HOW **STRUCTURED NOTES** FIT IN A PORTFOLIO

I. INTRODUCTION

Structured notes are investments that can be customized to target a level of return with a built-in level of downside protection.

Structured notes are issued by global banks whose returns are based on underlying assets like an index, stock, group of stocks, commodity or foreign currency. Structured notes include two components, a bond component and an options package and can vary in term lengths.

There's also the level of return, or yield, that investors seek when using structured notes. Most structured notes also include a level of protection that partially protects the investor from price declines in the underlying.

In the following pages, we'll go through two examples of protection—hard and soft. Hard protection acts as a 'buffer.' If the underlying declines the investor is only exposed to losses past the protection amount. Soft protection is a 'barrier' and if the underlying declines past the protection level, the investor's principal is exposed to the full losses of the underlying.

If you're looking to invest using structured notes, below are some of the key benefits that a thoughtful structured note portfolio can offer:

- **Built to match any market outlook—** bullish/bearish/sideways
- **Tailored to specific risk profiles** and time horizons
- **A single vehicle with a level of protection and returns** that can be implemented quickly

Structured notes are considered complex products and may not be suitable for some investors.

II. APPROACH

At Halo, our goal is to simplify the approach to using structured notes.

We know the flexibility of structured notes is one of its strengths, and why they are so popular across the globe.

However, that flexibility has led to many applications which can be overwhelming to those that haven't used them before. We want to provide a repeatable way to tackle these choices, and that's how we designed this framework and the examples below.

As a general guide, here is a formula to find a potential strategy and place for structured notes in portfolios:

A	+	B	+	C	=	D
Market Outlook		Investor Risk Tolerance		Existing Portfolio Allocation		Structured Note Implementation

A. Market Outlook

B. Investor Risk Tolerance

Table: A + B

A. Market Outlook	Bullish	Flat / Sideways	Bearish
B. Risk Tolerance			
Aggressive	Uncapped Growth/ Soft (0-20%)	Capped Growth/ Soft (10-30%)	Absolute Growth/ Soft (20-40%)
Moderate	Uncapped Growth/ Soft (10-30%)	Capped or Absolute Growth/Hard (10-30%)	Contingent Income/ Soft (20-40%)
Conservative	Contingent Income/ Soft (10-30%)	Guaranteed Income/ Soft (10-30%)	Guaranteed Income/ Hard (20-40%)

C. Existing Portfolio Allocation Opportunities

(Choose one or more)

Depending on the investor portfolio, there are a range of opportunities to implement structured notes. Structured notes are a re-allocation opportunity to add protection while also maintaining risk/return targets, here are three examples.

Table: C

De-Risk Equities	Simplify Alternatives	Put Cash into Play
When equity returns lead to lofty valuations, or to manage risk due to market/ economic conditions	When alternatives in a portfolio aren't performing or difficult to track and manage	When there is an outsized cash position in the portfolio, either waiting to deploy or low risk tolerance
Maintain upside returns	Maintain upside returns	Increase return potential
Reduce downside risk	Maintain risk targets	Maintain risk targets

D. Structured Note Implementation

Table: D

Strategy	Implementation	Allocation
Decide on potential structured note strategies – **Table** A + B	**Choose** an implementation stragegy that fits the investor – **Table** C	**Take** an 8-12% allocation and implement appropriate structured note(s)

III. INVESTOR EXAMPLES & USE CASES

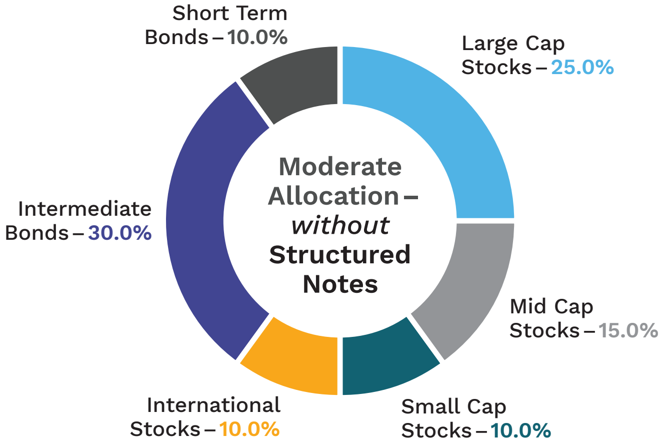
Included are **three examples of structured notes** used in investor portfolios. By no means exhaustive, these examples should give you an idea of how structured notes can be implemented and customized to a tailored investment strategy.

