

## THE CASE FOR CONVERTIBLES

## When Both Bonds and Equities are too Risky

## **EXECUTIVE SUMMARY**

The flexibility of convertible securities makes them especially well-suited to addressing the bond-versus-equity asset allocation question. Given the state of global financial markets at the moment and the high degree of uncertainty over the next few years, this asset allocation question is now particularly challenging, which makes the asymmetry in convertible securities even more valuable than usual. Investors should also consider convertibles' long track record of providing equity-like returns with much less risk than common stocks.

Traditional asset allocation models seem to have been turned upside down in recent years as fixed income instruments have provided superior returns to equities with less risk. Some investors believe this environment to be the "new normal" but we would suggest caution before embracing a completely new paradigm. Interest rates will not stay low forever. Investors will need to face the effects of rising rates at some point. Also, given where rates and yields are now, the risks between bonds and equities have become more evenly balanced. Now is the time for portfolio managers to consider alternative strategies that will benefit from a return to a more normal rate structure, while at the same time not over-committing to equity risk.

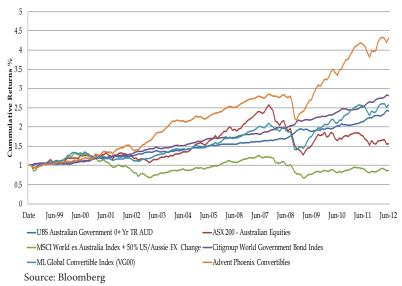
Our scenario analysis presented below suggests that shifting 5% of a portfolio's fixed income allocation into convertible securities, and in particular into Advent's Phoenix Convertible Strategy, significantly improves portfolio efficiency. As hybrid instruments, convertibles combine attributes of both equities and bonds to generate stronger returns than either asset class with meaningfully lower levels of risk than equities (see Figure 1). Convertibles have captured a significant portion of the appreciation of equities, while providing downside protection in declining markets. Key to the asset class's success is that convertibles:

- tend to outperform in a rising rate environment.
- have low correlation to other asset classes.
- are positively convex.

Advent's Phoenix Convertible Income Strategy seeks to enhance the already strong risk/reward profile of convertibles by investing in "theoretically cheap" convertible securities that trade close to their bond value (where the convertible would trade absent its conversion feature). The strategy identifies securities with positive asymmetry which exhibit less downside risk than the overall convertible market, but also participate in the upside of their underlying equities.

The Advent Phoenix Convertibles strategy offers Australian investors a potential solution to their bond/equity challenges in both the short and medium terms.

Figure 1: Cumulative Total Returns (July 1998 - July 2012)





### BENEFITS TO ALLOCATING TO ADVENT'S PHOENIX CONVERTIBLE STRATEGY

The analysis summarised in Figure 2 depicts various outcomes associated with specified equity and interest rate moves. The analysis is conducted from the perspective of an Australian investor and uses current stress test results from Advent's Phoenix Convertible Strategy and published metrics on the indices shown. This is a forward-looking analysis - it does not incorporate past performance.

The columns in Figure 2 represent movements of varying magnitudes in the equity and credit markets, while the three blocks of rows represent three different interest rate environments. The values in the right hand columns represent total returns over a one year horizon under the different interest rate/market move scenarios. The relative performance rows represent the alpha associated with a 5% reallocation from international bonds to Advent's Phoenix Convertible Strategy.

