

Rethink your toolbox for uncertain times with Convertible Bonds

Convertible bonds
June 2017

Shorten duration,
boost return expectations

p.04

At a glance

- Investors face a time of strategic challenges and tactical uncertainty, and convertible bonds can help with both.
- Strategically, a new paradigm in fixed income markets has left investors with portfolios whose remuneration of risk is too low and whose duration is too long.
- Tactically, equity and bond valuations appear high and the business cycle is already one of the longest on record.
- Convertible bonds combine features of both credit (with a promise to repay principal) and equity (with an embedded call option): one or the other dominates, or both are in balance, depending on the performance of the underlying equity.
- They can help with today's challenges by offering the downside protection associated with bonds at the same time as providing exposure to equity upside – all with shorter duration than conventional fixed income.
- Investors give up some yield in exchange for equity optionality, but the gap is currently offset by the unusual cheapness of that optionality.
- Overall, the balanced profile of convertibles should enable them to ride through a range of economic scenarios.

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When times are uncertain
convertible bonds come
into their own.

Publication of Lombard Odier Investment Managers

For further information please contact

Maxime Perrin on +41 22 700 9588
Email m.perrin@lombardodier.com
Or visit www.loim.com

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Because of the way they are structured, convertible bonds combine features of both bonds and equities. One or the other profile dominates, or both are in balance, depending on the performance of the underlying equity. That means holding a convertible is a bit like holding a balanced portfolio in a single

security, and that makes them an interesting alternative to balanced, multi-asset or absolute-return funds, as an investment designed for superior volatility-adjusted returns over the cycle.

There is understandably high demand for this kind of balanced profile given the tactical and strategic challenges facing investors.

A new paradigm in fixed income, and a time of uncertainty

Tactically, many investors are reluctant to position their assets too aggressively or narrowly because they are unsure where we are in the business cycle. Before Donald Trump was elected President of the US, the consensus was that we were experiencing a late-cycle rally, reflecting the fact that the current cycle is already one of the longest in history. Since the election, the talk has been about a fiscal stimulus much more suited to the early-to-mid stage of a cycle. Compounding the uncertainty is the outsized role played by monetary policy in the US, Europe and Japan and a volatile political environment that could change the market direction overnight.

At the strategic level, due to the macroeconomic conditions we find ourselves in and the responses of governments and central banks to those conditions, fixed-income markets have been structurally and lastingly altered from what they were a decade ago. High levels of debt, falling productivity growth and an ageing population are all making it difficult to return to pre-2007 economic growth levels. While the Federal Reserve has begun to

slowly tighten monetary conditions, the European Central Bank and the Bank of Japan are expected to maintain very low or negative rates for the foreseeable future.

This has resulted in widespread low or even negative yields in key developed markets, the risk of rising rates in the US, and a bond market whose duration has extended to make it highly sensitive to interest-rate movement. All of this leaves investors with a lot of downside risk within their bond allocations, and the challenge of finding ways to increase portfolio returns without lengthening duration. They also have good reason to be cautious about equity valuations, even though shares offer one of the key potential sources of upside.

We believe that convertible bonds can help with today's strategic and tactical challenges. They offer bond protection with shorter duration than conventional bonds; and at the same time they offer exposure to equity upside while limiting exposure to equity downside through the bond floor.

Convertible bonds: The basics

Typically, convertible bonds pay coupon interest until a fixed maturity, just like conventional bonds. In addition, they offer investors the option, until maturity, to convert the bond into an underlying equity at a set conversion price. The option component means that a convertible bond participates in a rising equity market (whereas the upside of a conventional bond is limited

to its coupons and principal repayment). At the same time the present value of its coupons and principal repayment provide a "floor" when equity markets are heading downwards.

The probability of conversion is called the convertible's delta, which can range from zero to 100%, and its sensitivity to credit,

equity and volatility factors is a function of where it currently sits on this credit-to-equity continuum. It will trade more like a straight conventional bond if conversion seems unlikely but more like an equity if the underlying share price has risen near or above the conversion price.