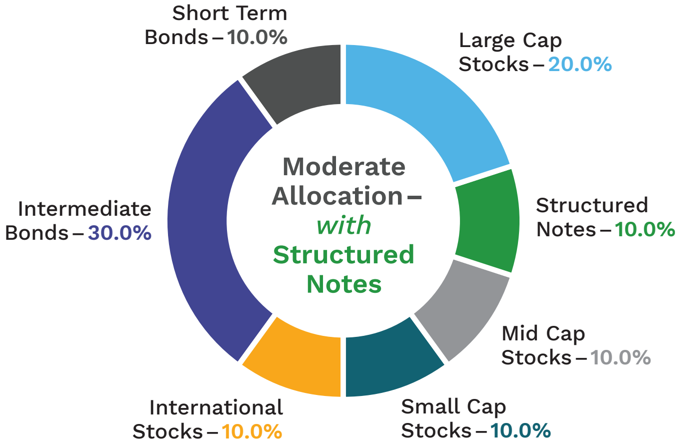
Investor Example 1

Investor 1 has a moderately positioned portfolio as a working professional with a steady stream of income. Although markets have performed well and there are risks in the market, the outlook is generally positive for their investment horizon. This investor also has an overweight allocation to equities from the strong performance seen in their holdings over the last few years.

A (Market Outlook - Bullish) + B (Risk Tolerance - Moderate) + C (De-Risk Equities) =

- Uncapped Growth Note (equity index), soft protection (10-30%)
- Add upside returns and protection to equity allocation
- Hypothetical moderate portfolio allocation with and without structured notes





Hypothetical Structured Note Example

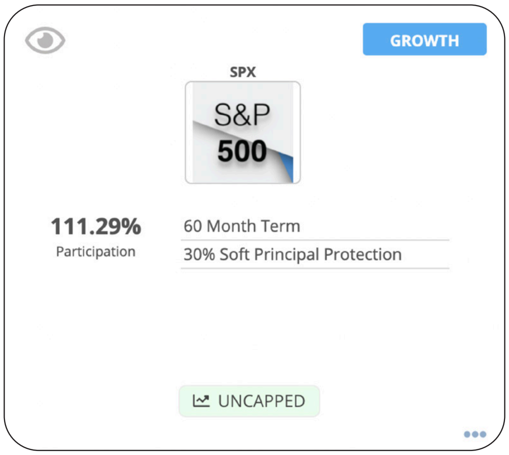
This structured note example is linked to the S&P 500 and has a five year maturity. In this portfolio example, a portion of the large/mid cap equity sleeve is re-allocated to reduce potential downside risk while maintaining return targets.

This type of structured note has uncapped upside participation of 111%, meaning that the investor can participate in above market returns given the generally favorable outlook over the time period.

Since we know that unexpected market risks can surface, included is 30% soft protection for the investor's moderate risk tolerance. This means that any losses up to 30% at maturity will be covered. If the performance of the underlying is below -30%, the investor will be exposed to the full loss amount. Like most structured notes, the negative return level matters only on the maturity date, and not before.

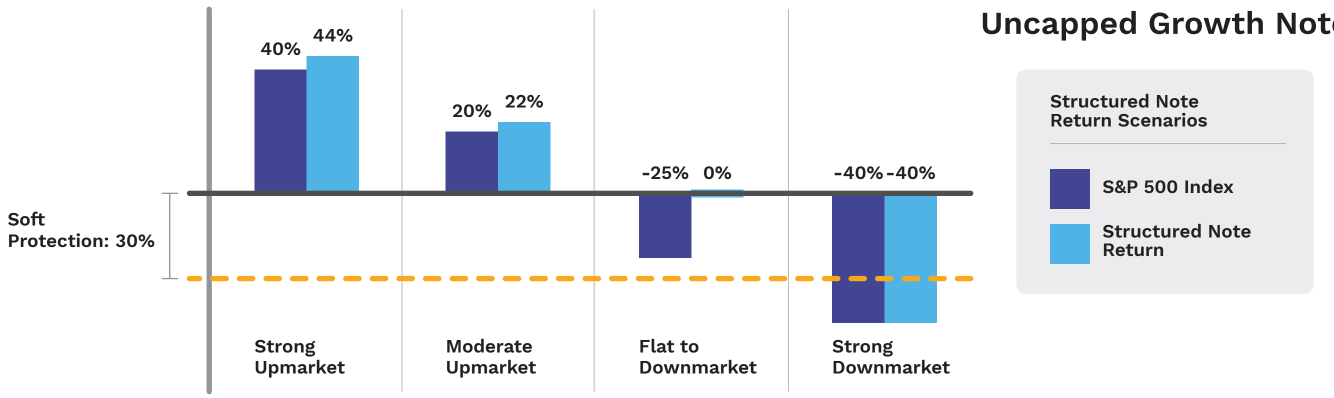
Uncapped Growth Note

Soft Protection (30%)



