

Asset Class Investment Strategies

Government Bonds

This is a financial promotion. Your capital is at risk, the value of investments may fall and rise and you may not get back the full amount you invested. Past performance is not indicative of future returns.

We recommend an underweight to nominal bonds of -5% relative to the SAA benchmark. In our base case we expect yields to move higher in 2021 as global growth recovers, and continue to prefer alternatives such as inflation-linked securities, absolute return managers and gold over nominal bonds.

In our base case scenario, we expect the US 10-year yield to reach 1.5% by the end of 2021 compared to a yield of 1.1% as of 31 January. This is modestly above the 1.3% priced into the 1-year forward curve as of 31 January and reflects our expectation of a strong rebound in growth over the year. We expect bond yields in the UK and Europe to rise by similar magnitude relative to what is discounted by the market. The 10-year Gilt yield is expected to rise from 0.3% as of 31 January to 0.7% by yearend, and the 10-year Bund to rise from -0.5% to -0.2%. We expect developed market central banks to keep policy largely unchanged in 2021, both in terms of interest rates and QE asset purchases.

Given the low coupon income and high interest rate sensitivity of longer-dated nominal bonds, even a modest increase in yields beyond what is already discounted in the forward curve would result in nominal bonds underperforming cash or Inflation-Linked Bonds. As a result, we recommend a weighted portfolio interest-rate duration that is below that of the SAA benchmark, with most of the portfolio's duration gained via an allocation to inflation-linked rather than nominal bonds. We may seek to reduce this duration underweight if yields were to rise sharply in 2021, for example if the US 10-year Treasury yield reached 2.5%. In the near-term, investors should hold a diverse mix of safety assets rather than defaulting to a large nominal bond allocation.

Asset Class Definition

We define government bonds as debt securities issued by sovereign governments with an investment grade credit rating, and with a remaining time to maturity of at least two years. These bonds are typically denominated in the currency of their issuer and carry very little default risk. The performance of these bonds will depend on the size of the coupon and the impact of any changes in interest rates. The sensitivity of the price of the bond to a change in the interest rate is measured by the duration of the bond. The longer the time to maturity, the higher the duration of the bond, the more sensitive the price is to a change in interest rates.

Role in the portfolio

Government bonds play the role of a 'safety net' and disinflation hedge in a multi-asset class portfolio, but perform poorly in high inflation environments. Moreover, they provide a source of liquidity for rebalancing in the event of a market correction. Government bonds have historically been an excellent diversifying asset in investment portfolios. The combination of negative correlation to equities and steady coupon income meant investors were effectively paid for the portfolio protection provided by bonds. This is no longer the case in today's low interest rate environment. The income component of bonds is negative in Europe, and well below inflation in the UK and US. Much of the

future return for bonds is now predicated on assumptions of capital gains or losses. Government bonds still play an important role as a diversifying safety asset to hedge the risk of a negative growth shocks or deflation, as witnessed in 2020, but they are fundamentally less attractive than they have been in the past due to low interest rates.

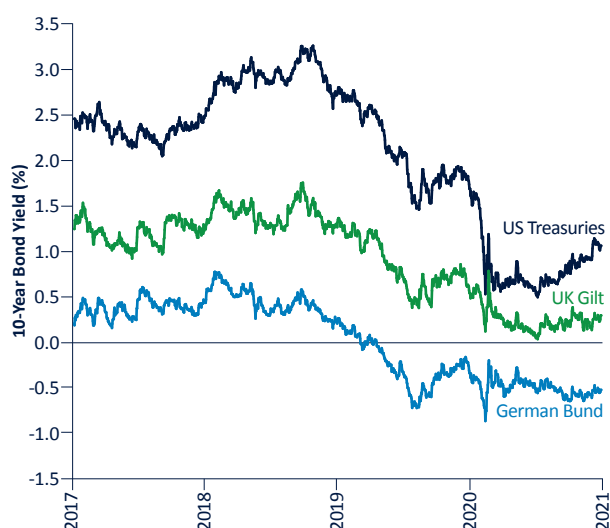
Market overview

Bond yields are still close to record lows across developed markets

Bond yields dropped sharply in the wake of the COVID-19 pandemic. The yield on the 10-year bonds of US, UK and Germany hit respective lows of 0.51%, 0.08% and -0.86% in 2020. Despite the increase in growth and inflation forecasts, yields remain well below pre-pandemic levels (Exhibit 1).

