PRIVATE WEALTH SOLUTIONS

Income: A Scarce Resource

The challenge of finding attractive income sources in a low-yield world has increased to a degree perhaps unfathomable a decade ago.

Income-oriented investors seeking to adapt to this new world should understand that (i) historically, low-rate environments have tended to be remarkably persistent;¹ (ii) many income-oriented portfolios today bear substantial depletion risk;² and (iii) alternative sources found in private markets may be part of the answer for yield-starved investors.

I. The Stubborn Persistence of Near-Zero Interest Rates

Low-rate environments tend to be stubbornly persistent. In the U.S. a series of factors have combined to drive interest rates near zero and there is reason to believe they could stay there for some time. Sluggish economic growth could keep a lid on rates with the Federal Reserve expected to hold steady until the end of 2022.³ Demographics may add an additional headwind to rates. The last

of the massive Baby Boomer cohort are not expected to turn 65 until 2030. We believe this generation's desire for retirement income could keep bidding up the prices of income-generating assets and suppress these assets' yields for years to come.⁴

FIGURE 1: Milestones on the Path to Zero / Near-Zero Interest Rates

DECEMBER 2008

Federal Funds Rate hit zero

SEPTEMBER 2012

First time the 60/40 portfolio yielded below 2%

JUNE 2020

Negative yields on 20% of advanced economy gov't bonds. 90% yielded less than 1%.

SEPTEMBER 1995

Bank of Japan's interest rate hit zero

MARCH 2009

Last time the 60/40 portfolio yielded 4%

JUNE 2014

European Central Bank's interest rate hit zero

Source: Federal Reserve Bank of St. Louis, 2020. Morningstar and Bloomberg, as of June 30, 2020. Reuters, 2019.

- 1. Source: Based on publicly available policy benchmark and interest rate data in Europe and Japan, 1995-2020.
- 2. Source: Alliance for Lifetime Income, "Americans are Confronted by a Looming Retirement Income Shortfall," July 2019.
- 3. Source: Board of Governors of the Federal Reserve System, 2020.
- 4. Source: U.S. Census data, June 2020.

The information herein is provided for educational purposes only and should not be construed as financial or investment advice, nor should any information in this document be relied on when making an investment decision. Opinions expressed reflect the current opinions of Blackstone as of the date hereof and are based on Blackstone's opinions of the current market environment, which are subject to change. Information herein may discuss general market activity, industry or sector trends, or other broad-based economic, market or political conditions and should not be construed as research or investment advice. Recipients should consult their own financial advisers regarding the information herein. There can be no assurances that any of the trends described herein will continue or will not reverse. **Past events and trends do not imply, predict or guarantee, and are not necessarily indicative of, future events or results.**

INCOME: A SCARCE RESOURCE Blackstone | 1

II. Significant Portfolio Depletion Risk

Accordingly, in our view many income-oriented portfolios today may face substantial depletion risk. That is, we believe portfolios may be at risk of being exhausted or permanently impaired while their owners still face financial obligations that they intend to meet with portfolio income.

The income generated by a representative yield-oriented portfolio (Figure 2) has fallen considerably over the last decade. This portfolio, which is weighted equally between U.S. high yield bonds, U.S. investment grade bonds, and European high yield bonds, has seen

its yield fall from a decade high north of 8% in 2011 to 2.6% as of September 30, 2021.

As a result of this decline, portfolios which are designed with the goal of generating significant portfolio yields may be at risk if investors continue to take distributions at rates similar to a decade ago. The drop in yield may force those investors to rely on market appreciation and/or drawing down capital to meet their anticipated living needs.

FIGURE 2: Income from Representative Income Portfolio, 2011-2021



Source: Bloomberg, Morningstar, as of September 30, 2021. Hypothetical portfolio allocated 33.3% to the Bloomberg U.S. Aggregate Bond Index, 33.3% to the Bloomberg U.S. Corporate High Yield Bond Index, and 33.3% to the Bloomberg Pan-European High Yield Index. Yields are shown from September 2011 to September 2021.

