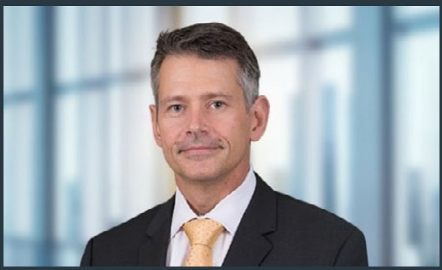
WHITEPAPER

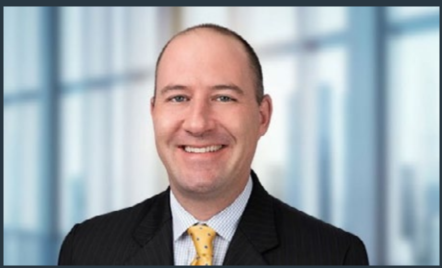
The case for global convertibles in the new YFYS regulatory environment

November 2021

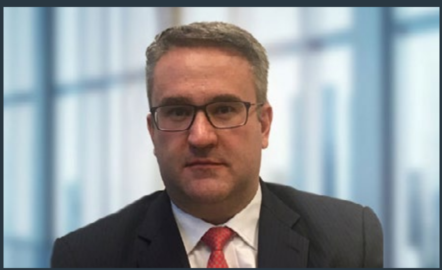


David Clott
Senior Portfolio Manager

Shawn Mato
Senior Portfolio Manager



Brendan Ryan
Portfolio Manager



Rico Pedrett
Investment Director

Contents

Market context

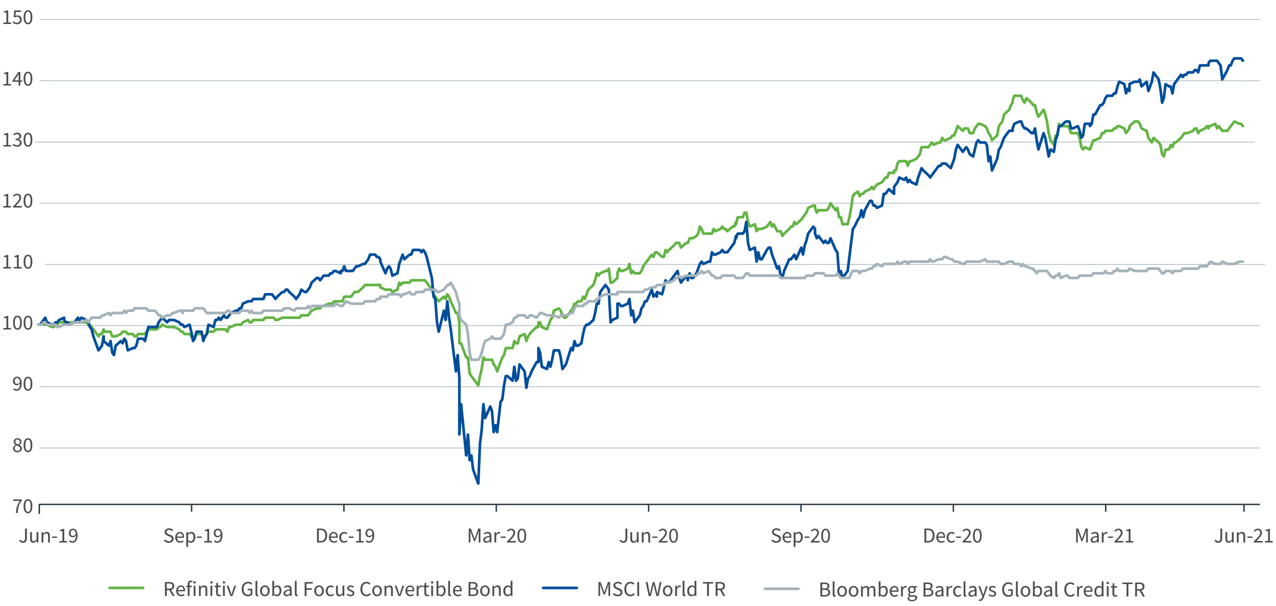
2020 brought convertible bonds into the spotlight for many investors who may have focused on more traditional asset classes for directional market exposure.

Fuelled by a significant increase in new issuance activity, convertible bonds posted one of the strongest years on record[1], demonstrating the intrinsic potential for upside participation in equities while maintaining defensive downside protection characteristics from the credit component.

This combination proved particularly valuable in a year with such a severe market dislocation due to the global COVID-19 pandemic and in the subsequent sharp rebound across risk assets. By the end of 2020, global convertibles were outperforming both global equities and global credit.

New issuance has provided new opportunities, as well as expanded the new names available.

Figure 1. **Case study: Convertible performance during the most severe market dislocation of the last decade in Q1 2020 (US$)**



Past performance is not indicative of future results. Client outcomes are not guaranteed.

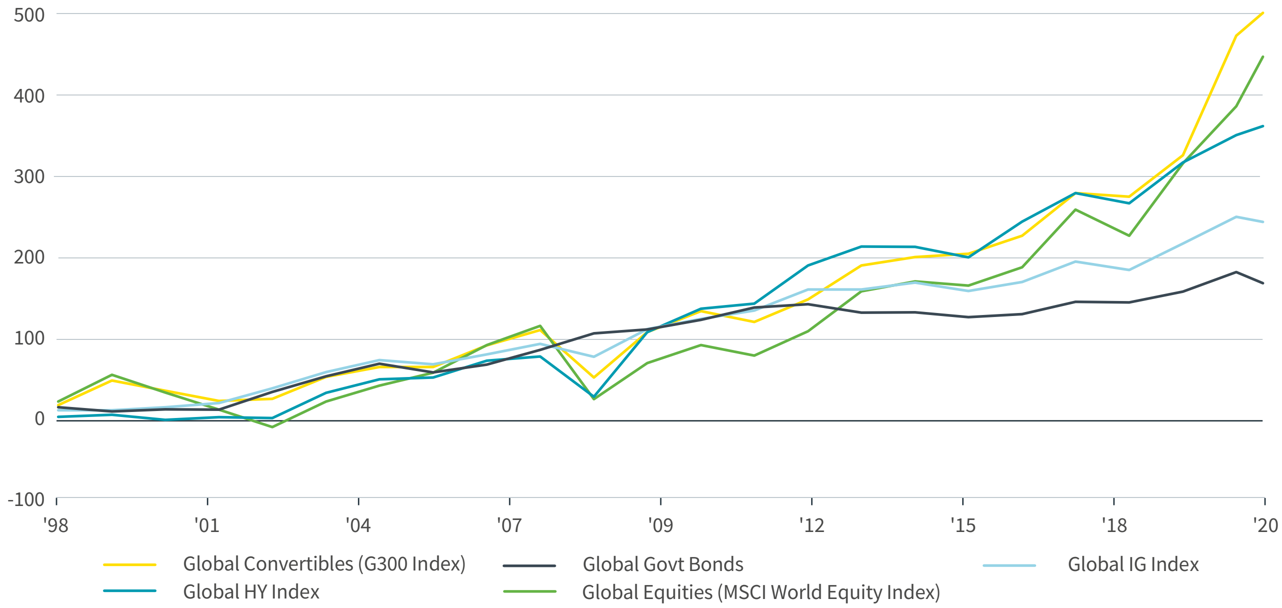
Note: Frequency - daily. Thomson Reuters Global Focus Convertible Bond Index has changed name to Refinitiv Global Focus Convertible Bond Index.

