FISCH »Asset Management

Bellerive 241 | Postfach
CH-8034 Zürich

info@fam.ch | www.fam.ch
T +41 44 284 24 24

»Convertible Bonds: An Analysis for Institutional Investors (USD)

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Executive Summary

Convertible Bonds ("CBs") offer a meaningful and credible alternative to equities, bonds and also to blended equity and bond exposure. This is particularly true for those with a desire to hold ongoing exposure to equities but with a more defensive stance in an environment of rising USD interest rates.

This paper from Fisch Asset Management provides empirical analysis to address this topic and shows why convertibles offer diversification into an asset class that has numerous features creating unique risk-return characteristics.

The CB asset class and the benchmarks that measure it offer various alternative approaches depending on the investor's desire to balance upside potential with downside protection.

Introduction

This paper is intended to set out arguments of relevance for institutional investors considering the relative attractiveness of Convertible Bonds within their asset allocation.

At the heart of our analysis is a performance comparison of the convertible bond asset class to both the MSCI World and a 50:50 composite of MSCI World/Bloomberg Barclays Global Aggregate bond index.

There are idiosyncratic features of the CB asset class that are not always fully understood which serve to highlight why CBs may be an attractive asset class in the current market environment.

Convertible Bond Performance Analysis

For the sake of simplicity, we have calculated returns based on a 50:50 composite calculated monthly of the MSCI World Index (Total Return in USD – ticker: NDDUWI) and the Bloomberg Barclays Global Aggregate USD Hedged bond index (ticker: LEGATRUH). For convertible bonds, we use the Thomson Reuters Global Vanilla Hedged CB Index (USD). We believe this index best represents the asset class of convertibles as it includes all CBs within the universe but excludes mandatory CBs (which have no bond floor). These indices allow for an analysis back to December 1993, with all returns and volatilities based upon monthly data up to the end of October 2018.

We have used the **total return** version of the MSCI World Index. Where CBs are analysed in comparison with equity price indices (rather than total return), their outperformance is materially more pronounced than shown here.

We have analysed a variety of time periods, with a particular focus on those situations in which interest rates have been rising. We highlight below some of the key themes arising from the data, with further detail in the accompanying presentation.

Long-term outperformance and context

Convertibles versus equities

As the primary driver of CB returns is the performance of the underlying equities, the starting point for any analysis is to review the performance of CBs versus equities. The longest run data available (nearly 25 years) shows **comparable returns for CBs and equities**. CBs are also ahead over 20 years, with returns almost identical over 10 years.

However, the average annual **volatility of CBs is 5 percentage points lower** than that for equities.

In the past few years, the performance of equities has generally been ahead of CBs, albeit with daily volatility around 50% higher. In a bull market, this is exactly as would be expected given that the CB asset class typically has an equity exposure of 40-50%.

The paradox, therefore, is why CBs perform so comparably to equities in the long run, when theory suggests that they should achieve only 40-50% of equity returns. The key to resolving this apparent paradox lies both in the nature of CBs as a financial instrument together with factors relating to the evolution of the global CB market, as explained later in this paper.

Our analysis suggests that the relative out- or under-performance of equities versus CBs is broadly mean reverting, and therefore that the period of recent relative CB underperformance is likely to be followed by a period of outperformance.

The empirical evidence also confirms the asymmetric return characteristics of CBs over shorter time periods. Throughout the past 25 years, in months when the MSCI has risen (an average of +3.5%), CBs have captured 65% of this upside (+2.0%). In contrast, in months when the MSCI has fallen (an average of -3.1%) CBs have lost only 49% (-1.7%).

Convertibles versus 50:50 composite

Convertible bonds outperformed the 50:50 composite over the longest time period for which data is available, nearly 25 years from end-1993 to end October 2018, with an annualised return of 7.3% versus 6.3%. Convertibles also outperformed on a 20, 15, 10 and 5 year basis.