The information herein is provided for educational purposes only and should not be construed as financial or investment advice, nor should any information in this document be relied on when making an investment decision. Opinions expressed reflect the current opinions of Blackstone as of the date hereof and are based on Blackstone's opinions of the current market environment, which is subject to change. Information herein may discuss general market activity, industry or sector trends, or other broad-based economic, market or political conditions and should not be construed as research or investment advice. Recipients should consult their own financial advisers regarding the information herein. There can be no assurances that any of the trends described herein will continue or will not reverse. **Past events and trends do not imply, predict or guarantee, and are not necessarily indicative of, future events or results**.

INCOME: A SCARCE RESOURCE Blackstone | 2

This may be particularly risky at a time of heightened market volatility. Sharp drops in asset value in our opinion only serve to heighten depletion risk, since the withdrawal of a fixed percentage after a market decline all else holding equal represents a larger relative percentage of the total portfolio.

Income-oriented investors today may want to revisit private market alternatives as a potential solution for their yield challenges. In particular, portfolios with private credit and private real estate allocations compared to a traditional portfolio (Figure 5) may offer greater yield potential and a higher likelihood of closing the above-discussed income gap.

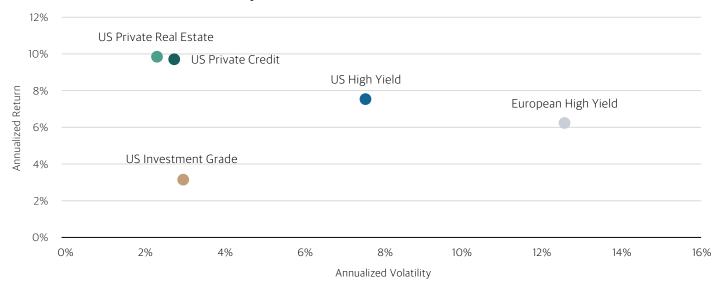
Allocating just a portion of the same portfolio to asset classes such as private real estate and private credit may bring significant potential yield enhancement. In the hypothetical illustration the portfolio yield rises 150 basis points (bps), to 4.1%.

As a trade-off of investing in private market alternatives, capital is often locked up for specified periods. This means investors must plan around the lack of liquidity of the investment.

We see private real estate as a compelling portfolio holding, one with attractive total return potential, a considerable portion of which may be delivered in the form of income. Private credit in our view is primarily a source of high income potential, and also warrants consideration as a long-term portfolio holding.

In practice, this often means investors must source liquidity from other parts of their portfolios. For some investors, a semi-liquid investment structure may represent a middle ground between liquid and illiquid investments.

FIGURE 3: Annualized Return and Volatility (Standard Deviation), 2011-2021



Source: Bloomberg, Morningstar, as of September 30, 2021. The returns and volatility of the asset classes presented are based on the following indices: For U.S. Private Credit: Cliffwater Direct Lending; for European High Yield: Bloomberg Pan-European High Yield; for U.S. High Yield: Bloomberg U.S. Corporate High Yield; for U.S. Private Real Estate: NCREIF ODCE; for U.S. Investment Grade: Bloomberg U.S. Aggregate. Annualized returns and volatility are based on quarterly returns over the 10-year period ending September 30, 2021.

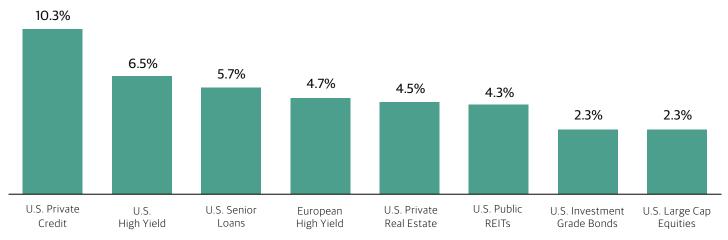
The information herein is provided for educational purposes only and should not be construed as financial or investment advice, nor should any information in this document be relied on when making an investment decision. Opinions expressed reflect the current opinions of Blackstone as of the date hereof and are based on Blackstone's opinions of the current market environment, which is subject to change. Information herein may discuss general market activity, industry or sector trends, or other broad-based economic, market or political conditions and should not be construed as research or investment advice. Recipients should consult their own financial advisers regarding the information herein. There can be no assurances that any of the trends described herein will continue or will not reverse. **Past events and trends do not imply, predict or guarantee, and are not necessarily indicative of, future events or results.**

