Structured Investments Solution Series, 2016

Market Linked Certificates of Deposit

Potential Profit from Market Gains While Protecting Your Investment from Downside Market Risk

J.P. Morgan
Introduction

FOCUSBING ON YOUR FINANCIAL GOALS can be challenging during periods of market volatility. While your brain may tell you that staying the course is the smartest strategy, your stomach may lead you to make impulsive investment decisions. For many investors, finding the optimal balance between risk and reward—and having the fortitude to maintain that balance over the long haul—is no easy task.

You can use Structured Investments to achieve greater diversification, to gain exposure to certain asset classes, to hedge certain exposures in your investment portfolio or to align your portfolio with a particular market or economic view. These instruments can also be designed to provide asymmetrical returns, meaning that potential returns may be higher or lower than those derived from a direct investment in a particular asset. Structured Investments can provide exposure to underlying equities, commodities, indices, other assets or market measures or a basket or hybrid combination of these market measures. Structured Investments offer risk-return profiles that vary from product to product and are designed for specific expectations of market performance and investment objectives. They are complex instruments that may not be suitable for all investors. It is important for investors to understand and consider carefully the unique features of a particular Structured Investment and their own risk profiles before making an investment decision. Generally, all payments on J.P. Morgan’s Structured Investments are subject to the credit risk of the issuer.

This report examines the role that Market Linked Certificates of Deposit can play in your portfolio. They combine some of the features of a bank time deposit, or traditional certificates of deposit such as the repayment of your principal in full at maturity, with the potential for capital appreciation that you can receive from equities. All payments on Market Linked CDs in excess of the applicable FDIC insurance limits will be subject to the credit risk of JPMorgan Chase Bank, N.A.
Understanding Market Linked Certificates of Deposit (MLCDs)

Market Linked Certificates of Deposit (which are time deposits and which we refer to as MLCDs) combine the repayment of your principal in full at maturity that you receive from traditional certificates of deposit with the potential for capital appreciation that you can receive from equities. All payments in excess of the applicable FDIC insurance limits are subject to the credit risk of the issuer. MLCDs are designed to protect against downside market movements at maturity while providing the opportunity to participate in the gains of an underlying asset. MLCDs may offer full upside participation, leveraged upside participation or they may be subject to a maximum return. MLCDs may also offer a contingent coupon for investors seeking current yield, paid as variable annual, quarterly or monthly income. In all cases, you forgo dividends and will receive full repayment of principal at maturity, subject to the credit risk of the issuer for amounts in excess of the applicable FDIC insurance limits.

MLCDs typically mature within one to seven years, and you must hold them until maturity in order to obtain a return of at least your initial investment. Generally, MLCDs are issued in $1,000 denominations. MLCDs can be linked to a variety of underlying assets, including an equity index, a basket of equities, commodities, currencies, exchange traded funds (ETFs) and JPMorgan investable indices. Many investors hold MLCDs in tax deferred accounts.

Anatomy of a MLCD

The example on page 4 illustrates a point to point MLCD linked to an equity index. As illustrated in figure 1, when creating a MLCD the issuer first uses a portion of the available assets to structure a zero coupon bond that matches the maturity date and principal amount of the MLCD. Unlike regular bonds, zero coupon bonds are issued at a discount to their face value and do not pay interest. This allows issuers to structure a bond that will return $1,000 at maturity for an upfront investment by the issuer of less than $1,000 today. The difference between the bond’s value at maturity and the amount paid represents the bond’s implied return.

Zero coupon bonds are issued at a discount to their face value. The discount provides MLCD issuers excess capital to invest. In this example, issuers will use this money to structure call options on a broad based equity index, such as the S&P 500 Index. A call option gives an investor the right (but not the obligation) to buy an investment in the index at a specific price within a predetermined period of time. The call options typically have an expiration date that matches the maturity date of the zero coupon bond, along with a “strike price,” or entry point, that matches the current value of the index. If the underlying asset (the S&P 500 Index) increases in value, the value of the call option will also increase.