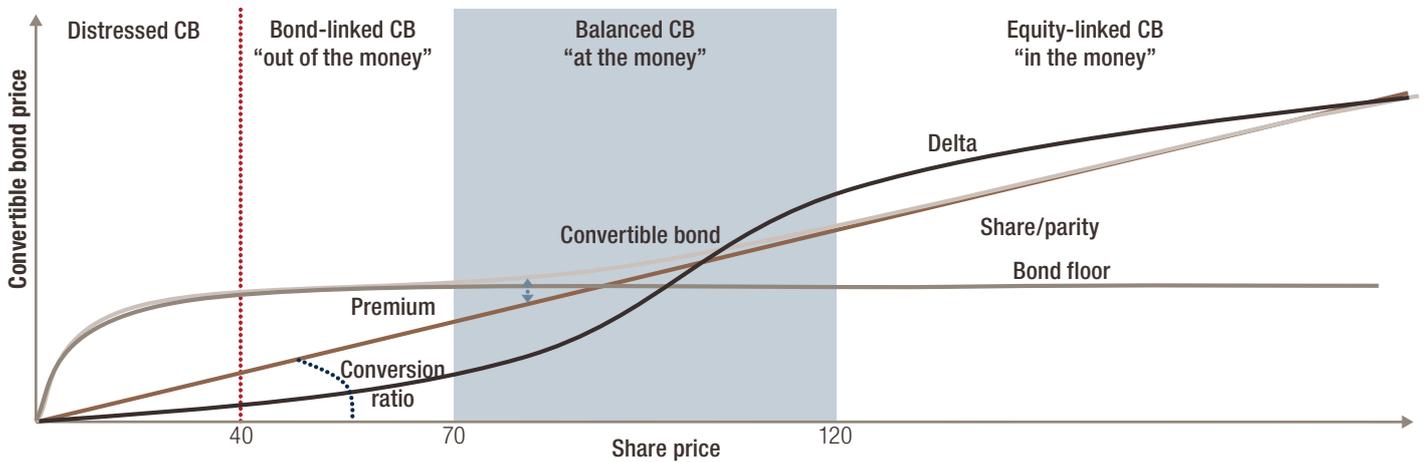
At issue, the equity conversion price is usually set 20 to 50% higher than the current equity price. The delta at issue is usually between 40% and 60% and the bond floor around 80%, striking a good balance between bond-like and equity-like characteristics.

The convertible will trade at a premium to the underlying equity to reflect the value of the bond floor, and that “conversion premium” will widen should the issuer’s equity fall in value. However, should the price of the equity eventually reach the convertible’s

conversion price, the conversion premium will close, and the convertible will exhibit a delta of 100% and act just like the underlying share (Figure 1). This is the ‘sweet spot’ of the convertible bond, offering investors upside potential with downside protection.

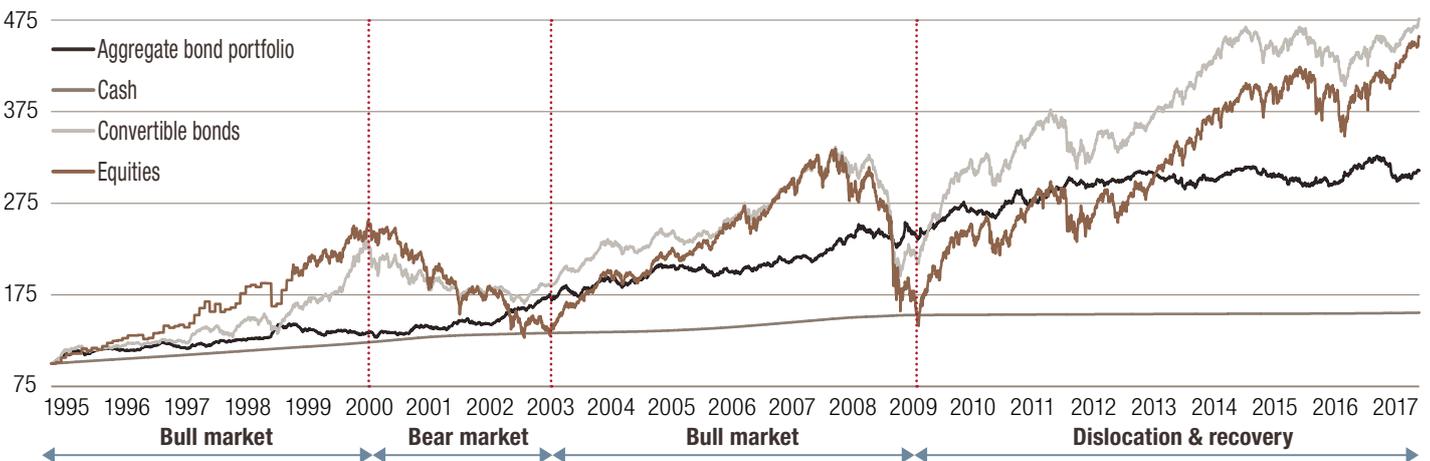
This hybrid or chameleon-like profile has enabled the convertible bond market to deliver superior volatility-adjusted returns over most time periods, when compared to equities or aggregate bond indices. Greater participation in the upside than the downside of equity price movements has compounded very favourably, relative to the returns of either equities or aggregate bond portfolios (Figure 2).