Source: Lipper, a Thomson Reuters company, data as at June 30, 2021; using Refinitiv Global Focus Convertible Bond Index, MSCI World TR and Bloomberg Barclays Global Credit TR as a proxy of asset class performance for global convertible bonds, global equities and global credit, respectively.

While the exceptional performance of 2020 may not be repeated every year, it is by no means an outlier. Instead, it confirms the observation that convertibles bonds have historically not only achieved equity-like returns with significantly lower volatility, but have also tended to outperform equities in market environments with elevated volatility[2].

1. The 2020 annual return of the Refinitiv Global Focus Convertible Bond Index was the highest since its inception in 1994.
2. Source: BoA Merrill Lynch – Global Convertibles Chartbook as at 30 June 2021, comparing cumulative returns and asset class volatility since 1998.

Figure 2. **Long-dated cumulative asset class returns (returns in US$)**



Past performance is not indicative of future results. Client outcomes are not guaranteed.

Note: Frequency – annually.

Source: BofA Global Research, ICE Data Indices, LLC, Bloomberg, data as at June 30, 2021; using indices as a proxy asset class performance.

As the extent of the pandemic started to become more visible towards the end of Q1 2020, convertibles proved their defensive qualities while still maintaining exposure to equity risk and upside. It is not altogether surprising that appetite for the asset class continues to grow. This has been driven by renewed interest from traditional equity and fixed income investors, as well as demand from dedicated convertible bond investors. Moreover, this increase in investor demand is mirrored by the healthy liquidity and supply of new issuance.

As market conditions started to normalise after the first quarter last year, new issuance levels experienced an almost unprecedented acceleration, especially in the US, with many issuers taking advantage of the opportunity of issuing convertible bonds with quick market access.

The opportunity set arising from this wave of new issues was particularly conducive for convertible bonds relative to other asset classes. The most significant pockets of supply came from two areas. First, rescue capital for issuers requiring quick market access while avoiding punitive funding costs in straight debt financing alternatives. Second, companies in sectors with attractive growth characteristics which have historically been overrepresented compared to the broader equity market, including Technology and Healthcare.

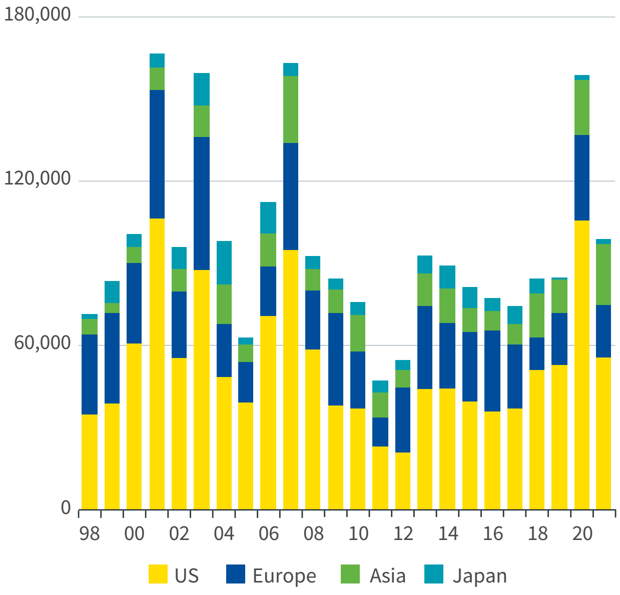
Recent performance has therefore benefited from these trends. Additionally though, the investible universe continues to offer convertibles that are either fairly valued or even display some technical cheapness compared to the theoretical aggregate value of the bond and option components.

With new issuance levels in 2021 continuing their trajectory above the long-term trend, and equity valuations and volatility heightened, convertibles could be an effective diversification tool within a defensive equity allocation.

Given that our positive outlook on the global economic recovery could be tempered by pandemic reopening uncertainties, convertibles offer an attractive risk/return profile. Certain pockets still offer relatively cheap pricing of volatility which, should equity markets move higher, is likely to gain.

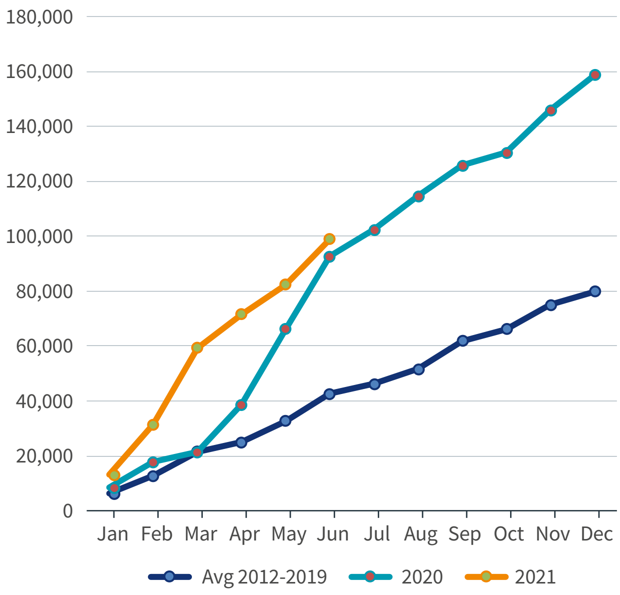
Issuance levels have begun to taper from the record pace of earlier this year.

Figure 3. **Annual global issuance aggregates (US$m)**



Source: BoA Merrill Lynch – Global Convertibles Chartbook, data as at 30 June 2021. The 2021 data shown is as at 30 June 2021.

Figure 4. **Global cumulative issuance (US$m)**



Source: BoA Merrill Lynch – Global Convertibles Chartbook, data as at 30 June 2021. The 2021 data shown is as at 30 June 2021.

