Morgan Stanley

OCIO CASE STUDIES

The Move From DIY to OCIO

How OCIO can help a new client turn a significant windfall into a holistic long-term investment strategy

The case study presented is provided for illustrative purposes only. It does not represent a specific client situation, but it does represent generally ways that Morgan Stanley's Outsourced Chief Investment Office (OCIO) can help clients with similar circumstances. Each client's specific situation, goals and results will differ.

MEET THE CLIENT:
JONATHAN

He's 45 and lives in San Francisco with his wife and two children.

Jonathan has an MBA and worked in tech for many years.

Jonathan founded and sold a company. He is now retired.

SELF-GUIDED

Jonathan had a brokerage account at an online brokerage, where he traded stocks without guidance from an Advisor.

Seeking Advice

A series of events in 2025 made Jonathan consider the value of an Advisor

MANAGING A WINDFALL

After the firm he founded was acquired, Jonathan had $50 million in liquid, concentrated assets. The daunting task of managing this much wealth motivated him to seek advice.

SELL-OFF FEARS

Jonathan held large, concentrated stock positions in tech companies. Frequent periods of market volatility and a lack of portfolio diversification made him feel uneasy, compelling him to work with an investment professional.

CALLING FOR SUPPORT

Jonathan realized he needed to diversify his portfolio and better manage risk, so he used the "Find a Financial Advisor" feature on MorganStanley.com and connected with Craig, a Private Wealth Advisor.

Meet: Craig

He's a solo practitioner based on the West Coast.

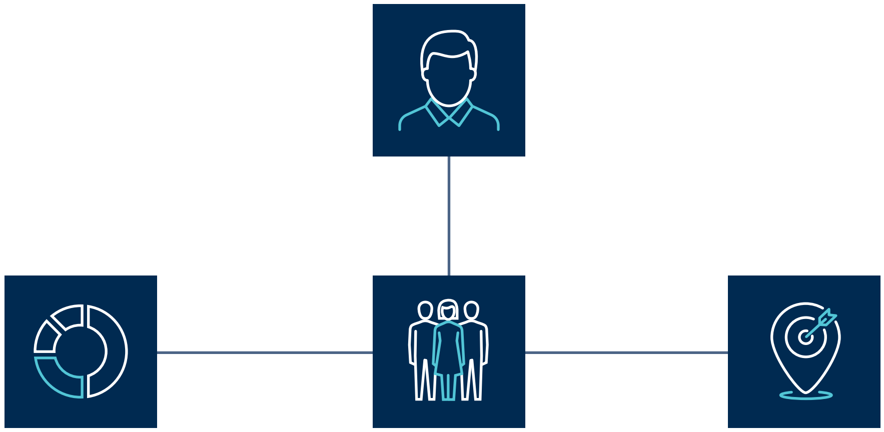
Craig focuses in first-generation wealth, specifically founders of tech companies.

A CONNECTION TO CAPABILITIES

Craig wanted to connect Jonathan with the broader resources of Morgan Stanley and introduce him to institutional investment capabilities.

Introducing OCIO

Craig reached out to Morgan Stanley's Outsourced Chief Investment Office (OCIO) whose professionals have extensive experience working with clients navigating the complexities of significant wealth.



OCIO ENTERS THE PICTURE

Jonathan valued Craig's experience advising entrepreneurs and the resources of Morgan Stanley's OCIO. He decided to fund his Morgan Stanley account with $50 million.

Coming Up With a Game Plan

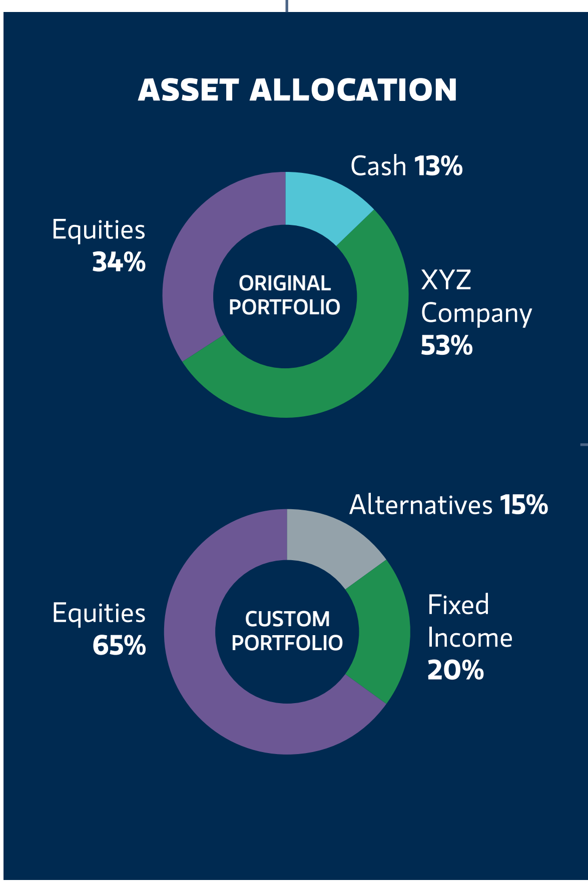
Jonathan, Craig and the OCIO team met to discuss:

- ✓ Jonathan's short-term goals, such as managing his tax situation, providing liquidity through lending, and diversifying concentrated stock
- ✓ He seeks to achieve with his holistic investment plan
- ✓ Modeling out diversification strategies while incorporating lending and illustrating the benefits and risks of alternative investments
- ✓ Preparing for potential market volatility by analyzing concentrated stock volatility and employing hedging strategies
- ✓ Working with a quantitative tax loss harvesting manager to show diversification benefits, tax savings and a staged sale plan

The appropriateness of a particular investment or strategy will depend on an investor's individual circumstances and objectives. No strategy can ensure a profit or guarantee against loss. A non-purpose securities based loan cannot be used to purchase, trade or carry securities or margin stock, as applicable.

A PLAN IN ACTION

OCIO and Craig developed a strategy to sell Jonathan's concentrated equity position, implement his tax planning strategy and diversify his holdings.



Portfolio Customization

The OCIO team and Craig analyzed Jonathan's current portfolio, proposed a new asset allocation and selected investment managers tailored for him, and created a custom benchmark based on his goals.

THE RESULT: For the first time, Jonathan's portfolio was diversified and customized. He also invested in alternative investments, an asset class in which the OCIO team has strong experience.

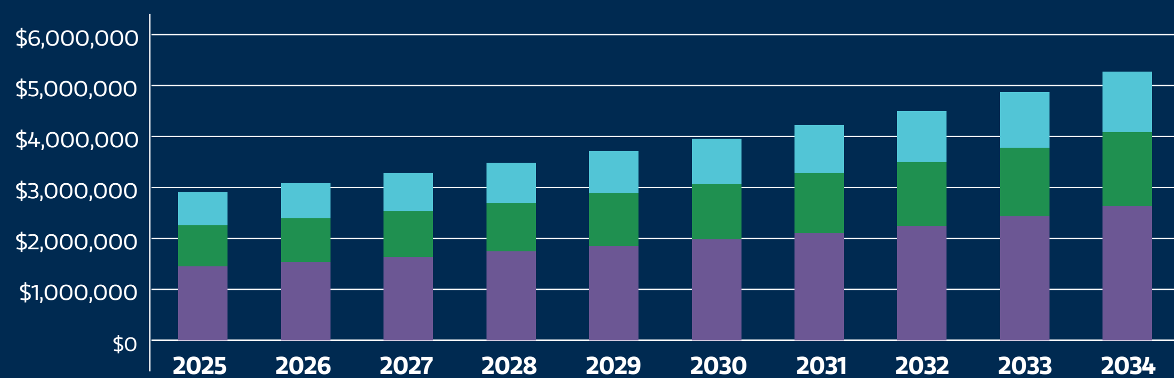
Hypothetical portfolio allocations are presented for illustrative purposes only and should not be relied upon for investment decisions.

A Focus on Alternative Investments

Craig spoke with Jonathan about the benefits of selling his concentrated stock and scaling into private investments. The OCIO team worked closely with the due diligence team to select investment managers and to craft a private pacing model for Jonathan's private investments. OCIO also handled capital calls and subscription documents on Jonathan's behalf.

COMMITMENT PACING | Private Investments Target Allocation: 15%

Commitment Amounts[1]



Annual Commitments	**2,900,000**	**3,080,050**	**3,273,912**	**3,483,338**	**3,709,560**	**3,953,570**	**4,216,208**	**4,497,912**	**4,867,597**	**5,267,766**
Private Equity	1,450,000	1,540,025	1,636,956	1,741,669	1,854,780	1,976,785	2,108,104	2,248,956	2,433,799	2,633,883
Private Credit	800,000	849,669	903,148	960,921	1,023,327	1,090,640	1,163,092	1,240,803	1,342,785	1,453,177
Private Real Estate	650,000	690,356	733,808	780,748	831,453	886,145	945,012	1,008,153	1,091,013	1,180,706
Private Allocation	**1.6%**	**4.2%**	**7.2%**	**10.1%**	**12.4%**	**14.2%**	**15.3%**	**15.5%**	**15.5%**	**15.4%**

Source: Private Investments Model

[1] Commitment amounts do not account for dramatic market movements and do not apply to target allocations beyond the analysis' timeline. Future allocations are hypothetical as proposed by the client or Financial Advisor. See disclosures for additional details regarding the potential risks and liabilities in private investments.