FIG. 1 THE PROFILE OF A CONVERTIBLE BOND CHANGES WITH THE PRICE OF ITS ISSUER’S EQUITY



Source: LOIM. For illustrative purposes only.

FIG. 2 CONVERTIBLE BONDS HAVE OUTPERFORMED IG BONDS AND WORLD EQUITIES OVER THE LONG TERM



Source: Bloomberg. The chart shows the performance of the JPMorgan Aggregate Bond Index USD, the MSCI World Index USD, 1-Month Libor and the Thomson Reuters Global Convertible Index USD. Past performance is not a guarantee of future results.

Convertibles can help shorten portfolio duration

Investors who need income face the biggest challenge under the new paradigm for fixed income markets that we have described. They need the coupon income that bonds provide, but they need those coupons to be higher than the market currently offers, and they need to limit duration risk at a time of rising base rates.

While it is true that the yields of convertible bonds tend to be lower than those of conventional bonds, that is because, typically, some of the fixed-income cash flow is traded in exchange for the embedded equity option. One advantage of the equity option in the current context of low and potentially rising rates is that it tends to reduce a convertible's interest rate sensitivity.

Convertibles are typically issued as four or five-year instruments, and are thus shorter-dated than a lot of credit instruments. The duration of the convertible-bond market is currently around four years. For a conventional bond that would suggest that, all else being equal, a one percentage point rise in yield would equate to a 4% fall in capital value. However, the equity option offsets some of the interest rate sensitivity from the convertible's duration: at the moment we estimate that the convertibles market would lose only around 2.2%¹ for each one percentage point increase in yield.

Given the low yields prevailing in the current market, most of the positive performance of an investment-grade convertible bond is

likely to come from the embedded call option, rather than the bond's yield. However, fixed-income investors who can hold conventional high-yield bonds might consider supplementing them with high-yielding convertibles: here, an attractive yield complements the potential boost from the equity option.

Another attractive characteristic of high-yielding convertible bonds is that they can diversify fixed income portfolios. The convertibles market tends to feature high-growth companies with low levels of debt, in technology, consumer goods, pharmaceuticals and biotech, rather than the highly-g geared commodities, energy or telecom companies that dominate the conventional debt market. The diversification is regional as well: US issuance dominates the conventional high-yield market whereas convertible bond issuance is more equally spread between all regions.

At Lombard Odier Investment Managers (LOIM), our overall focus is on good-quality credit first and foremost, which we see as crucial for capturing the fundamental asymmetry of the convertible-bond profile – more equity upside than equity downside. When yield is a priority, we would recommend finding the best possible credit quality, with a bias towards BB and BBB rated securities, to deliver the right balance between yield, bond-floor protection and equity participation.

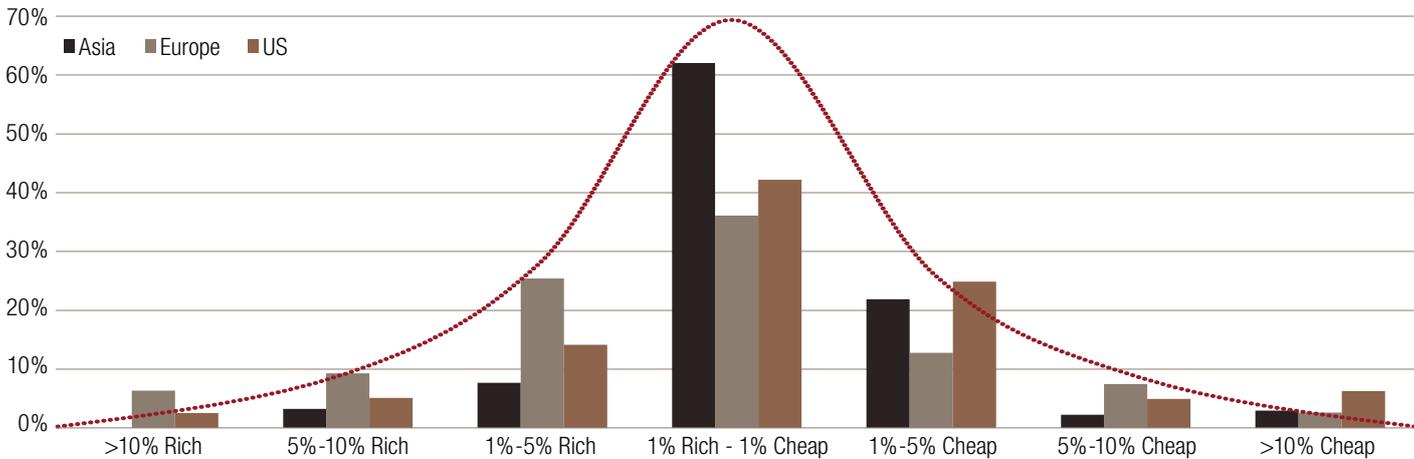
Cheap equity optionality can boost returns