Exhibit 1

Bond yields dropped sharply as a result of COVID-19



Source: Bloomberg

The collapse in yields allowed bond indices to post strong gains in 2020, with the 7-10 year US Treasury index rising +9.1%. The impact of lower starting yields was evident in German Bunds, with the comparative 7-10 year Bund index only rising +2.7% over the year.

Exhibit 3

Bond yields collapsed in the wake of COVID-19 and continue to remain low

	Yield as of 31 December 2019	Low of 2020	Yield as of 31 January 2021	Total Return of Index in 2020	Index name
US	1.92%	0.51%	1.09%	9.10%	Barclays 7-10 year Treasury Index
UK	0.82%	0.08%	0.33%	8.30%	FTSE Actuaries UK Conventional Gilt All Stocks Index
Germany	-0.19%	-0.86%	-0.52%	2.70%	Barclays 7-10 year German Government Bond Index

Source: Bloomberg

Central bank asset purchases have kept bond yields anchored since the pandemic

Helping to keep yields very low has been the significant increase in central bank purchases via quantitative easing. As shown in Exhibit 2, the central banks of the US, Europe, UK and Japan collectively added over \$8 trillion to their balance sheets in 2020, or roughly 19% of their collective 2019 GDP. In this regard the Bank of Japan has gone the furthest, holding assets on its balance sheet worth nearly 130% of the country's GDP. The ECB holds assets valued at roughly 58% of the bloc's GDP, while the US Fed and UK's BoE hold assets worth c. 35% of their respective GDP.

Exhibit 2

The central banks of US, Europe, UK and Japan added c. \$8.3T to the size of their balance sheets in the 13 months to Jan 2021, or c. 19% of their collective 2019 GDP

	Metric	US Fed	ECB	BoE	BoJ	Total
Size of balance sheet as of Jan 2021	USD	\$7.4t	\$8.5t	\$1.1t	\$6.7t	\$23.7t
	% of 2019 GDP	34.5%	58.1%	35.0%	128.3%	53.3%
Size of balance sheet as Dec 2019	USD	\$4.2t	\$5.3t	\$0.6t	\$5.3t	\$15.3t
	% of 2019 GDP	19.4%	35.9%	20.7%	101.1%	34.5%
Increase in last 13 -months to Jan 2021	USD	\$3.2t	\$3.3t	\$0.4t	\$1.4t	\$8.3t
	% of 2019 GDP	15.1%	22.2%	14.3%	27.2%	18.8%

Source: Bloomberg

Forward guidance from central banks indicates a strong willingness to continue with large scale asset purchases throughout 2020. Most recently, the US Federal Reserve explicitly committed to purchase at least \$80 billion per month of Treasuries and agency mortgage-backed securities until the committee feels "substantial further progress"

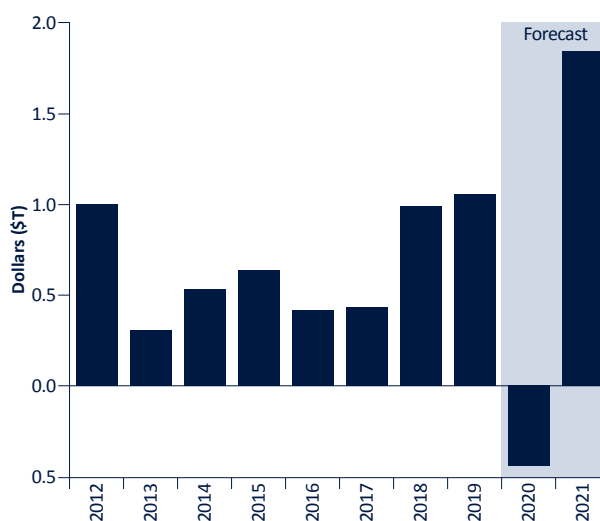
has been made towards its inflation and employment goals. The European Central Bank indicated in December that, amongst other measures, it will continue to purchase approximately €20 billion per month until March 2022. The Bank of Japan has committed to continuing its policy of yield curve control, buying as many bonds as necessary to keep 10-year Japanese government bond yields capped at close to 0%, and in November the Bank of England announced it would steadily expand its balance sheet to target level of £895 billion from c. £780 billion as of January 2021.

