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The basics of convertible securities

Key takeaways

Convertible securities offer a distinctive opportunity to investors, providing income and downside protection similar to bonds along with potential for price appreciation similar to stocks.

A variety of structures are available within the convertibles asset class, and over time the investment characteristics of each security can change due to sensitivity to equity prices, interest rates, and the credit quality of the issuer.

We believe active management of convertibles is vital, as it involves a combination of equity, fixed income, and structural analysis.

This white paper is the first in a series that aims to provide a general overview of convertible securities. As the first, it covers types of convertibles, key terminology, price drivers, and the advantages/disadvantages of investing in the asset class. The future papers in the series will provide an overview of the market for convertible securities, the behavior of convertibles, convertibles in a portfolio context, convertible securities in the context of ESG investing, and the current market environment for convertible securities.

An investor's need for either current income or the potential for capital appreciation naturally dictates a preference for bonds or stocks. However, many investors seek both objectives. Convertible securities can tap into the best of both worlds. Historically, these securities have a record of providing attractive risk-adjusted returns. They can also add portfolio diversification in terms of sector, style, and market capitalization.

Convertibles are not new to Wall Street, having helped finance growing industries for more than a century. Over time, the convertible securities market has grown both in size and in its array of offerings. Today, convertibles represent an asset class that is unique, vibrant, and often inefficient. This creates very attractive opportunities for experienced investors who understand that these unique

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For use with institutional investors and investment professionals.

instruments can supplement their income while providing the potential for capital appreciation. Yet, convertibles remain a mystery to many investors. We provide this overview to help investors understand the attractive features of this often overlooked asset class.

What is a convertible security?

Convertible securities are hybrid instruments that combine features of bonds (debt) and stocks (equity), and thus afford investors a unique opportunity. Convertible investors benefit from both the income and downside protection attributable to the convertible's fixed income characteristics. At the same time, convertible investors can profit from the potential price appreciation of the issuer's underlying common stock, and therefore have the potential for upside not available to investors who own traditional corporate bonds. Importantly, not all convertibles function in the same manner (Figure 1). They are typically issued as bonds, preferred stock, mandatories, or reverse convertible bonds, while offering investors exposure to the underlying equity associated with the convertible security.

Convertible bonds (aka vanilla convertibles) represent over 80% of the convertible market and more closely mirror traditional bonds (the securities are liabilities on a company's balance sheet), offering income via coupon payments (which are contractual obligations of the issuer), along with a stated maturity date on which the issuer is obligated to repay the principal amount. This bond-like characteristic of the instrument provides the investor with downside protection relative to stocks. In addition, there is also an embedded call option on the underlying stock, through which an investor is able to participate in equity upside. The investor can benefit from the potential upside even when the bond matures. At maturity, the company pays the principal amount in cash. If a bond is trading above par, the company pays the premium to investors either in cash or in stock or in a combination of the two.

Another type of convertible security is **convertible preferred stock**, which offers income in the form of fixed dividend payments. These instruments are typically subordinate in the issuer's capital structure to traditional debt, and sometimes have no maturity; therefore, they generally provide less downside protection than convertible bonds. However, convertible preferred

FIGURE 1

Types of convertibles

Convertible type	Typical yield	Type of income	
Vanilla convertible	Lowest	Stated coupon	
Convertible preferred	Second lowest	Dividends	
Mandatory	Second highest	Stated coupon	
Reverse convertible	Highest	Stated coupon	

Source: Putnam. For illustrative purposes only.

stocks generally provide higher dividend payments than convertible bonds. This characteristic serves to compensate for the lower level of downside protection. Convertible preferred stocks also contain a similar embedded call option on the underlying stock, and therefore participate in equity upside.

A third kind of convertible, **mandatories**, typically offers a higher yield than both convertible bonds and preferreds. This higher yield principally compensates for a special feature: Investors receive stock with no option to be paid cash if they hold these instruments until maturity.

The fourth type of convertible, reverse convertible bonds, can be converted to cash or equity at the discretion of the issuer at a set date. The issuer has an option on the maturity date to either redeem the bonds in cash or deliver a predetermined number of shares. At maturity, if the stock closes at or above the initial price, the bondholder will receive 100% of the original investment amount back in cash. If the stock closes below the initial price, the holder receives the predetermined number of shares. This means the holder ends up with shares that are worth less than the original investment. Reverse convertible bonds are complex assets that have unique characteristics. However, to compensate for their higher level of risk, reverse convertibles generally offer higher coupon rates over shorter maturities than traditional convertible bonds.

