possible alternative treatments and the issues presented by this notice.

Section 871(m) of the Code and Treasury regulations promulgated thereunder ("Section 871(m)") generally impose a 30% withholding tax (unless an income tax treaty applies) 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. Section 871(m) provides certain exceptions to this withholding regime, including for instruments linked to certain broad-based indices that meet requirements set forth in the applicable Treasury regulations (such an index, a "Qualified Index"). Additionally, a recent IRS notice excludes from the scope of Section 871(m) instruments issued prior to January 1, 2021 that do not have a delta of one with respect to underlying securities that could pay U.S.-source dividends for U.S. federal income tax purposes (each an "Underlying Security"). Based on certain determinations made by us, we expect that Section 871(m) will not apply to the notes with regard to Non-U.S. Holders. 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 necessary, further information regarding the potential application of Section 871(m) to the notes.

Withholding under legislation commonly referred to as "FATCA" may (if the notes are recharacterized as debt instruments) apply to amounts treated as interest paid with respect to the notes, as well as to payments of gross proceeds of a taxable disposition, including an automatic call or redemption at maturity, of a note, although under recently proposed regulations (the preamble to which specifies that taxpayers are permitted to rely on them pending finalization), no withholding will apply to payments of gross proceeds (other than any amount treated as interest). You should consult your tax adviser regarding the potential application of FATCA to the notes.

#### The Estimated Value of the Notes

The estimated value of the notes set forth on the cover of this pricing supplement is equal to the sum of the values of the following hypothetical components: (1) a fixed-income debt component with the same maturity as the notes, valued using the internal funding rate described below, and (2) the derivative or derivatives underlying the economic terms of the notes. The estimated value of the notes does not represent a minimum price at which JPMS would be willing to buy your notes in any secondary market (if any exists) at any time. The internal funding rate used in the determination of the estimated value of the notes is based on, among other things, our and our affiliates' view of the funding value of the notes as well as the higher issuance, operational and ongoing liability management costs of the notes in comparison to those costs for the conventional fixed-rate debt of JPMorgan Chase & Co. For additional information, see "Selected Risk Considerations — The Estimated Value of the Notes Is Derived by Reference to an Internal Funding Rate" in this pricing supplement.

The value of the derivative or derivatives underlying the economic terms of the notes is derived from internal pricing models of our affiliates. These models are dependent on inputs such as the traded market prices of comparable derivative instruments and on various other inputs, some of which are market-observable, and which can include volatility, dividend rates, interest rates and other factors, as well as assumptions about future market events and/or environments. Accordingly, the estimated value of the notes is determined when the terms of the notes are set based on market conditions and other relevant factors and assumptions existing at that time.

The estimated value of the notes does not represent future values of the notes and may differ from others' estimates. Different pricing models and assumptions could provide valuations for the notes that are greater than or less than the estimated value of the notes. In addition, market conditions and other relevant factors in the future may change, and any assumptions may prove to be incorrect. On future dates, the value of the notes could change significantly based on, among other things, changes in market conditions, our or JPMorgan Chase & Co.'s creditworthiness, interest rate movements and other relevant factors, which may impact the price, if any, at which JPMS would be willing to buy notes from you in secondary market transactions.

The estimated value of the notes will be lower than the original issue price of the notes because costs associated with selling, structuring and hedging the notes are included in the original issue price of the notes. These costs include the selling commissions paid to JPMS and other affiliated or unaffiliated dealers, the projected profits, if any, that our affiliates expect to realize for assuming risks inherent in hedging our obligations under the notes and the estimated cost of hedging our obligations under the notes. Because hedging our obligations entails risk and may be influenced by market forces beyond our control, this hedging may result in a profit that is more or less than expected, or it may result in a loss. A portion of the profits, if any, realized in hedging our obligations under the

#### PS-9 | Structured Investments

Auto Callable Contingent Buffered Equity Notes Linked to the Least Performing of the S&P 500<sup>®</sup> Index, the Russell 2000<sup>®</sup> Index and the NASDAQ-100 Index<sup>®</sup>

notes may be allowed to other affiliated or unaffiliated dealers, and we or one or more of our affiliates will retain any remaining hedging profits. See "Selected Risk Considerations — The Estimated Value of the Notes Will Be Lower Than the Original Issue Price (Price to Public) of the Notes" in this pricing supplement.

#### Secondary Market Prices of the Notes

For information about factors that will impact any secondary market prices of the notes, see "Risk Factors — Risks Relating to the Estimated Value and Secondary Market Prices of the Notes — Secondary market prices of the notes will be impacted by many economic and market factors" in the accompanying product supplement. In addition, we generally expect that some of the costs included in the original issue price of the notes will be partially paid back to you in connection with any repurchases of your notes by JPMS in an amount that will decline to zero over an initial predetermined period. These costs can include projected hedging profits, if any, and, in some circumstances, estimated hedging costs and our internal secondary market funding rates for structured debt issuances. This initial predetermined time period is intended to be the shorter of six months and one-half of the stated term of the notes. The length of any such initial period reflects the structure of the notes, whether our affiliates expect to earn a profit in connection with our hedging activities, the estimated costs of hedging the notes and when these costs are incurred, as determined by our affiliates. See "Selected Risk Considerations — The Value of the Notes as Published by JPMS (and Which May Be Reflected on Customer Account Statements) May Be Higher Than the Then-Current Estimated Value of the Notes for a Limited Time Period" in this pricing supplement.

#### Supplemental Use of Proceeds

The notes are offered to meet investor demand for products that reflect the risk-return profile and market exposure provided by the notes. See "How the Notes Work" and "Note Payout Scenarios" in this pricing supplement for an illustration of the risk-return profile of the notes and "The Indices" in this pricing supplement for a description of the market exposure provided by the notes.

The original issue price of the notes is equal to the estimated value of the notes plus the selling commissions paid to JPMS and other affiliated or unaffiliated dealers, plus (minus) the projected profits (losses) that our affiliates expect to realize for assuming risks inherent in hedging our obligations under the notes, plus the estimated cost of hedging our obligations under the notes.

#### **Supplemental Plan of Distribution**

We expect that delivery of the notes will be made against payment for the notes on or about the Original Issue Date set forth on the front cover of this pricing supplement, which will be the third business day following the Pricing Date of the notes (this settlement cycle being referred to as "T+3"). Under Rule 15c6-1 of the Securities Exchange Act of 1934, as amended, trades in the secondary market generally are required to settle in two business days, unless the parties to that trade expressly agree otherwise. Accordingly, purchasers who wish to trade notes on any date prior to two business days before delivery will be required to specify an alternate settlement cycle at the time of any such trade to prevent a failed settlement and should consult their own advisors.

#### Additional Terms Specific to the Notes

You may revoke your offer to purchase the notes at any time prior to the time at which we accept such offer by notifying the applicable agent. We reserve the right to change the terms of, or reject any offer to purchase, the notes prior to their issuance. In the event of any changes to the terms of the notes, we will notify you and you will be asked to accept such changes in connection with your purchase. You may also choose to reject such changes, in which case we may reject your offer to purchase.

You should read this pricing supplement together with the accompanying prospectus, as supplemented by the accompanying prospectus supplement relating to our Series A medium-term notes of which these notes are a part, and the more detailed information contained in the accompanying product supplement and the accompanying underlying supplement. This pricing supplement, together with the documents listed below, contains the terms of the notes and supersedes all other prior or contemporaneous oral statements as well as any other written materials including preliminary or indicative pricing terms, correspondence, trade ideas, structures for implementation, sample structures, fact sheets, brochures or other educational materials of ours. You should carefully consider, among other things, the matters set forth in the "Risk Factors" sections of the accompanying product supplement and the accompanying underlying supplement, as the notes involve risks not associated with conventional debt securities. We urge you to consult your investment, legal, tax, accounting and other advisers before you invest in the notes.

