

## SSI Unlevered Hedged Convertible FAQ

### 1. What is an Unlevered Hedged Convertible Arbitrage allocation?

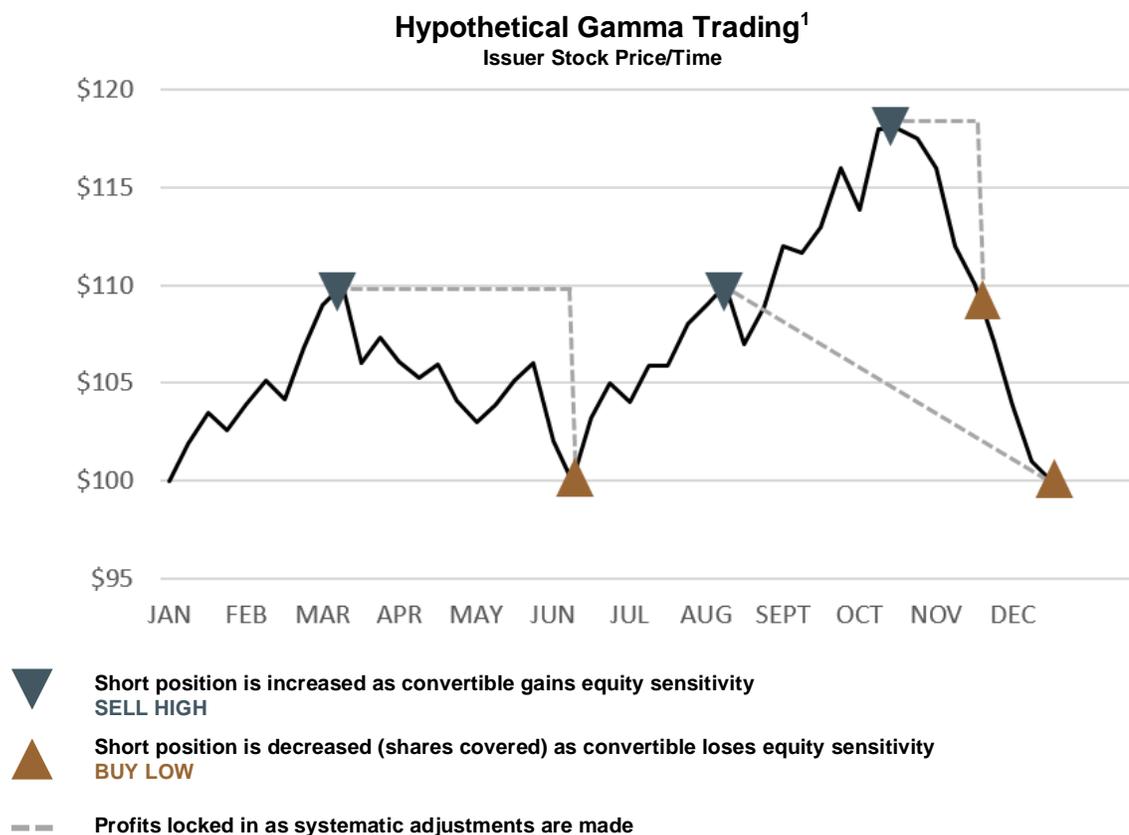
An Unlevered Hedged Convertible allocation is a conservative version of Convertible Arbitrage. The investment objective of this strategy is to provide enhanced income and a diversifying return, while still significantly reducing portfolio volatility. The strategy delivers high interest income available on convertible securities, while hedging the equity risk by taking a short position in the same company's underlying common stock. The opportunity set also includes gains through inefficiencies that exist in the marketplace and an increase in volatility in the market activity.