Figure 2: Scenario Analysis -Bonds, Equities, and Convertibles

		]	Down Side			Upside	
Equity & Credit Spread Scenario 10 Day Standard Deviation		(5.00)	(3.00)	(1.00)	1.00	3.00	5.00
Avg. Conv. Equity Price Change %		(30.70)	(18.42)	(6.14)	6.14	18.42	30.70
Eq Bench Price Change %		(29.02)	(17.41)	(5.80)	5.80	17.41	29.02
Avg. Credit Spread Change %		30.70	18.42	6.14	(6.14)	(18.42)	(30.70)
Interest Rate Scenario							
No Change							
	Advent Phoenix	-3.46%	-0.56%	3.01%	7.22%	12.05%	17.46%
	Equity (ASX200/MSCI World)	-24.28%	-12.67%	-1.06%	10.55%	22.15%	33.76%
	Bonds (UBS GBI/Citi GBI)	2.43%	2.77%	3.10%	3.43%	3.76%	4.10%
	Equity/Bond Blend <sup>1</sup>	-16.26%	-8.04%	0.19%	8.41%	16.64%	24.86%
	Equity/Bond/Convertible Blend <sup>2</sup>	-16.50%	-8.15%	0.22%	8.63%	17.07%	25.54%
	Relative Performance	-0.23%	-0.11%	0.04%	0.22%	0.44%	0.68%
+ 100BP							
	Advent Phoenix	-6.04%	-3.14%	0.42%	4.63%	9.46%	14.88%
	Equity (ASX200/MSCI World)	-24.28%	-12.67%	-1.06%	10.55%	22.15%	33.76%
	Bonds (UBS GBI/Citi GBI)	-2.47%	-2.15%	-1.84%	-1.52%	-1.20%	-0.89%
	Equity/Bond Blend <sup>1</sup>	-17.73%	-9.51%	-1.29%	6.93%	15.15%	23.37%
	Equity/Bond/Convertible Blend <sup>2</sup>	-17.75%	-9.41%	-1.04%	7.37%	15.81%	24.27%
	Relative Performance	-0.02%	0.10%	0.26%	0.44%	0.66%	0.91%
+ 200BP							
	Advent Phoenix	-8.63%	-5.73%	-2.16%	2.05%	6.88%	12.29%
	Equity (ASX200/MSCI World)	-24.28%	-12.67%	-1.06%	10.55%	22.15%	33.76%
	Bonds (UBS GBI/Citi GBI)	-6.84%	-6.55%	-6.25%	-5.95%	-5.65%	-5.35%
	Equity/Bond Blend <sup>1</sup>	-19.05%	-10.83%	-2.62%	5.60%	13.81%	22.03%
	Equity/Bond/Convertible Blend <sup>2</sup>	-18.92%	-10.58%	-2.21%	6.19%	14.63%	23.09%
	Relative Performance	0.13%	0.25%	0.41%	0.59%	0.81%	1.06%

<sup>&</sup>lt;sup>1</sup>Equity/Bond Blend denotes 40% ASX 200, 30% MSCI World Index (excuding Australian equities), 20% UBS Australian Government Index, and 10% Citi World Government Bond Index

The analysis illustrates that if interest rates remain at their current levels, the risk/reward payoff of reallocating 5% from international bonds to Advent's Phoenix Convertible Strategy is positively asymmetric in that the upside potential exceeds the downside risk. In a worst case scenario – equities fall 30% (5 standard deviations) - the portfolio would lose 23 basis points of relative performance. However, if equities increase an equal amount, the portfolio stands to gain 68 basis points.

<sup>&</sup>lt;sup>2</sup>Equity /Bond Convertible Blend denotes 40% A5X 200, 30% MSCI World Index (excuding Australian equities), 20% UBS Australian Government Index, and 5% Citi World Government Bond Index, and 5% Advent Phoenix Convertible Income Strategy

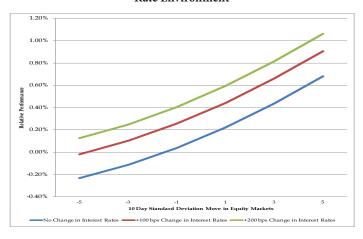
## August 2012



The remaining two scenarios consider interest rates beginning to normalize under differing equity market conditions. For example, if interest rates increased 100 basis points, reallocating 5% to Advent's Phoenix Convertible Strategy out of international bonds is again an effective way to mitigate the risks of rising interest rates, while providing significant upside capture. In this scenario, the portfolio would lose 2 basis points of relative performance in the event equity markets fell by 5 standard deviations, while gaining 91 basis points in the event equity markets increased by the equivalent amount. If interest rates increase by 200 basis points, the 5% reallocation to Advent Phoenix Convertibles would enhance performance in every equity market scenario.

These examples illustrate how convertibles can help portfolios not just in the short run through their optionality but also over time as the interest rate structure moves down the path of normalisation.