#### PS-10 | Structured Investments

Auto Callable Contingent Buffered Equity Notes Linked to the Least Performing of the S&P 500<sup>®</sup> Index, the Russell 2000<sup>®</sup> Index and the NASDAQ-100 Index<sup>®</sup>

You may access these documents on the SEC website at www.sec.gov as follows (or if such address has changed, by reviewing our filings for the relevant date on the SEC website):

#### Product supplement no. 4-I dated April 5, 2018: http://www.sec.gov/Archives/edgar/data/19617/000095010318004519/dp87528\_424b2-ps4i.pdf

Underlying supplement no. 1-I dated April 5, 2018: http://www.sec.gov/Archives/edgar/data/19617/000095010318004514/crt\_dp87766-424b2.pdf

Prospectus supplement and prospectus, each dated April 5, 2018: http://www.sec.gov/Archives/edgar/data/19617/000095010318004508/dp87767\_424b2-ps.pdf

Our Central Index Key, or CIK, on the SEC website is 1665650, and JPMorgan Chase & Co.'s CIK is 19617. As used in this pricing supplement, "we," "us" and "our" refer to JPMorgan Financial.

PS-11 | Structured Investments

Auto Callable Contingent Buffered Equity Notes Linked to the Least Performing of the S&P 500<sup>®</sup> Index, the Russell 2000<sup>®</sup> Index and the NASDAQ-100 Index<sup>®</sup>

right">422

These operations reported a 2% or R4,1 million increase in cash operating profit, up from R214,0 million to R218,1 million. During the June 2004 quarter, these operations reported a cash operating profit of R67,1 million. Total working cost of R761,6 million was 7% or R53,2 million less than the R814,8 million reported for the September 2004 period. Our approach of restructuring all our operations (including our profitable ones) resulted in our core assets being in a much batter shape than six months ago.

**Target** continued with the good performance reported in the September 2004 quarter. Tonnage milled decreased from 331 000 tonnes to 301 000 tonnes quarter on quarter due to a drop in availability of the mechanised fleet. New equipment has been purchased to improve the situation and general maintenance has improved. Recovery grade improved from 6,48 g/t to 6,74 g/t. This operation continued to make excellent working cost improvements, reporting costs of R46 774/kg (US\$241) at Rand/US\$6,03 compared to the R53 262/kg for the previous quarter. In R/tonne terms, the progress is more evident, with costs decreasing from R345/tonne to R315/tonne. Pre-acquisition, in April 2004, cost/tonne levels were in excess of R450/tonne. **The Harmony Way has seen cost/tonne dropped by 30% in a sustainable way!** 

Regretfully an employee lost his life in an electrical accident.

**Tshepong** continued with an improved performance on the results of the September quarter. Underground tonnages were marginally lower at 420 000 tonnes compared to the 444 000 tonnes for the previous quarter. At a higher recovery grade of 7,73 g/t (September 2004 7,01 g/t) net

gold recovered was higher at 3 247 kg (September 2004 R3 113/kg). Cash costs decreased by 2% from R61 184/kg to R59 774/kg. In June 2004, the operations reported costs of R66 013/kg.

Negotiations for the introduction of CONOPS at **Masimong Shaft** continues. The shaft however reported a 5% reduction in tonnages to 264 000 tonnes for the current quarter (September 2004 282 000 tonnes). This shaft lost five production shifts due to machinery breakdowns and an underground fire. A higher recovery grade of 5,43 g/t compared to the previous quarter s 5,01 g/t resulted in net gold recovered being 2% higher at 1 432 (September 2004 1 413 kg). Mining grades of the B-reef panels tend to be variable and higher grades were experienced during November 2004. This trend is not expected to continue in the March 2005 quarter. Costs were higher quarter on quarter at R115,9 million (September 2004 R109,9 million).

Two employees lost their lives in a mining related incident during this quarter.

Good progress has been made with the **Masimong Expansion Project**, which has now been incorporated into the shaft operations. A total of 4 054 metres were developed in the target areas, including 1 089 metres on capital, opening up 45  $000m^2$  of the ore body. On the B reef side drilling proved pay channels in E14 crosscut and in 1750 South haulage No. 2 with grades at 1 000cmg/t in the south east block. A high grade channel of ±4 000cmg/t was proven in the west block at 1810 W6 LINE and development layouts were made to access it.

#### ANNUAL CAPITAL EXPENDITURE PROFILE

#### FINANCIAL EVALUATION UPDATE

Gold price (kg)	80 000
NPV @ 7,5	60,3
IRR	43%

**Evander** continued with the good performance of the September reporting period. Similar tonnages of 446 000 tonnes (September 2004 448 000 tonnes) at an expected lower recovery grade of 6,34 g/t compared to the 7,65 g/t of the September 2004 quarter, resulted in lower net gold recovered of 2 826 kg (September 2004 3 430 kg). During the September 2004 quarter we stated that the high recovery grade at Evander 8 Shaft was unsustainable. Cash costs in R/kg terms increased by 12% from R62 995/kg to R71 704/kg. This is still significantly lower than the R89 919/kg reported in the March 2004 quarter. In R/tonne terms, working costs decreased by 7% from R483/tonne to R454/tonne, partly as a result of CONOPS.

CONOPS was fully implemented at Evander 7 Shaft by July 2004. Significant improvements in face advance has been reported, increasing from 6m to 10m per month. Of this at least 2,5m can be attributed to CONOPS. Although CONOPS has been fully implemented at Evander 2 Shaft, full benefits have not been realised due to a lack of flexibility.

**Decline No. 3 Project (Phase 3)** at Evander 7 Shaft is progressing well with the development of the 20 Level and the transfer conveyor. The extension of No 8 Conveyor was completed down to 20 Level. The two temporary chutes on 20 Level were commissioned and the construction of the tips is in progress. Completion is expected during the March 2005 quarter. The installation of air coolers for 19 Level will be completed during the March 2005 quarter.

#### ANNUAL CAPITAL EXPENDITURE PROFILE

#### FINANCIAL EVALUATION UPDATE

Gold price (kg)	R85 000
NPV @ 7,5	R117,2
IRR	211%
Gold price (kg)	R80 000
NPV @ 7,5	R88,5
IRR	162%

The Cooke Shafts in Randfontein reported a 9% decrease in production, down from 424 000 tonnes to 384 000 tonnes as part of the restructuring process. At higher recovery grades of 5,57 g/t (September 2004 5,24 g/t), net gold recovered was only 4% lower at 2 141 kg. Actual working costs decreased by R14,2 million to R169,9 million. Cash costs decreased by 4% from R82 832/kg to R79 377/kg. These shafts are in the early stages of implementing CONOPS.

Regretfully an employee lost his life after a fall of ground incident.

#### 2. GROWTH PROJECTS ELANDSRAND AND DOORNKOP

		December 2004	September 2004
U/g tonnes milled	( 000)	358	385
U/g recovery grade	(g/t)	5,62	5,22
U/g kilograms produced	(kg)	2 022	2 015
U/g working costs	(R/kg)	93 378	102 121
U/g working costs	(R/tonne)	524	523

#### 2.1 Elandsrand New Mine Project major operational improvements following restructuring programme

The major restructuring at these operations is delivering the desired outcome. Our Elandsrand Operations reported a cash operating loss of R10,4 million compared to a loss of R39,0 million for the September 2004 quarter. Underground tonnages were 6 000 tonnes or 2% less at 251 000 tonnes. Recovery grades increased by 11% from the 5,84 g/t to 6,44 g/t. Net gold recovered was 8% higher at 1 618 kg compared to 1 497 kg for the previous quarter. Although the phased implementation of CONOPS was started on 29 August 2004, full implementation was not achieved due to unavailability of surplus labour from our other mines.

The improved mining grade follows an increase in current sweepings, increasing from 73% to 83%. Following the refurbishing of the orepasses, the shaft moved off run of mine milling during the quarter. Working costs decreased for the third quarter in a row, down from R179,5 million in June 2004 to R146,2 million by December 2004, a decrease of an excellent 19% over the period. Due to the increased gold recovered, costs in R/kg terms decreased from R109 265/kg to R90 356/kg. Cost/tonne decreased by approximately 9% from R638/tonne to R582/tonne. Over the past three quarters, cost/tonne at Elandsrand decreased by 13% from R669/tonne to the R582/tonne for the December 2004 quarter.

Regretfully an employee lost his life after a heavy machinery accident.