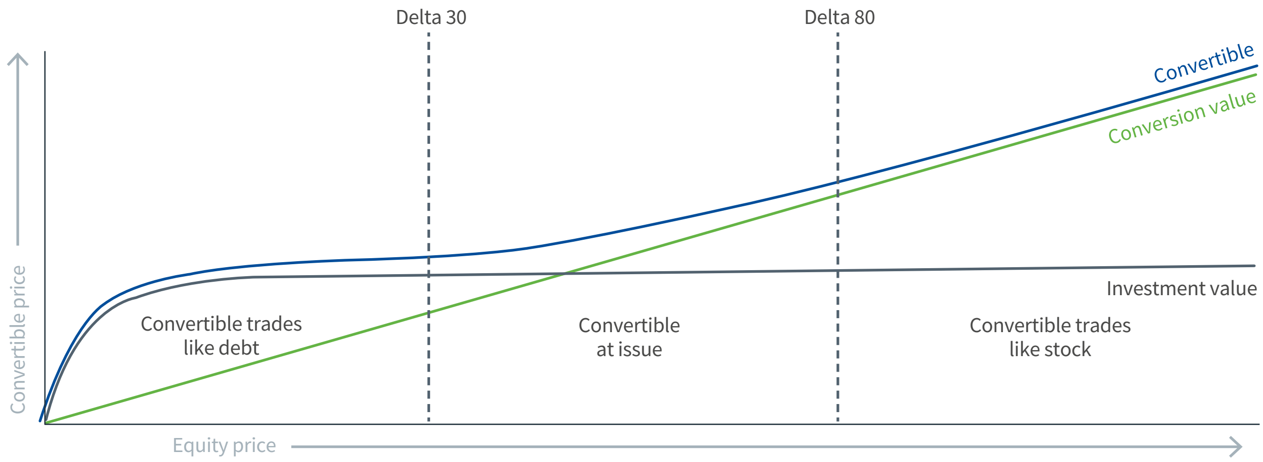
Natural asymmetry

Balanced convertibles are primed to take advantage of the new opportunities provided by the flood of issuance.

Investment professionals across many asset classes aim to identify opportunities that offer asymmetry in the risk-return profile – i.e. to position their portfolios in a way that participates in the market upside while providing protection on the downside in case of market corrections. In practice, this feature is often hard to achieve, especially in a consistent manner and throughout market cycles.

Convertibles offer a natural asymmetry as investors can either chose to convert to equity if the stock performs well or wait for the bond to redeem at maturity if the stock does not exceed the conversion price. This asymmetric profile is most extreme in the "balanced" part of the market, or in instruments that offer an equity sensitivity of between 30 per cent and 80 per cent compared to changes in the underlying share prices.

Figure 5. **Hypothetical convertible bond return versus equity return**



Note: The data shown are hypothetical in nature, does not reflect actual investment results, and are not guarantees of future results. Potential returns are based on a number of assumptions, may not be realised and are subject to risk.

Source: Aviva Investors, September 2021.

In order to take advantage of this structural convexity, our investment process focuses on balanced convertible bonds to maximize exposure to the embedded asymmetry.

By focusing on convertibles in this equity sensitivity (or delta) category, and by continuously selling the under- as well as outperformers, the portfolio can benefit in both positive and more volatile markets. Even in challenging markets with elevated volatility, convertible valuations can benefit on the downside as increases in the value of the embedded equity option helps to dampens any potential market dislocations.

Convertible bonds can be used in a wide range of investment approaches, ranging from acting as a low-volatility alternative to equities to being complementary debt instruments with diversification benefits. Investing in the balanced portion of the global convertible bond market can help achieve both goals at the same time.

A low-volatility alternative to equities

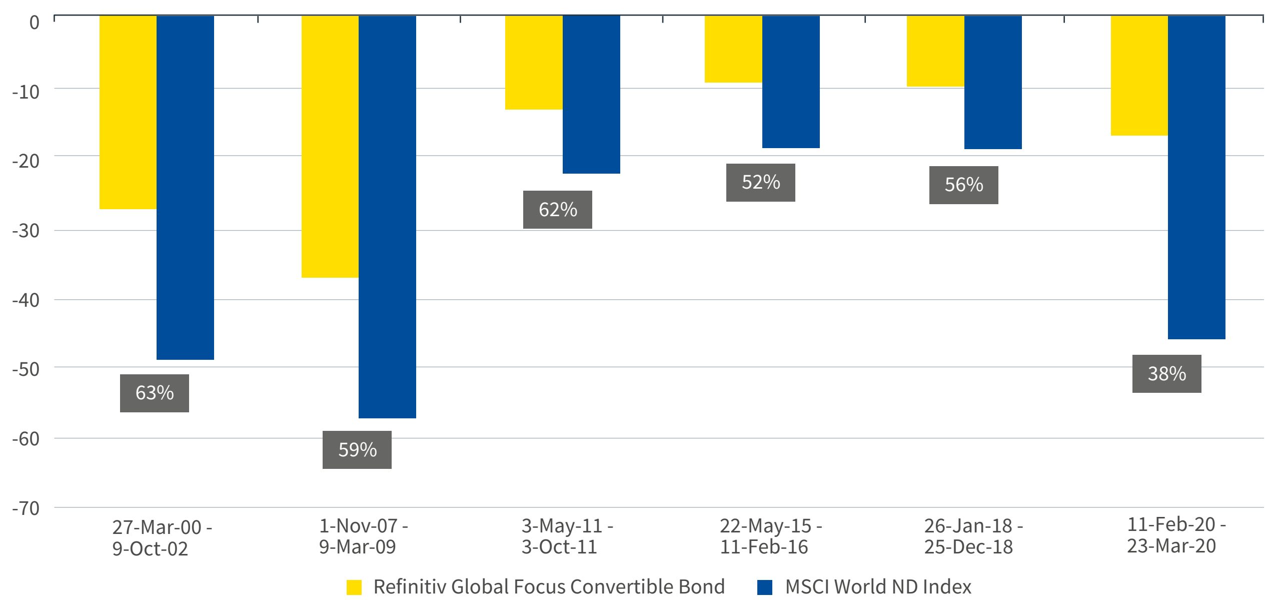
Convertibles currently look attractive compared to equities as volatility is expected to continue in the coming months and quarters. Valuations in many equity markets are also high in a historical context and, though we are positive on markets in general, the recent rally is unlikely to continue in a straight line. This leaves room for potential drawdowns which – even if only temporary –can be quite severe.

The defensive attributes of convertible bonds have helped to dampen such drawdowns, while giving continued upside exposure through the embedded optionality. Furthermore, a healthy and diverse mix of opportunities currently lie in growth, cyclical and recovery names.