Figure 3: Relative Performance of a Portfolio with a 5% Allocation to Convertibles Given Moves in Equity Markets in a Rising Interest Rate Environment



Substituting even a small allocation to Advent Phoenix Convertibles for international bond exposures could provide a better portfolio outcome if interest rates and equities go up or if interest rates go up and equities fall. Investors can cover a variety of bases with one as-

### **EFFECTS OF A RISING RATE ENVIRONMENT**

As illustrated in the previous analysis, reallocating part of a portfolio out of bonds and into convertibles is beneficial to the overall return as it reduces exposure to an asset class that underperforms in a rising rate environment and increases exposure to an asset class that tends to outperform in periods of rising rates.

The risk of owning fixed income instruments in a rising rate environment is considerable. Sovereign bonds are particularly exposed to market losses, given current low rates and the prospect of substantial losses in market value when rates begin to recover. At current price levels, the 10 year US Treasury has negative asymmetry (i.e., extremely limited upside but significant market risk on the downside). Figure 4 illustrates the significant negative impact a rising rate environment would have on the 10 year US Treasury. The yield to maturity on the note is currently approximately 1.5%. If rates were to rise to 3%, the value of the 10 year would drop by roughly 13%. If rates were to increase to 6.0%, the value of the 10 year bond would drop significantly by over 32%. To put this scenario in context, less than 5 months ago, interest rates hovered around 2%. Less than 1 year ago, rates were approximately 3%, and in the last 5 years, rates reached levels above 5%.

 10 Yr Treasury Price/Yield Analysis with Mark to Market Return

 10 Yr Treasury Yield
 Treasury Price Mark to Market Return

 1.51%
 102.17

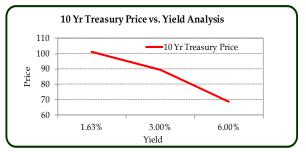
 3.00%
 89.41

 -12.5%

 6.00%
 68.75

 -32.7%

Figure 4: Effects of Rising Rates on US Treasurys



Source: Bloomberg



Unlike most fixed income instruments, convertibles historically have generated worthwhile total returns during periods of rising interest rates. As illustrated in the scenario analysis in Figure 2, an increase in interest rates concurrent with rising equity markets often leads to strength in the convertible market. Convertibles perform so well during periods of rising interest rates because they provide both offensive and defensive attributes. From an offensive point of view, convertibles benefit from their embedded call option feature, so as the equity market rebounds, the equity sensitivity works to their benefit. In addition, as rates rise in response to an improving economy, credit spreads tend to narrow as default risk declines; this also supports the prices of convertibles. Defensively, convertibles benefit from their typically lower duration vs. other fixed income securities, which reduces sensitivity to a rising rate environment.

Part of the reason an allocation to convertibles works so well is that typically convertibles beat sovereign bonds when interest rates rise.

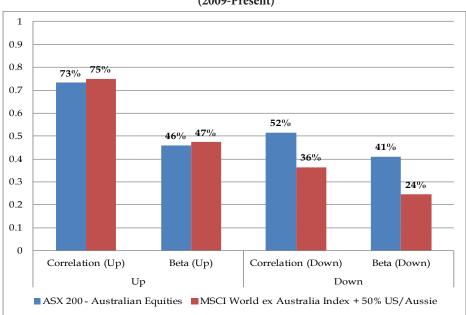
#### Low Correlation

Convertibles are not just beneficial in times of rising interest rates. Convertibles provide a long-term solution for investors. As it is difficult to time the markets and determine exactly when interest rates may rise and equities rebound, convertibles provide a solution for navigating uncertainty in the marketplace. Convertibles have low correlations to equity markets: given their hybrid structure, convertible instruments tend to behave more like stocks in strengthening markets, capturing a meaningful portion of the upside moves of equities, while their fixed income features reduce equity sensitivity in declining markets. Over the last 12 years, global convertibles have outperformed global equities, by capturing 83% of the upside of equities while suffering only 51% of the downside<sup>1</sup>.

Throughout volatile markets, Advent's Phoenix Convertible Strategy has demonstrated favorable correlations to global and Australian equity markets. In up markets, the strategy's correlation to both Australian and global markets is low at around 75% with a low beta in the mid 40's. As convertibles tend to drawdown less in down markets, the correlation is even lower in down markets, as is the beta to equity markets.

The distinct behavior of convertibles, and in particular Advent's Phoenix Convertible Strategy provides the key to the asset class and the strategy's strong long-term track record. By losing less in declining markets, while capturing a meaningful portion of the upside move of equities, the convertible bonds outperforms equities over long periods with considerably less risk.