Progress on 102 Level of the Elandsrand New Mine Project is as follows:

	March	June	September	December	
	2004	2004	2004	2004	
Development					
Reef metres	135	87	90	200	
Waste metres	447	493	335	201	
Stoping					
m <sup>2</sup>	1052	1854	3086	4435	
Stoping width	108	118	115	121	
Tonnes	3134	6017	12065	14806	
Cmg/t	2028	1831	2238	1470	
Kg s broken	59	93	234	179	
MCF %	78	84	66	80	
Kg s recovered	46	78	155	143	
Recovered grade g/t	14,6	13,0	12,8	9,6	

MCF variance due to low percentage sweepings of 75% in September quarter, improved to 85% in December quarter. All of these numbers confirm the potential of the new mine to be a high grade (7,5 8,0g/t) low cost mine.

#### **Access Development**

#### 102 Level

102 level access development continuing as per schedule. Reef development taking place on 37 and 38 line. 37 raise lines reef development will be completed this quarter.

#### 105 Level

All capital development on this level was completed. Reef development is continuing on the 33 raise, with a planned completion date before end of March 2005 quarter. It is planned to commence the 32 raise line and waste access development during the current quarter.

#### 109 & 113 Levels

Both of these levels continue to mine through the Cobra Dyke with its associated high pressure gas pockets. The 109 R.A.W. Cobra Dyke was successfully negotiated with no incidents/ accidents. Without any unexpected problems, both levels will be through the Cobra Dyke during the current quarter. Normal access development metres are planned to increase once the Cobra Dyke has been successfully negotiated.

#### ANNUAL CAPITAL EXPENDITURE PROFILE

FINANCIAL EVALUATION UPDATE	
Gold price (kg)	R85 000
NPV @ 7,5	R854 m
IRR	30%

#### 2.2 Tshepong Decline Expansion Project

Progress on the project is as follows:

#### INFRASTRUCTURE

Work on the decline project continues as per plan. Sub-projects that were completed or progressed in the past quarter include:

construction of approximately 1 500m rail in the second air intake from the Shaft to the Decline,

installation of the decline conveyor for sinking operation and first extension of 90m were completed,

installation of the monorail system recommenced,

the monotrain was commissioned and rail installed to 69 Level, and

the 66 Level chair lift and 66 Level material crosscut were completed.

#### ACCESS DEVELOPMENT

A total of 2 625m of the total required 6 221m development has been completed.

#### Chair lift decline

57% of the required 900m has been completed. The remaining 380 m will be completed over the next two quarters.

#### Material decline

55% of the required 1 000m has been completed. The remaining 450 m will be completed over the next three quarters.

#### 69 Level

Development on the 69 station, tipping crosscut and the north-south break-away has been completed. The construction of 69 level has been completed including the installation of temporary battery bay, and tips.

#### ANNUAL CAPITAL EXPENDITURE PROFILE

	2002/3	2003/4	2004/5	2005/6	2006/7	Total
Plan	37.4	78.5	62.6	66.7	35.6	280.8
Actual	32.8	66.6	23.9			123.3

#### FINANCIAL EVALUATION UPDATE

Base	
Gold price (Kg)	R95 000
NPV @ 7,5	R954 m
IRR	51,4%

Using a gold price of R80 000/kg, the project returns an IRR of 41,5%	
Gold price (Kg)	R80 000
NPV @ 7,5	R660 m
IRR	41,5%

#### 2.3 Doornkop South Reef Capital Project

Doornkop Shaft, which is currently mining the Kimberley Reef until tonnages from the South Reef Project area become available, reported a cash operating loss of R8,7 million. Performance from this operation over the next two quarters will be affected by the lack of higher grade mining areas. Tonnage was lower at 109 000 tonnes. At a lower recovery grade of 3,72 g/t (September 2004 3,99 g/t) net gold recovered decreased from 518 kg to 404 kg. Cash costs in R/kg terms increased from R77 634/kg to R105 485/kg. Flexibility at Doornkop is expected to improve once mining in the South Reef Project area resumes.

Access development on 192, 197 and 202 Levels continues. In-circle development around 212 Level has also been started whilst development of the main haulage to reef on this level will commence during the March quarter.

Preparatory work in the main shaft has been completed and cleaning of the shaft bottom is underway. The last two cover holes totalling 340m from shaft bottom are underway and are due for completion in January 2005. The last portion of shaft to be raise bored to 192 Level will commence in February 2005 when shaft bottom cleanup has been completed.

The second outlet shaft from 126 Level to 192 Level has been reamed to the final diameter of 2.4m. This multipurpose shaft will provide for a doubling of ventilation air in January 2005 when the plug is removed. It will also eventually be utilised as a second outlet and material transport facility when the hoist, headgear and conveyance are installed and commissioned at the end of the following quarter.

The mines infrastructure layout and general arrangements to cater for the latest geological interpretation as described in the last quarterly report is complete. The main shaft will be sunk and equipped to service mining as far as 212 Level. Exploration on 212 Level which is already underway, will provide opportunity for better insight into the ore-body to the north below 212 Level. The results will indicate whether gold will be extracted from this area in phase 3 of the project and if so, how this will be accomplished.

The shaft between 192 and 212 Levels has been cover drilled and raise bored as reported previously. Sliping of the shaft to final diameter on 197 Level will commence in January 2005 with the start of the pre-sink on this level. It is planned that the portion of shaft between 197 Level to 50m below 212 Level will be sliped to final diameter by the time the sinking operation above from current shaft bottom reaches 192 Level in October 2005.

The updated schedule provides for the main shaft to be commissioned in July 2006 and for production to ramp up to 135 000 t/m by October 2008. Both dates meet the requirements of the feasibility base plan.

#### ANNUAL CAPITAL EXPENDITURE PROFILE

Table (R million)										
	2003	2004	2005	2006	2007	2008	2009	2010	2011	
Actual spent	13	98	60							171
Forecast			69	173	160	160	161	142	62	927
Total	13	98	129	173	160	160	161	142	62	1098
### FINANCIAL EVALUATION UPDATE

Gold price (Kg)	R85 000
NPV @ 7,5	R531 m
IRR	89%
Even at a gold price of R80 000/kg the project has a robust IRR of 58%	
Gold price (Kg)	R80 000
NPV @ 7,5	R403 m
IRR	58%

#### Leverage Operations restructuring underway

Shafts included under this section are Bambanani, Joel, Kudu, Sable, West Shaft, Nyala, St Helena, Harmony 2, Merriespruit 1 and 3 Shafts, Unisel and Brand 3 and 5 Shafts, Saaiplaas 3 and Orkney 2 and 4 Shafts.

		December 2004	September 2004
U/g tonnes milled	( 000)	1 426	1 708
U/g recovery grade	(g/t)	4,88	4,54
U/g kilograms produced	(kg)	6 956	7 755
U/g working costs	(R/kg)	98 600	93 430
U/g working costs	(R/tonne)	481	424

These operations which consist of shafts which are either in the process of being restructured, downscaled in line with available ore reserves or being mothballed, returned a cash operating loss of R101,6 million. The operations reported a 17% reduction in underground tonnage, down from 1 708 000 tonnes to 1 426 000 tonnes. At a higher recovery grade of 4,88 g/t (September 2004 4,54 g/t), resulted in a 10% net decrease of gold recovery of 7 755 kg. Costs decreased from R724,5 million to R685,9 million. Due to the lower gold recovery, working costs in R/kg increased from R93 430/kg to R98 600/kg.

Regretfully three employees lost their lives due to falls of ground in separate incidents.

Our challenge at these shafts remains to establish both working cost and grade profiles to ensure breakeven at the current gold price. These approximately 900 000 ounces per annum have huge gearing to the change in R/kg gold price. We plan to retain this optionality. It is worth noting that 120 000 oz or 53% of the ounces produced for the quarter were profitable.

#### Surface Operations (includes Kalgold)

		December	September	
		2004	2004	
Opencast tonnes milled	( 000)	1 334	1 591	
Opencast recovery grade	(g/t)	1,09	0,82	
Kilograms produced	(kg)	1 454	1 297	
Working costs	(R/kg)	80 183	83 791	
Working costs	(R/tonne)	87	68	

**Kalgold** reported a profit of R7,1 million compared to a cash operating loss of R2,9 million in the September 2004 quarter. Tonnages increased by 7% from 389 000 tonnes to 415 000 tonnes, quarter on quarter. A higher recovery grade of 2,09 g/t (September 2004 1,71 g/t) resulted in a higher gold recovery of 868 kg, an increase of 31% on the September 2004 quarter. Recovery grades at this operation have tended to be variable and this is expected to continue in future. Working costs were lower in R/kg terms, down from R88 268 kg to R75 600 kg. In R/tonne terms, working costs increased marginally from R151/tonne to R158/tonne.

