COLCHESTER®
GLOBAL INVESTORS

The Death of Government Bonds has Been Greatly Exaggerated

28 September 2020

Heathcoat House
20 Savile Row
London W1S 3PR
United Kingdom
Tel: +44 207 292 6920

885 Third Avenue
24th Floor
New York, NY 10022
United States of America
Tel: +1 646 472 1800

6 Battery Road #40-02A
Six Battery Road
Singapore 049909
Singapore
Tel: +65 3158 0222

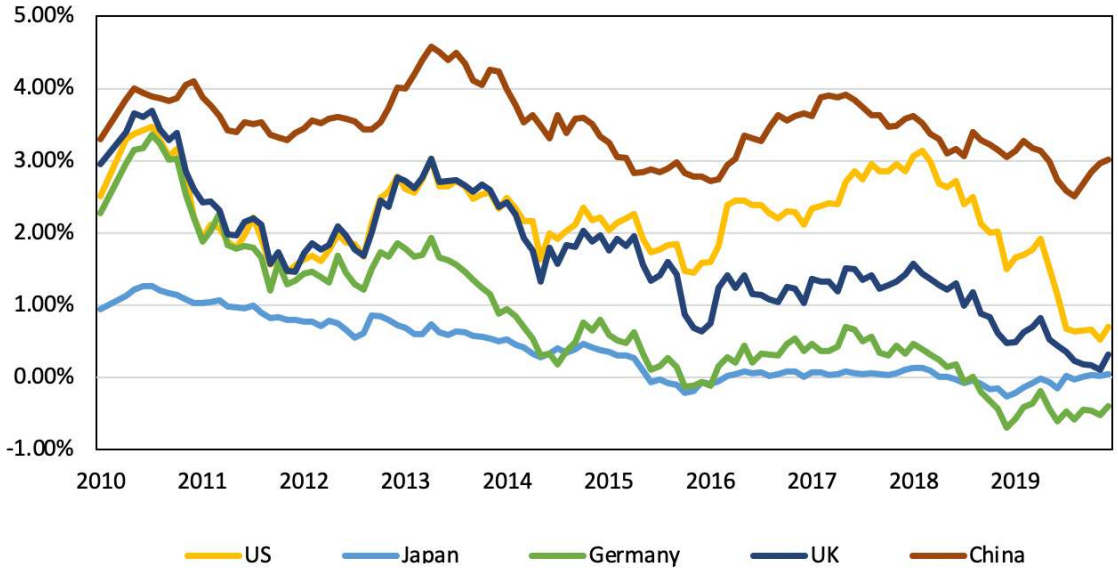
Level 10
20 Martin Place
Sydney NSW 2000
Australia
Tel: +61 2 8599 2132

Index Tower, Unit 403
Dubai International
Financial Centre
Dubai, United Arab Emirates
Tel: +971 5 0463 5370

The Death of Government Bonds has Been Greatly Exaggerated

The global pandemic of 2020 has exacerbated many of the trends that have been evident for many years; the decline in interest rates towards zero, or below, across developed markets, increases in government debt/GDP ratios, and increases in central bank balance sheets (largely a result of purchases of government bonds). With the level of yield currently below 1% on the vast majority of developed market government debt, and with negative yields prevailing in a significant proportion of the market (Chart 1), investors are understandably considering whether government bonds still have the capacity to cushion a downturn in equity markets. Investors are asking if yields can fall further from these already low levels?

