October 2022

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The behavior of the convertible market

Key takeaways

For investors considering an allocation to convertible securities, it is important to recognize the dynamic characteristics of the asset class over time and the drivers of performance.

In this paper, we evaluate convertible securities to understand the effects of equity sensitivity across the three key categories of the market, the market's changing industry bias, factor styles, and interest rates.

The market has been most impacted by movements in equity-like, growth, and technology names in its most recent history, but attribution biases will likely fluctuate as markets evolve over time.

Determining the behavior and performance attribution of the convertible market is a dynamic process due to the hybrid nature of the asset class and its constantly evolving characteristics. To identify drivers of performance, investors must examine multiple factors including, but not limited to, equity sensitivity and sector and style exposures. Additionally, market metrics including changes in interest rates and liquidity may influence performance of the asset class. In this paper, we analyze some of the most relevant factors and outline their impact on recent historical performance.

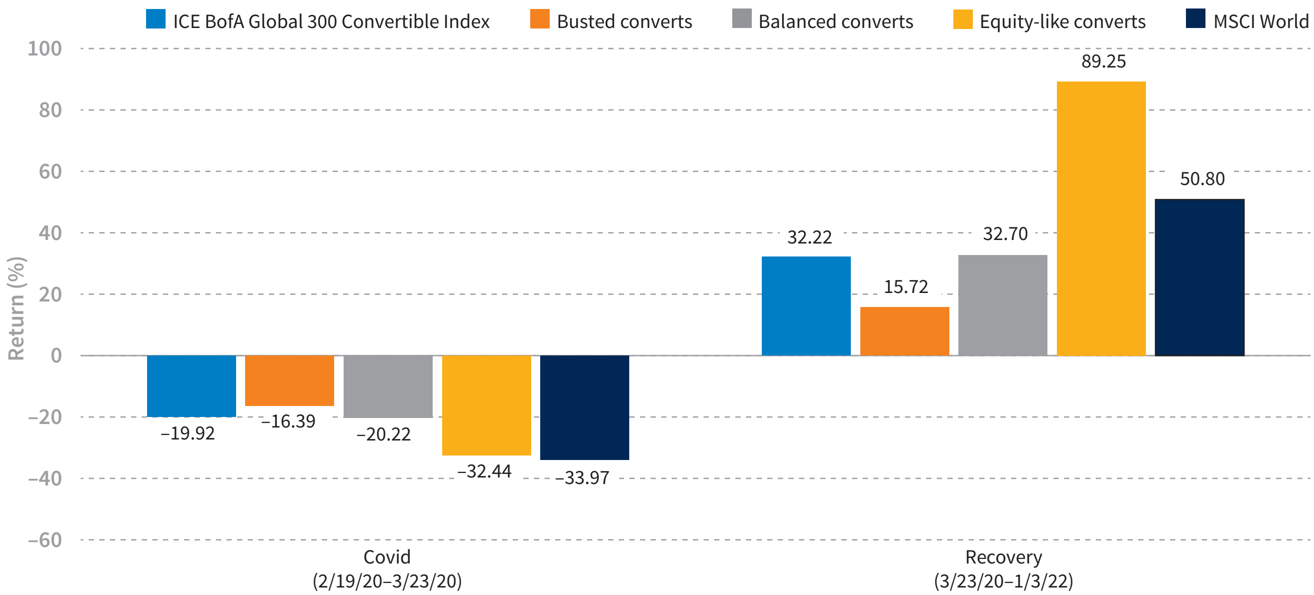
This paper is part of a series on convertible securities. See additional papers in this series on putnam.com.

Effect of equity sensitivity

As outlined in the first paper of this series, "The basics of convertible securities," convertible securities typically fit into three categories, corresponding to various levels of delta, the measure of equity sensitivity — busted, balanced, or equity-like. (Delta, also referred to as a convertible security's equity sensitivity, measures the sensitivity of the price of a convertible to the price of the underlying equity.) To analyze how these three segments of the convertible market performed in different market environments, we review their upside and downside capture ratios both during a period of declining market value and a period of rising market value relative to a broad equity index (MSCI World Index).