Australasian Operations improved performance levels sustained

### Highlights

Another quarter of significant improvements in operating profits and cash flow at our Australian operations.

Start up of the development of the St George underground mine.

Continuation of good results from the Northern Territory Joint Venture.

The Australian Operations reported their best quarter for some time with operating profit improving from A\$8,5m to A\$12.9m during December 2004. This good result came from a combination of improvements in all three key parameters of:

gold production of 80 235oz during December compared to 78 177oz for the September quarter, an improvement of 3%

gold price received of A\$573/oz compared to A\$559/oz for the previous quarter, and

a 6% reduction in working costs, down from A\$35,1m to A\$33,1m.

		December 2004	September 2004
Kilograms produced	(kg)	2 496	2 432
Working costs	(R/kg)	60 869	65 494
Working costs	(R/tonne)	162	. 168

#### **Mount Magnet**

Mount Magnet reported an improved working profit of A\$7,0m (September 2004 A\$5,6m), mainly due to the mining of higher grades towards the base of the open pits at St George, Watertank Hill and Hill 60.

Tonnages from in the open pits were steady whilst underground tonnages decreased by 18% in line with the planned reduction in activities at Star. Star continues to yield small discoveries and extensions to the scattered ore bodies that occur in this system and the closure of this profitable operation has now been deferred to May 2005.

Development of the new underground mine at St George is progressing well with the decline having advanced to 140m from the portal. The first stope ore from this new mine is expected in the September 2005 quarter.

In total the site produced 47 786 oz of gold from the processing of 675 579 tonnes of ore and low grade stockpiles.

Costs were well controlled throughout the quarter.

### South Kal Mines

The site returned a higher profit of A\$5,9m for the quarter compared to the A\$2,96m for the September quarter.

South Kal Mines increased production to 32 449 ounces (Dec 2004 27 955 ounces) from the milling of 304 912 tonnes of ore.

Whilst the open pits production was steady with slightly lower tonnes and slightly better grades, the main contribution to the improved performance was the Mt Marion underground operation where various technical improvements in the flow of ore in the sub level cave led to increases in both tonnage and grade with negligible increases in cost.

#### Northern Territory Joint Venture (Harmony 50%)

The drilling programme completed in the September quarter resulted in an upgrade of the resource at the Cosmo deposit from 0,7m oz to over 1m oz of gold. The resource now stands at:

Indicated Resource	3,30mt @ 5,10 g/t	540 700 ounces
Inferred Resource	4,21mt @ 3,68 g/t	498 200 ounces
Total Resource	7,51mt @ 4,30 g/t	1 038 900 ounces

Metallurgical test work has confirmed that the ore will yield excellent recoveries through the newly purchased Union Reef plant. Detailed mining studies to optimise the establishment of a decline and underground mine are progressing well.

The first round of infill drilling at several of the prospects in the Pine Creek mining leases was completed during the quarter. These results together with the collation of the historical data base have, to date, established a resource of 5,2 million tons at 2,1 g/t for 346 000 oz of contained gold. These resources, located 20 km from the newly acquired Union Reefs plant, will form a significant ore source for the operation. Limited further drilling and detailed mining analysis studies in early 2005 will establish the reserve and mining sequence from this area.

CAPITAL EXPENDITURE		
	Actual	Forecast
Operational Capex	December 2004	March 2005
South African Operations	52	23
Australasian Operations	42	55
Total Operational Capex	94	78
Project Capex		
Doornkop South Reef	28	25
Elandsrand New Mine	31	14
Tshepong North Decline	13	11
Phakisa Shaft	34	23
Target Shaft	13	16
PNG	18	25
Total Project Capex	137	114
TOTAL CAPEX	231	192

**Operating and Financial Results** (Rand/Metric)

		Underground production South Africa			th Africa
Harmony Gold Mine Co. Ltd		Quality Ounces	Growth Projects	Leve- raged Ounces	Sub total
Ore milled t 000	<b>Dec-04</b>	<b>1,815</b>	<b>360</b>	<b>1,426</b>	<b>3,601</b>
	Sep-04	1,929	386	1,708	4,023
Gold produced kg	<b>Dec-04</b> Sep-04	<b>11,676</b> 12,323	<b>2,022</b> 2,015	<b>6,956</b> 7,755	<b>20,654</b> 22,093
Yield g/tonne	<b>Dec-04</b>	<b>6.43</b>	<b>5.62</b>	<b>4.88</b>	<b>5.74</b>
	Sep-04	6.39	5.22	4.54	5.49
Cash operating costs R/kg	<b>Dec-04</b>	<b>65,224</b>	<b>93,376</b>	<b>98,600</b>	<b>79,222</b>
	Sep-04	66,118	101,121	93,430	78,897
Cash operating costs R/tonne	<b>Dec-04</b>	<b>420</b>	<b>524</b>	<b>481</b>	<b>454</b>
	Sep-04	422	528	424	433
Working revenue (R 000)	<b>Dec-04</b>	<b>979,664</b>	<b>169,677</b>	<b>584,249</b>	<b>1,733,590</b>
	Sep-04	1,028,768	167,492	642,886	1,839,146
Cash operating costs (R 000)	<b>Dec-04</b> Sep-04	<b>761,558</b> 814,772	<b>188,806</b> 203,759	<b>685,859</b> 724,549	<b>1,636,223</b> 1,743,080
Cash operating profit (R 000)	<b>Dec-04</b>	<b>218,106</b>	( <b>19,129</b> )	( <b>101,610</b> )	<b>97,367</b>
	Sep-04	213,996	(36,267)	(81,663)	96,066
Capital expenditure (R 000)	<b>Dec-04</b>	<b>50,790</b>	<b>106,448</b>	<b>13,214</b>	<b>170,452</b>
	Sep-04	47,384	92,227	21,566	161,177

Quality Ounces Evander Shafts, Randfontein Cooke Shafts, Target, Tshepong, Masimong

Growth Projects Doornkop shaft and South Reef Project, Elandsrand shaft and New Mine Project, Phakisa shaft, Tshepong Decline Project

Leveraged Ounces Bambanani, Joel, Kudu/Sable, West, Nyala, St Helena, Harmony 2, Merriespruit 1 and 3, Unisel, Brand 3 and 5, Saaiplaas 3, Evander 9, Orkney 2 and 4

# **OPERATING AND FINANCIAL RESULTS** (Rand/metric)

		South Africa Surface	South Africa Total	Australia Total	Harmony Total
Ore milled t 000	Dec-04				
	<b>a</b>	1,334	4,935	981	5,916
	Sep-04	1,591	5,614	950	6,564
Gold produced kg	Dec-04				
	Sep 04	1,454	<b>22,108</b>	<b>2,496</b>	24,604
Viold allowers	Sep-04	1,297	25,590	2,432	23,822
ried g/tonne	Dec-04	1.00	1 18	2 54	4 16
	Sep-04	0.82	4.17	2.54	3.93
Cash operating costs R/kg	Dec-04				
Cash operating costs rang		80.183	79,284	60.859	77.415
	Sep-04	83,791	79,169	65,494	77,881
Cash operating costs R/tonne	Dec-04				
		87	355	155	322
	Sep-04	68	330	168	306
Working Revenue (R 000)	Dec-04				
		122,780	1,856,370	211,123	2,067,493
	Sep-04	106,684	1,945,830	198,025	2,143,855
Cash operating costs (R 000)	Dec-04				
	<b>a</b>	116,586	1,752,809	151,904	1,904,713
	Sep-04	108,677	1,851,757	159,282	2,011,039
Cash operating profit (R 000)	Dec-04				
	San 04	<b>6,194</b>	103,561	<b>59,219</b>	162,780
	Sep-04	(1,995)	94,075	38,743	152,810
Capital expenditure (K 000)	Dec-04	Δ	170 453	60.060	220 512
	Sep-04	0	161.177	76,800	230,312