Chart 1. Ten-year bond yields in major markets

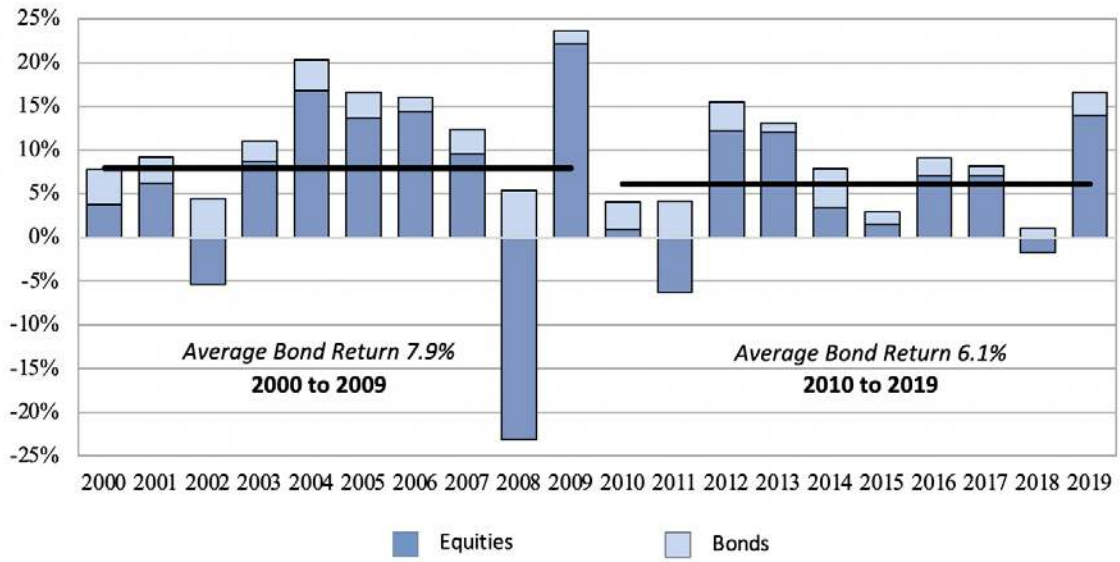


Source: Bloomberg (data from September 2010 to August 2020)

Whilst this question is fundamentally about the future, and so by definition, impossible to answer with absolute certainty, we need to start by considering the past. The foundation of many traditional investment strategies has been a combination of equities and bonds (i.e. the classic 60/40 asset allocation), and this has been predicated on the negative correlation between equities and government bonds (other fixed income assets may feature in the allocation but the key element of diversification comes from government debt).

Chart 2 shows a version of this 60/40 portfolio, with 60% invested in Australian equities and 40% invested in Global government bonds hedged into Australian dollars over the last twenty years. It can be seen that the bond portion of the portfolio has performed as expected, producing positive returns every year, thus giving defensive ballast to the portfolio in those years when equities were down. It is also interesting to see that the average returns from bonds in the first decade, 2000-2009, was 7.9%, and over the last ten years was 6.1%. Thus, not only did the bonds provide diversification, but also a reasonable rate of return.

Chart 2. Portfolio - Australian Equities 60% and Global Government Bonds 40%



Source: Bloomberg, FTSE, Bond market returns are in AUD-hedged terms. (data from calendar year 2000 to 2019)

Not only has the empirical evidence historically shown a consistent "structural" negative correlation between the two asset classes, there are solid economic and financial reasons why one would expect this relationship to hold. Equity markets will tend to suffer large declines in value when expectations of future profits drop sharply. This is likely to be a function of a significant drop in demand across the economy (or some other shock), leading to upward pressure on the unemployment rate, and downward pressure on inflation. The decline in actual and/or expected inflation is likely to negatively impact on bond yields and central banks are likely to loosen monetary policy in response, also putting downward pressure on real yields. Financial market dynamics are also likely to support such movements in asset prices as higher levels of economic uncertainty tend to result in higher demand for the safety and liquidity of government bonds.

In our opinion, this underlying logic continues to hold today. Firstly, a demand shock such as the global pandemic may be expected to lower inflation and inflation expectations, at least in the short to medium term. If nominal bond yields do not fall in such a scenario, then real yields would rise, inducing a pro-cyclical tightening of financial conditions. Such an outcome would be inconsistent with the objective of most central banks, thereby prompting monetary easing to support activity. Whilst one can debate the merits of the recent rebound in US equity markets (consequently clouding the picture in this example), the COVID environment has created exactly this environment. Meaningful declines in non-US equity markets in response to the impact of the virus have been accompanied by meaningful declines in interest rates, thereby preserving that negative correlation.