FIGURE 1

Convertible categories offer different upside/downside profiles



Upside/downside capture vs. MSCI World Index

	ICE BofA Global 300 Convertible Index	Busted convertibles	Balanced convertibles	Equity-like convertibles
Covid-19 outbreak (2/19/20–3/23/20)	59% downside	48% downside	60% downside	95% downside
Market recovery (3/23/20–1/3/22)	63% upside	31% upside	64% upside	176% upside

Sources: Putnam, Bloomberg, as of 8/31/22. Performance of busted convertibles is represented by the ICE BofA Yield Alternative Global 300 Convertible Index; balanced convertibles by the ICE BofA Total Return Global 300 Convertible Index; and equity-like convertibles represent the ICE BofA Equity Alternative Global 300 Convertible Index. For illustrative purposes only. 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.

In the most recent market downturn (the Covid-19 outbreak in 2020), we see that equity-like convertibles captured 95% of the downside performance of the MSCI World Index, whereas busted (bond-like) convertibles only captured 48% of the downside (Figure 1). Thus, equity-like convertibles were negatively impacted twice as much as busted convertibles during the period. However, during the recovery period, equity-like securities strongly outperformed the broader global equity market, capturing 176% of equities' upside. Relative to bond-like securities that did not recoup all their losses, equity-like convertibles rebounded at a dramatically greater rate due to strength in high-delta growth technology and certain consumer discretionary names, both of which make up a large portion of the current market. Meanwhile, balanced convertibles experienced a similar capture ratio versus equities on the upside as they did on the downside.

As equity markets rally, an investor typically expects the higher-delta portion of the convertible universe to outperform, as we saw during this recovery period. During that time, the average delta of the ICE BofA Global 300 Convertible Index was 48 and modestly more elevated than the long-term average of 42. Across geographic regions, delta was elevated, but disproportionately so within the U.S. convertible market: The ICE BofA U.S. Convertible Index delta had a high of 68 on December 31, 2020. With the U.S. comprising roughly 65% of the Global 300 Index, the elevated equity sensitivity considerably improved convertibles' performance. With that said, as markets change and become more balanced or bond-like, the degree to which equity-like convertibles outperform relative to balanced and bond-like converts may fluctuate; however, if underlying equities perform well, then the higher-delta portion of the market typically will as well.

Effect of industry bias

The convertible market provides an attractive avenue for a wide variety of companies to access capital, and therefore, industry dominance has shifted over time.[1] For example, prior to the global financial crisis (GFC) in 2008, the financials sector dominated the universe, accounting for roughly 25% of the global convertible market. More recently, the technology sector accounted for up to 29% of the universe, as of February 2021.

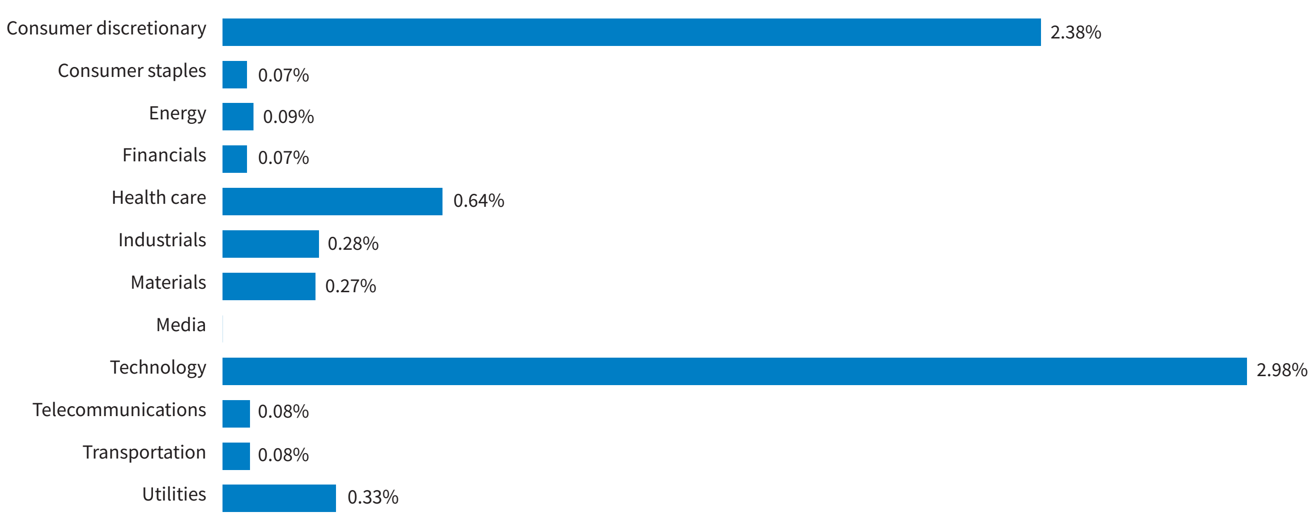
Figure 2 displays the attribution by sector of the ICE BofA Global 300 Convertible Index. Since 2018, there has consistently been a material contribution to returns from the technology and consumer discretionary sectors. This is consistent with the theme of the convertible market currently more heavily weighting growth sectors, like technology, which has performed well in recent history. Similarly, consumer discretionary exposure has grown from roughly 9% of the global index to as high as 17% (12/31/20) during the pandemic. This occurred following significant activity by value-oriented issuers (e.g., airlines, cruise lines, retailers) reentering the capital markets as well as a sizeable position in Tesla, whose market share hovered close to 5% in October 2020. In the market recovery period, certain consumer discretionary names that were considered "reopening" names rebounded; therefore, the sector was a positive contributor due to its sizeable weight. Overall, as markets evolve, it is important to analyze the sector exposure within the convertible market, as it may set the tone for future performance.