# TOTAL OPERATIONS QUARTERLY FINANCIAL RESULTS (Rand/metric) (unaudited)

		Quarter ended 31 December 2004	Quarter ended 30 September 2004	Quarter ended 31 December 2003
Ore milled t 000		5 916	6 564	8 183
Gold produced kg		24 604	25 822	29 294
Gold price received R/kg		84 031	83 023	85 139
Cash operating costs R/kg		77 415	77 881	75 888
		R million	R million	R million
Gold sales		2 068	2 144	2 494
Cash operating costs		1 905	2 011	2 223
Cash operating profit		163	133	271
Other income net		11	37	65
Employment termination and restructuring	costs	(109)	(154)	(20)
Corporate, marketing and new business exp	enditure	(41)	(38)	(43)
Exploration expenditure		(20)	(24)	(35)
Loss from associates				(34)
Profit on sale of Highland and High River				522
Interest paid		(104)	(100)	(107)
Depreciation and amortisation		(216)	(239)	(246)
Provision for rehabilitation costs		(14)	(14)	(18)
Gain/(loss) on financial instruments		(29)	1	11
Profit on Australian-listed investments			4	
Profit/(loss) on foreign exchange		14	(1)	(50)
(Loss)/income before tax		(345)	(395)	316
Current tax benefit/(expense)		56	(17)	(84)
Deferred tax benefit		12	72	10
Net (loss)/income before minority interes	ts	(277)	(340)	242
Minority interests				(6)
Net (loss)/income		(277)	(340)	236

### TOTAL OPERATIONS QUARTERLY FINANCIAL RESULTS (Rand/metric) (unaudited)

	Quarter ended 31 December 2004	Quarter ended 30 September 2004	Quarter ended 31 December 2003
	R million	R million	R million
(Loss)/earnings per share (cents)*			
Basic (loss)/earnings	(80)	(106)	92
Headline loss	(88)	(110)	(66)
Fully diluted (loss)/earnings** ***	(80)	(106)	92
Dividends per share (cents)			
Interim			40
Proposed final			

Prepared in accordance with International Financial Reporting Standards.

\* Calculated on weighted average number of shares in issue at quarter end December 2004: 345.0 million (September 2004: 320.8 million) (December 2003: 257.9 million).

\*\* Calculated on weighted average number of diluted shares in issue at quarter end December 2004: 344.7 million (September 2004: 320.9 million) (December 2003: 256.5 million).

\*\*\* The effect of the dilution of shares is anti-dilutive.

Reconciliation of headline loss:			
Net (loss)/earnings	(277)	(340)	236
Adjustments:			
Profit on sale of assets	(25)	(10)	(3)
Profit on disposal of Highland and High River net of tax			(444)
Profit on Australian-listed investments		(4)	
Amortisation of goodwill			41
	<u> </u>	<u> </u>	
Headline loss	(302)	(354)	(170)

# TOTAL OPERATIONS YEAR TO DATE FINANCIAL RESULTS (Rand/metric) (unaudited)

		Year to date 31 December 2004	Year to date 30 September 2003
Ore milled	t 000	12 480	15 039
Gold produced	kg	50 426	52 019
Gold price received	R/kg	83 528	85 623
Cash operating costs	R/kg	77 658	76 241
		R million	R million
Gold sales		4 212	4 454
Cash operating costs		3 916	3 966
Cash operating profit		296	488
Other income net		48	135
Employment termination and a	estructuring costs	(263)	(32)
Corporate, marketing and new	business expenditure	(79)	(74)
Exploration expenditure		(44)	(49)
Loss from associates			(41)
Profit on sale of Highland and	High River		522
Interest paid		(204)	(162)
Depreciation and amortisation		(455)	(388)
Provision for rehabilitation cost	its	(28)	(28)
Loss on financial instruments		(28)	(161)
Profit on Australian-listed invo	estments	4	
Gain/(loss) on foreign exchange	je	13	(81)
(Loss)/income before tax		(740)	129
Current tax benefit/(expense	)	39	(102)
Deferred tax benefit	,	84	96
Net (loss)/income before min	ority interests	(617)	123
Minority interests			(6)
Net (loss)/income		(617)	117

### TOTAL OPERATIONS YEAR TO DATE FINANCIAL RESULTS (Rand/metric) (unaudited)

	Year to date 31 December	Year to date 30 September
	2004	2003
(Loss)/earnings per share (cents)*		
Basic (loss)/earnings	(185)	50
Headline loss	(197)	(129)
Fully diluted (loss)/earnings**	(185)	52
Dividends per share (cents)		
Interim		40
Proposed final		

Prepared in accordance with International Financial Reporting Standards.

\* Calculated on weighted number of shares in issue for 6 months to December 2004: 332.9 million (December 2003: 231.7 million).

\*\* Calculated on weighted average number of diluted shares in issue for 6 months to December 2004: 332.8 million (December 2003: 230.3 million).

Reconciliation of headline loss:		
Net (loss)/earnings	(617)	117
Adjustments:		
Profit on sale of assets	(34)	(12)
Profit on disposal of Highland and High River net of tax		(444)
Profit on Australian-listed investments	(4)	
Amortisation of goodwill		41
Headline loss	(655)	(298)

# ABRIDGED BALANCE SHEET AT 31 DECEMBER 2004 (Rand)

	At 31 December 2004 R million (unaudited)	At 30 September 2004 R million (unaudited)	At 31 December 2003 R million (unaudited)
ASSETS			
Non-current assets			
Property, plant and equipment	22,390	22,489	14,911
Intangible assets	2,268	2,268	2,803
Investments	6,364	2,795	1,098
Investments in associates			2,564
	31,022	27,552	21,376
Current assets			
Inventories	550	518	463
Receivables	383	401	551
Cash and cash equivalents	296	1,013	2,888
	1,229	1,932	3,902
Total assets	32.251	29.484	25.278
		_,,	
EQUITY AND LIABILITIES			
Share capital and reserves	05.010	20.000	14 (72)
Issued capital	25,313	20,889	14,6/3
Fair value and other reserves	(2,061)	(963)	(243)
Retained earnings	364	642	1,821
	23,616	20,568	16,251
Minority interest			155
·			
Non-current liabilities			
Long-term borrowings	2,861	2,801	2,863
Net deferred taxation liabilities	2,549	2,647	2,779
Net deferred financial liabilities	529	573	432
Long-term provisions	825	817	860
	6,764	6,838	6,934
Current liabilities			
Payables and accrued liabilities	1,834	2,044	1,658
Income and mining taxes	27	26	272
Shareholders for dividends	10	8	8
	1,871	2,078	1,938
Total equity and liabilities	32,251	29,484	25,278
Name and and a second sec	202 002 00 1	200.010.720	259,250,024
inumber of ordinary snares in issue	392,993,004	320,819,739	238,330,934

# Edgar Filing: JPMORGAN CHASE & CO - Form 424B2

Net asset value per share (cents)	6,009	6,411	6,351
		·	

### **Basis of accounting**

The unaudited results for the quarter have been prepared on the International Financial Reporting Standards (IFRS) basis. These consolidated quarterly statements are prepared in accordance with IFRS 34, Interim Financial Reporting. The accounting policies are consistent with those applied in the previous financial year.