Convertibles also offer unusually long-dated and liquid options related to single stocks that are typically not available in other parts of equity markets, especially compared to the listed options market. We find this particularly appealing in times where volatility itself is attractively priced within the asset class.

A strategic allocation for asset allocators seeking more consistent returns and downside protection.

Figure 6. **Peak to trough downside market capture (for market periods down >10 per cent) (per cent)**



Past performance is not indicative of future results. Client outcomes are not guaranteed.

Note: Max drawdown per cent (peak to trough). Frequency - daily, in US$. Thomson Reuters Global Focus Convertible Bond Index has changed its name to Refinitiv Global Focus Convertible Bond Index.

Source: Bloomberg, data as at June 30, 2020.

The opportunity set in terms of individual names and industry diversification is as healthy as it has ever been.

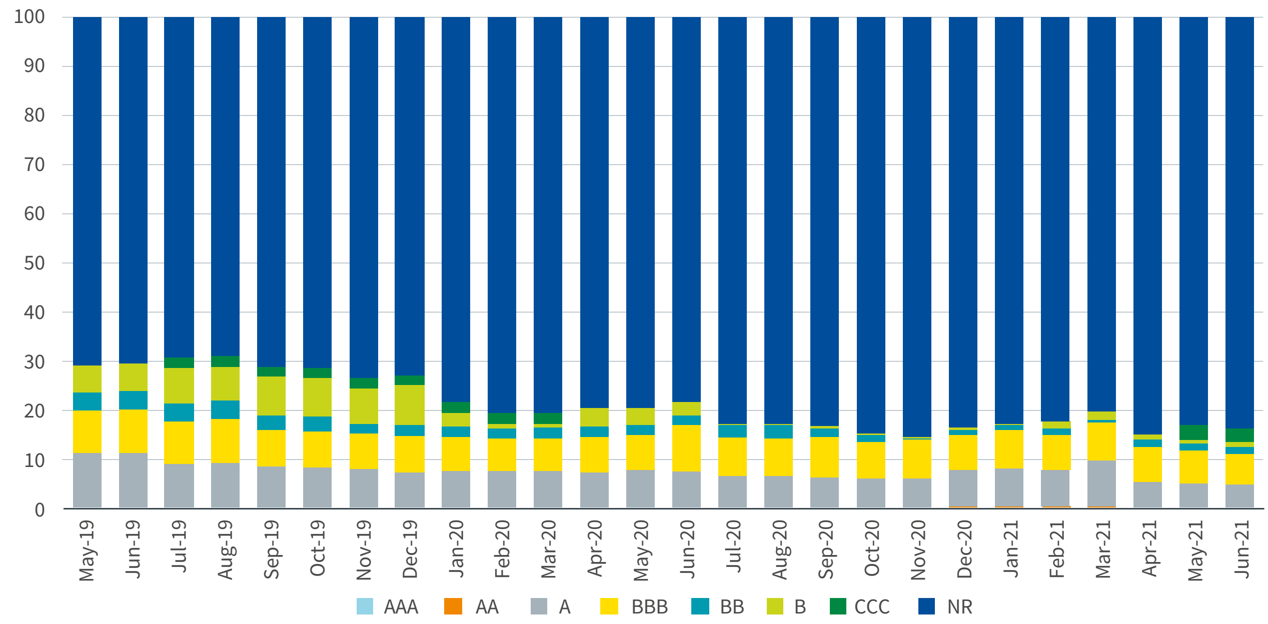
Diversification in fixed income

As highlighted in Figure 2, the long-term performance of convertible bonds compares favourably to other corporate credit asset classes, including investment grade and high yield.
In addition to offering upside participation to equities, which clearly is an important aspect in this relative outperformance, there are several other factors that contribute to the appeal of convertibles in a diversified fixed income portfolio.

1. Convertible bond issuers differ substantially from other corporate issuers

As a popular source of funding, especially for growth companies, convertible bonds are often the only piece of capital markets debt in a company's capital structure. One way to illustrate the limited overlap compared to investment grade and high yield markets is the significant portion of unrated paper in the convertible bond market, highlighting the unique nature of the convertible bond universe.

Figure 7. **Convertible benchmark credit quality breakdown (per cent)**



Note: Using Refinitiv Global Focus Index to represent the broader convertible market.
Source: Aviva Investors and Thomson Reuters, data as at June 30, 2021.

Moreover, a sector breakdown of the convertible bond market, illustrated by a widely followed benchmark, compared to the global high yield market shows a significantly different sector composition of the available opportunity sets.

Figure 8. **Global convertibles sector breakdown (per cent)**

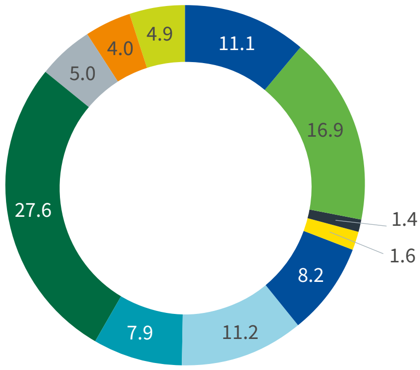
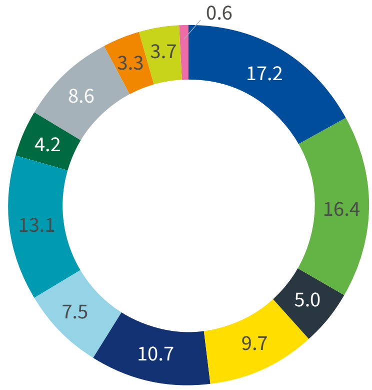


Figure 9. **Global high yield sector breakdown (per cent)**



Comm. services
Consumer disc.
Consumer staples
Energy
Financials
Health care
Industrials
Info tech
Materials
Real estate
Utilities
Cash and FX G/L

Note: Using Refinitiv Global Focus Index to represent the broader convertible market.
Source: Aviva Investors and Thomson Reuters, data as at June 30, 2021.

Note: Using Bloomberg Barclays Global High Yield excl. CMBS and EMG 2 per cent to represent the broader global high yield market.
Source: Aviva Investors and Aladdin, data as at June 30, 2021.

2. An attractive fixed income opportunity when rates are rising

Convertible bonds offer fixed income investors a unique ability to protect real returns in an inflationary, rising interest rate environment. Their equity attributes help protect against inflation and heightened volatility in a way that most other fixed income investments lack. They are also less sensitive to interest-rate fluctuations than straight debt.

For this reason, we would expect convertibles to behave more like equities in an environment with rising interest rates, as has historically been seen.

The shorter duration nature of convertibles (and the potential use of embedded puts) provides additional protection during periods of rising interest rates. Historically, convertibles have correlated more closely with equity returns than any fixed income asset types – providing an excellent risk-mitigation strategy through diversification.