1 For more information, see the second paper in this series, "The convertible bond market."

FIGURE 2

Technology and consumer discretionary sectors have dominated convertible returns in recent years

Performance attribution by sector 2018–2022 (%)



Sources: Putnam, ICE BofA, as of 8/31/22. Average annualized returns are based on monthly returns of the ICE BofA Global 300 Convertible Index from 1/31/18 to 8/31/22. Further historical data is limited due to index methodology changes. For illustrative purposes only. Past performance is not a guarantee of future results. Indexes are unmanaged. It is not possible to invest directly in an index.

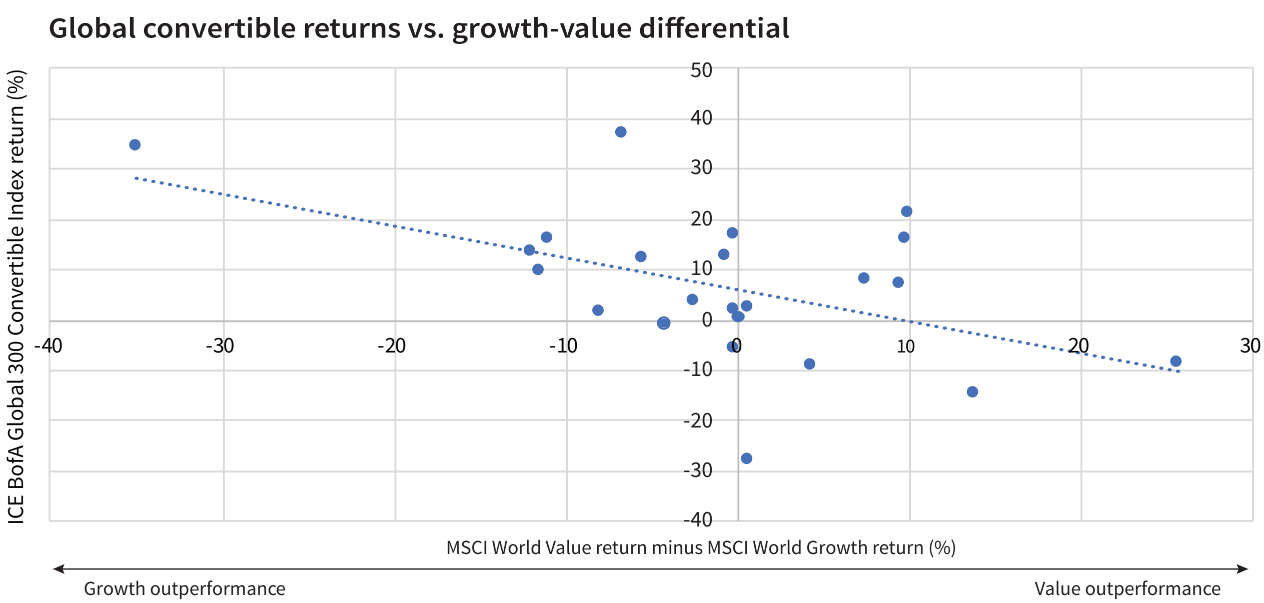
Effect of factor style

Historically, companies in growth-oriented sectors have dominated the convertible market, as discussed in the second paper in this series, "The convertible bond market." However, we have seen a resurgence of value names returning to the convertible market in the past few years. While value may be a sizeable portion of the global market, particularly versus U.S.-only convertibles, we still find that outperformance of growth names tends to influence convertible returns over time.

Using calendar-year performance since 2000, we compare the MSCI World Value Index vs. MSCI World Growth Index returns with the ICE BofA Global 300 Convertible Index performance (Figure 3). As shown by the trend line, global convertibles tend to perform better when growth equities outperform value (upper left quadrant), implying there is increased sensitivity to performance movements in growth-oriented names versus value-oriented names over time.

FIGURE 3

Outperformance of growth impacts convertible returns more than value



Source: Putnam, as of 8/31/22. Growth represents MSCI World Growth Index; Value represents MSCI World Value Index. For illustrative purposes only. Past performance is not a guarantee of future results. Indexes are unmanaged.
It is not possible to invest directly in an index.

Effect of interest rates

Convertible securities are not immune from the impact of interest-rate changes. When rates increase, a convertible's value will decline; and as interest rates decrease, its value will rise. However, convertible securities are less sensitive to interest-rate changes compared with traditional bonds. Since the GFC, the global economy was in a prolonged period of low inflation and low interest rates, which was a tailwind for risk assets. However, now that we have entered a period of rising inflation and rising interest rates, the length of which is uncertain, convertibles may provide a better interest-rate hedge than traditional bonds.