### **OPERATING AND FINANCIAL RESULTS** (US\$/imperial)

		Underground production S		uction So	outh Africa
Harmony Gold Mine Co. Ltd		Quality Ounces	Growth Projects	Leve- raged Ounces	Sub total
Ore milled t 000	Dec-04				
		2,003	397	1,573	3,973
	Sep-04	2,126	426	1,884	4,436
Gold produced oz	Dec-04				
	Sep 04	<b>375,399</b>	<b>65,020</b>	<b>223,642</b>	<b>664,061</b>
Vield oz/t	Sep-04	390,193	04,779	249,331	/10,505
	Dec-04	0.19	0.16	0.14	0.17
	Sep-04	0.19	0.15	0.13	0.16
Cash operating costs \$/oz	Dec-04				
		337	482	509	409
	Sep-04	322	493	455	385
Cash operating costs \$/t	Dec-04		-0		60
	Sen-04	<b>63</b> 60	7 <b>9</b> 75	72 60	<b>68</b> 62
Working revenue (\$ 000)	Dec-04	00	15	00	02
() of king revenue (\$ 000)		162.543	28,152	96,937	287.632
	Sep-04	161,241	26,251	100,761	288,253
Cash operating costs (\$ 000)	Dec-04				
		126,356	31,326	113,796	271,478
	Sep-04	127,701	31,936	113,560	273,197
Cash operating profit (\$ 000)	Dec-04	26 105	(2.154)	(16.050)	16154
	Sep-04	<b>36,18</b> 7 33 540	(3,174)	(16,859)	16,154 15,056
Capital expenditure (\$ 000)	Dec-04	55,510	(5,005)	(12,777)	15,650
	200-04	8,427	17,661	2,192	28,280
	Sep-04	7,427	14,455	3,380	25,262

Quality Ounces Evander Shafts, Randfontein Cooke Shafts, Target, Tshepong, Masimong

Growth Projects Doornkop shaft and South Reef Project, Elandsrand shaft and New Mine Project, Phakisa shaft, Tshepong Decline Project

Leveraged Ounces Bambanani, Joel, Kudu/Sable, West, Nyala, St Helena, Harmony 2, Merriespruit 1 and 3, Unisel, Brand 3 and 5, Saaiplaas 3, Evander 9, Orkney 2 and 4

# **OPERATING AND FINANCIAL RESULTS** (US\$/imperial)

		South Africa Surface	South Africa Total	Australia Total	Harmony Total
Ore milled t 000	Dec-04				
	Sen-04	<b>1,471</b> 1,754	<b>5,442</b>	<b>1,081</b>	<b>6,525</b> 7 238
Gold produced oz	Dec-04	1,754	0,170	1,040	7,230
		46,737	710,798	80,235	791,033
	Sep-04	41,699	752,002	78,190	830,192
Yield oz/t	Dec-04				
	<b>G</b> 04	0.03	0.13	0.07	0.12
	Sep-04	0.02	0.12	0.07	0.11
Cash operating costs \$/oz	Dec-04	414	400	214	400
	Sep-04	414	386	314 319	380
Cash operating costs \$/t	Dec-04				
		13	53	23	48
	Sep-04	10	47	24	44
Working revenue (\$ 000)	Dec-04				
	Sep-04	<b>20,371</b>	<b>308,003</b> 304,974	<b>35,029</b>	<b>343,032</b>
Cash operating costs (\$ 000)	Dec 04	10,721	504,974	51,057	550,011
Cash operating costs (\$ 000)	Dec-04	19.344	290.822	25.204	316.026
	Sep-04	17,033	290,230	24,965	315,195
Cash operating profit (\$ 000)	Dec-04				
	Sep-04	<b>1,027</b> (312)	<b>17,181</b> 14 744	<b>9,825</b> 6,072	<b>27,006</b> 20,816
Canital expenditure (\$ 000)	Dec-04	(012)	1.,,, 11	0,072	20,010
	Dec 04	0	28,280	9,965	38,245
	Sep-04	0	25,262	12,037	37,299

# TOTAL OPERATIONS QUARTERLY FINANCIAL RESULTS (US\$/imperial) (unaudited)

		Quarter ended 31 December 2004	Quarter ended 30 September 2004	Quarter ended 31 December 2003
Ore milled	t 000	6,525	7,238	9,023
Gold produced	OZ	791,033	830,192	941,814
Gold price received	\$/oz	434	405	393
Cash operating costs	\$/oz	400	380	350
		\$ million	\$ million	\$ million
Gold sales		343	336	370
Cash operating costs		316	315	330
Cash operating profit		27	21	40
Other income net		2	5	10
Employment terminati	on and restructuring costs	(18)	(24)	(3)
Corporate, marketing,	and new business expenditure	(7)	(6)	(6)
Exploration expenditur	re	(3)	(4)	(5)
Loss from associates				(5)
Profit on sale of Highla	and and High River			77
Interest paid		(17)	(16)	(16)
Depreciation and amor	tisation	(36)	(37)	(37)
Provision for rehabilitation	tion costs	(2)	(2)	(3)
Gain/(loss) on financia	l instruments	(5)		2
Profit on Australian-lis	ted investments		1	
Loss on foreign exchar	nge			(7)
(Loss)/income before	tax	(59)	(62)	47
Current tax benefit/(	expense)	9	(3)	(12)
Deferred tax benefit		2	12	1
Net (loss)/income befo	ore minority interests	(48)	(53)	36
Minority interests				(1)
Net (loss)/income		(48)	(53)	35

### TOTAL OPERATIONS QUARTERLY FINANCIAL RESULTS (US\$/imperial) (unaudited)

	Quarter ended 31 December 2004 \$ million	Quarter ended 30 September 2004 \$ million	Quarter ended 31 December 2003 \$ million
(Loss)/earnings per share (cents)*			
Basic (loss)/earnings	(13)	(17)	14
Headline loss	(15)	(17)	(10)
Fully diluted (loss)/earnings** ***	(13)	(17)	14
Dividends per share (cents)			
Interim			6
Proposed final			

Prepared in accordance with International Financial Reporting Standards.

*Currency conversion rates average for the quarter: December 2004: US\$1=R6.03 (September 2004: US\$1=R6.38) (December 2004: US\$1=R6.75).* 

\* Calculated on weighted average number of shares in issue at quarter end December 2004: 345.0 million (September 2004: 320.8 million) (December 2003: 257.9 million).

\*\* Calculated on weighted average number of diluted shares in issue at quarter end December 2004: 344.7 million (September 2004: 320.9 million) (December 2003: 256.5 million).

\*\*\* The effect of the dilution of shares is anti-dilutive.

Reconciliation of headline loss:			
Net (loss)/earnings	(48)	(53)	35
Adjustments:			
Profit on sale of assets	(4)	(1)	(1)
Profit on disposal of Highland and High River net of tax			(66)
Profit on Australian-listed investments		(1)	
Amortisation of goodwill			7
Headline loss	(52)	(55)	(25)

# TOTAL OPERATIONS YEAR TO DATE FINANCIAL RESULTS (US\$/imperial) (unaudited)

Year to dat 31 December 2004	e Year to date r 31 December 2003
Ore milled t 000 13,76	<b>2</b> 16,584
Gold produced oz 1,621,22	<b>6</b> 1,672,442
Gold price received \$/oz 41	9 376
Cash operating costs \$/oz 38	9 335
\$ million	\$ million
Gold sales 67	<b>'9</b> 629
Cash operating costs 63	1 560
Cash operating profit	<b>8</b> 69
Other income net	8 19
Employment termination and restructuring costs (4	<b>2</b> ) (5)
Corporate, marketing and new business expenditure (1	<b>3</b> ) (10)
Exploration expenditure	(7)
Loss from associates	(6)
Profit on sale of Highland and High River	74
Interest paid (3	<b>(23)</b>
Depreciation and amortisation (7)	<b>3</b> ) (55)
Provision for rehabilitation costs	(4)
Loss on financial instruments	(23)
Profit on Australian-listed investments	1
Gain/(loss) on foreign exchange	2 (11)
(Loss)/income before tax (11	9) 18
Current tax benefit/(expense)	6 (14)
Deferred tax benefit	4 14
Net (loss)/income before minority interests (9	9) 18
Minority interests	(1)
Net (loss)/income (9	<b>9</b> ) 17

### TOTAL OPERATIONS YEAR TO DATE FINANCIAL RESULTS (US\$/imperial) (unaudited)

	Year to date 31 December 2004	Year to date 31 December 2003
	\$ million	\$ million
(Loss)/earnings per share (cents)*		
Basic (loss)/earnings	(30)	7
Headline loss	(32)	(18)
Fully diluted (loss)/earnings**	(30)	7
Dividends per share (cents)		
Interim		6
Proposed final		

Currency conversion rates average for the 6 months ended December 2004: US\$1=R6.21 (December 2003: US\$1=R7.08).

\* Calculated on weighted number of shares in issue for 6 months to December 2004: 332.9 million (December 2003: 231.7 million).

\*\* Calculated on weighted average number of diluted shares in issue for 6 months to December 2004: 332.8 million (December 2003: 230.3 million).

