



# MLCD 101

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MARKET LINKED CDs

 First Trust

# MLCD OVERVIEW

A common predicament in which investors may find themselves is the desire to protect their assets while still having the potential for capital gains and/or income. Every investor has their own unique story which calls for their own unique approach to investing. Typically, one common objective is the need for principal protection. Market-Linked Certificate of Deposits, or MLCDs, offer investors the potential for higher gains than that of a standard CD but with the same benefit of principal protection, provided that the MLCD is held to maturity.

## WHAT

### A Type of Structured Product.

An MLCD is an investment vehicle that falls under the category of a “Structured Product.” The purchase of an MLCD provides the investor with upside potential as well as principal protection, provided the investor is able to hold the MLCD until its full maturity. The “Market” aspect of the MLCD means that the MLCD can provide indirect exposure to the performance of many different asset classes while still providing principal protection. That said, many MLCDs have complex payout structures that can impact returns and may not be suitable for all investors.

## WHY

### FDIC Insurance. Principal Protected Growth. Hedge Existing Positions.

MLCDs seek to provide the investor with key benefits that can add value to an overall investment objective.

#### FDIC Insurance

An investment in MLCDs carries federal deposit insurance administered by the Federal Deposit Insurance Corporation (FDIC) and backed by the full faith and credit of the US Government up to a maximum amount for all deposits held in the same legal capacity per depository institution. In general, the FDIC feature guarantees principal of, and any accrued interest\* on, the MLCDs up to \$250,000 if held to maturity. Any amounts exceeding the FDIC limits are subject to the credit and claims paying ability of the issuer. The investor will have the ability to participate in the upside potential of the reference asset, with no downside risk, provided they can hold the MLCD for the duration of its life. However, it is important to understand that an investment in an MLCD, unlike a traditional CD, may suffer a loss of principal if the MLCD is sold or redeemed prior to maturity. Therefore, an MLCD is not a substitute for a traditional CD.

#### Estate Feature

An estate feature known as a “death put” or “survivor’s option”, is a benefit that may be appealing to investors concerned about their estate because their beneficiaries may be able to redeem the MLCD at par, without interest, before maturity upon death or adjudication of incompetence, subject to the terms and limitations of the issuer.

#### Versatility

MLCDs can be used to fit virtually any market outlook and may hedge a variety of existing positions. MLCDs can be structured to fit investors’ outlook for growth, income or combination of both with the added benefit of principal protection if held to maturity. However, many MLCDs have complex payout structures that impact returns. MLCDs subject investors to risks associated with the underlying asset and are not suitable for all investors.

## WHO

### Risk-Averse Clients. Retirees. Baby Boomers. Education Planning.

MLCDs can be used in many different client portfolios. There is no typical client with regard to MLCDs. MLCDs could be attractive to newly retired baby boomers, families saving for future college expenses as well as investors with reservations on the overall volatility of the market. It is important, however, to note that MLCDs work best when held until maturity. The MLCDs are the epitome of the buy and hold strategy. The aforementioned features of the MLCD are only applicable when it is held by the investor until its maturity date. An investor may incur a loss if the MLCD is sold or redeemed prior to maturity. Therefore, the investor must have a time horizon that is consistent with the duration of the MLCD. This information can be found on the various fact sheets and term sheets, which should always be reviewed prior to purchasing an MLCD.

\*See last page for definitions of certain financial terms.

