Convertibles: An Innovative Solution for Rising Funding Ratios

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The funded ratio for U.S. corporate pensions has increased to levels not seen since before 2008. Convertibles offer these well-funded plans a prudent alternative.

As well-funded plans seek to de-risk, plans sponsors and their consultants should consider convertibles as a thoughtful risk controlled equity solution, while still maintaining some market exposure. Convertibles can provide defensive equity exposure, complement a low volatility equity allocation, or enhance the risk-return profile of a return-seeking asset portfolio.

According to management consulting firm, Milliman, the average funded ratio for the 100 largest corporate pensions in the U.S. was 98.3% at the end of April 2021. Other consulting firms have conducted similar studies, and the conclusion is the same: corporate pensions' funded status is at a level not seen since before the GFC.

Convertibles as a Defensive or Low Volatility Equity Alternative[1]

Many well-funded plans actively implement low volatility or defensive equity allocations. As the tables below exhibit, pairing convertibles with low volatility equities can improve the risk-return profile of a plan sponsor's low volatility equity allocation. **Over the last 20 years, a 50/50 allocation to low volatility equities and convertibles has resulted in superior risk-adjusted returns represented by a higher Sharpe Ratio.**

Total Return as of December 31, 2020			
U.S. Statistics	**5 Years**	**10 Years**	**20 Years**
LV Equity[1]	10.51%	12.20%	9.17%
50% LV / 50% CVT	**14.20%**	**12.51%**	**9.06%**
Convertibles (CVT)[1]	17.76%	12.89%	8.71%

Sharpe Ratio as of December 31, 2020			
U.S. Statistics	**5 Years**	**10 Years**	**20 Years**
LV Equity[1]	0.74	1.04	0.69
50% LV / 50% CVT	**1.09**	**1.14**	**0.70**
Convertibles (CVT)[1]	1.22	1.00	0.58

For investors constructing portfolios with a more global focus, a blended allocation results in an even higher Sharpe Ratio. Specifically, the blending of two non-perfectly correlated asset classes with minimal issuer overlap results in dampened volatility.

Total Return as of December 31, 2020			
Global Statistics	**5 Years**	**10 Years**	**20 Years**
Global LV Equity[2]	8.72%	9.33%	7.47%
50% Global LV / 50% Global CVT	**10.85%**	**8.87%**	**7.76%**
Global CVT[2]	12.25%	7.79%	7.47%

Sharpe Ratio as of December 31, 2020			
Global Statistics	**5 Years**	**10 Years**	**20 Years**
Global LV Equity[2]	0.69	0.88	0.54
50% Global LV / 50% Global CVT	**1.32**	**1.25**	**0.76**
Global CVT[2]	0.98	0.69	0.54

[1] LV Equity is represented by the S&P 500 Low Volatility Equity Index; Convertibles are represented by the ICE BofA US Convertible Index (VXA0).
[2] Global LV Equity is represented by the MSCI World Minimum Volatility Equity Index; Global Convertibles are represented by the Refinitiv Global Convertible Index.

Convertibles as Return Seeking Assets

As plans become more well-funded, the need for income to meet liabilities is a priority. Investors often times seek to generate returns and through credit investments such as high yield bonds, emerging market debt, or investment grade bonds. However, the tailwind that declining interest rates have provided fixed income since 1981 (when interest rates peaked) is unlikely to continue. As yields and spreads have declined, the coupon income generated has subsequently dropped. Looking ahead, it is highly likely that investors will realize substantially lower returns from their traditional credit allocations and may, in fact, suffer losses. **Defensive, lower delta convertible strategies, which have a materially lower standard deviation than a more traditional convertible strategy, have repeatedly demonstrated the capacity to generate positively asymmetric, risk-adjusted returns across a full market cycle, including during periods when interest rates have risen.**

The table below illustrates the enhanced risk-return characteristics of a lower equity beta and lower standard deviation convertible allocation versus both high yield and emerging market debt over the long-term. Since there is not a suitable index with a long-term track record for defensive convertibles, the analysis incorporates the track record of the Advent Phoenix Convertible Income Strategy (dating back to October 1996). The merits of diversifying a fixed income allocation with lower delta convertibles are clear, as evidenced by Phoenix's higher return and Sharpe Ratio versus U.S. high yield, emerging market debt, and investment grade corporate bonds.