Figure 4 demonstrates convertible securities have more closely reflected equity returns than traditional bond returns during rising interest-rate periods over the past 20 years. In all five highlighted periods when the yield on the 10-year U.S. Treasury increased by at least 150 basis points (and the yields on the 10-year German Bund and 10-year Japanese Government Bond also increased), global convertibles outperformed both U.S. and global bond indexes. Convertibles may outperform traditional bonds in rising-rate periods because of their unique nature. Rising interest rates may cause the investment value of the convertible security to fluctuate, but the market price can remain relatively stable because changes in interest rates are only one of many factors that affect the market price. If the convertible's underlying stock is appreciating at the same time as interest rates are rising, the convertible's price can be impacted more by its equity component than its bond component, and thus can increase in value while traditional bonds fall in value.

FIGURE 4

Global convertibles historically outperformed other bonds during rising-rate periods

	Global yield changes			Global index performance		
Date range	**10-year Treasury yield change**	**10-year Bund yield change**	**10-year Japanese govt yield change**	**ICE BofA Global 300 Convertible Index**	**Bloomberg Global Aggregate Bond Index**	**MSCI World Stock Index**
6/13/2003–6/14/2004	176 bps	96 bps	140 bps	8.02%	0.21%	19.41%
12/30/2008–6/10/2009	189	74	37	16.75	-1.19	9.37
7/24/2012–12/31/2013	164	69	4	26.19	-0.21	42.22
7/8/2016–11/8/2018	188	65	41	23.01	-3.47	30.83
8/4/2020–8/31/2022	269	209	21	4.54	-17.24	15.96

Sources: Putnam, Bloomberg, as of 8/31/22. Index performance is cumulative for each date range.

For illustrative purposes only. The table 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. Indexes are unmanaged. It is not possible to invest directly in an index.

Liquidity of the convertible market

Liquidity is also an important aspect to consider when allocating to convertibles, as there are fewer issuers in the convertible bond market than in the traditional corporate bond market (both investment grade and high yield). Convertible issues with less liquidity can lead to increases in trading costs, or trading halts in extreme cases. It is important to conduct an in-depth analysis from a trading perspective, examining factors such as historical trading volume and the issuing company's market capitalization, before deciding to participate in a deal.