Key to the outlook for interest rates will be the timing of tapering by central banks. The US Fed is likely to lead this debate. Some Fed officials (Evans, Harker, Kaplan and Bostic) have recently indicated an openness to tapering asset purchases in 2021, most analysts see tapering as likely to start in 2022. However, recent comments by Chair Powell have called a focus on tapering as “premature”, and emphasised the lessons learnt from past Fed experience and the “taper tantrum” of 2013, suggesting the Fed will take a very slow and cautious approach to dialling back QE in the future.

US fiscal stimulus expected to cause a surge in bond issuance

The large deficits being run by most western governments will require much higher bond issuance. In the US, the net issuance of Treasuries in excess of Fed purchases is already expected to be c. \$1.8 trillion in 2021, more than double the average annual issuance of the last decade. This excludes the recent fiscal spending proposal by President Biden of \$1.9 trillion, which would further add to required issuance in 2021 and 2022. The surge in issuance is expected to be concentrated in the long-end of the curve, which marks a distinct change from 2020 when most of the new issuance was short-dated and net issuance of Treasuries with a maturity of more than one year was actually negative (Exhibit 4).

Exhibit 4 US net debt issuance less QE purchases forecast to increase to c. \$1.8T in 2021



Notes:

1. Excludes Treasury Bills with maturity of less than 12 months
2. Does not include an estimate for Biden's recent \$1.9T fiscal spending proposal

Source: US Federal Reserve, J.P. Morgan

In terms of demand for Treasuries, Exhibit 5 shows how the aggregate ownership of Treasuries changed over the year to 30 Nov 2020 (latest data point at the time of writing). The Fed and domestic US investors increased their holdings the most, adding \$2.3T and \$1.7T respectively. Of the domestic investors, mutual funds added c. \$1.2T and banks c. 300B, with most of the remainder being bought by pensions. Foreign investors increased absolute holdings but their share of overall Treasuries declined. Holders registered in Japan increased ownership by \$100B, while China decreased its holdings by \$26B.

Exhibit 5 Bond yields collapsed in the wake of COVID-19 and continue to remain low

Foreign Holders	Nov 2019		Nov 2020		Change	
	US\$ Billions	Portion of Total Debt	US\$ Billions	Portion of Total Debt	US\$ Billions	Portion of Total Debt
Intragovernmental holdings	5,971	25.9%	6,097	22.2%	126	-3.7%
Fed holdings of Treasuries	2,206	9.6%	4,546	16.6%	2,340	7.0%
Foreign Investors	6,902	29.9%	7,054	25.7%	152	-4.2%
US Investors	7,997	34.7%	9,750	35.5%	1,753	0.9%
US Total Debt	23,076	100%	27,446	100%	4,370	0