Investor Example 1 continued

Hypothetical Structured Note Performance



Market Return Scenarios

Strong upmarket (+40%)

If the underlying is up significantly over the life of the structured note, investor returns will be uncapped and greater than the underlying (i.e. 111%)

Moderate upmarket (20% to 0%)

In moderately positive markets, the notes return will also be 111% of the underlying at maturity.

Flat to downmarket (0% to -30%)

In flat to negative markets within the protection amount, investors will be protected from losses and receive their full principal.

Strong downmarket (-40%)

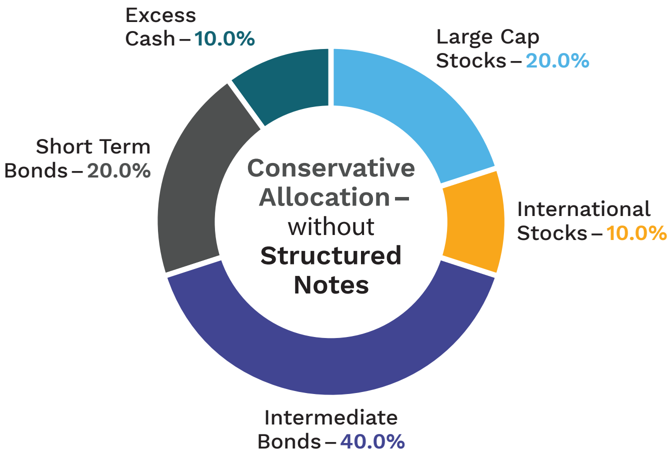
If the underlying declines more than the protection amount (-30%), the investor is exposed to the full losses of the index.

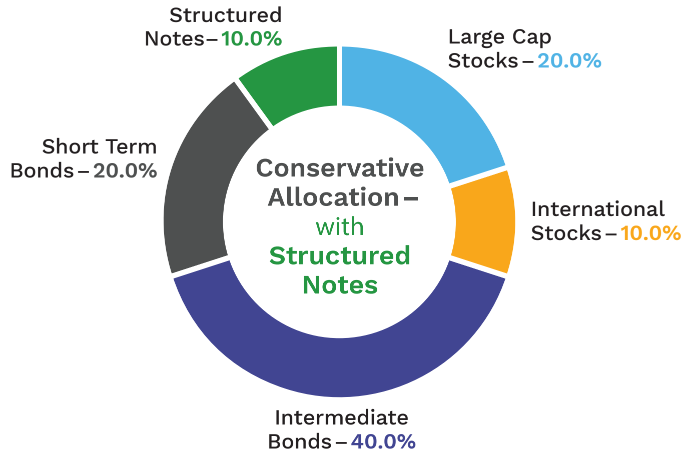
Investor Example 2

Investor 2 has a low risk tolerance and wants to focus on income now that they are later in their retirement journey. There is a modest outlook for the markets but the risk of negative returns without a full-time salary has them wanting more certainty. There is an extra portion of cash in the portfolio that is being held in case there is an opportunity to deploy for current income.

A **(Market Outlook - Bearish) +** B **(Risk Tolerance - Conservative) +** C **(Put Cash Into Play) =**

- Guaranteed Income Note, Hard Protection (20-40%)
- Shift cash off the sidelines for guaranteed income
- Hypothetical conservative portfolio allocation with and without structured notes





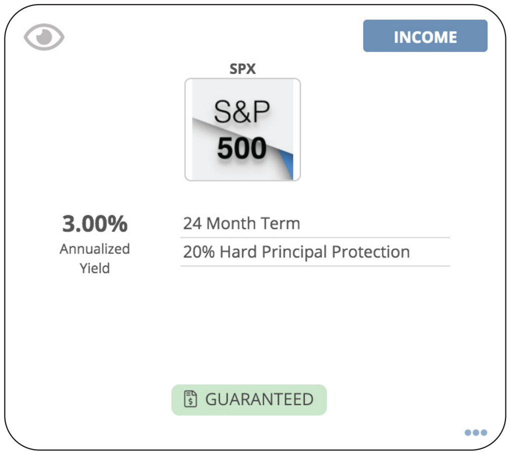
Hypothetical Structured Note Example

With a guaranteed income note, regular coupon payments occur regardless of underlying performance. This is ideal for a investor that would like to manage risks and a need for regular income. By taking an allocation of excess cash, a structured note allows an investor to receive coupon payments, while maintaining risk/return targets with a level of downside protection.