Since Inception Risk-Return Characteristics Oct 18, 1996 – April 30, 2021	Annualized Return	Annualized Standard Deviation	Annualized Sharpe Ratio	Effective Duration as of April 30, 2021	Average Credit Quality as of April 30, 2021
Phoenix Composite (Gross)[3]	**8.49**	**8.09**	**0.83**	**3.1 years**	**BB-**
Phoenix Composite (Net)	**7.64**	**8.09**	**0.74**	**3.1 years**	**BB-**
ICE BofA US High Yield Index (H0A0)	6.93	8.83	0.56	4.1 years	B+
JPM EMBI Global Diversified Index	8.48	10.65	0.60	7.9 years	BB+
ICE BofA US Corporate Index (C0A0)	5.97	5.41	0.72	8.2 years	A-

Source: Advent Capital, ICE Data Services, JPMorgan

Fixed income investors concerned that their portfolios have less yield and more duration risk than in past years, should also consider defensive convertibles as a solution. **As of April 30, 2021, the effective duration of the Phoenix Convertible Income Strategy was 3.1 years, versus 4.1 years for U.S. high yield and approximately 8 years for both emerging market debt and investment grade bonds.** The duration risk currently embedded within many fixed income portfolios is extraordinary and could lead to significant losses in the future. Investors' fixed income portfolios are subject to increased risk given the historically low levels of interest rates. Fixed income markets already experienced what a sharp rise in rates feels like in March of this year, and while the Fed has signaled their intentions to keep rates low, it is

[3]The Phoenix Composite is the Phoenix Convertible Income Institutional Composite. Inception date of the Phoenix Composite was October 18, 1996. Returns presented on a gross basis are substantially higher than returns presented on a net basis because gross returns do not reflect the deduction of investment advisory fees and other expenses that would be incurred by a client. Investment advisory fees have a compounding effect in reducing the value of a client portfolio over time. Past performance is not a guarantee of future results. Please see the "Disclosures" section at the end of this presentation.

possible for interest rates to normalize as the economy improves. Historically, convertibles have performed exceptionally well in periods of rising interest rates, and this is driven by two main factors. First, periods of rising rates are typically accompanied by rising equity markets and stable to improving credit spreads. Thus, the embedded option will benefit from strengthening equity prices and improving credit spreads will help offset any duration related losses associated with the fixed income portion of the convertible. Second, convertibles have a shorter duration profile relative to other fixed income asset classes, so they are less negatively impacted in periods when interest rates move higher.

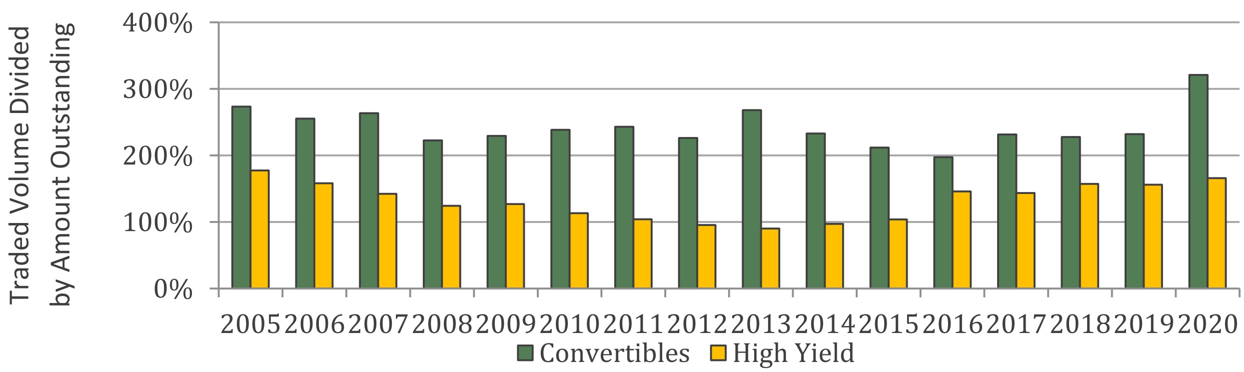
Defensive Convertibles: Low Correlation, Low Beta to Equities

It is important for credit investors to understand that **defensive convertibles do not represent an equity surrogate**. Despite investing in equity-linked securities, the Phoenix Strategy has provided a beta to the S&P 500 of 0.4 (similar to U.S. high yield) since its inception in 1996 with a lower standard deviation than high yield and the broader convertible universe.

October 1996 - April 2021		
	Beta to S&P 500	**Standard Deviation**
Phoenix Composite[3]	**0.4**	**8.1%**
U.S. High Yield[4]	0.4	8.8%
U.S. Convertibles[4]	0.7	13.1%

More Liquid than High Yield

U.S. convertibles have higher TRACE volumes than high yield bonds since it is easier for dealer desks to hedge convertible exposure. This is in contrast to high yield where regulations now prevent dealer desks from holding lower rated bonds on their books which negatively impacts liquidity. This causes the bid-ask spreads on convertibles typically to be tighter than high yield debt in periods of market stress. Convertible securities contain embedded options, and therefore exhibit both debt and equity-like characteristics throughout their life cycle, appealing to multiple buyers including dedicated convertible investors, along with large fixed income and equity managers. As shown by the chart below, convertibles have been more liquid than high yield in every year since 2005 (the first year where data is available[5]).