Source: US Treasury, Bloomberg

The term premium on longer dated bonds will rise from record lows

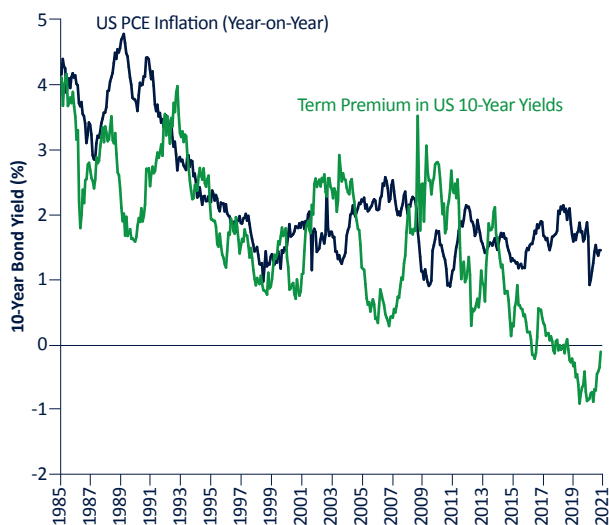
Increased issuance and increased inflation expectations should lead to an increase in term premium from record lows. Term premium is a form of risk premium which measures the additional return investors can expect to receive by locking up their money in a longer maturity bond instead of rolling over a short-term T-bill for many years. Historically, the term premium has been positive and closely correlated to inflation. Intuitively it makes sense that a lender would require a term premium that compensates for the risk of inflation. However, as shown in Exhibit 6, over the past few years the term premium has been negative – meaning that investors have been willing to pay a premium to take on duration risk. This started to reverse in the latter half of 2020 as the yield curve began to steepen, but remains below zero. This suggests that investors have been much less concerned about the loss of real spending power in recent years, but may be starting to price in a premium on the back of rising debt issuance and inflation expectations. If and when central bank purchases of bonds were to be tapered, it would also contribute to a widening of the term premium.

Forward rates are discounting very low bond yields over the next 5 years

In terms of market expectations, forward rates are discounting a very gradual increase in bond yields over time. In the US where the 10-year Treasury yield was 1.1% at the end of January 2021, the forward curve is pricing

Exhibit 6

Term premium in bonds is at extreme lows relative to history, and significantly below the rate of inflation



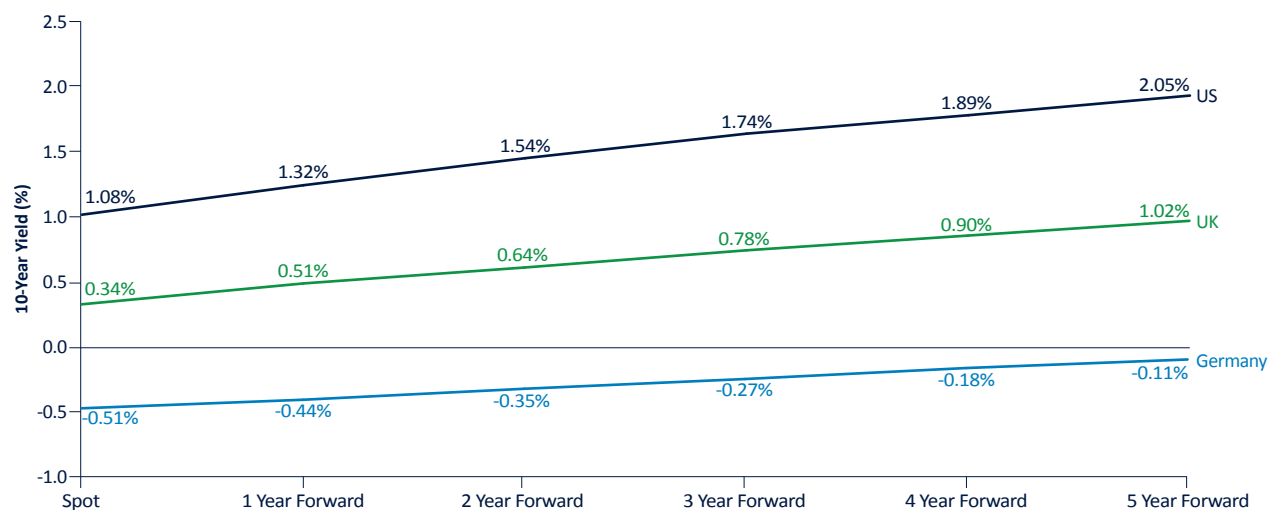
Note: Personal Consumption Expenditure (PCE) is the Federal Reserve's preferred price index for measuring inflation. Historically it has typically been about 0.5% p.a. below the Consumer Price Index (CPI).