### 2. What are the drivers of returns for an Unlevered Hedged Convertible allocation?

The primary drivers of returns include the following:

- i. Interest or dividend income on long convertible position (either bond or preferred)**  
The interest or dividend income component is straightforward. Convertible bonds are debt securities that provide investors an interest payment. This income is contractual until maturity.
- ii. Interest rebate on short positions**  
Portfolio positions are commonly hedged by pairing a long convertible position with a short position in the common stock of the convertible issuer. This short creates a potential income component, called the short rebate, while mitigating equity-linked exposure. In summary, the short rebate is the interest earned on the cash proceeds from short positions.
- iii. Net capital gains from trading profits resulting from convertible securities moving toward fair value**  
Skilled Hedged Convertible managers aim to invest in convertible securities where the price of the convertible is below the fundamental fair value of the components – a straight bond and embedded call option. The disparity between the price and fundamental value of convertible bonds creates a discount to fair value and an opportunity for arbitrage investors to actualize the discount.
- iv. Net capital gains from trading profits created by stock price volatility (gamma trading)**  
A Hedged Convertible allocation benefits from equity volatility, as profits are generated from underlying stock price moves in either direction. When the

price of the issuer's common stock rises, a Hedged Convertible position will be under-hedged and benefit from the upside equity participation. When the price of the issuer's common stock declines, a Hedged Convertible position will be over-hedged and benefit from the short position. This creates a natural return stream through the process of reestablishing neutral hedging by selling high and buying low. Below is a summarized explanation of a hypothetical gamma trade:



1. The above example is a hypothetical illustration of investment themes. It does not represent the outcome of actual trades or the performance of a particular security.

- **Neutral hedge** on Jan 1 at \$100, gain/loss on convertible should offset loss/gain on stock short
- **Increase in stock price**, delta (equity sensitivity) of the convertible increase, SELL more shares to get back to neutral hedge
- **Decrease in stock price**, delta of the convertible decreases, BUY back (covers) shares to get back to neutral hedge
- **Systematically Buying Low and Selling High**

**3. How does the return profile of an Unlevered Hedged Convertible allocation compare to that of long-only convertible exposure?**

Similar return characteristics exist between both Hedged Convertible and long-only convertibles, which include a predictable income stream and a reduced risk profile. Additionally, both strategies tend to perform well on a relative basis during times of increased volatility. The primary difference is the amount of equity beta captured in the two convertible strategies. Unlevered Hedged Convertible strategies are considered market neutral and deliver low equity beta and a lower correlation to other fixed income asset classes. Long-only convertible strategies capture a significant degree of equity upside participation with reduced equity downside risk.

In a portfolio allocation, an Unlevered Hedged Convertible allocation can be categorized as a fixed income alternative or as a defensive liquid alts solution with a focus on predictable income. The strategy takes advantage of the interest income available on convertible securities, while hedging the equity risk of the convertible with a short position in the same company's underlying common stock. The strategy can benefit from heightened equity volatility.

Long-only convertibles can be viewed as a defensive or low volatility equity allocation or as an opportunistic fixed income solution with a focus on equity upside accompanied by lowered downside risk and enhanced income.

**4. What is the most favorable environment and the most challenging environment for an Unlevered Hedged Convertible allocation?**

Favorable Environment:

- Fluctuating equity volatility
- Narrowing or stable credit spreads
- High rate of new issuance

Challenging Environment:

- Rapidly widening credit spreads
- Declining credit quality
- Reduced equity volatility

**5. How does an Unlevered Hedged Convertible allocation fit in a portfolio?**

Allocators utilize Unlevered Hedged Convertible strategies as part of a conservative liquid alts allocation or as a diversifying fixed income option. The strategy consistently provides a low volatility return profile and is a unique solution for a defensive, low duration or all-weather portfolio allocation. Due to the lower duration profile and multiple return drivers, the

strategy is an alternative to most other fixed income allocations and can perform favorably when other fixed income assets classes are under duress. The theoretical duration of the strategy is lower than most other fixed income asset classes and the empirical duration has historically been even lower.

#### **6. What is the benefit of allocating to a dedicated Hedged Convertible manager?**

Unlevered Hedged Convertible strategies provide investors with the ability to capitalize on unique opportunities in different market cycles. An allocation exhibits clear advantages by providing differentiating return drivers. The asset class has produced risk and return characteristics that are commensurate with targets sought by a majority of institutional investors while providing diversifying exposure. It also provides a low duration and low risk profile.

The convertible market has become more complex over the past several years and it requires a dedicated team with dedicated resources focused on the asset class to properly exploit all potential return drivers in a growing asset class.