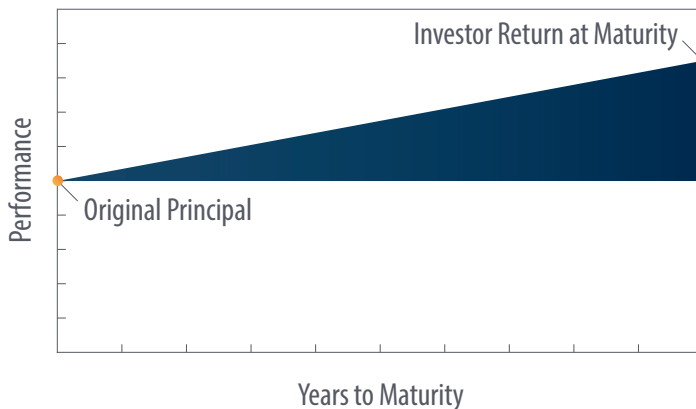
## Examples

### Growth-Oriented MLCDs

When looking at possible outcomes for investing in a growth-oriented MLCD, there are generally two scenarios to consider. When held to maturity, the investor will receive either the original principal invested or the original principal plus any appreciation of the reference asset\*. If the performance of the reference asset matures below the original purchase price, the investor will simply receive their full original principal. If the performance of the reference asset matures above the original price, the investor will receive their full original principal plus the positive performance return of the reference asset which may be subject to a cap\*, dependent on the terms of the MLCD. See examples below.

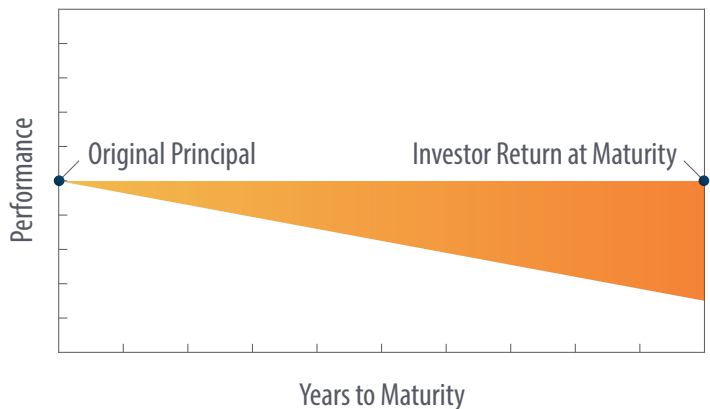
#### Chart 1

In this example, the graph illustrates the “point-to-point”<sup>1</sup> structure of the MLCD. The investor will purchase the MLCD at par and fully realize the upside exposure of the reference asset. At maturity, the investor will receive original principal plus any appreciation of the reference asset.



#### Chart 2

In this example, the reference asset matures below the original starting level. Due to the principal protection<sup>2</sup> feature of the MLCD, the investor will receive their full original principal at maturity, regardless of where the index closes.



<sup>1</sup> Point-to-Point: A method used to calculate the return of an MLCD. The starting point is the value of the index when the CD is issued and the ending point is the value of the same index just before maturity. The return of the MLCD is the difference, or a percentage of the difference depending on the Participation Rate.\*

<sup>2</sup> Principal Protection is the return of an investor’s initial principal amount if held to maturity. MLCDs should be purchased with the intention of holding them until maturity. Some MLCDs may offer an early redemption opportunity, allowing holders the option to redeem prior to maturity. Generally, MLCDs held to maturity are entitled to full return of the principal amount invested. A secondary market for the MLCDs may develop, although there is no guarantee that any person will maintain a secondary market. The value of the MLCD sold prior to maturity in the secondary market will be subject to then prevailing market conditions and may include a transaction charge. The sale proceeds may be less or more than the original purchase amount paid.

These examples are for illustrative purposes only and is not indicative of a specific product. MLCDs are complex products and may not be suitable for all investors. The components of any MLCD can vary depending on the terms of the MLCD.

### Income-Oriented MLCDs

There are many different variations of MLCDs that may produce income via different factors. The income (if any) may be paid annually or more frequently, depending on the terms of the MLCD. The income-producing CDs may be attractive to an investor whose goals are a current stream of income and principal protection. These MLCDs may also have an annual minimum guaranteed rate. Again, it’s always best for an investor to consult the fact sheet and term sheet to obtain the full details of each MLCD when determining the most suitable product.

### Tax Considerations

**Growth-Oriented CD.** For MLCDs treated as “contingent payment debt instruments” for U.S. federal income tax purposes, the bearer of an MLCD may be required to pay annual income taxes on a “comparable yield” from a coupon paying debt instrument as determined by the issuer. The interest reported each year will be added to the investor’s cost basis. Generally, amounts received in excess of the investor’s adjusted cost basis will be treated as additional interest income while any loss will be treated as an ordinary loss, which will be deductible against other income.