INCOME: A SCARCE RESOURCE Blackstone | 3

III. Potential Solution: Introducing Alternative Sources of Income

FIGURE 4: Yield Comparison

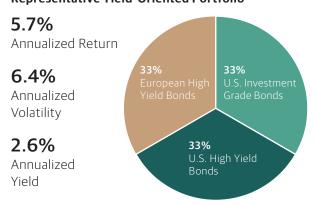
(Average Annual Yield, Trailing 10 Years as of Q3 2021)



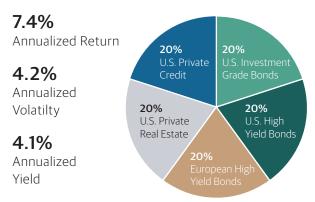
Source: Morningstar, Bloomberg, Cliffwater as of September 30, 2021.

The yields of the asset classes presented are based on the following indices: For U.S. Private Credit: Cliffwater Direct Lending; for European High Yield: Bloomberg Pan-European High Yield; for U.S. Senior Loans: S&P/LSTA Leveraged Loan; for U.S. High Yield: Bloomberg U.S. Corporate High Yield; for U.S. Private Real Estate: NCREIF ODCE; for U.S. Public REITs: MSCI US REITS; for U.S. Investment Grade: Bloomberg U.S. Aggregate; for U.S. Large-Cap Equities: S&P 500; for U.S. Treasuries: Bloomberg Intermediate Treasury;

FIGURE 5:
Representative Yield-Oriented Portfolio



Portfolio with Private Market Alternatives Allocation



Source: Morningstar, Bloomberg, Cliffwater, as of September 30, 2021.

The yield on the Representative Yield-Oriented Portfolio was calculated using the annualized yield of the Bloomberg Pan-European High Yield Index, Bloomberg U.S. Aggregate Bond Index, and Bloomberg U.S. Corporate High Yield Bond Index. Yield of the Portfolio with Private Market Alternative Allocation was calculated using the annualized yield of the Bloomberg Pan-European High Yield Index, Bloomberg U.S. Aggregate Bond Index, Bloomberg U.S. Corporate High Yield Bond Index, Cliffwater Direct Lending Index, and NCREIF ODCE Index. Annualized yields, as of September 30, 2021. Annualized returns and volatility are based on quarterly returns over the 10-year period ending September 30, 2021.

The information herein is provided for educational purposes only and should not be construed as financial or investment advice, nor should any information in this document be relied on when making an investment decision. Opinions expressed reflect the current opinions of Blackstone as of the date hereof and are based on Blackstone's opinions of the current market environment, which is subject to change. Information herein may discuss general market activity, industry or sector trends, or other broad-based economic, market or political conditions and should not be construed as research or investment advice. Recipients should consult their own financial advisers regarding the information herein. There can be no assurances that any of the trends described herein will continue or will not reverse. **Past events and trends do not imply, predict or guarantee, and are not necessarily indicative of, future events or results**.

INCOME: A SCARCE RESOURCE

Blackstone | 4

Key Risk Factors

Certain countries have been susceptible to epidemics which may be designated as pandemics by world health authorities, most recently COVID-19. The outbreak of such epidemics, together with any resulting restrictions on travel or quarantines imposed, has had and will continue to have a negative impact on the economy and business activity globally (including in the countries in which funds invest), and thereby is expected to adversely affect the performance of a fund's investments. Furthermore, the rapid development of epidemics could preclude prediction as to their ultimate adverse impact on economic and market conditions, and, as a result, presents material uncertainty and risk with respect to funds and the performance of their investments.