Secondly, while there remains some debate about a "zero lower bound" for nominal interest rates, recent history suggests that this may not be the constraint that many had previously thought. Negative interest rates have been adopted as a policy tool in the likes of the Eurozone, Switzerland and Sweden (until recently), while other central banks, such as those in Australia and New Zealand are proactively considering and preparing for their use. In the absence of further declines in overnight policy interest rates, central banks have deployed an array of other policy measures to drive longer dated interest rates lower (e.g. quantitative easing). Despite the historically low and in some cases negative interest rates on offer, longer dated nominal interest rates across the globe still declined further in response to the negative COVID shock, suggesting bonds still provided the negative correlation when it was needed most. In other words, negative yielding bond yields, became more negative. This suggests that the underlying drivers of, and rationale, for lower nominal yields during a period of stress, still apply.

Investors also need to consider the impact of the low and negative yield environment on all asset classes, not just fixed income. The lowering of interest rates has supported all types of asset prices, including equity markets, through a lowering of the discount rate which pushes up the present value of future earnings. Potentially a diversifying asset may be of greater value in such an environment when asset prices may be heavily dependent upon the level of policy interest rates. In this context, investors may consider increasing the defensive characteristics of their fixed income allocation through a rotation of the sovereign bond allocation into longer duration debt. This could reduce the exposure to negative yields at the front-end of the yield curve and increase the price sensitivity of the portfolio to further yield declines, thus enhancing the negative correlation benefit. This greater "insurance" of course comes at the cost of potentially greater capital loss, relative to the status quo, if yields unexpectedly increase. Whilst we have a benign outlook for inflation in the near term, as the COVID induced negative demand shock, fall in the velocity of money and increase in pre-cautionary savings dominate, the longer-term picture is more clouded. Nonetheless, it may be reasonable to assume an extended period of lower interest over the foreseeable future as countries come to terms with the economic and policy consequences of the pandemic.

What does the Empirical Evidence Say?

Turning to the empirical analysis, we consider the past relationship between bonds and equities to understand whether it is changing as interest rates have approached zero. Firstly, if we look at the correlations between monthly returns of global equities[1] and returns on global bonds[2] in Table 1 below, it is apparent that global bond returns have maintained a negative correlation to equities over time.

Table 1: Historical Correlations

Correlation of monthly returns: MSCI ACWI v's Global bond markets						
	FTSE WGBI	US	Germany	Japan	UK	China
20yrs to Aug 2020	-0.28	-0.35	-0.35	-0.16	-0.25	n/a
5yrs to Aug 2020	-0.25	-0.44	-0.19	-0.11	-0.28	-0.21
3yrs to Aug 2020	-0.27	-0.50	-0.18	-0.06	-0.33	-0.31

Source: Bloomberg & Colchester Global Investors, data from August 2000 to August 2020

As correlations can, and do, vary over shorter time frames, we believe that it is prudent to consider such relationships over a minimum of three years. Even that may be too short a time frame to truly assess a fundamental relationship. There is always a danger of interpreting a spurious relationship – the rise in nearly all asset prices in the recent past as interest rates have fallen, may be one such example.

An examination of Table 1 suggests that the correlation of returns between the FTSE WGBI and global equities has not shifted materially in the past three years, compared with the past twenty years. Interestingly, in the case of the US market, the negative correlation appears to have increased over time, as it also has in both the UK and China. In contrast there has been a slight decline in the negative correlation with the Japanese and German markets. At a "push" this may lend some validity to the argument that the level of yields at the start of the period does influence how far they can decline – although in both cases the correlation reduction is only by around 0.10. We would be cautious attaching too high a significance to the characteristics of the Japanese market, as it is subject to a policy known as Yield Curve Control (YCC) whereby the Bank of Japan has explicitly committed to maintaining ten-year yields at "around zero". Whilst this policy is normally considered as

[1] MSCI ACWI Index

[2] FTSE World Government Bond Index (WGBI)