**Income-Oriented CD.** For CDs treated as “variable rate debt instruments”, interest paid on the CDs is generally taxable as ordinary interest income at the time it accrues or is received in accordance with the investor’s regular method of accounting for U.S. federal income tax purposes. In general, gain or loss realized on the sale, exchange or other disposition of the CDs will be capital gain or loss.

**Investors should consult their tax advisor regarding the tax implications of an investment in MLCDs, and whether it is advisable to make the investment in light of their tax situation.**

\*See last page for definitions of certain financial terms.

# INCOME-ORIENTED MLCDs

The use of MLCDs in a client's portfolio may fulfill many different needs in an overall investment plan. MLCDs may be used to potentially grow assets or provide current income while ensuring principal protection, provided the MLCD is held to maturity. The income-oriented MLCDs may be attractive to clients that desire the possibility to achieve a higher coupon than a traditional CD. Like traditional CDs, MLCDs carry FDIC insurance and are backed by the full faith and credit of the U.S. Government up to regulatory maximums. It's important to read each fact sheet and term sheet for the corresponding MLCD to ensure a full understanding of the features associated with a purchase. It is also important to understand MLCDs are much different than traditional bank CDs in that MLCD's performance is tied to an index and/or basket of assets that may be tied to derivatives and/or options. This may create more volatility in its pricing while held. The following are selected examples of different kinds of income-oriented MLCDs.

## Either/Or Coupon Example

One of structures commonly used follows an "either/or" pattern of income generation. This structure tracks a basket of securities that determine how the investor is paid. If all of the securities in the portfolio are at their initial observation level ("flat") or higher on the observation date, the investor will receive the maximum (full) coupon payment as defined by the terms of the MLCD. If any of the securities are below their initial price on the observation date, the investor will receive the minimum coupon (if applicable) as defined by the terms of the MLCD. In general, each year on the observation date, the investor will receive either the maximum (full) coupon or the minimum coupon, or no coupon if there is no minimum coupon.

In the example below, we have assumed a minimum coupon of 1.00% and a maximum coupon of 6.50%. Take note of each scenario with regard to either all of the reference shares at or above their initial share price (maximum coupon paid) or any reference share closing lower than the initial share price, resulting in a minimum coupon payment.

### Closing Price greater than or equal to Initial Share Price?

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
Reference Share 1	Yes	Yes	Yes	Yes	Yes	Yes	No
Reference Share 2	No	Yes	Yes	Yes	Yes	Yes	Yes
Reference Share 3	No	No	Yes	Yes	Yes	Yes	Yes
Reference Share 4	Yes	Yes	Yes	Yes	Yes	Yes	No
Reference Share 5	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Interest Payments	1.00%	1.00%	6.50%	6.50%	6.50%	6.50%	1.00%

# INCOME-ORIENTED MLCDS

## Minimum Coupon + Bonus Example

Another common structure for income-oriented MLCDS is one that provides a minimum coupon with the possibility of an added bonus coupon dependent on the performance of the reference basket of securities. The same rules apply with regard to the underlying basket of securities: on the observation date, each security's price has to be flat or better than its initial share price to qualify for a performance bonus coupon. If any of the securities experience a negative return for that year, in conjunction with the observation dates, the investor will receive the minimum coupon. This structure looks similar to the "either/or" structure with the exception that in this case, the performance coupon is in addition to the minimum coupon.

For example, in the scenario illustrated below, each security is assigned an "initial share price" as well as its performance over the assumed 7-year life of the MLCDS. Each year, the MLCDS will pay the minimum coupon or the minimum coupon plus the performance bonus coupon. If we assume that the minimum coupon is 1% and the performance bonus coupon is 5%, the investor would receive both the minimum coupon plus the performance bonus coupon in years 1 and 4 as each of the reference securities is positive over those observation dates. Conversely, the investor would receive only the minimum coupon in years 2,3,5,6 and 7.