Below are more detailed explanations as to why this is the case:

Inflation-linked protection from equity component

While convertibles are affected by rising interest rates, they are also affected by the price movements of their underlying stocks, which tends to dampen the negative impact of rising rates.

This was seen in the last major inflationary period from 1978-1982[3], which had annualised inflation of 9.8 per cent (compared to 2.94 per cent over the last thirty years). Not only did convertible bonds dramatically outperform Treasuries and corporate bonds in this period, they posted equal or superior performance to equity indices during this five-year period as well.

3. For investors concerned with weak fixed income performance as a result of inflation, note that during the period from 1979-1981, inflation increased by more than ten per cent for three consecutive years. They even outpaced inflation to provide positive real returns.

Figure 10. **Risk and return, 5-year increments, 1957-1992 (per cent)**

Period	Convertible bonds		S&P 500		Intermediate-term Corporate bonds		Long-term Corporate bonds	
	Compound annual report	Standard deviation	Compound annual report	Standard deviation	Compound annual report	Standard deviation	Compound annual report	Standard deviation
1957-62	3.19	16.08	8.88	21.33	4.26	2.99	4.46	5.01
1963-67	9.36	12.67	12.39	13.79	0.76	2.75	0.30	3.60
1968-72	0.23	17.65	7.53	10.70	6.48	7.59	5.85	9.87
1973-77	6.79	10.09	-0.21	17.31	7.81	5.67	6.29	8.21
1978-82	16.48	11.94	14.05	16.07	7.15	9.15	5.84	15.34
1983-87	11.45	12.70	16.49	17.92	14.35	5.69	13.78	10.67
1988-92	12.49	7.93	15.89	13.36	11.17	3.53	12.50	6.28

Source: Scott L. Lummer, Mark W. Riepe, and Laurence B. Siegel, 'Taming your optimizer: A guide through the pitfalls of mean-variance optimization', in Jess B. Lederman and Robert A. Klein, eds., 'Advances in Asset Allocation: Techniques for Optimizing Portfolio Management in the U.S. and Global Markets', New York: John Wiley & Sons, 1994; and Ibbotson Associates, Inc., Chicago.

Positive exposure to volatility

Holding other factors constant, an increase in volatility that might be expected with sudden interest rate sensitivity would increase the value of the call options embedded in convertible bonds. This may help to explain why convertibles even managed to outperform equity indices in the last significant period of rising rates.

Minimising duration risk

Convertibles are typically issued as 5-7 year instruments, and sometimes have maturities as short as three years or less. Versus many outstanding corporate bonds, which are 8-10 years in duration, a lower duration convertible will help mute downside performance when interest rates rise. In addition, convertible bonds frequently contain puts at even shorter intervals, allowing for early optional prepayment.

Diversification within a fixed income portfolio

Convertibles can be particularly useful for fixed income investors who are restricted in their equity holdings. Historical data shows that returns on convertible bonds are more closely correlated with equities than with corporate bonds or Treasury securities. Through mean-variance optimisation, fixed income portfolio risk can therefore be reduced with the addition of convertibles to the overall asset allocation.

3. Convertibles offer resilience in times of market dislocation and liquidity shocks

The migration towards longer maturities and lower-grade credits has not only resulted in a higher duration risk but can often coincide with incremental liquidity risk in diversified fixed income portfolios.

Compared to other risk asset classes, especially lower-grade credit, convertible bonds have historically illustrated notable resilience. A significant shift towards fundamental long-only investors and a general deleveraging of convertible issuers has helped convertible bonds withstand market dislocations well – most recently in March 2020.

Using the US market as an example, which lends itself as the best geography to compare liquidity because of its size and the relative importance in international capital markets, as well as the Trade Reporting and Compliance Engine ("TRACE"), which is the FINRA-developed vehicle that facilitates the mandatory reporting of over-the-counter transactions in eligible fixed income securities, allows for a comparison to the high yield market.

From 2011 to 2020, the average annual turnover in US convertible bonds equated to 233 per cent of the outstanding amount. This is compared to 126 per cent in US high yield bonds. Since the market dislocation in the first quarter of 2020 and the subsequent record levels of new issuance activity in the convertible bond market, the absolute turnover in the asset class has significantly increased; the first quarter of 2021 amounted to the highest absolute turnover in US convertible bonds on record, with total trading activity in excess of $160bn. Annualising the quarterly run-rate, the trading activity in US convertibles is on track for a 313 per cent turnover in 2021, compared to 192 per cent in US high yield.

A potential complement to global credit with competitive returns and less exposure to interest rate fluctuations.

4. Growing importance of sustainable finance

2020 was the year of the first shoots of "green" convertible bond issuance. While this segment of the market is still nascent and may lack the scalability of the more established green bond market, these instruments display an important trend towards sustainable investment. We anticipate that this part of the market will gain traction, especially considering that innovative sectors such as technology and renewable energy have a strong representation in the global convertible bond universe.

Benefits of active management

Long-only convertible investing favours the active investor.

Actively managing convertible bond portfolios with an unconstrained investment approach is an important attribute to take advantage of the currently attractive market conditions by:

- Offering flexibility to navigate changing market conditions
- Allowing to calibrate the portfolio with varying degrees of equity sensitivity and/or duration
- Identifying pricing anomalies in certain overlooked parts of the global market that can result in alpha opportunities compared to the most liquid securities that are included in the benchmark

An active and unconstrained approach can give investors a distinctive advantage compared to passive investment. Specifically, active management offers:

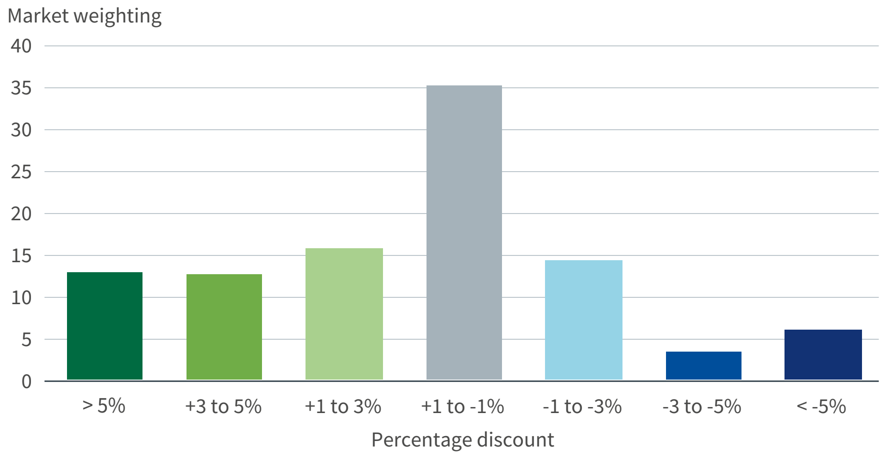
- **Alpha** opportunities due to pricing anomalies
- **Flexibility** to navigate changing market conditions
- **Ability** to calibrate portfolios with varying degrees of equity sensitivity or duration
- **Asymmetric** outcomes, requiring a greater emphasis on intended risks versus unintended risks.