Source: US Federal Reserve

in rise of just 24bps to 1.3% over the next 12-months, and a rise to 2.1% over the next five years. Yields are also expected to remain very low in the UK and Europe, with 10-year Gilt and Bund yields only forecast to reach 1.0% and -0.1% respectively in five years' time (Exhibit 7).

Exhibit 7

Forward markets expect government bond yields to remain low



Source: Bloomberg

2021 Investment Strategy

Our expectation is that developed market interest rates will gradually move higher in 2021 at a rate that is slightly faster than discount by the forward markets at the start of the year, primarily driven by rising inflation and debt issuance. Given the interest rate sensitivity of longer-dated bonds and low coupon levels, even a modest increase in yields would result in nominal bonds underperforming cash or Inflation Linked Bonds.

Over the last 30 years, government bonds have served well as diversifiers by providing both income and capital appreciation. However, very low yields have increased the opportunity cost of holding bonds. A 10-year Treasury bond with a starting yield of 1.1% and standard deviation of 6% is expected to produce a negative nominal 12-month total return roughly 43% of the time (assuming normal distribution). In Europe where yields are negative, investors are more likely than not to suffer a negative nominal return. In short, investors must adjust to a new normal where they are required to pay for the portfolio protection that bonds provide, rather than being paid for such an advantage as they were in the past.

Exhibit 8

Government Bonds Total Return Expectations by Scenario

Scenario	Summary Analysis	2021 Calendar Year Total Expected Return	Weighted Return	Long-term Return Forecast	Recommended Deviation from Benchmark for 2021
Upside Scenario: "Warp speed to normal growth" (20% probability)	US 10-year Treasury yields rise to 1.9%, 80bps more than was priced into the forward curve at the start of the year. This is driven by a sharp increase in inflation expectations as economy quickly recovers.	-7%			
Base Case: "The herd slowly immunises" (60% probability)	US 10-year Treasury yields rise to 1.7%, 60bps more than was priced into the forward curve at the start of the year. This is driven by pickup in growth and expectation that fiscal policy will remain loose but not entirely unconstrained. Central bank bond buying continues to suppress yields. Other DM bond yields also rise slightly faster than priced into their respective forward curves.	-5%	-3.7%	0.9%	-5.0%
Downside Scenario: "Ongoing waves" (20% probability)	Bond yields decline, with the US 10-year moving down to 0.7%. Further declines in bond yields are limited by increasing calls for large-scale fiscal stimulus, which would both increase the supply of bonds and, if inflationary, decrease the demand for them.	4%			
TAA Implications of short-term returns vs. long-term expectations	In the near-term a re-acceleration of global growth, potential increase in inflation expectations are large increase in debt issuance at the longer-end of the curve are likely to cause a steepening of the yield curve. This weighs down the near-term return outlook for bonds, but improves the future return prospects for the asset class. As a result we remain underweight government bonds.				

Source: Partners Capital

Hypothetical return expectations are based on simulations with forward looking assumptions, which have inherent limitations. Such forecasts are not a reliable indicator of future performance.

DISCLAIMER

Copyright © 2023, Partners Capital Investment Group LLP

Within the United Kingdom, this material has been issued by Partners Capital LLP, which is authorised and regulated by the Financial Conduct Authority of the United Kingdom (the “FCA”), and constitutes a financial promotion for the purposes of the rules of the Financial Conduct Authority. Within Hong Kong, this material has been issued by Partners Capital Asia Limited, which is licensed by the Securities and Futures Commission in Hong Kong (the “SFC”) to provide Types 1 and 4 services to professional investors only. Within Singapore, this material has been issued by Partners Capital Investment Group (Asia) Pte Ltd, which is regulated by the Monetary Authority of Singapore as a holder of a Capital Markets Services licence for Fund Management under the Securities and Futures Act and as an exempt financial adviser. Within France, this material has been issued by Partners Capital Europe SAS, which is regulated by the Autorité des Marchés Financiers (the “AMF”).

For all other locations, this material has been issued by Partners Capital Investment Group, LLP which is registered as an Investment Adviser with the US Securities and Exchange Commission (the “SEC”) and as a commodity trading adviser and commodity pool operator with the Commodity Futures Trading Commission (“CFTC”) and is a member of the National Future’s Association (the “NFA”).