By investing in the zero coupon bond, the issuers have designed the MLCDs so that you will receive your initial investment at maturity. The MLCDs are deposit obligations of JPMorgan Chase Bank, N.A. and are insured by the FDIC up to applicable limits set by federal law and regulation. The maximum deposit insurance is $250,000 for all deposits held by you in the same ownership capacity. Any additional amount is not insured by the FDIC and is subject to the credit risk of JPMorgan Chase Bank, N.A.
Risk/Reward

As referenced above, MLCDs allow you to participate in some, but typically not all, of the gains in an equity index via a call option. To pay for the downside market protection provided by the investment in zero coupon bonds, you forfeit all dividend income, and you may also forgo a portion of any gains in the equity index. The percentage of the potential gains that you receive, known as the “participation rate,” will vary for each MLCD, depending on the underlying asset, the maturity date and the minimum and maximum return payouts. The participation rate is primarily determined by two factors: the remaining capital available after structuring the zero coupon bond and the price of the embedded equity call option. The price paid for the embedded equity call option depends upon the implied volatility of the equity index or other reference asset purchased. Generally, higher market volatility leads to higher prices for call options. There is no way to control this; therefore, the participation rate will be determined by market conditions at the time of issuance. When volatility is higher, participation rates are generally lower and when volatility is lower, participation rates are generally higher.

FDIC Insurance

The MLCDs are deposit obligations of JPMorgan Chase Bank, N.A and are insured by the FDIC up to applicable limits set by federal law and regulation, currently $250,000 for all deposits held by you in the same ownership capacity at JPMorgan Chase Bank, N.A. The principal amount of any MLCDs, together with all other deposits held by you, in excess of this limit is not insured by the FDIC. Under federal legislation adopted in 1993, claims of depositors are entitled to a preference in right of payment over claims of general unsecured creditors in the event of a liquidation or other resolution of any FDIC-insured depository institution. However, there can be no assurance that a depositor would receive the entire or any uninsured amount of the MLCDs in any such liquidation or other resolution. Additionally any payment on the MLCD in excess of your principal investment will not be eligible for FDIC insurance prior to the applicable coupon determination date or final valuation date and is subject to the credit risk of JPMorgan Chase Bank, N.A.
MLCD Performance under Different Market Conditions

Figure 2 illustrates how a MLCD might perform under varying market conditions. In this hypothetical example, you invest $1,000 in a MLCD linked to the S&P 500 Index. The MLCD matures in five years and offers a participation rate of 90%. This means that, should the S&P 500 move higher, you would participate in 90% of those gains.

If, at maturity, the S&P 500 had risen 20%, you would receive your original investment ($1,000), subject to the credit risk of JPMorgan Chase Bank, N.A. for amounts in excess of the applicable FDIC insurance limits, plus a return of 18% or $180 ($1,000 x 90% (0.90) x 20% (0.20) = $180).

While the MLCD gained less than a direct investment in the index would have returned ($200 plus the potential dividend yield), you can take comfort in the fact that the payout formula of the MLCD was designed to return your initial investment at maturity.

Now consider what happens if the S&P 500 were to decline 20% at maturity (figure 2). Rather than incurring a $200 loss as you would in a direct investment, you would be entitled to the full repayment of your principal at maturity, subject to the credit risk of JPMorgan Chase Bank for amounts in excess of the applicable FDIC insurance limit. As this example demonstrates, MLCDs, if held to maturity, will generally outperform a direct investment in an index during periods of market declines and may underperform during periods of market gains.
Are MLCDs Right for You?

If you are saving and investing for life’s major milestones, but tend to avoid equities altogether MLCDs may be an appropriate investment for you. Do you recognize yourself in any of the following profiles?

Focused on Life’s Milestones

People who are investing for a specific long-term goal, such as future college expenses, retirement or a vacation home, usually have a good idea of the minimum amount they will need to meet their financial objective. For these investors, returns over and above their goal are “nice to have,” but not a necessity. On the other hand, they cannot tolerate the idea of failing to meet their financial goal, and thus they often favor fixed income or cash investments over more volatile equities. Due to the fact that yields on fixed income products have been at or near historical all-time lows, it requires a higher proportion of capital invested in fixed income now than in the past to achieve the same investment goal.

Risk Averse

All investments entail a trade-off between risk and reward. Investors typically will take on more risk when they are convinced that the potential for higher returns outweighs the risk of losses. Some investors, however, have such a high degree of loss aversion that they have difficulty taking on even a conservative amount of market risk.