The global convertible market remains fragmented with significant opportunities.

Taking advantage of relatively cheap valuations

With the global convertible market trading below fair value, it remains a fragmented market with significant opportunities, especially in pockets of the market that are not included in widely followed benchmarks.

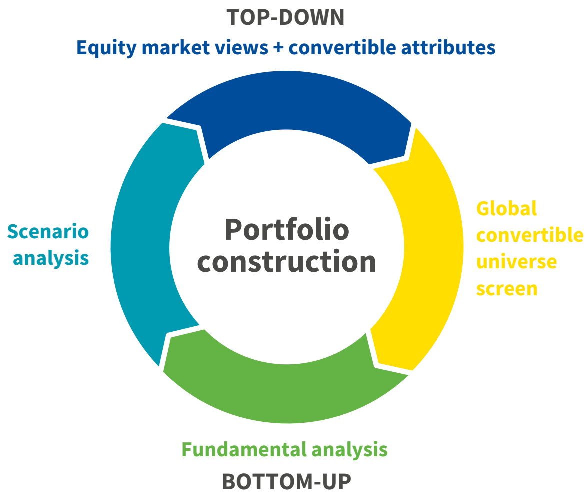
Figure 11. **Market cheapness offers opportunities to exploit (per cent)**



Note: Using BAML G300 Index to represent the broader convertible market.
Source: Bank of America Merrill Lynch, data as at June 30, 2021.

Investment process: We combine a top-down and bottom-up approach to investment management. While the underlying characteristics of a security are of the utmost importance, we seek to enhance the portfolio construction process through an analysis of top-down and macro-economic factors.

Figure 12. **Combining top-down approach with fundamental bottom-up security selection**



Source: Aviva Investors, as at September 2021.

Regional and asset allocation decisions

Utilising a **top-down** approach, we seek to identify attractive regional markets through research on global equity market growth potential, macroeconomic analysis and fundamental convertible market attributes.

Regional allocations among Asia, Europe and North America are mainly strategic, which allows us to take advantage of disconnections between fundamental strength and valuation levels within various convertible markets. We also incorporate economic and asset allocation research over medium-term outlooks. This research includes economic scenario analysis and asset-return forecasting. The final asset allocation is driven by the overall delta/equity sensitivity.

Utilising a **bottom-up** approach and a broad investment universe which consists of approximately 1,500 global convertible securities, we look for securities with favourable risk/reward characteristics and strong underlying equity and credit fundamentals. We focus on securities that offer asymmetric return profiles that we feel will enhance performance and provide a competitive level of return relative to a given level of risk over the long term.

Our global, active and unconstrained investment approach enables us to capture inefficiencies and unique pricing anomalies to increase alpha potential.

How this strategy can be applied in client portfolios: The Aviva Investors Global Convertibles strategy can serve multiple roles within investors' portfolios. Seeking to provide equity-like returns with lower volatility and adding diversification and convexity within a diversified portfolio.

Convertible bond valuations are currently at levels usually seen after significant drawdowns.

The Australian backdrop

Australian institutional investors continue to face challenges from the persistent low-yield environment

Like their counterparts globally, Australian institutional investors continue to face challenges from the persistent low-yield environment and the requirement to deliver strong risk-adjusted returns for their members.

In this section of paper, we examine the role long-only global convertible bonds can play in an Australian institutional portfolio.

Implications of the recent APRA superannuation reforms

The recent introduction of the government's superannuation reforms, "Your Future, Your Super" (YFYS), was intended to improve retirement outcomes by holding underperforming funds to account. However, this has introduced some unintended consequences for superannuation funds.

There is now ongoing business risk associated with failing the YFYS performance test, which means funds are faced with balancing or making a trade-off between maximising returns for their members' funds and passing the YFYS performance test.

While it is beyond the scope of this paper to discuss the nuances of the YSYF performance test, we see evidence funds are responding to the reforms in different ways.

1. Superannuation funds are changing the asset class classification of their strategic asset allocation (SAA) to align with APRA's YFYS benchmark.
2. Because the YFYS benchmark measures how well a superannuation fund has implemented its Strategic Asset Allocation (SAA), superannuation funds are moving away from active management in large liquid asset classes (i.e., equities) for passive alternatives.

These two actions result in reducing tracking error and brings the performance of the fund closer to that of the YFYS benchmark, increasing the likelihood that the fund will pass the YFYS performance test. We don't believe this is in the best interest of members and could result in lower risk-adjusted returns.

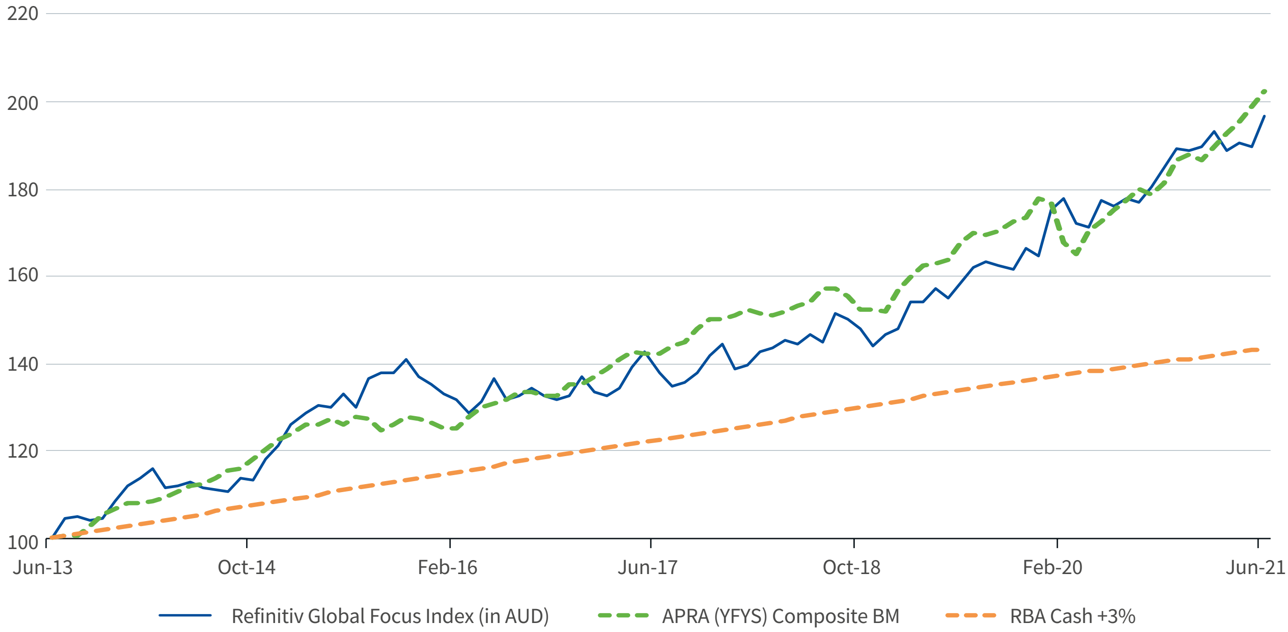
How can global convertibles be used within the YFYS framework?