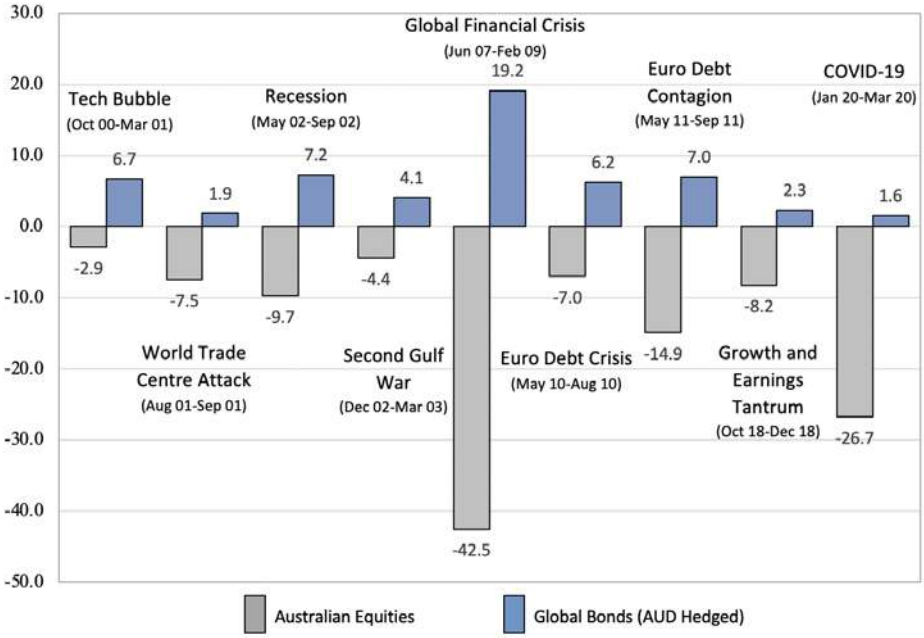
a cap on yields, it also seems to act as something of a floor for Japanese bond yields, potentially reducing the effectiveness of the Japanese market as a diversifier of equity risk.

Turning to Europe, ten-year yields in the core of the Euro area have moved materially below those in Japan over recent years, and the prevalence of negative interest rates in Europe has not prevented the German market from maintaining a significant negative correlation to equities over the past three years. The German market produced a positive return in the first quarter of 2020 despite negative yields at the beginning of the period. The yield on the ten-year German bund for example fell from a high of -17bps in mid-January to a low of -85bps in March 2020. Whilst this some 70bp decline was around half that of the equivalent 120bp decline seen in the US ten-year yield over the same period, it commenced from negative territory (unlike the US ten year yield that fell from around +1.80%) and provided a solid quarterly return of +2.6% when equity markets fell by around 20% or more.

Whilst the downward trend in yields has captured the headlines, another huge shift in the global fixed income landscape has been the opening of the Chinese bond market to foreign investors. For this reason, we include the Chinese government bond market in this analysis. The Chinese market offers attractive diversification benefits relative to equities, and that negative correlation appears to have increased over time. The Chinese government bond market has increasingly become a viable destination for foreign investors and with ten-year yields currently over 3% the question of zero or negative yields impairing this characteristic appears rather moot at this point.

For most investors of course, correlation between bonds and equities is less about the statistical significance and more about the reality of downside protection in a period of falling equity markets. We can also look at this over the last twenty years, and Chart 3 below shows how global bonds and Australian equities responded through past crisis points. It can clearly be seen that through all of these events bonds delivered positive returns as the equity market fell. The negative correlation and positive returns that investors look for in global bonds delivered every time when it was needed most.