Certain information contained in these materials constitutes "forward-looking statements," which can be identified by the use of forward-looking terminology or the negatives thereof. These may include financial estimates and their underlying assumptions, statements about plans, objectives and expectations with respect to future operations, and statements regarding future performance. Such forward-looking statements are inherently uncertain and there are or may be important factors that could cause actual outcomes or results to differ materially from those indicated in such statements. Blackstone believes these factors include but are not limited to those described under the section entitled "Risk Factors" in its Annual Report on Form 10-K for the fiscal year ended December 31, 2020 and any such updated factors included in its periodic filings with the Securities and Exchange Commission, which are accessible on the SEC's website at www.sec.gov. These factors should not be construed as exhaustive and should be read in conjunction with the other cautionary statements that are included in these materials and in the filings. Blackstone undertakes no obligation to publicly update or review any forward-looking statement, whether as a result of new information, future developments or otherwise.

Important Disclosure Information

The views expressed in this commentary are the views of Private Wealth Solutions group of Blackstone Inc. (together with its affiliates, "Blackstone") and do not necessarily reflect the views of Blackstone itself. All information in this commentary is believed to be reliable as of the date on which this commentary was issued, and has been obtained from public sources believed to be reliable. No representation or warranty, either express or implied, is provided in relation to the accuracy or completeness of the information contained herein.

Investment concepts mentioned in this commentary may be unsuitable for investors depending on their specific investment objectives and financial position. Tax considerations, margin requirements, commissions and other transaction costs may significantly affect the economic consequences of any transaction. Concepts referenced in this commentary should be reviewed carefully with one's investment and tax advisors.

This commentary does not constitute an offer to sell any securities or the solicitation of an offer to purchase any securities. This commentary discusses broad market, industry or sector trends, or

other general economic, market or political conditions and has not been provided in a fiduciary capacity under ERISA and should not be construed as research, legal, tax or investment advice, or any investment recommendation. Past performance is not necessarily indicative of future performance.

Blackstone Securities Partners L.P. ("BSP") is a broker-dealer whose purpose is to distribute Blackstone managed or affiliated products. BSP provides services to its Blackstone affiliates, not to investors in its funds, strategies or other products. BSP does not make any recommendation regarding, and will not monitor, any investment. As such, when BSP presents an investment strategy or product to an investor, BSP does not collect the information necessary to determine—and BSP does not engage in a determination regarding whether an investment in the strategy or product is in the best interests of, or is suitable for, the investor. You should exercise your own judgment and/or consult with a professional advisor to determine whether it is advisable for you to invest in any Blackstone strategy or product. Please note that BSP may not provide the kinds of financial services that you might expect from another financial intermediary, such as overseeing any brokerage or similar account. For financial advice relating to an investment in any Blackstone strategy or product, contact your own professional advisor.

Issued by The Blackstone Group International Partners LLP ("BGIP"), which is authorised and regulated by the Financial Conduct Authority (firm reference number 520839) in the United Kingdom.

This communication is directed only at persons: (a) who are "Professional Clients" as defined in the Glossary to the UK Financial Conduct Authority Handbook; or (b) to whom it may otherwise lawfully be communicated. It is intended only for the person to whom it has been sent, is strictly confidential and must not be distributed onward.

So far as relevant, the only clients of BGIP are its affiliates. No investor or prospective investor is a client of BGIP and BGIP is not responsible for providing them with the protections afforded to clients. Investors and prospective investors should take their own independent investment, tax and legal advice as they think fit. No person representing BGIP is entitled to lead investors to believe otherwise.

If communicated in Belgium, Denmark, Finland, the Republic of Ireland, Lichtenstein or Norway, to per se Professional Clients or Eligible Counterparties for the purposes of the European Union Markets in Financial Instruments Directive (Directive 2014/65/EU), this communication is made by The Blackstone Group International Partners LLP ("BGIP") of 40 Berkeley Square, London, W1J 5AL (registration number OC352581), which is authorised and regulated by the Financial Conduct Authority (firm reference number 520839) in the United Kingdom and which maintains appropriate licences in other relevant jurisdictions.