In addition to the unintended consequences mentioned above, liquid alternatives that have historically been used as a bond replacement and risk diversifier will be used more selectively going forward. Under the reforms, the YFYS performance benchmark for liquid alternatives is a (50/50) equity/ bond index, which is a difficult benchmark to outperform against.

We believe that creates an opportunity for long-only global convertible bonds to play a role in institutional portfolios. As mentioned earlier, the key return drivers of convertibles are equity, credit, interest rates and volatility. These diversifying qualities, with embedded downside protection, make convertible bonds a sensible candidate for an institutional investor to consider.

To demonstrate the benefits of convertibles, we have plotted the performance of the Refinitiv Global Focus Index (Global Convertible Bonds) against APRA YFYS (50% MSCI ACWI /50% Bloomberg Barclays Global Aggregate) index and RBA Cash +3%.

Figure 13. **Refinitiv Global Focus Index versus APRA (YFYS) Composite Index & RBA Cash +3%**



Past performance is not indicative of future results. Client outcomes are not guaranteed.
Note: The constituents and composition of the APRA (YFYS) Composite Index used in the chart above.[4]
Source: Aviva Investors and Bloomberg, data as at June 30, 2021.

The chart above illustrates the unique return/risk drivers make global convertibles one of few liquid asset classes that can keep pace with the new APRA YFYS benchmark for alternatives.

Why is an allocation to long only convertibles beneficial in this market environment?

As outlined earlier in the paper, the hybrid nature of global convertible bonds and asymmetric return profile provide a unique balance between capital appreciation and downside protection.

Here, we set out some of the key reasons why global convertibles could play an important role in institutional portfolios:

1. The co-ordinated monetary and fiscal stimulus from central banks and governments has driven up valuations in risk asset markets and provided an environment where investors are looking for equity-like returns with low volatility. The asymmetric nature of convertibles provides investors with a low volatility equity substitute.
2. Current heightened volatility in equity markets provides a tailwind for convertible bonds. Convertibles are one of the few asset classes to have demonstrated an ability to not only withstand but benefit in volatile markets.
3. Acceleration in convertible bond issuance has increased and broadened the opportunity set for investors. We believe convertibles offer either fair value or are cheaper than their theoretical valuations.
4. The asset class has evolved significantly since the global financial crisis, with most of the buyers long-only investors. The companies issuing these bonds range from fast-growing companies in the technology and healthcare sectors, to cash-strapped leisure, tourism and retail companies looking for rescue capital to shore up their balance sheets.

4. APRA (YFYS) Composite benchmark is comprised of (25% MSCI ACWI ex AU (Unhedged) in AUD, 25% MSCI ACWI ex AU (Hedged in AUD), 50% Bloomberg Barclays Global Aggregate Index (hedged in AUD)).

Conclusion

After the excellent performance of the asset class in 2020, with relative outperformance compared to other risk asset classes including equities and credit, we continue to see a positive market backdrop for convertible bonds. This is despite the recent valuation compression across the investable universe following record levels of new issuance in the last twelve months.

While the extent of this success may have been extraordinary, which may not be repeated every year or throughout an economic cycle, there is a compelling case for convertible bonds to continue their equity-like returns with significantly reduced volatility.

The natural asymmetry of the instrument makes convertible bonds well equipped for a wide range of market scenarios. In our view, the unique characteristics of balanced convertible bond portfolios, particularly when actively managed using an unconstrained approach, remain an attractive investment proposition that is well-suited to the current volatile and uncertain market environment.

As the global economy recovers from the pandemic and we move into a more volatile but reflationary macro environment, institutional investors again find themselves at a challenging point of the investment cycle, with valuations driven up significantly by fiscal and monetary stimulus. With fewer defensive options available for institutional investors to utilise in risk-off periods, and the added burden of having to navigate the changing regulatory environment in Australia, investors need to think differently about how they will continue to deliver strong risk-adjusted returns for members.

We believe an allocation to long-only global convertible bonds, with their diversifying characteristics and asymmetrical return profile, can improve multi-asset portfolios' efficient frontier by adding defensive characteristics while continuing to offer equity exposure.

Portfolio management

David Clott
CFA - Senior Portfolio Manager

Joined investment industry: 1992
Joined Aviva Investors: 1999

Main responsibilities
David manages our Global Convertibles Absolute Return and our Global Convertibles Long Only strategies.

Experience and qualifications
David joined Aviva Investors as an equity portfolio manager in 1999 and has since spent most of his career managing both long only and absolute return global convertibles strategies. He co-founded both convertible funds in 2002 and 2009, respectively. From 2014 until his return to Aviva Investors in 2020, David served as a Senior Portfolio Manager on the Westwood Global Convertible Securities team. Additionally, he has been involved in renewable energy investments and research throughout his career, maintaining board representation on two portfolio companies in this area.

David holds a BSc in Finance from Bryant University and an MSc in Energy Policy and Climate Change from Johns Hopkins University. He is a CFA Charterholder.

Shawn Mato
CFA, CAIA - Senior Portfolio Manager

Joined investment industry: 1994
Joined Aviva Investors: 2001

Main responsibilities
Shawn manages our Global Convertibles Absolute Return and our Global Convertibles Long Only strategies.

Experience and qualifications
Shawn joined Aviva Investors as an equity analyst in 2001, started managing the long only strategy in 2004 and co-founded the absolute return strategy in 2009. From 2014 until his return to Aviva Investors in 2020, he served as a Senior Portfolio Manager on the Westwood Global Convertible Securities team. Prior to 2001, Shawn was a Research Associate at Dresdner Kleinwort Wasserstein, a Financial Consultant at Deloitte and Touche LLP, and held a variety of roles at Nomura Securities.