Reconciliation of headline (loss)/earnings:		
Net (loss)/earnings	(99)	17
Adjustments:		
Profit on sale of assets	(5)	(2)
Profit on disposal of Highland and High River net of tax		(63)
Profit on Australian-listed investments	(1)	
Amortisation of goodwill		6
Headline loss	(105)	(42)

# ABRIDGED BALANCE SHEET AT 31 DECEMBER 2004 (US\$)

	At 31 December 2004 US\$ million (unaudited)	At 30 September 2004 US\$ million (unaudited)	At 31 December 2003 US\$ million (unaudited)
ASSETS			
Non-current assets			
Property, plant and equipment	3,978	3,472	2,226
Intangible assets	403	350	418
Investments	1,131	431	164
Investments in associates			
	5,512	4,253	3,191
Current assets			
Inventories	98	80	69
Receivables	68	62	82
Cash and cash equivalents	53	156	431
	219	298	582
Total assets	5,731	4,551	3,773
EQUITY AND LIABILITIES			
Share capital and reserves			
Issued capital	4,497	3,225	2,190
Fair value and other reserves	(366)	(149)	(36)
Retained earnings	65	99	272
	4,196	3,175	2,426
March Land			
Minority interest			23
Non-current liabilities			
Long-term borrowings	508	432	427
Net deferred taxation liabilities	453	409	415
Net deferred financial liabilities	94	88	64
Long-term provisions			129
	1,202	1,055	1,035
Current liabilities			
Payables and accrued liabilities	326	316	247
Income and mining taxes	5	4	41
Shareholders for dividends	2	1	1
	333	321	289
Total equity and liabilities	5,731	4,551	3,773
Number of ordinary shares in issue	392,993,004	320,819,739	258,350,934
The asset value per share (US Cents)	1,000	<i>99</i> 0	240

### Edgar Filing: JPMORGAN CHASE & CO - Form 424B2

#### **Basis of accounting**

The unaudited results for the quarter have been prepared on the International Financial Reporting Standards (IFRS) basis. These consolidated quarterly statements are prepared in accordance with IFRS 34, Interim Financial Reporting. The accounting policies are consistent with those applied in the previous financial year.

Balance sheet converted at conversion rate of US\$1 = R5.63 (September 2004: R6.48) (December 2003: R6.70).

### CONDENSED STATEMENT OF CHANGES IN EQUITY

### FOR THE SIX MONTHS ENDED 31 DECEMBER 2004

	Issued share capital R million	Fair value and other reserves R million	Retained earnings R million	Total R million
	(unaudited)	(unaudited)	(unaudited)	(unaudited)
Balance as at 1 July 2004	20,889	(1,186)	1,078	20,781
Issue of share capital	4,424			4,424
Currency translation adjustment and other		(875)		(875)
Net loss			(617)	(617)
Dividends paid			(96)	(96)
Balance as at 31 December 2004	25,313	(2,061)	365	23,617
Balance as at 1 July 2003	6,875	(242)	1,995	8,628
Issue of share capital	7,798			7,798
Currency translation adjustment and other		(1)		(1)
Net earnings			117	117
Dividends paid			(291)	(291)
Balance as at 31 December 2003	14,673	(243)	1,821	16,251

	Issued share capital US\$ million	Fair value and other reserves US\$ million	Retained earnings US\$ million	Total US\$ million
	(unaudited)	(unaudited)	(unaudited)	(unaudited)
Delement of the 1004	2 711	(211)	102	2 602
Balance as at 1 July 2004	3,/11	(211)	192	3,092
	/80	(155)		/80
Currency translation adjustment and other		(155)	(110)	(155)
Net loss			(110)	(110)
Dividends paid			(17)	(17)
Balance as at 31 December 2004	4,497	(366)	65	4,196
	^			
Balance as at 1 July 2003	1,026	(36)	298	1,288
Issue of share capital	1,164			1,164
Currency translation adjustment and other				
Net earnings			17	17
Dividends paid			(43)	(43)
Balance as at 31 December 2003	2,190	(36)	272	2,426

Balances translated at closing rates of: December 2004: US\$1 = R5.63 (December 2003: US\$1 = R6.70).

#### SUMMARISED CASH FLOW STATEMENT

### FOR THE SIX MONTHS ENDED 31 DECEMBER 2004 (unaudited)

Six months ended 31 December 2003	Six months ended 31 December 2004		Six months ended 31 December 2004	Six months ended 31 December 2003
US\$ million	US\$ million		R million	R million
		Cash flow from operating activities		
73	(62)	Cash generated by operations	(382)	513
14	10	Interest and dividends received	63	102
(18)	(19)	Interest paid	(120)	(127)
(50)		Income and mining taxes paid		(355)
19	(71)	Cash (utilised)/generated by operating activities	(439)	133
		Cash flow from investing activities		
103		Cash held by subsidiaries at acquisition		729
140	(9)	Net (additions)/proceeds on disposal of listed investments	(57)	994
(58)	(66)	Net additions to property, plant and equipment	(407)	(413)
		Other investing activities	1	1
	·			
185	(75)	Cash (utilised)/generated by investing activities	(463)	1,311
		Cash flow from financing activities		
(9)	3	Long-term loans raised/(repaid)	18	(63)
10	(6)	Ordinary shares issued net of expenses	(36)	73
(41)	(15)	Dividends paid	(95)	(292)
(40)	(18)	Cash utilised by financing activities	(113)	(282)
42		Foreign currency translation adjustments	(103)	39
12		i oreign currency translation aufustitients	(105)	37
206	(164)	Net (decrease)/increase in cash and equivalents	(1 118)	1 201
200	217	Cash and equivalents 1 July	1 /1/	1,201
	217	Cash and equivalents 1 July	1,414	1,007
/21	52	Cash and aquivalants 21 December	204	2 000
431		Cash and equivalents 31 December	290	2,000

Operating activities translated at average rates of: December 2004: US\$1 = R6.21 (December 2003: US\$1 = R7.08).

Closing balance translated at closing rates of: December 2004: US\$1 = R5.63 (December 2003: US\$1 = R6.70).

#### SUMMARISED CASH FLOW STATEMENT

### FOR THE THREE MONTHS ENDED 31 DECEMBER 2004 (unaudited)

Three months	Three months		Three months	Three months
30 September	ended		ended	ended
2004	31 December 2004		31 December 2004	30 September 2004
US\$ million	US\$ million		R million	R million
		Cash flow from operating activities		
(7)	(54)	Cash generated by operations	(338)	(44)
6	4	Interest and dividends received	27	36
(9)	(10)	Interest paid	(64)	(56)
		Income and mining taxes paid		
<u> </u>				
(10)	(60)	Cash utilised by operating activities	(375)	(64)
		Cash flow from investing activities		
		Cash held by subsidiaries at acquisition		
	(9)	Net additions of listed investments	(57)	
(35)	(29)	Net additions to property, plant and equipment	(183)	(224)
		Other investing activities		
<u> </u>				
(35)	(38)	Cash utilised by investing activities	(240)	(224)
		Cash flow from financing activities		
	3	Long-term loans raised	18	
	(6)	Ordinary shares issued net of expenses	(36)	
(15)		Dividends paid	1	(96)
(15)	(3)	Cash utilised by financing activities	(17)	(96)
(11)	(2)	Foreign currency translation adjustments	(85)	(17)
		8 0 0		
(71)	(103)	Net decrease in cash and equivalents	(717)	(401)
22.7	156	Cash and equivalents beginning of quarter	1.013	1,414
156	53	Cash and equivalents end of quarter	296	1.013
150	55	cum una equivalente end el quarter	270	1,015

Operating activities translated at average rates of: December 2004 quarter: US\$1 = R6.03 (September 2004 quarter: US\$1 = R6.38).

Closing balance translated at closing rates of: December 2004: US\$1 = R5.63 (September 2004: US\$1 = R6.48).