## Closing Price per Reference Security on Applicable Valuation Dates

	Initial Share Price	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
Reference Security 1	\$50	\$56	\$52	\$55	\$57	\$47	\$45	\$43
Reference Security 2	60	65	67	58	67	58	55	61
Reference Security 3	70	71	80	83	72	65	67	72
Reference Security 4	80	84	82	64	82	71	75	83
Reference Security 5	90	91	83	96	93	90	93	95

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
Reference Security 1	12.00%	4.00%	10.00%	14.00%	-6.00%	-10.00%	-14.00%
Reference Security 2	8.33%	11.67%	-3.33%	11.67%	-3.33%	-8.33%	1.67%
Reference Security 3	1.43%	14.29%	18.57%	2.86%	-7.14%	-4.29%	2.86%
Reference Security 4	5.00%	2.50%	-20.00%	2.50%	-11.25%	-6.25%	3.75%
Reference Security 5	1.11%	-7.78%	6.67%	3.33%	0.00%	3.33%	5.56%

## Valuation Share Price greater than or equal to Initial Share Price

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
Reference Security 1	Yes	Yes	Yes	Yes	No	No	No
Reference Security 2	Yes	Yes	No	Yes	No	No	Yes
Reference Security 3	Yes	Yes	Yes	Yes	No	No	Yes
Reference Security 4	Yes	Yes	No	Yes	No	No	Yes
Reference Security 5	Yes	No	Yes	Yes	Yes	Yes	Yes
Performance Event Occurred?	Yes	No	No	Yes	No	No	No
Interest Payments	6.00%	1.00%	1.00%	6.00%	1.00%	1.00%	1.00%

# INCOME-ORIENTED MLCDs

## Performance-Average Coupon Example

The performance-average structure for income-oriented MLCDs uses the actual performance of the underlying basket of securities to determine the coupon payment, subject to any maximum coupon (“cap”) as stated by the terms of the MLCD. These MLCDs may also come with a minimum coupon as well, which would guarantee a certain minimum coupon payment, regardless of the reference basket performance.

On the observation date, an average calculation will be made based on the performance of each security in the reference basket to determine the coupon payment for that respective year. The parameters as to how the calculation is made involve the “stock return floor\*,” which is the lowest possible averaging component for each underlying stock as well as the “maximum coupon (if applicable).” For instance, if the “stock return floor” is -10% and one of the stocks in the basket is -17% on the observation date, the averaging qualifier used for the stock, for that year’s coupon calculation would be -10%. Concerning the upside, if any of the stocks fall between the minimum coupon and the maximum coupon, the averaging component for those particular stocks would be automatically increased to the maximum coupon rate as defined by the corresponding term sheet.

In general, the coupon payment for each year will be determined by each stock’s performance, subject to the stock return floor and the maximum coupon. The performance numbers will then be added together and divided by the total number of securities in the basket to achieve the average return for that year. It is important to note that if the MLCD, as dictated by the term sheet, does not have a minimum coupon payment, and the final coupon calculation is zero or negative, the MLCD will not pay any interest for that period. These MLCDs can be considered “variable coupon rate” instruments as the coupon may change year over year. In the following example, any flat or positive stock performance will result in a 5.00% coupon factor in the averaging calculation. Any negative stock performance will result in a negative coupon factor (limited to an assumed 10% stock floor) in the averaging calculation.

## Closing Price per Reference Shares on Applicable Valuation Dates

Reference Stock	Initial Share Price	Final Share Price	Stock Return	Coupon Factor	Coupon Factor x Stock Weighting
Stock 1	100	100.1	0.10%	5.00%	0.50%
Stock 2	100	100.05	0.05%	5.00%	0.50%
Stock 3	100	106	6.00%	5.00%	0.50%
Stock 4	100	101	1.00%	5.00%	0.50%
Stock 5	100	102	2.00%	5.00%	0.50%
Stock 6	100	89	-11.00%	-10.00%	-1.00%
Stock 7	100	102.5	2.50%	5.00%	0.50%
Stock 8	100	92	-8.00%	-8.00%	-0.80%
Stock 9	100	105	5.00%	5.00%	0.50%
Stock 10	100	110	10.00%	5.00%	0.50%
				Total	2.20%
				Coupon Rate	2.20%

\*See last page for definitions of certain financial terms.

All examples shown in this brochure are for illustrative purposes only.

## Definitions

**Reference Asset** – The reference asset is the underlying security or securities, index, currency, commodity, fund, or other asset which is used to calculate the return of the MLCD at maturity.