All four types of these hybrid instruments have come to represent an increasingly popular method of financing, allowing the issuing companies to raise capital at relatively low cost.

Categories of convertible securities

Convertibles typically fit into three categories, corresponding to various levels of delta. Delta, also referred to as a convertible security's equity sensitivity, estimates how the change in the price of an asset can change the price of a related security or derivative (Figure 2). For example, a delta of 50 means that when the price of the underlying equity changes by 1%, the price of its related convertible security changes by 0.5%.

• Busted: These convertibles usually trade in a delta range of 0 to 40 and are considered more "bond like." A convertible becomes busted when the underlying stock falls well below the conversion price set when the bond is issued. The conversion price is the product of multiplying the price of the stock at the bond's issuance by the conversion premium, which is also set at the time of the bond's issuance (note the conversion premium is different from the conversion ratio, which is the number of shares that investors receive when converting a bond). A busted convertible is also referred to as being deeply "out of the money" and trades closely to its bond price floor, which typically is the lowest value that a convertible bond can fall to as long as the creditworthiness of the issuer remains unchanged. These securities become much less sensitive to moves in the underlying stock price, responding instead to changes in the company's credit quality, and thus offer more downside protection.

- Similar to the analysis of corporate bonds, analysis of these types of investments focuses more on underlying asset value and cash flow generation than on earnings growth and other traditional equity metrics. The objective of buying a busted convertible is to take advantage of an overreaction to negative fundamental developments at the company, and/or an underappreciation by the market of the company's ability to eventually turn around.
- **Balanced:** Typically, these securities trade within a range of 40 to 80 delta to the underlying equity and are priced around par value. Balanced convertibles currently represent a potentially attractive subset of the convertible securities market, as they react in a manner that is neither too equity sensitive nor too bond-like. Balanced convertibles can provide investors a way to capture the upside of an equity rally on a risk-adjusted basis while being able to cushion the impact when their associated underlying equities lose value.
- Equity-like: This type of convertible security usually trades with a delta between 80 and 100. High delta convertibles act more like the underlying equity. Once an equity's price rises and the convertible's conversion premium shrinks, the convertible will begin trading in tandem with its equity. These types of convertibles offer little downside protection given the greater distance they can fall to their bond floors.

FIGURE 2

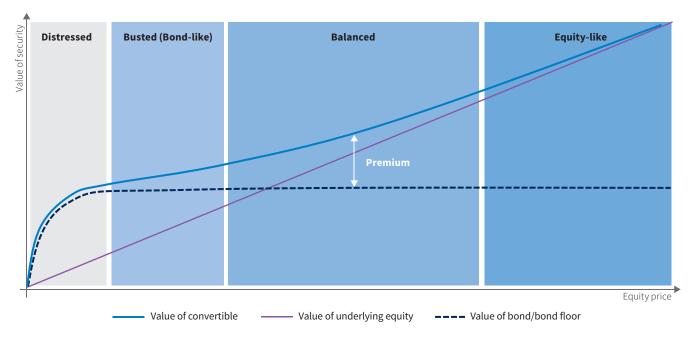
Equity sensitivity of convertible categories

Convertible type	Delta range	Characteristic	Typical underlying equity price
Busted	0-40	Bond-like (yield alternative)	Below par
Balanced	40-80	Traditional (return alternative)	Near par
Equity-like	80-100	Equity-like (equity alternative)	Above par

Source: Putnam. For illustrative purposes only. Downside protection does not assure a profit or protect against loss. It is possible to lose money in investing in convertible securities. All financial investments involve an element of risk. Therefore, the value of the investment and the income from it will vary and the initial investment amount cannot be guaranteed.

FIGURE 3

Convertible security value versus equity price



Source: Putnam. For illustrative purposes only.