#### **7. Is an Unlevered Hedged Convertible allocation a tactical or strategic portfolio allocation?**

Unlevered Hedged Convertibles serves as a compelling strategic allocation. An allocation helps to provide effective diversification and decrease the overall risk/return profile of any portfolio allocation.

The multiple sources of return in an Unlevered Hedged Convertible strategy allows managers to be tactical in how they source alpha. This inherent flexibility of alpha generation enables skilled Hedged Convertible managers to extract attractive returns irrespective of macro conditions. Multiple decades of compelling returns, combined with recent positive structural transformations in the market illustrate why a portfolio of Unlevered Hedged Convertibles merits inclusion into a core asset allocation.

#### **8. What happened to the Convertible Arbitrage market in 2008?**

Prior to 2008, years of strong returns were fueled by many hedge funds deploying meaningful degrees of leverage. Investors experienced historical market dislocations in the second of half of 2008 which led to massive de-leveraging by proprietary trading desks and Convertible Arbitrage hedge funds. This created unprecedented price pressure and forced selling. Additionally, the SEC placed a temporary ban on short selling which further impacted liquidity.

In the third quarter of 2008, the ownership profile of convertibles was heavily skewed in favor of hedge fund investors, at 73%, compared to 27% for outright long only convertible

investors. This unbalanced ownership profile only exaggerated the unprecedented selling pressure in the convertible market.

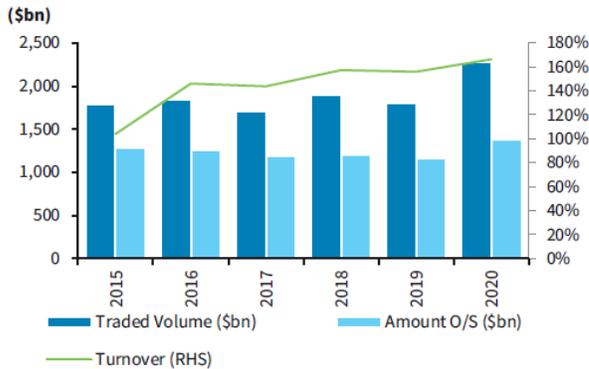
However, there have been significant improvements in the convertible market to support a healthy convertible market. First, the Volcker Rule eliminated the propriety trading desks. Second, the investor profile of convertibles is much more balanced between alternative funds and outright investors. As of the beginning of 4Q 2020, the distribution between alternative funds and outright investors had evolved to 40% and 60%, respectively. Additionally, the alternative funds that are investing in the convertible market are utilizing significantly lower leverage levels.

Today’s market has significantly curbed not only the amount of leverage being deployed in the market, but also created a relatively uncrowded, balanced market of experienced, focused, and skilled Hedged Convertible managers with ample opportunities to take advantage of mispricing.

**9. What is the liquidity profile of the convertible market?**

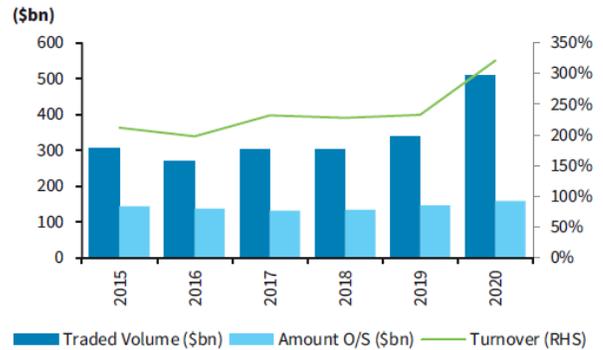
The convertible bond market offers superior liquidity compared to some larger asset classes. In fact, the convertible market is more liquid than the high-yield market, according to volumes recorded by the Trade Reporting and Compliance Engine (TRACE) of the National Association of Securities Dealers and as shown by Barclays Research:

*High Yield Market*



Source: Total volumes and par amounts of TRACE-eligible high yield market as reported by MarketAxess. 2020 total straight-line annualized. Source: MarketAxess, As of 12/31/2020

*Convertible Market*



Source: FINRA, Bloomberg Barclays Convertible Composite, Barclays Research as, As of 12/31/2020

The structure of convertible bonds allows market participants the ability to manage risk through hedging – shorting the underlying common stock and through the use of options.