He holds a BSc in Business Administration from the University of New Hampshire and an MBA in Finance with Honors from Fordham University.

Shawn is a CFA and CAIA Charterholder. He is also a member of the CFA Institute, the Boston Security Analysts Society and Chartered Alternative Investment Analyst Association.

Brendan Ryan
CFA - Portfolio Manager

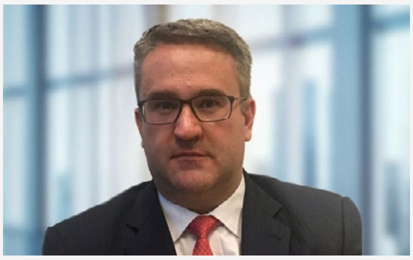
Joined investment industry: 2004
Joined Aviva Investors: 2011

Main responsibilities
Brendan serves as a Senior Research Analyst on our Global Convertibles Absolute Return and our Global Convertibles Long Only strategies.

Experience and qualifications
Brendan joined Aviva Investors in 2011 as a convertible bond research analyst. From 2014 until his return to Aviva Investors in 2020, he served as a Senior Research Analyst on the Westwood Global Convertible Securities team.
Prior to 2011, Brendan held various positions focused on debt and reorganised equity of distressed/bankrupt firms at Cypress Tree Investment Management LLC for seven years.

He holds a BSc in Biology from Boston College and an MBA in Management/ Finance from Massachusetts Institute of Technology.

Brendan is a CFA Charterholder. He is also a member of the CFA Institute and the Boston Security Analysts Society.



Rico Pedrett
Investment Director

Joined financial industry: 2001
Joined Aviva Investors: 2020

Main responsibilities
Rico is an Investment Director in the Multi-Asset & Macro team, focusing on our Multi-Strategy and Convertible Bond capabilities. In his role, he works closely with our portfolio managers to articulate their investment process, portfolio positioning and investment performance. He is based in London.

Experience and qualifications
Rico joined Aviva Investors in November 2020. He spent most of his 20-year career as a capital markets banker at Merrill Lynch, Goldman Sachs and UniCredit.

In Rico's most recent role as Head of Equity-Linked Capital Markets, he was responsible for the origination, structuring and execution of convertible bond transactions. Rico also spent two years at CQS, where he focused on the development and structuring of long-only and hedged multi-asset investment solutions with particular focus on traditional and alternative convertible bond strategies.

He holds a Master's in Business Administration and Economics from the University of St. Gallen (lic. oec. HSG) and a Sustainable Finance certificate from the University of Cambridge for Sustainability Leadership.

Key risks

The value of an investment and any income from it can go down as well as up. Investors may not get back the original amount invested.

Convertible bonds can earn less income than comparable debt securities and less growth than comparable equity securities, and carry a high level of risk.

Bond values are affected by changes in interest rates and the bond issuer's creditworthiness. Bonds that offer the potential for a higher income typically have a greater risk of default.

Important information

Except where stated as otherwise, the source of all information is Aviva Investors Global Services Limited (AIGSL). Unless stated otherwise any views and opinions are those of Aviva Investors. They should not be viewed as indicating any guarantee of return from an investment managed by Aviva Investors nor as advice of any nature. Information contained herein has been obtained from sources believed to be reliable but has not been independently verified by Aviva Investors and is not guaranteed to be accurate. Past performance is not a guide to the future. The value of an investment and any income from it may go down as well as up and the investor may not get back the original amount invested. Nothing in this material, including any references to specific securities, assets classes and financial markets is intended to or should be construed as advice or recommendations of any nature. Some data shown are hypothetical or projected and may not come to pass as stated due to changes in market conditions and are not guarantees of future outcomes. This material is not a recommendation to sell or purchase any investment.

In Europe this document is issued by Aviva Investors Luxembourg S.A. Registered Office: 2 rue du Fort Bourbon, 1st Floor, 1249 Luxembourg. Supervised by Commission de Surveillance du Secteur Financier. An Aviva company. In the UK Issued by Aviva Investors Global Services Limited. Registered in England No. 1151805. Registered Office: St Helens, 1 Undershaft, London EC3P 3DQ. Authorised and regulated by the Financial Conduct Authority. Firm Reference No. 119178.

In Singapore, this material is being circulated by way of an arrangement with Aviva Investors Asia Pte. Limited (AIAPL) for distribution to institutional investors only. Please note that AIAPL does not provide any independent research or analysis in the substance or preparation of this material. Recipients of this material are to contact AIAPL in respect of any matters arising from, or in connection with, this material. AIAPL, a company incorporated under the laws of Singapore with registration number 200813519W, holds a valid Capital Markets Services Licence to carry out fund management activities issued under the Securities and Futures Act (Singapore Statute Cap. 289) and Asian Exempt Financial Adviser for the purposes of the Financial Advisers Act (Singapore Statute Cap.110). Registered Office: 1Raffles Quay, #27-13 South Tower, Singapore 048583. In Australia, this material is being circulated by way of an arrangement with Aviva Investors Pacific Pty Ltd (AIPPL) for distribution to wholesale investors only. Please note that AIPPL does not provide any independent research or analysis in the substance or preparation of this material. Recipients of this material are to contact AIPPL in respect of any matters arising from, or in connection with, this material. AIPPL, a company incorporated under the laws of Australia with Australian Business No. 87 153 200 278 and Australian Company No. 153 200 278, holds an Australian Financial Services License (AFSL 411458) issued by the Australian Securities and Investments Commission. Business Address: Level 30, Collins Place, 35 Collins Street, Melbourne, Vic 3000, Australia.

The name "Aviva Investors" as used in this material refers to the global organization of affiliated asset management businesses operating under the Aviva Investors name. Each Aviva investors' affiliate is a subsidiary of Aviva plc, a publicly- traded multi-national financial services company headquartered in the United Kingdom. Aviva Investors Canada, Inc. ("AIC") is located in Toronto and is registered with the Ontario Securities Commission ("OSC") as a Portfolio Manager, an Exempt Market Dealer, and a Commodity Trading Manager. Aviva Investors Americas LLC is a federally registered investment advisor with the U.S. Securities and Exchange Commission. Aviva Investors Americas is also a commodity trading advisor ("CTA") registered with the Commodity Futures Trading Commission ("CFTC") and is a member of the National Futures Association ("NFA"). AIA's Form ADV Part 2A, which provides background information about the firm and its business practices, is available upon written request to: Compliance Department, 225 West Wacker Drive, Suite 2250, Chicago, IL 60606.

251920 – 01/11/2022

Contact us

Aviva Investors
St Helen's, 1 Undershaft
London EC3P 3DQ
+44 (0)20 7809 6000

www.avivainvestors.com