Main price drivers of convertible bonds

The hybrid nature of convertible bonds is also reflected in the price drivers of these instruments. While the prices of convertibles can be influenced by a variety of factors, we will focus on the three main price drivers:

- 1. **Stock price:** If the convertible issuer's common stock increases or declines, whether due to company factors, such as earnings, or macro factors, the convertible bond's price will be affected.
- 2. Interest rates: Interest rates affect the price of convertibles in a similar fashion as they do straight bonds. As interest rates increase, the investment value will decline (and vice versa).
- **3. Credit rating:** A credit rating downgrade is generally associated with a deterioration in a company's fundamentals, and thus reflects a greater possibility that the issuer may not be able to meet its debt obligations, driving the price of a convertible bond down.

It's important to note that a convertible bond may be more or less influenced by these three factors depending on where the bond is trading relative to its conversion price. For example, a busted convertible is much less sensitive to moves in the underlying stock price than an equity-like convertible, while an equity-like convertible is likely to be less susceptible to movements in interest rates than a busted convertible, as busted convertibles trade more like debt instruments.

Advantages and disadvantages of convertible securities

We believe that convertibles are a highly attractive asset class and offer sophisticated investors a variety of investment opportunities. In the following section, we will take a closer look at the main reasons that bring us to this conclusion, but also acknowledge potential disadvantages.

- We believe convertible securities offer six main advantages to investors:
- 1. Lower volatility: For many investors, managing portfolio risk means limiting volatility. Convertible securities offer a unique way to accomplish this over longer time horizons. In a falling stock market, the debtlike elements (coupon payment and stated maturity) of the convertible typically cushion the effects of a market decline, often allowing convertibles to outperform equities. In a rising stock market, convertibles may also provide the opportunity for capital growth, albeit to a lesser degree than common stock. It is important to note that although convertible investors do not typically participate in 100% of the movements in the underlying stock, historically they have generally participated in a greater proportion of upward movements than downward movements. Over the last 20 years, the ICE BofA Global 300 Convertible Index has captured 75% of its underlying equity upside in up years versus only 42% of the downside of its underlying equities in down years.

2. Diversification: Convertibles also offer diversification along the lines of industry, style, and market capitalization. Typically, convertibles are issued by mid- and largecap companies that have high expectations for growth, which results in large market weightings in industry sectors such as information technology, consumer discretionary, and health care.* At the same time, the breadth of the convertible market provides sophisticated investors with an opportunity to participate in a wider variety of sectors that span the entire capitalization spectrum through both growth and value stocks. Historically, convertibles had a low correlation to bonds, and a lower correlation to stock indexes than the major equity indexes have to each other (Figure 4). This characteristic is beneficial from a portfolio construction perspective and helps to further increase diversification within the asset allocation.†

FIGURE 4

Convertibles correlation

5 years ended 6/30/22	ICE BofA Global 300 Convertibles	S&P 500 Index	Russell 3000 Index	Bloomberg U.S. Aggregate Bond Index	Bloomberg Global Aggregate Bond Index	MSCI World Index (ND)
ICE BofA Global 300 Convertibles	_					
S&P 500 Index	0.84	_				
Russell 3000 Index	0.87	1.00	-			
Bloomberg U.S. Aggregate Bond Index	0.36	0.22	0.23	_		
Bloomberg Global Aggregate Bond Index	0.59	0.43	0.43	0.86	_	
MSCI World Index (ND)	0.87	0.99	0.99	0.22	0.45	_

Sources: Putnam, as of 6/30/22. Past performance is not a guarantee of future results. As with any investment, there is a potential for profit as well as the possibility of loss. Indexes are unmanaged. It is not possible to invest directly in an index.

^{*} See Putnam's "The convertible bond market" in this series of papers for greater detail about this topic.

[†] See Putnam's "The behavior of convertible bonds" in this series of papers for greater detail about this topic.