Included is 20% hard principal protection, meaning that any losses up to 20% at maturity will be covered. If the performance of the underlying is below -20% at maturity, the investor will only be exposed to losses past this amount—creating a downside 'buffer.'

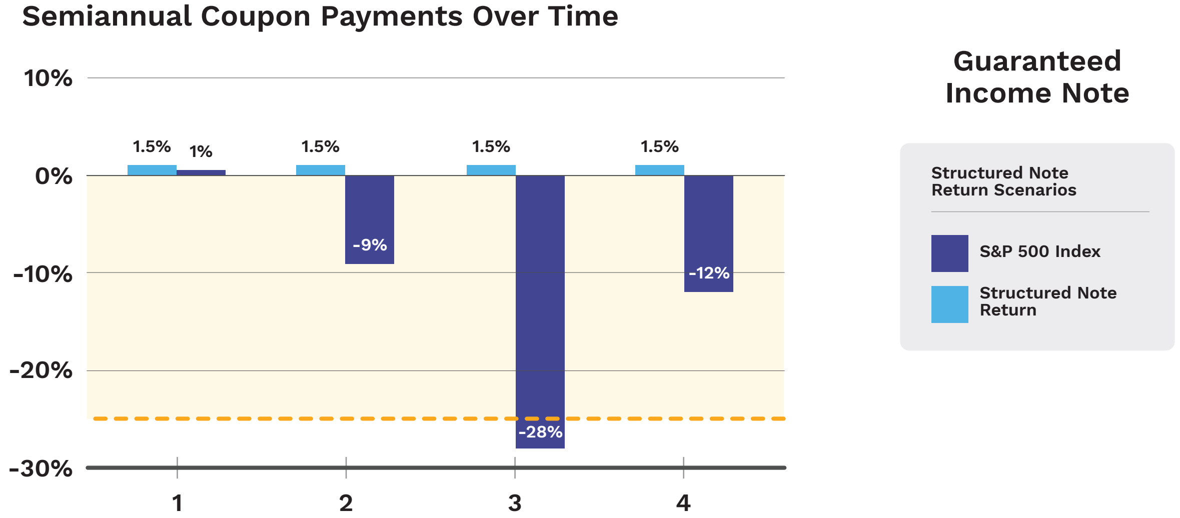
Guaranteed Income Note

Hard Protection (20%)



Investor Example 2 continued

Hypothetical Structured Note Returns



Market Return Scenarios

Strong upmarket (+40%)

If the underlying (S&P 500 Index) is up significantly over the life of the structured note, the investor receives the semiannual coupon payments totaling 3% annually and their full principal at maturity.

Moderate upmarket (20% to 0%)

In moderately positive markets, the notes return will be 3% annualized yield and full principal is returned at maturity.

Flat to downmarket (0% to -25%)

In flat to negative markets within the protection amount, investors will receive the regular coupon payments and be protected from losses on their principal.

Strong downmarket (-40%)

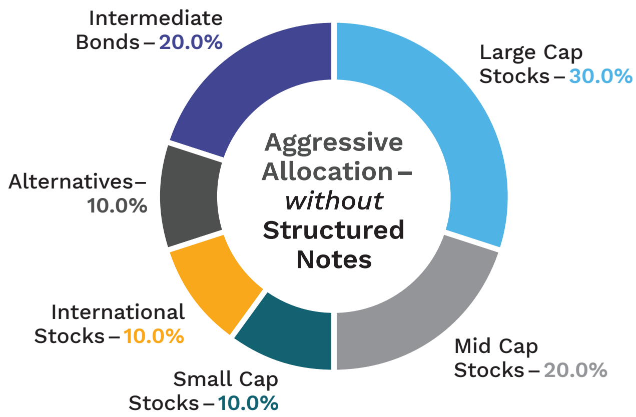
In strong downmarkets, the investor will continue to receive semiannual coupon payments totaling 3% annually. These payments still occur even if the underlying (S&P 500) experiences significant losses. If at the maturity date the S&P 500 is below the -20% protection level, the investor is only exposed to losses on their principal past this amount, but keeps all semiannual coupon payments.