Although yields are low among investment-grade convertibles, they can still offer a boost to return expectations simply because the embedded equity options are currently very attractively valued. A sum-of-the-parts comparison of convertibles with their equivalent

conventional corporate bonds and equity call options reveals that 27% of Asian, 23% of European and 36% of US convertibles are cheaper than a synthetic combination of an equivalent corporate bond and equity call option would be (Figure 3).

¹ Source: LOIM.

FIG. 3 ONE-THIRD OF CONVERTIBLES ARE CHEAP RELATIVE TO THEORETICAL VALUE



ASIA	31 DEC 2015	31 DEC 2016	28 APR 2017	EUROPE	31 DEC 2015	31 DEC 2016	28 APR 2017	US	31 DEC 2015	31 DEC 2016	28 APR 2017
Expensive	31.8%	7.9%	10.9%	Expensive	44.1%	32.9%	41.1%	Expensive	23.6%	23.0%	21.8%
Fair value	28.9%	56.0%	62.0%	Fair value	27.3%	37.2%	36.1%	Fair value	21.1%	40.4%	42.2%
Cheap	39.3%	36.2%	27.1%	Cheap	28.6%	29.9%	22.9%	Cheap	55.3%	36.6%	36.1%

Source: Bank of America Merrill Lynch.
Theoretical value is represented by the combined valuation of the equivalent corporate bond and equity call option.

At the beginning of March 2017, according to Exane BNP Paribas, the implied volatility of the global convertibles market was close to its lowest ever level, some 15% lower than its average and almost as low as the volatility implied by conventional equity call options.

This cheapness relative to conventional call options is remarkable: convertibles offer up to four years' worth of equity-volatility exposure relative to the 9 to 12 months' worth available from the liquid options market; in addition, the convertible investor gets coupon income as well as the equity optionality, and the conversion price of many convertibles' will have been adjusted downwards to compensate for corporate events affecting the issuers share price, such as dividend payments, acquisitions or stock splits.²

In other words, in a world where bond and equity valuations appear high in a lot of markets, volatility seems to be cheap – the VIX Index of S&P500 implied volatility closed at its lowest

level since 1993 on 8 May, 2017. Convertible bonds offer an efficient way of buying exposure to this volatility.

One important condition for maintaining this attractive valuation will be good levels of new issuance. When demand for outstanding convertibles begins to push prices up, new issues in the same or similar categories can provide a gravitational pull back towards fair value. Older issues have shorter-dated optionality and may also present a less-balanced delta based on what has happened to the issuer's equity price. New issues should help preserve the current, balanced profile, with bond floors sitting at around 85%, equity conversion prices around 20%, and delta close to 50%.

The good news is that 2017's global issuance is likely to look a lot like 2016's, with similar supply from Asia and Japan, and an increase from the US offsetting a little less supply from Europe: Merrill Lynch and Barclays analysts anticipate new issuance totalling between USD 65 billion and USD 80 billion.

² Exane Derivatives Research, "Convertibles Flash: CB allocation: a compelling entry point" (March 2017).

Conclusion: An ideal asset class for uncertain times

Overall, the balanced profile of convertible bonds makes them well-positioned for a lot of scenarios in this time of uncertainty. If an investor requires income but expects slightly higher interest rates, modest spread-tightening and rising equity volatility, the equity options and shorter duration make convertible bonds an attractive alternative to straight debt. If an investor expects interest rates to remain low but is concerned about equity valuations and the potential for politics to upset sentiment, convertibles are an attractive alternative to straight equity. If both scenarios are regarded as equally probable, convertible bonds remove the imperative to bet either way.

Finally, investors that rely on income from their investments and now find that their portfolio yield is too low and their portfolio duration is too long, can turn to convertibles to shorten duration and boost expected returns potential with equity optionality. We believe the fact that equity optionality is currently available at a very attractive price adds to the investment case.

When times are as uncertain as they are today – both tactically and strategically – we would argue that convertible bonds come into their own.

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