**10. What is the duration profile of the convertible asset class?**

Historically, the convertible asset class has maintained a very low duration profile. The average duration for the asset class is generally around 2 years, plus or minus 0.5 years. This compares favorably to the duration profile for other fixed income asset class. This is one of the reasons that convertibles have historically been one of the best performing asset classes in a rising rate environment.

#### **11. Performance of convertibles in a rising rate environment?**

Rising rates can lead to substantial losses in most fixed income investments, but convertibles have historically provided a diversifying allocation during these periods. Over the past 30+ years, convertibles have had positive returns 10 out of the 12 rising rate environments<sup>2</sup>.

The outperformance is in part due to the short duration characteristics of convertibles, which allows for minimal sensitivity to changes in interest rates. Additionally, the equity option tends to increase in value when interest rates rise in response to favorable economic conditions.

2. Source: SSI internal research; Bank of America Global Research; Bloomberg; Barclays. Rising interest rate environment periods based on SSI internal research/evaluation where the 10-Year Treasury rises at least 100 bps in a twelve-month rolling period. Study conducted since Dec 1989. August 2, 2021.

#### **12. What is the credit quality profile of an Unlevered Hedged Convertible allocation?**

As of 7/31/2021, the ICE BofA All US Convertible Index (VXA0) was composed of 12% investment grade rated securities, 11% below investment grade securities, and 77% non-rated securities with an average BB+ rating<sup>3</sup>. Seemingly, when compared to the 19% investment grade securities on 12/31/2018, one could surmise that the market value of the investment grade credit quality securities has decreased. However, the market value of the index has increased by 96% between both periods, expanding the overall universe, which has also resulted in a 23% increase in the market value of investment grade convertible securities, despite a smaller representation in the overall market.

The vast majority of convertibles come to market via Rule 144A which allows for a rapid offering to Qualified Institutional Buyers. Seeking a rating from one of the rating agencies is typically a lengthy process that involves paying a fee to the rating agency and most convertible issuers do not chose to undergo the process. When we look at the aggregate sector level net debt-to-enterprise value for convertible issuers, we find the credit profiles are healthy.

GICS Sectors	Net Debt to EV (as of 12/31/2020) <sup>4</sup>			
	Aggregate	25th Percentile	Median	75th Percentile
	%	%	%	%
Communication Services	23.40	-3.80	8.20	33.00
Consumer Discretionary	-1.80	-1.90	1.60	20.10
Consumer Staples	27.60	18.20	23.40	25.40
Energy	38.70	38.30	61.90	75.40
Financials	61.70	32.80	61.70	76.00
<b>Health Care</b>	<b>9.00</b>	<b>-5.00</b>	<b>1.30</b>	<b>18.20</b>
Industrials	20.20	11.30	20.60	42.50
<b>Information Technology</b>	<b>0.10</b>	<b>-4.10</b>	<b>0.20</b>	<b>7.90</b>
Materials	26.90	9.20	19.60	36.10
Real Estate	37.30	27.30	42.30	62.20
Utilities	33.80	34.70	39.40	43.70
<b>Whole Universe</b>	<b>13.00</b>	<b>-2.10</b>	<b>9.00</b>	<b>36.40</b>

Additionally, for many issuers, the convertible is the only debt outstanding and, as the table above demonstrates, cash levels can be quite high in relation to overall debt.

3. Source: Bank of America Global Research, ICE BofA All US Convertible Index, VXA0, August 2, 2021.

4. Source: Barclays Research, VXA0, January 4, 2021.

### 13. What is the default rate for convertibles?

The convertible market generally contains healthy company profiles and balance sheets. From 2003 - Q1 of 2021, the average default rate in the U.S. convertible market was 1.34%. In 2020, default rate for convertible securities was 1.74%, significantly lower than the High Yield default rate of 6.4%<sup>5</sup>.

5. Source: Bank of America Global Research, ICE BofA All US Convertible Index, VXA0, ICE BofA US High Yield Index, HOA0, SSI internal research, August 2, 2021.