However, despite the convertible market having fewer issuers, research provided by Barclays has shown that convertibles are frequently more liquid than high-yield bonds. This may seem surprising, as one typically expects a smaller market to be more liquidity constrained than a broader market. However, convertibles generally maintain strong relative liquidity due to the liquidity of their underlying equities (which convertible arbitrage investors use to hedge their positions) and the turnover within the market for convertible issues. Figure 5 depicts the volume and turnover of the U.S. convertible and high-yield markets. Despite a considerably lower trading volume due to the smaller market size, the convertible market has noticeably higher relative turnover (right-hand scale) than the high-yield market, which is additive for liquidity purposes.

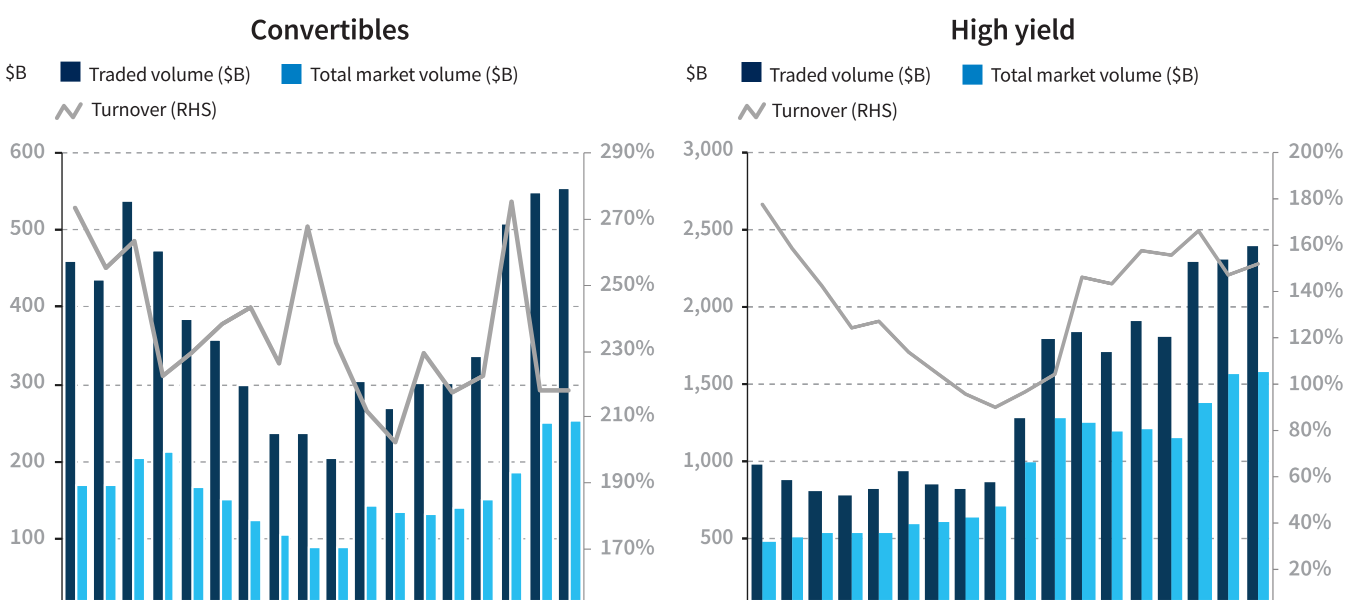
Convertibles' underlying equities are very liquid, which provides a risk hedge for investors. Furthermore, there tends to be lower volatility of flows in the convertible market relative to high yield. Overall, the hybrid nature of convertibles means their liquidity profile can fall somewhere in between that of equity markets, which are typically not liquidity constrained, and fixed income markets, where liquidity is a more important consideration.

Shifting makeup changes market behavior

Given the hybrid nature and constantly evolving characteristics of the convertible market, it is imperative to understand the makeup of the asset class in order to identify drivers of performance. As outlined, the market has been most impacted by movements in equity-like, growth, and technology names in its most recent history. However, these attribution biases will likely fluctuate as markets evolve over time, provided the convertible market remains an attractive avenue for companies to access capital markets.

FIGURE 5

U.S. convertibles are more liquid than high-yield securities



Sources: MarketAxess, Barclays Research, as of 6/30/22. For illustrative purposes only.

Analysis is based on the U.S. market due to much higher transparency of reported over-the-counter trades. Similar data is not available for the global convertible and high-yield markets.

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