Sometimes, the picture is less clear-cut, such as in 2017 when the composite outperformed. This stemmed from a variety of factors, such as the lack of representation of mega-cap FAANG stocks in the CB universe, or CB market specific factors such as the poor performance of serial CB-issuer Steinhoff dragging down benchmark index performance in 2017, while simultaneously generating opportunities for significant outperformance for managers (like Fisch) that were not exposed.
Furthermore, convertible bond markets feature their own ebbs and flows in valuation, measured in terms of whether CBs trade rich or cheap in relation to their theoretical value. These

changes are largely a function of net issuance and fund flows, and tend to mean revert. Valuations are currently around fair value for US and European CBs, and cheap for Asian and Japanese CBs.

Performance in times of rising rates

The past 30 or more years have seen a secular downward shift in USD interest rates (albeit with plenty of ups and downs along the way), which have given bond returns particularly strong returns which may not be repeated in the coming years.

We have identified 11 periods in the past 20 years where interest rates moved up materially. **In 10 out of 11 cases, CBs outperformed** the composite. There are various reasons for this, including the relatively low sensitivity of CBs to interest rates (relatively short duration and offsetting benefit of rising rates increasing option value), together with generally positive equity market performance in periods of rising rates.

US region outperforms

From a regional CB market perspective, in line with the underlying equity markets, the US region has performed more strongly than other regions, particularly in recent years. This in part reflects the greater share of high growth companies in the US CB market, particularly from the technology sector.

On the flipside, this segment of the market is more volatile, has experienced higher drawdowns in weaker markets, and contains CBs of weaker credit quality than a broader global portfolio.

A comment on 2008

Detractors of CBs often point to the performance of the asset class in 2008. It is undeniable that CBs were somewhat at the centre of the storm, as the CB asset class at that time was dominated by leveraged hedge funds. As a consequence, CBs sold off aggressively and traded well below their theoretical bond floors.

We would counter that the price dislocation was short-lived and what was experienced was a temporary drying up of liquidity and price discovery. CBs recovered to pre-crisis levels in just 13 months, versus 28 months for the MSCI World. The make-up of the CB investment community has shifted and today the majority of investors are long-only, with hedge funds still involved with an important role to play in providing liquidity and maintaining valuations.

Rationale for Investment in CBs

Ironically, it may be argued that the biggest single challenge for the CB asset class is not demonstrating its role in a diversified asset allocation, but 'finding a home' within narrowly defined asset allocation buckets.

Despite the undoubted benefits of CBs as a defensive alternative to equities, its hybrid nature means it may not fit neatly into an equity bucket. Likewise, it is neither pure fixed income nor obviously 'alternative'. While the CB asset class should ideally have its own place in a strategic asset allocation, those investors with the flexibility to see through these classification issues are well placed to benefit from the unique features of this asset class.

In order to understand the apparent paradox of why CBs as an asset class have performed so well historically despite their typical 40-50% exposure to equities, we need to look at the features and characteristics of CBs. There are various features of CBs that are not always well understood, which together help to explain why the performance characteristics of the product cannot be replicated with a combination of other instruments.

These features can be split broadly into two groups, namely those arising from the very nature of convertible bonds as a financing instrument, and those that have arisen as a result of the evolution of the global CB market over the past 25 years.

Features relating to CBs as a financing instrument

Built-in market timing: A convertible bond by its very nature increases in exposure to equities as the underlying stock price rises, while providing increased protection as stock prices fall if the bond floor is solid.

Lower sensitivity to rate rises: CBs have relatively low exposure to interest rises compared to other fixed income instruments, owing to relatively short duration and the compensatory effect on the CB embedded equity option value of rate rises.

Volatility cushion: In times of stock market weakness, stock volatility tends to increase. The price of a CB may therefore increase as a result of its underlying equity option increasing in response to higher stock volatility, serving to cushion the impact of a weaker share price.

Portfolio effects: While the 'best of both worlds' combination of exposure to upside potential together with downside protection from a bond floor is well understood, the portfolio benefits of CBs are less often articulated. A set of CBs of different maturities with different technical features, together with a flow of new issuance, helps to lock in gains during rising markets and reduce downside risks in times of weakness.

A unique package: The equity option within a CB can only be exercised by delivering the bond in its entirety. Hence the exercise price (what is given up in order to exercise the option) is in effect floating as it is the value of the bond, which itself moves with interest rates and credit spreads. This differentiates it from a classic bond plus options strategy. Indeed, CBs are the only way in public markets to gain access to liquid corporate volatility in size.