### 14. Describe the new issuance market for convertibles.

The recent convertible market has been defined by a very robust new issuance pipeline that has significantly expanded the investment opportunities in the space. New issuance for the U.S. Convertible Market has continued its healthy pace with \$60.4bn YTD thru July 2021. After a record 2020 new issuance of \$113.7bn, 2021 is on pace to have another strong year. With approximately \$97.8bn in new issuance over the trailing twelve months and given that the typical convertible issue usually comes to market with terms for 5-7 years, the supply is likely to help maintain a healthy market for years to come<sup>6</sup>.

New issuance in the market created more sector diversification. The sector configuration of the convertible market is not replicated in broad equity indices and unique when compared to fixed income asset classes. The convertible universe has been dominated by structural

growth companies in the Technology and Healthcare space that are disruptors with large addressable markets and potential for high growth rates that are likely to be long lasting.

Since the COVID pandemic began in early 2020, cyclical issuers have come to the market to re-capitalize and strengthen their ability to weather any potential additional economic headwinds. This phenomenon is not new to the convertible market, as companies seeking capital during times of market stress often recapitalize via convertibles. Overall, the cyclical segment of the market has grown as a proportion of the overall market, providing opportunities to benefit from the reopening trade.

The robust new issuance in the market also provides an expanding opportunity set for active managers to invest in balanced convertibles which in our view provide the most favorable risk/return profile. Balanced convertibles exhibit characteristics of both equities and bonds, leading to an asymmetric profile that many investors favor. These securities are commonly characterized by moderate yields, stock price sensitivity, and convex return pattern, which provides meaningful downside protection.

6. Source: BofA Global Research, Global Convertibles Chartbook, August 2, 2021.

#### **15. Does the current market environment offer a good buying opportunity for Unlevered Hedged Convertible investors?**

Unlevered Hedged Convertible investors benefit from multiple sources of return, including a consistent theoretical cheapness of asset class. The stability of the convertible market's cheapness enables skilled managers to extract attractive returns irrespective of macro conditions and supports why a persistent "good buying opportunity" exists.

To entice investors, convertible bonds are often issued at prices below the fundamental value of their components – a straight bond and embedded call option. The disparity between the price and fundamental value of convertible bonds creates an opportunity for arbitrage investors. This discount is known as theoretical cheapness. From 2011-2020, the theoretical cheapness of the U.S. convertible market at month-end averaged 1.76%. During the same period, there have only been three times at month-end that the overall convertible market was rich (or at a premium to its fundamental value)<sup>7</sup>.

An Unlevered Hedged Convertible portfolio manager will seek to isolate this cheapness and limit, through hedging, the exposure to risk factors that might affect the value of the portfolio. The manager's skill and experience in doing so, combined with the other sources of return, can support an allocation that merits strategic exposure to the asset class, producing stable returns and diversification benefits.

7. Source: Bank of America Global Research, ICE BofA All US Convertible Index, VXA0, January 4, 2021.

## 16. How does an investor access Unlevered Hedged Convertible?

Investors can access an Unlevered Hedged Convertible portfolio through a separate account, a limited partnership, or a mutual fund.

In fact, SSI manages Unlevered Hedged Convertible strategies through separate accounts and also sub-advises a hedged convertible mutual fund through American Beacon Advisors, Inc. SSI has the ability to customize portfolios in a separate account structure depending on the specified needs of the client.

© 2021 SSI Investment Management LLC

*SSI Investment Management LLC believes all the information contained in the report to be accurate but we do not guarantee its accuracy. The analyst(s) principally responsible for the preparation of this research report certify that the views expressed in this research report accurately reflect his/her (their) personal views about the subject security (ies) or issuer(s) and that his/her (their) compensation was not, is not, or will not be directly or indirectly related to the specific recommendations or views contained in this research report. None of the information reported or opinions expressed constitute a solicitation of the purchase or sale of securities or any commodities.*

*SSI operated under the name of SSI Investment Management, Inc. (1/1/1973-4/30/2019) and as of 5/1/2019 operates as SSI Investment Management LLC*