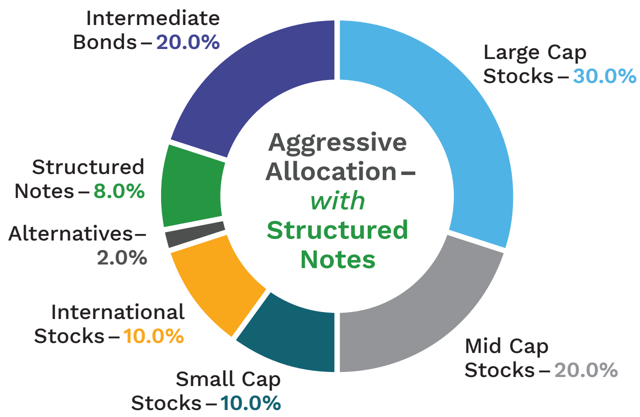
Investor Example 3

Investor 3 has a higher risk tolerance, and while the markets have performed well the possibility that they move sideways is looking probable. Being an investor that's comfortable including alternatives in their portfolio, there is an opportunity to re-allocate to structured notes.

A (Market Outlook - Flat) + B (Risk Tolerance - Aggressive) + C (Simplify Alternatives) =

- Capped Growth Note (equity index), Soft Protection (10-30%)
- Simplify alternatives allocation
- Hypothetical aggressive portfolio allocation with and without structured notes





Hypothetical Structured Note Example

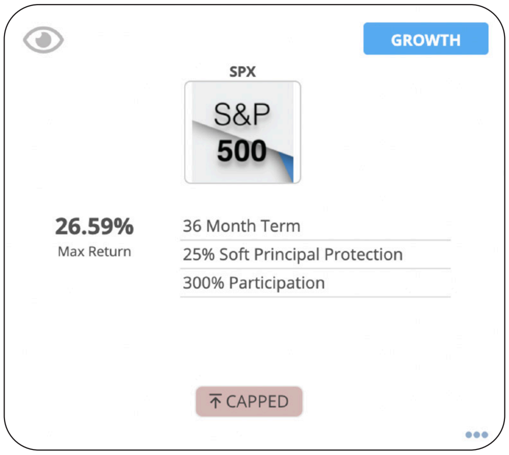
This structured note example is linked to the S&P 500 and has a three year maturity. By repositioning a portion of the alternatives allocation, structured notes can be a supplement to alternative investment strategies for managing market risks.

Although this type of structured note has a cap on upside returns, it can provide meaningful performance in moderate to flat markets from the 300% upside participation.

Included is 25% soft protection, meaning that any losses up to 25% at maturity will be covered. If the performance of the underlying is below -25%, the investor will be exposed to the full loss amount. Like most structured notes, the negative return level matters only on the maturity date, and not before.

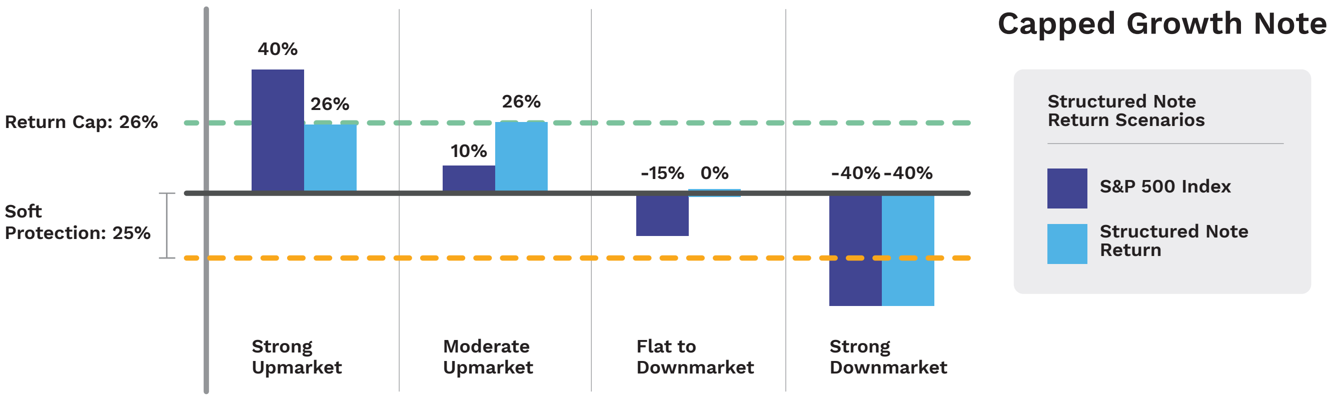
Capped Growth Note

Soft Protection (25%)



Investor Example 3 continued

Hypothetical Structured Note Performance



Market Return Scenarios

Strong upmarket (+40%)

If the underlying is up significantly over the life of the structured note, investor returns will be subject to the max return cap.