Dynamic market: By its nature, a CB that begins its life as a balanced instrument will, at the point of maturity, either redeem or convert. Put simply, CBs will tend from a 50 delta exposure at issue to either a 0 or 100 delta exposure at maturity. Therefore, the flow of new issues over time ensures that the CB market has scope for re-invention despite the effects that long market cycles might impose upon the asset class.

Features related to CB market evolution

Primary market: Issuers value the unique combination of low cost debt while monetising equity volatility and thus often revisit the market. As a result they tend to leave some alpha 'on the table' in the form of new issue cheapness.

Diversification: At any given time, the CB market will have a make-up by region, sector and single security exposure that differs from global equity markets, providing additional investor diversification.

Prospectus features: Takeover ratchets and dividend protection are just two examples of features written into the terms and conditions of convertibles which can add significant value if triggered by corporate actions such as M&A.

Not a passive market: Only a tiny proportion of the global CB universe can be accessed in passive form owing to the skills and knowledge required to trade the instrument in different regional markets. Ironically, anecdotal evidence indicates that fees for passive investment are higher than those for active management. The lack of passive flows means CB valuations are less influenced by 'blind' flows.

Capital structure: Most CBs are senior unsecured obligations of the issuer, and therefore the capital protection provided by the asset class is further up the capital structure than a combination of different bond exposures plus equity.

Inefficient corporate actions: CB issues tend to be callable subject to certain conditions, but many companies choose for strategic reasons to leave CBs outstanding, which makes them more valuable than models would suggest.

Convertible Bond Benchmark Indices

The Thomson Reuters CB index family is by far the most widely used convertible bond performance benchmark.

Global CB strategies (and thus global CB benchmark indices) tend to be favoured over US-only owing to their diversification, lower volatility, lower drawdown, greater credit quality and broader opportunity set. Nevertheless, Thomson Reuters provides comprehensive regional CB indices, including the US.

Thomson Reuters provides a full suite of indices both globally and in the US to cover the range of different types of CB fund, including those investing primarily in all CBs, balanced convertibles or those focused on investment grade issues.

We believe the level of data availability, calculation methodology, support, governance, pricing quality, staff experience and overall resourcing committed to the indices to be the best in the market. This is reflected in the almost universal usage of Thomson Reuters CB Indices by global CB funds.

Our white paper “A Review of Convertible Bond Indices”, published in 2016, explains the landscape and history of CB indices in more detail and is available upon request.

About the author

Martin Haycock
Senior Product Specialist | 23 years of experience

Martin Haycock is a member of the Investment Office. He supports the Convertible Bond portfolio management and Clients & Markets teams as a senior product specialist, leveraging his broad experience of the convertible bond asset class. Before joining Fisch Asset Management in 2015, he worked at UBS for 20 years. Upon joining UBS in 1995, he spent 6 years as a member of the convertible bond origination team. In 2001 he was appointed head of convertible bond research and thereafter head of convertible bond marketing. In 2012, Martin Haycock was appointed global head of the newly-formed UBS Index Group. He also served as global COO for the cash equities business, and in 2014 led the sale of the UBS Convertible Indices to Thomson Reuters. He holds an MA and BA (Hons) in Land Economy from Cambridge University.

Fisch Asset Management

Fisch Asset Management is an asset manager specialising in select investment strategies. It offers convertible bonds, corporate bonds and multi asset/absolute return solutions. Its objective is to generate gains for long-term investors through active management. The company's core strength lies in fundamental credit analysis, trend identification and its experienced portfolio managers. Founded in Zurich in 1994 by two brothers, Kurt Fisch and Dr. Pius Fisch, the independent asset manager has made a name for itself as a global leader in convertible bonds. The company has 90 employees and manages assets of over CHF 10 billion (USD 11 billion) for institutional investors primarily based in Europe. As a licensed securities dealer, the company is regulated by the Swiss Financial Market Supervisory Authority (FINMA). Fisch Asset Management is a signatory of the United Nations Principles for Responsible Investment (UN PRI).

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