This material is being provided to clients, potential clients and other interested parties (collectively “clients”) of Partners Capital LLP, Partners Capital Asia Limited, Partners Capital Investment Group (Asia) Pte Ltd, Partners Capital Europe SAS and Partners Capital Investment Group, LLP (the “Group”) on the condition that it will not form a primary basis for any investment decision by, or on behalf of the clients or potential clients and that the Group shall not be a fiduciary or adviser with respect to recipients on the basis of this material alone. These materials and any related documentation provided herewith is given on a confidential basis. This material is not intended for public use or distribution. It is the responsibility of every person reading this material to satisfy himself or herself as to the full observance of any laws of any relevant jurisdiction applicable to such person, including obtaining any governmental or other consent which may be required or observing any other formality which needs to be observed in such jurisdiction. The investment concepts referenced in this material may be unsuitable for investors depending on their specific investment objectives and financial position.

This material is for your private information, and we are not soliciting any action based upon it. This report is not an offer to sell or the solicitation of an offer to buy any investment. While all the information prepared in this material is believed to be accurate, the Group, may have relied on information obtained from third parties and makes no warranty as to the completeness or accuracy of information obtained from such

third parties, nor can it accept responsibility for errors of such third parties, appearing in this material. The source for all figures included in this material is Partners Capital Investment Group, LLP, unless stated otherwise. Opinions expressed are our current opinions as of the date appearing on this material only. We do not undertake to update the information discussed in this material. We and our affiliates, officers, directors, managing directors, and employees, including persons involved in the preparation or issuance of this material may, from time to time, have long or short positions in, and buy and sell, the securities, or derivatives thereof, of any companies or funds mentioned herein.

Whilst every effort is made to ensure that the information provided to clients is accurate and up to date, some of the information may be rendered inaccurate by changes in applicable laws and regulations. For example, the levels and bases of taxation may change at any time. Any reference to taxation relies upon information currently in force. Tax treatment depends upon the individual circumstances of each client and may be subject to change in the future. The Group is not a tax adviser and clients should seek independent professional advice on all tax matters.

Within the United Kingdom, and where this material refers to or describes an unregulated collective investment scheme (a “UCIS”), the communication of this material is made only to and/or is directed only at persons who are of a kind to whom a UCIS may lawfully be promoted by a person authorised under the Financial Services and Markets Act 2000 (the “FSMA”) by virtue of Section 238(6) of the FSMA and the Financial Services and Markets Act 2000 (Promotion of Collective Investment Schemes) (Exemptions) Order 2001 (including other persons who are authorised under the FSMA, certain persons having professional experience of participating in unrecognised collective investment schemes, high net worth companies, high net worth unincorporated associations or partnerships, the trustees of high value trusts and certified sophisticated investors) or Section 4.12 of the FCA’s Conduct of Business Sourcebook (“COBS”) (including persons who are professional clients or eligible counterparties for the purposes of COBS). This material is exempt from the scheme promotion restriction (in Section 238 of the FSMA) on the communication of invitations or inducements to participate in a UCIS on the grounds that it is being issued to and/or directed at only the types of person referred to above. Interests in any UCIS referred to or described in this material are only available to such persons and this material must not be relied or acted upon by any other persons.

Within Hong Kong, where this material refers to or describes an unauthorised collective investment schemes (including a fund) (“CIS”), the communication of this material is made only to and/or is directed only at professional investors who are of a kind to whom an unauthorised CIS may lawfully be promoted by Partners Capital Asia Limited under the

Hong Kong applicable laws and regulation to institutional professional investors as defined in paragraph (a) to (i) under Part 1 of Schedule to the Securities and Futures Ordinance (“SFO”) and high net worth professional investors falling under paragraph (j) of the definition of “professional investor” in Part 1 of Schedule 1 to the SFO with the net worth or portfolio threshold prescribed by Section 3 of the Securities and Futures (Professional Investor) Rules (the “Professional Investors”).