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THE RESULT: According to the pacing model set by the OCIO team, Jonathan's recommended in private investments increased as he sold more concentrated stock. Morgan Stanley's Private Investments Model provides a customized pacing strategy that considers the client's liquid assets, current private investments and overall liquidity preferences.

A Streamlined Tax Transition

To help manage Jonathan's tax liabilities, the OCIO team and Craig constructed a plan to implement Jonathan's staged sale strategy. The strategy utilizes a portion of the securities held in the existing portfolio to defer substantial unrealized gains and realize targeted losses.

FULL LIQUIDATION OF PRE-EXISTING PORTFOLIO

	Liquidation of Pre-Existing Portfolio		Transition to Completion Portfolio
Unrealized Gains	$4,971,978	Proposed Realized Gains	$2,078,782
Unrealized Losses	**$656,540**	**Proposed Realized Losses**	**$656,540**
		Net Realized Gains/Losses	**$1,422,243**
Full Liquidation Tax Cost	$1,027,074	**Transition Tax Cost**	**$338,494**
Tax Cost Not Currently Recognized[1]			**$688,581**
RISK REDUCTION			
Beginning Tracking Difference			**16.3%**
Ending Tracking Difference			**1.0%**

Source: Parametric, Portfolio Transition Analysis

THE RESULT: Jonathan diversified his portfolio using a tax advantaged strategy.

[1] All gains/losses in the model are assumed to be long term capital gains/losses taxed at a long term capital gains rate of 23.8%.

Tax laws are complex and subject to change. Morgan Stanley does not provide tax or legal advice.

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Diversifying a Concentrated Stock Position

The OCIO team and Craig prioritized the development of a stock-sale plan for Jonathan. Their strategy divested his equity position over the course of five years and reduced concentration risk.

THE IMPACT OF DIVERSIFICATION OVER TIME

Source: Parametric, Staged Diversification Analysis

THE RESULT: Jonathan was able to visualize the sale plan process and take action to reduce his tracking error in half by year three.

Asset allocation do not assure a profit or protect against loss in a declining market.
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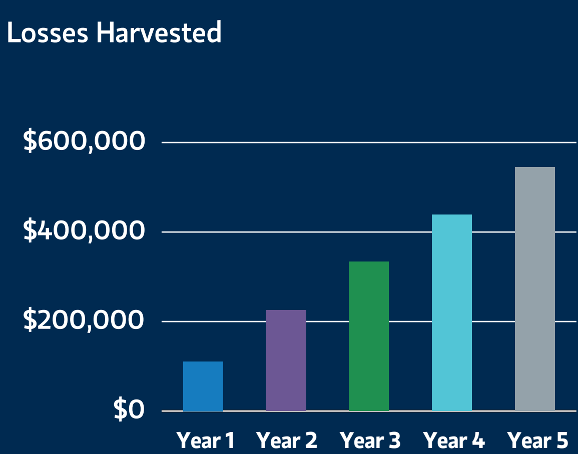
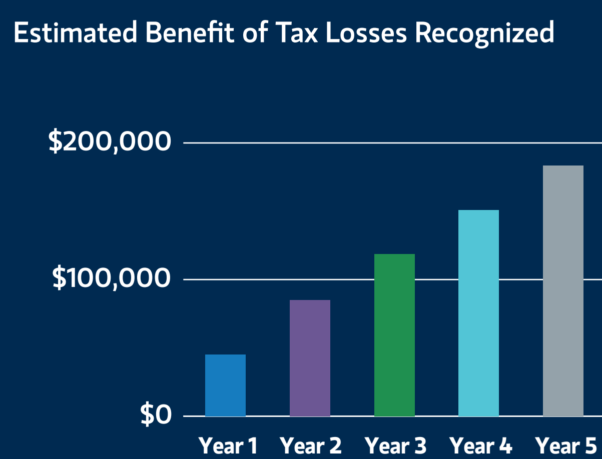
The Tax Benefit of Using a Completion Portfolio Over Time

The OCIO team and Craig employed a passive tax-loss harvesting portfolio overlay strategy.

CUMULATIVE PROJECTED TAX LOSS RECOGNITION





Source: Parametric, Staged Diversification Analysis

THE RESULT: Jonathan may recognize a cumulative $183,000 of tax losses over five years, which may reduce his current tax obligations.