- 3. Income potential: Compared with traditional equity securities, convertibles may provide the opportunity for superior income potential in certain market environments.† Also, unlike equity dividends, the convertible coupon (or dividend in the case of convertible preferred securities) is contractually guaranteed, providing investors with a more secure income stream. In select cases, convertible mutual funds may look to enhance income by purchasing higher-yielding convertible structures, such as mandatories, busted convertibles, or preferreds.
- 4. Lower principal risk: Vanilla convertibles, which make up over 80% of the convertible market, generally carry a lower level of principal risk than common stock since convertibles are more senior in the capital structure. Vanilla convertibles fall just below secured debt in a company's capital structure. In the event of corporate bankruptcy, convertible bondholders are repaid ahead of common shareholders (Figure 5). However, some other types of convertibles, such as convertible preferreds, do not offer as much principal protection in the event of bankruptcy, as they are just slightly above common stock in the capital structure.
- 5. Opportunity for capital appreciation: While a convertible's fixed income characteristics can mitigate downside risk if the issuing company's common stock performs poorly, the underlying equity option allows the holder to participate in a portion of the upside if the stock performs well. This is a clear advantage compared with a classic bond investment that does not offer any upside when the issuer's underlying equity does particularly well. As a result of this feature, convertibles offer the potential for attractive riskadjusted returns.
- 6. Lower interest-rate sensitivity: The hybrid nature of convertible securities causes them to have lower duration or interest-rate sensitivity than pure debt instruments. Features that allow convertibles to participate in the equity upside potential of the underlying common stock, for example, can reduce their interest-rate sensitivity. As a result, convertible securities have been less influenced by interest-rate movements than bonds and have performed well in rising-rate markets on a relative basis, barring any major shocks to equity markets (Figure 3). That said, changes in interest rates may influence multiple components of a convertible bond.*

FIGURE 5

Typical company capital structure

Secured debt (e.g., bank loans)				
Senior unsecured debt (e.g., convertible and non-convertible bonds)				
Subordinated debt				
Preferred equity (convertible and non-convertible)				
Common stock				
Rights and warrants				

Source: Putnam. For illustrative purposes only.

^{*} See Putnam's "The behavior of convertible bonds" in this series of papers for greater detail about this topic.

There are of course some disadvantages, or facts worth considering, before investing in convertible securities:

- 1. Callable: Many convertible bonds are callable, meaning that the issuer can force investors to convert. A bond may be issued with a specified call date or the company may call the bond and force conversion if the stock price rises beyond a particular point. In such forced conversions, the bond usually trades well above par and the company typically pays in both cash and stock. Therefore, the upside potential of the investment may be limited, though often an attractive premium.
- 2. Correlation to equities: If using convertibles in place of traditional bonds, one must be aware that convertible bonds have a higher correlation to equity markets than traditional types of secured and unsecured debt.
- **3. Default risk:** Though of higher priority than common stock, given convertibles' place in a company's capital structure (Figure 5), they are of lower priority than secured debt in the event of default, meaning that in the event of bankruptcy, there is a greater risk of not receiving principal.

Conclusion

Overall, convertible securities represent a unique opportunity for investors. However, given the various types and their functions, convertibles need to be evaluated carefully. In our view, active management is vital. Properly evaluating a convertible security requires a combination of equity, fixed income, and structural analysis, all of which require experience, time, and resources. For these reasons, using an institutional asset manager is often the best option for investing in this market. In the accompanying papers, we expand upon the market for convertible securities, their behavior, and how they can be used in the context of a portfolio.

FIGURE 6

Convertible performance during rising-rate periods

	Global yield changes (bps)		Global index performance (%)			
Date range	10-year Treasury yield change	10-year Bund yield change	10-year Japanese gov't yield change	ICE BofA Global 300 Convertible Index	Bloomberg Global Aggregate Bond Index	MSCI World Stock Index
06/13/2003- 06/14/2004	+176	+96	+140	+8.02	+0.21	+19.41
12/30/2008- 06/10/2009	+189	+74	+37	+16.75	-1.19	+9.37
07/24/2012- 12/31/2013	+164	+69	+4	+26.19	-0.21	+42.22
07/08/2016- 11/08/2018	+188	+65	+41	+23.01	-3.47	+30.83
08/04/2020- 8/31/2022	+269	+209	+21	+4.54	-17.24	+15.96

Sources: Putnam, Bloomberg, ICE, as of 6/30/22. Index returns are being shown as cumulative returns. The chart represents periods where the 10-year Treasury yield has risen 150 bps or more since the indexes' common inception. Past performance is not a guarantee of future results. As with any investment, there is a potential for profit as well as the possibility of loss. Indexes are unmanaged. It is not possible to invest directly in an index.

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