Chart 3. Returns Through Crisis Points



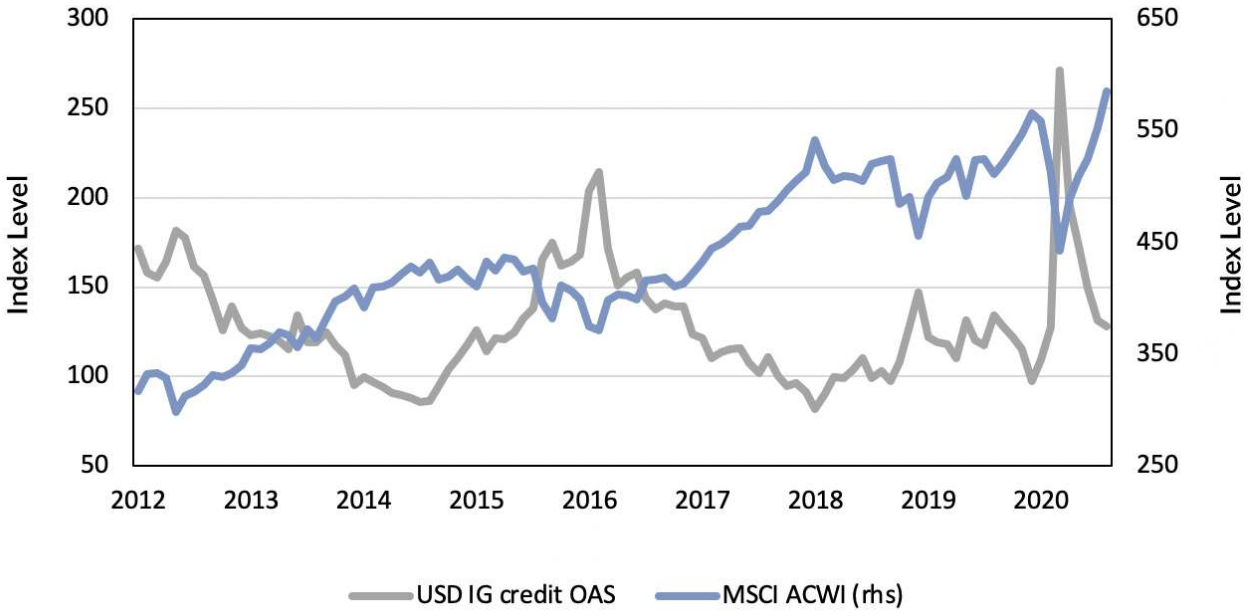
Sources: Bloomberg, FTSE, Bond market returns are in AUD-hedged terms.

Sovereign Bonds Remain the True Diversifier

Some bond investors have responded to the decline in yields by seeking more flexible or unconstrained bond funds that hint at the potential to outperform in all market environments. This approach offers the allure of positive returns and a negative correlation to risk assets (or protection). They typically utilise duration and sector rotation strategies to generate return. Paradoxically to avoid a capital loss in the event of a meaningful back up in yields these strategies would need to be uninvested in bond duration. In other words, not "own" the key duration characteristic that provides the negative correlation in the event of a negative shock or downward shift in interest rates. If there is a 100bps back-up in yields for example, it doesn't matter what type of bonds you own, all bonds will suffer a capital loss. In an effort to avoid such losses, these types of strategies may run a zero or negative duration position, thereby undermining one of the key fundamental reasons why bonds are typically held within a diversified asset portfolio.

Many of these funds are also structurally invested in credit. This diminishes the potential negative correlation of the exposure as there is a strong inverse relationship between credit spreads and equities (see Chart 4). This was again the case in the first quarter of 2020 as spreads widened when equity markets sold off.

Chart 4. Credit spreads move inversely with equities



Source: Bloomberg (data from January 2012 to August 2020)

Summary

An analysis of the behaviour of government bonds in recent years suggests that they continue to provide diversification benefits relative to equity markets. Although this may be constrained to some extent by the current level of yields in many major markets, it is supported by the emergence of the Chinese bond market, a larger market than the UK or German bond markets, and notably with meaningfully positive nominal yields.

Both the empirical evidence and the recent experience of the COVID induced shock in the first half of 2020, suggest that the optimal strategy to ensure - to the extent possible - that a bond strategy retains its ability to serve as diversifying anchor in a multi-asset portfolio is to make a dedicated allocation to sovereign debt. The intrinsic value of government debt as the "risk free asset" underpinned by the ability of a government to tax its citizens, and to "print money" in the case of the major developed markets, does mean that its characteristics are difficult to replicate using any other asset class.

As we look out over the coming years, the landscape for global bond markets has certainly changed on account of negative rates, and unprecedented expansion of central bank balance sheets. While we are not asset allocators, we believe that investors should look to diversify as much as possible, whether in terms of asset class, region or country as the future is inherently unpredictable. Nonetheless, government bonds remain the only asset class that offer the potential for a meaningful negative correlation to equities, and other so called "growth" assets, in a crisis. This has again been demonstrated this year, as the pandemic fuelled a sharp equity selloff in March. It is also apparent that there is no lower bound on bond yields, the decline in negatively yielding German yields to more deeply negative yields at a time of stress makes that abundantly clear.