These investors typically evaluate gains and losses in an entirely different manner, attributing more importance to investment losses than investment gains. Whereas these investors are happy when they gain $100, they are not twice as happy when they gain $200. Conversely, they consider a $100 loss more important than a $100 gain. This tendency to avoid any losses relegates their portfolio to fixed income and cash investments. While these investors may never find equities attractive, MLCDs, if held to maturity, allow them to participate in potential equity market gains while offering full repayment of principal at maturity, subject to the credit risk of the issuer for amounts in excess of the applicable FDIC insurance limits.

Seeking Safer Investing

On the other end of the risk spectrum, some investors have such a high degree of confidence in their investment decisions that they have difficulty letting go of poorly performing investments. When an investment holding declines, these investors tend to take increasingly risky bets in an effort to break even. Some of these investors tend to hold on to poorly performing investments even when it’s clear that they should have reallocated a portion of their funds to safer investments, such as fixed income or cash. For investors who fit this profile, MLCDs offer an effective way to avoid reckless behavior without sacrificing the potential for capital appreciation.
Certain Risk Considerations

Although MLCDs may offer an alternative investment for those who fit one of the profiles described, they are subject to significant risks, some of which are discussed below.

• Market risk: Returns on the MLCDs at maturity are generally linked to the performance of an underlying asset such as an index, and will depend on whether, and the extent to which, the applicable index appreciates during the term of the MLCDs.

• Any payment on the MLCDs in excess of the applicable FDIC insurance limits is subject to the credit risk of JPMorgan Chase Bank, N.A. If JPMorgan Chase Bank, N.A. were to default in its payment obligations, you may not receive any amount owed to you under the MLCDs for amounts in excess of the applicable FDIC insurance limits and could lose all or a significant portion of your initial investment.

• You may receive no more than the full principal amount of your MLCDs at maturity if the underlying asset is flat or negative during the term of the MLCDs.

• Returns on MLCDs may be limited to a maximum return.

• You may receive a lower payment at maturity than you would have received if you had invested in the underlying asset directly.

• The estimated value of the MLCDs set forth in the applicable disclosure document will likely be lower than the price paid for the MLCDs.

• The estimated value of the MLCDs computed by J.P. Morgan Securities LLC, which we refer to as JPMS, is derived by reference to an internal funding rate.

• The value of the MLCDs, which may be reflected in customer account statements, may be higher than the estimated value computed by JPMS for a limited time period.

• Lack of liquidity: JPMS, acting as agent for JPMorgan Chase Bank, N.A., may offer to purchase the MLCDs in the secondary market but is not required to do so. The price, if any, at which JPMS may be willing to purchase the MLCDs from you in the secondary market, if at all, may result in a significant loss of your principal.

• The tax consequences of the MLCDs may be uncertain. You should consult your tax advisor regarding the U.S. federal income tax consequences of an investment in the MLCDs.

• Potential Conflicts: JPMorgan Chase Bank, N.A. and its affiliates play a variety of roles in connection with the MLCDs, including acting as a calculation agent for the MLCDs and hedging JPMorgan Chase Bank, N.A.’s obligations under the MLCDs and making the assumptions used to determine the pricing of the MLCDs and the estimated value of the MLCDs when the terms of the MLCDs are set. It is possible that such hedging activities or other trading activities of JPMorgan Chase Bank, N.A. or its affiliates could result in substantial returns for JPMorgan Chase Bank, N.A. or its affiliates while the value of the MLCDs declines.

• A depositor purchasing a principal amount of MLCDs in excess of FDIC insurance limits, when aggregated with all other deposits held by the depositor at JPMorgan Chase Bank, will be subject to the credit risk of JPMorgan Chase Bank.

• MLCDs may have complex payout structures that impact returns. Investors should consider these structures carefully before investing in these instruments.

• The risks identified above are not exhaustive. Please see “Risk Factors” in the applicable disclosure statement and “Selected Risk Considerations” in the term sheet for additional information.
What benefits do MLCDs provide?

Generally, MLCDs offer a return at maturity that is linked to an underlying asset, such as a broad market index or a basket of stocks. They provide some of the features of a bank time deposit, such as return of principal at maturity (subject to the credit risk of the issuer for amounts in excess of the applicable FDIC insurance limits), along with the potential for capital appreciation similar to equities. Maturities range from one to seven years, and investors should plan to hold them to maturity.

What is the downside?

Investors forgo dividends and interest, and may also give up a portion of any capital appreciation in exchange for full repayment of principal at maturity. Any payment on MLCDs is subject to the credit risk of the issuer for amounts in excess of the applicable FDIC insurance limits. Your ability to sell the MLCDs prior to maturity may be limited. MLCDs are subject to additional risks, including those discussed under “Certain Risk Considerations” on page 7.