Moderate upmarket (20% to 0%)

In moderately positive markets, the notes return will be 3x (300%) of the underlying subject to the max return cap.

Flat to downmarket (0% to -25%)

In flat to negative markets within the protection amount, investors will be protected from losses and receive their full principal.

Strong downmarket (-40%)

If the underlying declines more than the protection amount (-25%), the investor is exposed to the full losses of the index.

IV. PUTTING IT ALL TOGETHER

The examples covered show just a few ways how structured notes can be used in portfolios. Although the returns or yield on these structured note examples are subject to change, we hope the general approach to narrowing the choices available is helpful in explaining the power of structured notes.

It is important to remember that implementing structured notes should be based on investor needs, a corresponding investment outlook and a practical re-allocation.

As a helpful guide, just remember:

A + B + C = D

If you'd like to discuss these and more examples, please reach out to your financial advisor!

Learn more at **haloinvesting.com**

FINRA Reviewed

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What are Structured Notes?
Structured notes are securities Issued by financial institutions whose returns are based on, among other things, equity indexes, a single equity security, a basket of equity securities, interest rates, commodities, and/or foreign currencies. Thus, your return is “linked” to the performance of a reference asset or index. Structured notes have a fixed maturity and include two components–a bond component and an embedded derivative. Financial institutions typically design and issue structured notes, and broker-dealers sell them to individual investors. Some common types of structured notes sold to individual investors include: principal protected notes, reverse convertible notes, enhanced participation or leveraged notes, and hybrid notes that combine multiple characteristics.

Risks and Other Considerations with Structured Notes Complexity
You and your broker should take time to fully understand the manner in which your return on a structured note is calculated. You should understand the reference asset(s) or index(es) and determine how the note’s payoff structure incorporates such reference asset(s) or index(es) in calculating the note’s performance. This payoff calculation may include leverage multiplied on the performance of the reference asset or index, protection from losses should the reference asset or index produce negative returns, and fees.

Market risk
Some structured notes provide for the repayment of principal at maturity, which is often referred to as “principal protection.” This principal protection is subject to the credit risk of the issuing financial institution. Many structured notes do not offer this feature. For structured notes that do not offer principal protection, the performance of the linked asset or index may cause you to lose some, or all, of your principal. Depending on the nature of the linked asset or index, the market risk of the structured note may include changes in equity or commodity prices, changes in interest rates or foreign exchange rates, or market volatility.

Issuance Price and Note Value
The price you will pay for a structured note at issuance will likely be higher than the fair value of the structured note on the date of issuance. Issuers now disclose an estimated value of the structured note on the cover page of the offering prospectus, allowing investors to gauge the difference between the issuer’s estimated value of the note and the issuance price. The estimated value of the notes is likely lower than the issuance price of the note to investors because issuers include the costs for selling, structuring or hedging the exposure on the note in the initial price of their notes. After issuance, structured notes may not be re-sold on a daily basis and thus may be difficult to value given their complexity.

Liquidity
Your ability to trade or sell structured notes in a secondary market is often very limited as structured notes (other than exchange-traded notes known as ETNs) are not listed for trading on security exchanges. As a result, the only potential buyer for your structured note may be the issuing financial institution’s broker-dealer affiliate or the broker-dealer distributor of the structured note. In addition, issuers often specifically disclaim their intention to repurchase or make markets in the notes they issue. You should, therefore, be prepared to hold a structured note to its maturity date, or risk selling the note at a discount to its value at the time of sale.

Daily Pricing
The pricing accuracy is questionable because most structured notes never trade after issuance. Prices are usually calculated by a matrix, which is very different than net asset value. Matrix pricing is essentially a best-guess approach by the issuer.

Tax Considerations
The tax treatment of structured notes is complicated and, in some cases, uncertain. Before purchasing any structured note, you may wish to consult with a tax advisor. You also should read the applicable tax risk disclosures in the prospectuses and other offering documents of any structured note you are considering purchasing.