Figure 5: Correlation and Beta of Advent's Phoenix Convertible Strategy to Equities (2009-Present)



Source: Bloomberg

The decision to allocate to convertibles now is easier than the decision to switch between bonds and equities sometime in the future.

<sup>1</sup> B of A / ML Global Convertibles Index (VG00), MSCI World Index. As of July 31, 2012

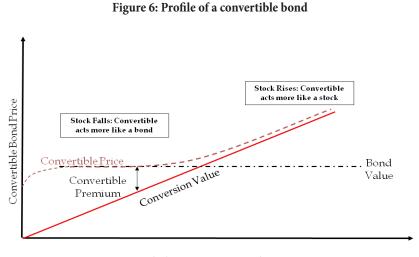


#### Convexity Driving Performance

The asset class's strong long-term track record can be largely attributed to it is positive convexity. The asymmetric payout of a convertible is shown in Figure 6 below.

Similar to fixed income instruments, convertibles typically have a final maturity date and pay a periodic coupon or preferred dividend. The fixed income component of convertibles provides a bond floor. At the same time, the security may be converted into common shares. Due to the conversion feature, most convertibles are intrinsically convex and maintain positive asymmetry, which means upside potential exceeds downside risk. Positive asymmetry, in relation to stock price movements, is achieved through two means:

• a fixed coupon and a self-adjusting delta: coupon payments generate income independent of market fluctuations. When equity markets decline, the income helps mitigate the loss incurred from a decline in the underlying bond price. When equity markets increase, the coupon enhances the overall return.



Underlying Common Stock Price

• changes in stock-sensitivity: gamma measures the sensitivity of a bond's delta to a change in stock price. Gamma is maximized when the issuer's underlying stock price approaches the conversion price. As the value of the underlying equity appreciates, the gamma increases the bond's sensitivity to underlying moves in the equity price. As the value of the underlying equity declines, the gamma reduces the bond's sensitivity to the underlying equity move, increasing downside protection.

The optionality in convertibles is a key source of value to the investor as well as a way of enhancing decision-making.

### Conclusion

Australian pension funds are increasingly sophisticated in their investment strategies when compared to their global peers. They have been receptive to evaluating niche and alternative asset classes. Given the above normal risk involved with allocations to fixed income at the moment – assuming the current international interest rate structure cannot last forever and that we will live through more risk on/risk off until the normalisation of rates starts – we believe that convertible securities are particularly well suited for Australian funds. Convertibles provide a more defensive way of participating in equity market returns because they offer superior risk-reward characteristics over equities, with stronger appreciation over the intermediate and long term, but at meaningfully lower levels of risk and volatility. Since most investors cannot accurately predict what markets will do, or when, they often rebalance their portfolio at inopportune times. Convertible securities relieve much of this uncertainty, because they become more equity-like as stock prices rise, and more bond-like, or defensive, as stock prices fall. As interest rates approach their nadir, integrating convertibles into a core fixed income allocation provides discernible portfolio benefits.

The Advent Phoenix Convertible Income Strategy may not quite be the "fund for all seasons" but it is pretty close.

# August 2012



#### **Disclosures**

This material is for information only and does not constitute an offer or recommendation to buy or sell any investment, or subscribe to any investment management or advisory service. This material may include opinions and forward-looking statements based upon the current belief of Advent Capital and are subject to significant risks and uncertainties. Actual results may differ from those set forth in the opinions and forward-looking statement. Investors must meet certain eligibility criteria in order to purchase certain funds. It is not, under any circumstances, intended for distribution to the general public.

This report is issued and approved by Advent Capital Management, LLC and Advent Capital Management UK Limited (Advent Capital), which is Authorised and Regulated by the Financial Services Authority. The Funds that may be referred to in this document are unregulated collective investment schemes for the purposes of Section 238 of the Financial Services and Markets Act 2000. Accordingly, this document may only be issued in the United Kingdom to persons to whom unregulated collective investment schemes are permitted to be promoted by virtue of Section 238 of the FSMA and COBS 4.12 of the new Conduct of Business Sourcebook.

No part of this document may be reproduced in any manner without the written permission of Advent Capital. We do not represent that this information, including any third party information, is accurate or complete and it should not be relied upon as such. Opinions expressed herein reflect the opinion of Advent Capital and are subject to change without notice. Past performance is not a guarantee of future results.