MLCDs may be right for clients who:

- Have a medium-to-long-term horizon (one to seven years) and are saving to meet specific financial goals, such as retirement or college.
- Are loss-averse investors who typically avoid equities altogether.
- Tend to make increasingly aggressive bets in an effort to break even on poorly performing stocks.
Do MLCDs Make Sense for You?

Structured Investments, including MLCDs, can provide innovative ways to help you meet your investment goals. To determine whether a MLCD is appropriate for you, you may want to review the following questions with your advisor:

- What is my investment time horizon?
- How much risk am I comfortable taking on?
- Am I willing to sacrifice dividends or guaranteed coupon payments in exchange for full repayment of principal at maturity?
- Do I have a bullish, bearish or neutral market outlook?
- Am I comfortable with the risk profile of the underlying asset?
- Can I do without a regular stream of income?
- Am I willing to invest capital for longer periods of time, up to eight years?
- Am I comfortable with the credit risk of JPMorgan Chase Bank, N.A. for amounts in excess of the applicable FDIC insurance limits?

The answers to these questions should help you determine whether MLCDs belong in your portfolio. At a minimum, taking the time to gain a better understanding of your financial goals and risk tolerance will be its own reward.

Experience the J.P. Morgan Advantage

J.P. Morgan's Structured Investments are designed to complement your overall investment strategy. They allow for varying degrees of principal protection, subject to the credit risk of JPMorgan Chase Bank, N.A. for amounts in excess of FDIC insurance limits and an array of asset class exposure backed by J.P. Morgan. Experience the benefits of J.P. Morgan's Structured Investments, including:

- Innovative Structured Investments that span all of the major asset classes.
- Innovative rules-based investable indices.
- Turn-key marketing program and education campaign utilizing website available to advisors and their clients, education materials, customized web-based conference calls and/or in-person branch presentations.
The information contained in this document is for discussion purposes only. The final terms of any MLCDs offered by JPMorgan Chase Bank, N.A., may be different from the terms set forth herein and any such final terms will depend on, among other things, market conditions on the applicable pricing date for such MLCDs. Any information relating to performance contained in these materials is illustrative and no assurance is given that any indicated returns, performance or results, whether historical or hypothetical, will be achieved. These terms are subject to change, and J.P. Morgan undertakes no duty to update this information. This document shall be amended, superseded and replaced in its entirety by a subsequent term sheet and/or disclosure supplement, and the documents referred to therein. In the event any inconsistency between the information presented herein and any such term sheet and/or disclosure supplement, such term sheet and/or disclosure supplement shall govern.

IRS Circular 230 Disclosure: This communication was written in connection with the promotion or marketing, to the extent permitted by applicable law, of the transaction(s) or matter(s) addressed herein by persons unaffiliated with JPMorgan Chase Bank, N.A. However, JPMorgan Chase Bank, N.A. and its affiliates do not provide tax advice. Accordingly, to the extent this communication contains any discussion of tax matters, such communication is not intended or written to be used, and cannot be used, for the purpose of avoiding tax-related penalties. Any recipient of this communication should seek advice from an independent tax advisor based on the recipient’s particular circumstances.

Investment suitability must be determined individually for each investor, and the financial instruments described herein may not be suitable for all investors. The products described herein should generally be held to maturity as early unwinds could result in lower than anticipated returns. This information is not intended to provide and should not be relied upon as providing accounting, legal, regulatory or tax advice. Investors should consult with their own advisors as to these matters.

This material is not a product of J.P. Morgan Research Departments. Structured investments may involve a high degree of risk, and may be appropriate investments only for sophisticated investors who are capable of understanding and assuming the risks involved. J.P. Morgan and its affiliates may have positions (long or short), effect transactions or make markets in securities or financial instruments mentioned herein (or options with respect thereto), or provide advice or loans to, or participate in the underwriting or restructuring of the obligations of, issuers mentioned herein. J.P. Morgan is the marketing name for JPMorgan Chase & Co. and its subsidiaries and affiliates worldwide. J.P. Morgan Securities LLC is a member of FINRA, NYSE, and SIPC. Clients should contact their salespersons at, and execute transactions through, a J.P. Morgan entity qualified in their home jurisdiction unless governing law permits otherwise.

©All Rights Reserved