**Cap** – Cap is defined as the maximum coupon (yield paid by a fixed-income security) an investor would receive when investing in an income-oriented MLCD, or the maximum return the investor would receive at maturity when investing in a growth-oriented MLCD.

**Stock Return Floor** – The lowest possible averaging component for each underlying asset.

**Accrued Interest** – The interest tied to the reference asset that has accumulated, and has not yet been paid, since the purchase of the MLCD.

**Participation Rate** – The percentage of the reference asset's performance that investors will receive at maturity. For example, a participation rate of 150% means that the investor will receive 150% of the reference asset's performance.

## Risk Considerations

**Liquidity Risk** – Liquidity risk will exist if the issuer chooses not to maintain a secondary market. Available liquidity may vary by issuer. Some issuers may maintain daily liquidity while others may be more limited. Early withdrawal is generally not permitted.

**Secondary Market Risk** – Investors who sell MLCDs prior to maturity are subject to secondary market risk, including the risk of loss, as the market price may be less than the initial principal or face value. There is no guarantee of principal return unless the MLCD is held to maturity. Factors that determine secondary market pricing may include, but are not limited to, supply and demand, general market conditions, then-current interest rates, the level, liquidity and volatility of any relevant index and time remaining until maturity. These factors differ from the parameters used to calculate the CD's final return at maturity. Therefore, secondary market pricing may not be equivalent to a return determined by the calculation method used at maturity.

**Credit Risk** – Any amount higher than the maximum amount insured by the FDIC is an obligation of the issuer and is not insured by the FDIC. This portion is subject to the credit and claims paying ability of the issuer.

**Call Risk** – A MLCD may be callable at the option of the issuer. If the issuer exercises that option, the client will only receive the applicable call price and will not receive any interest payments that would have been payable for the remainder of the term of the MLCD.

**May Not Pay Periodic Interest Payments** – Some MLCDs pay a contingent interest payment only at maturity. MLCDs with an income opportunity performance structure, however, generally pay a variable interest rate, ranging from zero to a pre-determined maximum amount, periodically depending on the performance of the underlying reference asset or index.

**Opportunity Costs** – The opportunity cost of investing in MLCDs can be defined as the forgone "risk-free rate of return" that would be received if the principal was invested in other fixed-income investments.

**No Early Redemption** – MLCDs should be purchased with the intention of holding them until maturity. Some MLCDs may offer an early redemption opportunity, allowing holders the option to redeem prior to maturity. Generally MLCDs held to maturity are entitled to full return of the principal amount invested. A secondary market for the MLCDs may develop, although there is no guarantee that any person will maintain a secondary market. The value of the MLCD sold prior to maturity in the secondary market will be subject to then prevailing market conditions and may include a transaction charge. The sale proceeds may be less or more than the original purchase amount paid.

**FDIC Insurance Limitations** – FDIC insurance does not protect against loss if the MLCD is sold or redeemed prior to maturity. Furthermore, FDIC insurance applies only to the principal amount and the accrued interest, if any, of the MLCD and only if the principal is guaranteed by the issuer of the MLCD. FDIC insurance protects the deposits up to \$250,000 for all deposits held in the same legal capacity per depositor, per institution. Amounts exceeding the FDIC limits are subject to the credit and claims paying ability of the issuer. With regard to growth oriented MLCDs, if the accrued interest is credited to the investor at maturity, the payment of said interest is subject to the paying ability of the issuer. If the issuer fails during the life of a growth oriented MLCD, the accrued interest will not be credited and therefore will not be paid to the MLCD holder.

**There are a wide variety of MLCDs available, with attributes which affect their risks and potential rewards. Before making any investment decision, you should obtain advice from your financial, legal and tax advisers for information about and analysis of the investment, its risks and its suitability in your particular circumstances.**

The information presented is not intended to constitute an investment recommendation for, or advice to, any specific person. By providing this information, First Trust is not undertaking to give advice in any fiduciary capacity within the meaning of ERISA and the Internal Revenue Code. First Trust has no knowledge of and has not been provided any information regarding any investor. Financial advisors must determine whether particular investments are appropriate for their clients. First Trust believes the financial advisor is a fiduciary, is capable of evaluating investment risks independently and is responsible for exercising independent judgment with respect to its retirement plan clients.



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