### RECONCILIATION BETWEEN CASH OPERATING PROFIT AND

### CASH GENERATED BY OPERATIONS PERIOD ENDED 31 DECEMBER 2004

	Six months					
	to		Quarter	Six months		
	31 December	Quarter ended 30	ended	to		
	2004	September           2004         2004		September         31 December           2004         2004         2004		31 December 2003
	R million	R million	R million	R million		
Cash operating profit	296	133	163	488		
Other cash items per income statement:						
Other income	61	36	25	54		
Employment termination and restructuring costs	(263)	(154)	(109)	(32)		
Corporate, administration and other expenditure	(79)	(38)	(41)	(74)		
Exploration expenditure	(44)	(24)	(20)	(49)		
Provision for rehabilitation costs	(3)	(1)	(2)	(11)		
Cash flow statement adjustments:						
Cost of Avgold currency hedge	(94)	(45)	(49)			
Profit on sale of mining assets	(34)	(9)	(25)	(12)		
Interest and dividends received	(63)	(36)	(27)	(102)		
Other non-cash items	(43)	(20)	(23)	(58)		
Effect of changes in operating working capital items:						
Receivables	477	458	19	446		
Inventories	(19)	13	(32)	21		
Accounts payable and accrued liabilities	(574)	(357)	(217)	(158)		
Cash generated by operations	(382)	(44)	(338)	513		

### NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

#### FOR THE QUARTER ENDED 31 DECEMBER 2004

#### **Commodity contracts**

Maturity schedule of the Harmony Group s commodity contracts by type as at 31 December 2004:

	30 June 2006	30 June 2007	30 June 2008	30 June 2009	Total
Forward sales agreements					
Ounces	108,000	147,000	100,000	100,000	455,000
A\$/ounce	510	515	518	518	515
Calls contracts sold					
Ounces	40,000				40,000
A\$/ounce	552				552
	148,000	147,000	100,000	100,000	495,000

These contracts are classified as speculative and the marked-to-market movement is reflected in the income statement.

The mark-to-market of these contracts was a negative R230 million (US\$41 million) as at 31 December 2004. These values were based on a gold price of US\$438 (A\$562) per ounce, exchange rates of US\$1/R5.6288 and A\$1/US\$0.7793 and prevailing market interest rates at the time. These valuations were provided by independent risk and treasury management experts.

#### Gold lease rates

Harmony holds certain gold lease rate swaps which were acquired through its acquisitions of New Hampton and Hill 50. These instruments are all treated as speculative. The mark-to-market of the above contracts was a positive R20 million (US\$4 million) as at 31 December 2004, based on valuations provided by independent treasury and risk management experts.

#### Interest rate swaps

The Group has interest rate swap agreements to convert R600 million of its R1,2 billion fixed rate bond to variable rate debt. The interest rate swap runs over the term of the bond, interest is received at a fixed rate of 13% and the company pays floating rate based on JIBAR plus a spread raging from 1.8% to 2.2%.

# Edgar Filing: JPMORGAN CHASE & CO - Form 424B2

These transactions which mature in June 2006 are designated as fair value hedges. The marked-to-market value of the transactions was a negative R32 million (US\$6 million) as at 31 December 2004, based on the prevailing interest rates and volatilities at the time.

#### **Currency contracts:**

	30 June	30 June	
	2005	2006	Total
Forward exchange contracts			
US\$ million	43	40	83
Average strike ZAR/US\$	9.23	9.54	9.38
(Buy US\$, sell ZAR at the agreed exchange rate)			
Forward exchange call contracts sold			
US\$ million	43	40	83
Average strike ZAR/US\$	9.23	9.54	9.38
(Sell US\$, buy ZAR at the agreed exchange rate)			

Harmony inherited these contracts with the acquisition of Avgold. The contracts are classified as speculative and the mark-to-market movement is reflected in the income statement.

The mark-to-market of these contracts was a negative R288 million (US\$51 million) as at 31 December 2004. These values were based upon an exchange rate of US\$1/R5.6288 and prevailing market interest rates at the time. Independent risk and treasury management experts provided these valuations.

#### **Z B Swanepoel**

Chief Executive

Virginia

21 January 2005

# DEVELOPMENT RESULTS (metric)

### Quarter ended 31 December 2004

	Reef	eef Sampled	Channel ed width s (cm s)	Channel value (g/t)	Gold (cmg/t)
	metres	metres			
Randfontein					
VCR Reef	924	870	71	73.32	5,189
UE1A	1.352	1.384	141	9.51	1.338
E8 Reef	224	170	143	4.84	692
Kimberley Reef	842	715	164	6.39	1,049
All Reefs	3,342	3,139	127	18.17	2,305
Free State					
Basal	2,046	1,862	92	9.94	914
Leader	767	588	127	7.10	902
A Reef	407	368	131	3.56	466
Middle	258	230	222	3.36	745
B Reef	518	472	52	22.17	1153
All Reefs	3,996	3,520	105	8.44	886
Evander					
Kimberley Reef	2,177	2,079	56.4026	17.51	988
Elandskraal					
VCR Reef	146	96	102	4.81	490
Orkney					
Vaal Reef	104	97	97	21.11	2,048
Target					
Elsburg	740	510	347	4.17	1,445
Free Gold					
Basal	2.236	1.931	72	20.58	1.474
Beatrix	711	663	105	9.22	968
Leader	49	39	183	5.92	1,083
All Reefs	2,996	2,633	82	16.42	1,341

# DEVELOPMENT RESULTS (imperial)

# Quarter ended 31 December 2004

	Reef	Sampled	Channel ampled width	Channel value	Gold (in.oz/t)
	feet	feet	(inches)	(oz/t)	
Randfontein					
VCR Reef	3,032	2,854	28	2.13	60
UE1A	4,437	4,541	55	0.27	15
E8 Reef	736	558	56	0.14	8
Kimberley Reef	2,761	2,346	65	0.18	12
All Reefs	10.966	10.299	50	0.52	26
Free State					
Basal	6,713	6,109	36	0.29	10
Leader	2,516	1,929	50	0.21	10
A Reef	1,336	1,207	52	0.10	5
Middle	845	755	87	0.10	9
B Reef	1,699	1,549	20	0.66	13
All Reefs	13,109	11,549	41	0.25	10
Evender					
Kimberley Reef	7 142	6 821	22	0.52	11
Kinoency Keer		0,021		0.52	
Elandskraal					
VCR Reef	480	315	40	0.14	6
Orkney					
Vaal Reef	341	318	38	0.62	24
Target					
Elsburg	2,428	1,673	137	0.12	17
Free Gold					
Basal	7,336	6,334	28	0.60	17
Beatrix	2,332	2,175	41	0.27	11
Leader	159	128	72	0.17	12
All Reefs	9,827	8,637	32	0.48	15

### CONTACT DETAILS

### Harmony Gold Mining Company Limited

**Corporate Office** 

Suite No. 1

Private Bag X1

Melrose Arch, 2076

South Africa

First Floor

4 The High Street

Melrose Arch, 2196

Johannesburg

South Africa

Telephone: +27 11 684 0140 Fax: +27 11 684 0188

Website: http://www.harmony.co.za

### Directors

P T Motsepe (Chairman)

Z B Swanepoel (Chief Executive)

F Abbott, F Dippenaar, V N Fakude, T S A Grobicki

W M Gule, D S Lushaba, R P Menell, M Motloba, Dr M Z Nkosi

M F Pleming, N Qangule, C M L Savage

### **Investor Relations**

### Ferdi Dippenaar

Marketing Director

 Telephone:
 +27 11 684 0140

 Fax:
 +27 11 684 0188

 E-mail:
 fdippenaar@harmony.co.za

Corné Bobbert

Investor Relations Officer

Telephone:	+27 11 684 0146
Fax:	+27 11 684 0188
E-mail:	cbobbert@harmony.co.za

### Marian van der Walt

Company Secretary

Telephone:	+27 11 411 2037
Fax:	+27 11 411 2398
E-mail:	mvanderwalt@harmony.co.za

### South African Share Transfer Secretaries

Ultra Registrars (Pty) Ltd

PO Box 4844

Johannesburg, 2000

Telephone:+27 11 832 2652Fax:+27 11 834 4398

### **United Kingdom Registrars**

Capita Registrars

The Registry

34 Beckenham Road

### Beckenham

Kent BR3 4TU

Telephone:+44 870 162 3100Fax:+44 208 639 2342

### **ADR Depositary**

The Bank of New York

101 Barclay Street

New York, NY 10286

United States of America

Telephone: +1888-BNY ADRS Fax: +1 212 571 3050

### **Trading Symbols**

JSE Securities Exchange South Africa	HAR
New York Stock Exchange, Inc.	HMY
London Stock Exchange plc	HRM
Euronext Paris	HG
Euronext Brussels	HMY
Berlin Stock Exchange	HAM1

Registration number 1950/038232/06

Incorporated in the Republic of South Africa

ISIN: ZAE000015228
DTES	

NOTES	

NOTES	