Risk Disclosures

- Unless otherwise stated, this document reflects Colchester Global Investor's ('Colchester') views and opinions as of 28 September 2020. In respect of the products and strategies mentioned in this document, the information is provided for illustrative purposes only and is intended only for professional clients and third-party intermediaries. Colchester makes no representation or warranty as to the accuracy or completeness of the information in this document and disclaims all liability for any direct, indirect, consequential or other losses or damages including loss of profits incurred by you or any third party that may arise from reliance on this document.
- Investors should seek professional advice before making an investment. Past performance is no guarantee of future performance and the value of any investment may fall as well as rise. Investment in the products mentioned in this document puts your capital at risk, and you may lose some or all of your investment.
- Prospective investors and clients should be aware that any investment involves a degree of risk. The return of your investment may increase or decrease as a result of currency fluctuations if your investment is made in a currency other than that used in the past performance calculation within this document.
- Unless shown otherwise, all returns are illustrated as gross of fees. Gross returns do not reflect the deduction of fees and expenses, which would inevitably reduce the client's returns. Additional information regarding policies and procedures for calculating and reporting returns is also available on request. Nothing in this document should be construed as providing any type of investment, tax or other advice, or be considered a solicitation, recommendation, endorsement or offer to purchase or sell any financial instrument.
- This is a research report. Certain information in this document may constitute forward-looking statements. Due to the various uncertainties and actual events, the actual performance of the markets may differ materially from those reflected or contemplated in such forward-looking statements. As a result, clients/investors should not rely on such forward-looking statements in making any investment decisions.

- This document may contain information obtained from third parties, including ratings from credit ratings agencies. Reproduction and distribution of third party content in any form is prohibited, except with the prior written permission of the related third party. Third party content providers do not endorse or recommend the securities or products discussed herein, nor do they guarantee the accuracy, completeness, timeliness or availability of any information, including ratings (negligent or otherwise), regardless of the cause, or for the results obtained from the use of such content. Third party content providers give no express or implied warranties, including, but not limited to, any warranties of merchantability or fitness for a particular purpose or use. Third party content providers shall not be liable for any direct, indirect, incidental, exemplary, compensatory, punitive, special or consequential damages, costs, expenses, legal fees, or losses (including lost income or profits and opportunity costs or losses caused by negligence) in connection with any use of their content, including ratings. Credit ratings are statements of opinions and are not statements of fact or recommendations to purchase, hold or sell securities. They do not address the suitability of securities for investment purposes and should not be relied on as investment advice.
- Information concerning the calculation of statistics used for portfolio characteristics is available upon request. Various industry standards, indices and industry performance comparative data are provided in this document and are detailed where appropriate. These include indices from FTSE, Bloomberg Barclays, MSCI, JP Morgan and ICE. Data is sourced additionally from Bloomberg and Datastream.
- FTSE Russell is a trading name of certain of the LSE Group* companies. FTSE® is a trade mark of the relevant LSE Group companies and is used by any other LSE Group company under license. "TMX®" is a trade mark of TSX, Inc. and used by the LSE Group under license. All rights in the FTSE Russell indexes or data vest in the relevant LSE Group company which owns the index or the data. Neither LSE Group nor its licensors accept any liability for any errors or omissions in the indexes or data and no party may rely on any indexes or data contained in this communication. No further distribution of data from the LSE Group is permitted without the relevant LSE Group company's express written consent. The LSE Group does not promote, sponsor or endorse the content of this communication. * London Stock Exchange Group plc and its group undertakings (collectively, the "LSE Group"). © LSE Group 2020.
- Bloomberg Index Services Limited. BLOOMBERG® is a trademark and service mark of Bloomberg Finance L.P. and its affiliates (collectively "Bloomberg"). BARCLAYS® is a trademark and service mark of Barclays Bank Plc (collectively with its affiliates, "Barclays"), used under license. Bloomberg or Bloomberg's licensors, including Barclays, own all proprietary rights in the Bloomberg Barclays Indices. Neither Bloomberg nor Barclays approves or endorses this material, or guarantees the accuracy or completeness of any information herein, or makes any warranty, express or implied, as to the results to be obtained therefrom and, to the maximum extent allowed by law, neither shall have any liability or responsibility for injury or damages arising in connection therewith.
- Information has been obtained from sources believed to be reliable but J.P. Morgan does not warrant its completeness or accuracy. The Index is used with permission. The Index may not be copied, used, or distributed without J.P. Morgan's prior written approval. Copyright 2020, J.P. Morgan Chase & Co. All rights reserved.
- There can be no assurance that professionals currently employed by Colchester will continue to be employed by the firm or that a level of experience or past performance is indicative of future performance or success.
- Information about how to make a complaint, any right to compensation and any cancellation rights will be provided to you upon request.