[4]U.S. High Yield is represented by the ICE BofA US High Yield Index (H0A0); U.S. Convertibles are represented by the ICE BofA US Convertible Index (VXA0).
[5]Source: Barclays Research as of December 31, 2020

Conclusion

In order to optimally position their portfolios for the future and to take advantage of their improving funded status, corporate pensions and their advisors should consider convertibles as a flexible investment option that can be utilized within various areas of their portfolios. **Allocators can use traditional, equity sensitive convertibles as a supplement (or replacement) to a defensive or low volatility equity allocation, or they can invest in defensive, lower delta convertibles to potentially enhance and further diversify their fixed income allocation.**

As part of a defensive or low volatility equity portfolio, investors benefit from convertibles' stabilizing bond-like features (interest paying instrument repaid at maturity) because they typically exhibit positive asymmetry[6], meaning they are expected to capture a significant portion of the equity market upside, while only suffering a portion of equity price declines. **Since convertibles are not perfectly correlated with either equities or bonds, and provide one of the few sources of cheap long-term optionality/volatility, the addition of convertibles can decrease the overall risk level of a diversified portfolio, while maintaining or improving the total return.**

Defensive, lower delta convertibles also offer a path to unlock the upside potential of equities with downside protection. An approach of "winning by losing less" has led to equity-like returns over the long-term with significantly lower risk.

Should you have any questions or would like to learn more about these topics, we would welcome a discussion with you to delve deeper into the role convertibles can serve in a diversified portfolio.

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[6] Since 1995, U.S. Convertibles have captured 93% of the annual return of the S&P 500 in positive years and 63% of the downside when the total return of the S&P 500 is negative.

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Phoenix Convertible Income Institutional Composite

Year	Total Return Gross of Fees %	Total Return Net of Fees %	Primary Benchmark: ICE BofA Yield Alternatives Index %	Secondary Benchmark: ICE BofA All Convertibles Excluding Mandatories Index %	Number of Portfolios	Dispersion %	Total Composite Assets End of Period ($MM)	Total Firm Assets End of Period ($MM)
2011	-1.73	-2.29	-1.73	-5.41	10	0.51	1,047.6	5,537.9
2012	11.66	11.05	12.21	14.41	9	0.04	1,204.2	6,092.1
2013	15.83	15.20	10.55	25.00	9	0.05	1,556.2	7,591.3
2014	4.94	4.36	2.75	9.33	13	0.07	1,958.1	8,427.9
2015	-1.08	-1.65	-6.77	-2.75	14	0.26	1,952.2	8,565.5
2016	7.77	7.19	9.96	11.71	14	0.15	2,055.8	8,835.2
2017	8.31	7.74	9.44	15.70	13	0.23	2,044.7	9,350.1
2018	-1.10	-1.61	-0.42	0.65	14	0.17	2,236.5	8,479.6
2019	13.19	12.59	14.40	22.89	15	0.54	2,525.0	9,500.1
2020	17.51	16.92	13.34	52.05	11	0.96	2,436.5	10,940.5

Composite Characteristics:

1) Advent's Phoenix Convertible Income Institutional Composite (Composite) consists of the following:

- Inception of the Composite was October 18, 1996 and the creation of the Composite was September 2006.
- From inception, October 31, 1996, to August 31, 2001, the performance of the Composite represents that of a pooled investment vehicle (fund), which is counted as one separate account. The fund was comprised of accredited investors that could not invest in Rule 144A securities. The fund was no longer inclusive in the Composite as of August 31, 2001.
- The Composite was redefined as an Institutional composite with inception of the first managed account in the strategy on September 1, 2001.
- All accounts included in the Composite invest in convertible securities that trade near their bond floors and provide positive asymmetry.

2) The following is the criteria for inclusion in the Composite:

- Through 3/31/11, all accounts must have had an initial account value of at least $5,000,000. As of 04/01/11, all account must have an initial account value of at least $3,000,000.
- The Composite will be composed of all accounts that meet the criteria to invest in Rule 144A securities.
- The Composite does not include accounts of investors who are not Qualified Institutional Buyers due to their inability to invest in Rule 144A securities.

3) The following pertains to performance results:

- All performance is presented in US dollars.
- Returns for the Composite are presented both gross of fees and net of actual management fees paid by the Advent accounts but not expenses paid by the clients. The Phoenix Convertible Income Strategy's advertised fee schedule is 1% on the first 25 million, 0.80% on the next 25 million, 0.65% on the next 50 million and 0.55% over 100 million. The management fees are described in Part 2 of Advent's Form ADV. Returns presented on a gross basis are substantially higher than returns presented on a net basis because gross returns do not reflect the deduction of investment advisory fees and other expenses that would be incurred by a client. Investment advisory fees have a compounding effect in reducing the value of a client portfolio over time.
- Past performance is not necessarily indicative of future results.

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