If communicated in any other state of the European Economic Area or to elective Professional Clients for the purposes of the European Union Markets in Financial Instruments Directive (Directive 2014/65/EU), this communication is made by Blackstone Europe Fund Management S.à r.l. ("BEFM") of 2-4 Rue Eugène Ruppert,

INCOME: A SCARCE RESOURCE

Blackstone | 5

Important Disclosure Information (cont'd)

L-2453, Luxembourg (registration number B212124), which is authorized by the Luxembourg Commission de Surveillance du Secteur Financier (reference number A00001974).

This communication is exclusively for use by persons identified above and must not be distributed to retail clients. It is intended only for the person to whom it has been sent, is strictly confidential and must not be distributed onward.

This communication does not constitute a solicitation to buy any security or instrument, or a solicitation of interest in any Blackstone fund, account or strategy. The content of this communication should not be construed as legal, tax or investment advice.

In Switzerland, this material is for the exclusive use of qualified investors as defined in article 10(3) Swiss Collective Investment Schemes Act ("CISA").

This document is not intended to constitute an offer, sale or delivery of shares or other securities under the laws of the United Arab Emirates ("UAE"). The Fund has not been and will not be registered under Federal Law No. 4 of 2000 Concerning the Emirates Securities and Commodities Authority and the Emirates Security and Commodity Exchange, or with the UAE Central Bank, the Dubai Financial Market, the Abu Dhabi Securities Market or with any other UAE exchange. The promotion of the Fund and units and interests therein have not been approved or licensed by the UAE Central Bank or any other relevant licensing authorities in the UAE, and does not constitute a public offer of securities in the UAE in accordance with the Commercial Companies Law, Federal Law No. 8 of 1984 (as amended) or otherwise. In relation to its use in the UAE, this document is strictly private and confidential and is being distributed to a limited number of investors and must not be provided to any person other than the original recipient, and may not be reproduced or used for any other purpose. The Fund may not be offered or sold directly to the public in the UAE. The information is not directed at and should not be read by persons in any of the free zones in the UAE (including the DIFC). Further, the information contained in this presentation is not intended to lead to the conclusion of any contract of any nature within the territory of the UAE. Nothing contained in this presentation is intended to constitute investment, legal, tax, accounting or other professional advice in, or in respect of, the UAE. This presentation is confidential and for your information only and nothing in this presentation is intended to endorse or recommend a particular course of action. You should consult with an appropriate professional for specific advice rendered on the basis of your situation.

Recipients should bear in mind that past or estimated performance is not necessarily indicative of future results and there can be no assurance that a fund will achieve comparable results, implement its investment strategy, achieve its objectives or avoid substantial losses or that any expected returns will be met.

The activity of identifying, completing and realizing attractive investments is highly competitive, and involves a high degree of uncertainty. There can be no assurance that a fund will be able to locate, consummate and exit investments that satisfy its objectives or realize upon their values or that a fund will be able to fully invest its committed capital. There is no guarantee that investment opportunities will be allocated to a fund and/or that the activities of a sponsor's other funds will not adversely affect the interests of such fund.

Recipients should be aware that an investment in a fund is speculative and involves a high degree of risk. There can be no assurance that a fund will achieve comparable results, implement its investment strategy, achieve its objectives or avoid substantial losses or that any expected returns will be met. A fund's performance may be volatile. An investment in a private equity fund or other alternative investment should only be considered by sophisticated investors who can afford to lose all or a substantial amount of their investment. A fund's fees and expenses may offset or exceed its profits.

The foregoing information has not been provided in a fiduciary capacity under ERISA, and it is not intended to be, and should not be considered as, impartial investment advice.

There can be no assurances that any of the trends described herein will continue or will not reverse. Past events and trends do not imply, predict or guarantee, and are not necessarily indicative of, future events or results.

Certain information herein has been obtained from sources outside Blackstone, which in certain cases have not been updated through the date hereof. While such information is believed to be reliable for purposes used herein, no representations are made as to the accuracy or completeness thereof and none of Blackstone, its funds, nor any of their affiliates takes any responsibility for, and has not independently verified, any such information.