Regulatory Information

- Colchester is an employee owned firm headquartered in London and has regional offices in New York, Singapore and Dubai and a representative office in Sydney, Australia.
- Colchester is authorised and regulated by the Financial Conduct Authority in the United Kingdom. Colchester is also registered with the Securities and Exchange Commission in the USA and is registered as a Commodity Trading Advisor and Commodity Pool Operator with the Commodity Futures Trading Commission.
- Colchester Global Investors (Singapore) Pte. Ltd holds a capital markets services licence in fund management issued by the Monetary Authority of Singapore. Colchester Global Investors (Singapore) Pte. Ltd also holds an offshore discretionary investment management services licence issued by the Financial Services Commission of Korea.
- Please note the following in respect of Colchester's regulatory status in Australia: (i) neither Colchester Global Investors Limited nor Colchester Global Investors (Singapore) Pte. Ltd. holds an Australian financial services licence for the provision of certain financial services, and both entities are exempt from the requirement to hold an Australian financial services licence under the Corporations Act 2001 (Cwlth) in respect of the financial services Colchester provides; (ii) Colchester Global Investors Limited is authorised and regulated by the Financial Conduct Authority of the United Kingdom under UK laws, which differ from Australian laws; (iii) Colchester Global Investors (Singapore) Pte. Ltd. is regulated by the Monetary Authority of Singapore under Singapore laws, which differ from Australian laws. Therefore, Australian wholesale clients are not necessarily subject to the same types of legal protections or remedies that they would enjoy if Colchester was directly subject to the Corporations Act. Colchester is entitled to offer its financial services in Australia pursuant to an exemption from the requirement to hold an Australian Financial Services Licence under the Corporations Act, on the basis, among other things, that the clients are "wholesale clients" within the meaning of the Corporations Act.
- Colchester Global Investors Middle East Limited is regulated by the Dubai Financial Services Authority for the provision of Advising on Financial Products and Arranging Deals in Investments. All communications and services are directed at Professional Clients only. Persons other than Professional Clients, such as Retail Clients, are not the intended recipients of Colchester Global Investors Middle East Limited's communications or services. Colchester Global Investors Middle East Limited is a company established in the Dubai International Financial Centre (DIFC) pursuant to the DIFC Companies Law with registration number CL 3239.
- Discretionary investment management services and funds are not and will not be marketed in Argentina by means of a public offering, as such term is defined under Section 2 of Law N° 26,831, as amended. No application has been or will be made with the Argentine Comisión Nacional de Valores, the Argentine securities governmental authority, to offer funds or discretionary investment management services in Argentina
- Colchester Global Investors Limited is licenced as a financial services provider by the Financial Sector Conduct Authority (licence number 43012) in South Africa.
- Colchester Global Investors Inc. is a wholly owned subsidiary of Colchester Global Investors Limited. It is not permitted to provide investment advice or otherwise engage in a regulated activity.

THIS DOCUMENT IS INTENDED FOR PROFESSIONAL USE ONLY AND IS NOT FOR PUBLIC DISTRIBUTION. IT MAY CONTAIN INFORMATION THAT IS PRIVILEGED, CONFIDENTIAL OR EXEMPT FROM DISCLOSURE UNDER APPLICABLE LAW. IF YOU HAVE RECEIVED THIS COMMUNICATION IN ERROR, PLEASE DISREGARD AND DELETE IT AND DO NOT DISSEMINATE THE CONTENTS TO ANY OTHER PERSON.

THIS DOCUMENT DOES NOT CONSTITUTE A PROSPECTUS OR OFFERING CIRCULAR TO SUBSCRIBE FOR ANY SECURITIES. POTENTIAL INVESTORS MUST REVIEW THE RELEVANT PRODUCT OFFERING DOCUMENTS OR INVESTMENT MANAGEMENT AGREEMENT, AND IN PARTICULAR, THE RISK DISCLOSURES SET OUT THEREIN.