Within Singapore, where this material refers to or describes an unauthorised collective investment schemes (including a fund) (“CIS”), the communication of this material is made only to and/or is directed only at persons who are of a kind to whom an unauthorised CIS may lawfully be promoted by Partners Capital Investment Group (Asia) Pte Ltd under the Singapore applicable laws and regulation (including accredited investors or institutional investors as defined in Section 4A of the Securities and Futures Act).

Within France, where this material refers to or describes to unregulated or undeclared collective investment schemes (CIS) or unregulated or undeclared alternative Investment Funds (AIF), the communication of this material is made only to and/or is directed only at persons who are of a kind to whom an unregulated or undeclared CIS or an unregulated or undeclared AIF may lawfully be promoted by Partners Capital Europe under the French applicable laws and regulation, including professional clients or equivalent, as defined in Article D533-11, D533-11-1, and D533-13 of the French Monetary and Financial Code.

Certain aspects of the investment strategies described in this presentation may from time to time include commodity interests as defined under applicable law. Within the United States of America, pursuant to an exemption from the US Commodity Futures Trading Commission (CFTC) in connection with accounts of qualified eligible clients, this brochure is not required to be, and has not been filed with the CFTC. The CFTC does not pass upon the merits of participating in a trading program or upon the adequacy or accuracy of commodity trading advisor disclosure. Consequently, the CFTC has not reviewed or approved this trading program or this brochure. In order to qualify as a certified sophisticated investor a person must (i) have a certificate in writing or other legible form signed by an authorised person to the effect that he is sufficiently knowledgeable to understand the risks associated with participating in unrecognised collective investment schemes and (ii) have signed, within the last 12 months, a statement in a prescribed form declaring, amongst other things, that he qualifies as a sophisticated investor in relation to such investments.

This material may contain hypothetical or simulated performance results which have certain inherent limitations. Unlike an actual performance record, simulated results do not represent actual trading. Also, since the trades have not actually been executed, the results may have under- or over-

compensated for the impact, if any, of certain market factors, such as lack of liquidity. Simulated trading programs in general are also subject to the fact that they are designed with the benefit of hindsight. No representation is being made that any client will or is likely to achieve profits or losses similar to those shown. These results are simulated and may be presented gross or net of management fees. This material may include indications of past performance of investments or asset classes that are presented gross and net of fees. Gross performance results are presented before Partners Capital management and performance fees, but net of underlying manager fees. Net performance results include the deduction of Partners Capital management and performance fees, and of underlying manager fees. Partners Capital fees will vary depending on individual client fee arrangements. Gross and net returns assume the reinvestment of dividends, interest, income and earnings.

The information contained herein has neither been reviewed nor approved by the referenced funds or investment managers. Past performance is not a reliable indicator and is no guarantee of future results. Investment returns will fluctuate with market conditions and every investment has the potential for loss as well as profit. The value of investments may fall as well as rise and investors may not get back the amount invested. Forecasts are not a reliable indicator of future performance.

Certain information presented herein constitutes “forward-looking statements” which can be identified by the use of forward-looking terminology such as “may”, “will”, “should”, “expect”, “anticipate”, “project”, “continue” or “believe” or the negatives thereof or other variations thereon or comparable terminology. Any projections, market outlooks or estimates in this material are forward-looking statements and are based upon assumptions Partners Capital believe to be reasonable. Due to various risks and uncertainties, actual market events, opportunities or results or strategies may differ significantly and materially from those reflected in or contemplated by such forward-looking statements. There is no assurance or guarantee that any such projections, outlooks or assumptions will occur.

Certain transactions, including those involving futures, options, and high yield securities, give rise to substantial risk and are not suitable for all investors. The investments described herein are speculative, involve significant risk and are suitable only for investors of substantial net worth who are willing and have the financial capacity to purchase a high risk investment which may not provide any immediate cash return and may result in the loss of all or a substantial part of their investment. An investor should be able to bear the complete loss in connection with any investment.

All securities investments risk the loss of some or all of your capital and certain investments, including those involving futures, options, forwards and high yield securities, give rise to substantial risk and are not suitable for all investors.