A completion portfolio is an index-based portfolio that when added to the concentrated position, creates an overall portfolio with exposures comparable to the investor's benchmark with an estimated tracking error range.

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The model above assumes that harvested losses offset a combination of short-term and long-term capital gains.

A PLAN IN ACTION

Liquidity Solution

OCIO and Craig worked with a Morgan Stanley lending team to develop a plan to help cover Jonathan's capital gains tax obligations by lending against his investment portfolio. The strategy used eligible securities in Jonathan's investment account as collateral for a Line of Credit.

THE RESULT: Jonathan financed his capital gains tax obligation without liquidating assets or disrupting his investment strategy.

THE OUTLOOK

Jonathan's portfolio is now on track to:

- Continue to diversify more of his concentrated position and move closer to his targeted allocation
- Passive manage tax loss recognition over time
- Find potential new sources of return with alternative investments

He meets quarterly with Craig and the OCIO team to review and continually recalibrate his portfolio.

OCIO: BY THE NUMBERS

OCIO delivers tailored investment solutions, grounded on a disciplined process, leveraging the full resources of Morgan Stanley.

4th[1]
Largest OCIO provider by assets under management (AUM).

35+
Dedicated investment management professionals within OCIO

25+ Years
OCIO's track record of performance and advice and solutions for institutions, organizations and wealthy families

$107.1 Billion
Total assets under management for all OCIO clients

Data as of September 30, 2024.

1. OCIO assets as of 9/30/2024.
The Cerulli Report: U.S. Outsourced Chief Investment Officer Function 2024. Morgan Stanley ranked 4 out of 30 providers on 12/31/2023. Ranking solely represents outsourced assets under management reported as of 1/1/2023 through 12/31/2023.

Borrowing against securities may not be appropriate for everyone. Clients must be aware that there are risks associated with a securities based loan, including possible maintenance calls on short notice, and that market conditions can magnify any potential for loss. For details please see the important disclosures at the end of this brochure.

OCIO SERVICES & SOLUTIONS

INVESTMENT MANAGEMENT

OCIO has developed proprietary asset allocation and portfolio construction tools to help meet our clients' complex objectives and requirements.

CLIENT SEGMENT EXPERIENCE

OCIO possesses focused knowledge across segments such as nonprofits, family offices, non-U.S. investors, corporate and public pensions and more.

FIDUCIARY OVERSIGHT

OCIO shares fiduciary responsibility with clients.

ALTERNATIVE INVESTMENTS & ESG

OCIO has an extensive approach to liquid and illiquid alternatives. OCIO also combines traditional investment approaches with ESG strategies to help achieve financial and purpose-driven outcomes.

RISK MANAGEMENT & GOVERNANCE

OCIO provides sophisticated risk management techniques and daily, third-party independent investment governance.

ADVANCED ANALYTICS

Our team has access to robust resources with ongoing development of proprietary tools and heavy investment in third-party technology for investment analysis and portfolio attribution reporting.

Get Started With OCIO

To learn more about Morgan Stanley Wealth Management's dedicated OCIO service, please contact your Morgan Stanley Financial Advisor

DISCLOSURES

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Transitioning from a brokerage to an advisory relationship may not be appropriate for some clients.

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Morgan Stanley Wealth Management's Outsourced Chief Investment Officer (OCIO) program, provides a discretionary investment management solution for accounts generally in excess of $50 million in assets. The program's robust investment process includes investment policy statement development and review, customized asset allocation, investment product selection, risk management, disciplined rebalancing and ongoing portfolio monitoring. To learn more about the OCIO program, read the applicable Morgan Stanley Smith Barney LLC ADV brochure and/or brochure supplement, available at www.morganstanley.com/ADV.

In the OCIO program, accounts are subject to an annual asset-based fee which is payable quarterly in advance (some account types may be billed differently). In general, the Fee covers all fees or charges of Morgan Stanley (including investment advisory services, brokerage commissions, compensation to Morgan Stanley Financial Advisors and Morgan Stanley custodial charges) except certain costs or charges associated with the account such as any applicable Sub-Manager fees or certain securities transactions, including dealer mark-ups or mark-downs, auction fees, certain odd-lot differentials, exchange fees, transfer taxes, electronic fund and wire transfer fees; charges imposed by custodians other than Morgan Stanley.

Morgan Stanley or Executing Sub-Managers, as applicable, in some of Morgan Stanley's Separately Managed Account ("SMA") programs may affect transactions through broker-dealers other than Morgan Stanley or our affiliates. In such instance, you may be assessed additional costs by the other firm in addition to the Morgan Stanley and Sub-Manager fees. Those costs will be included in the net price of the security, not separately reported on trade confirmations or account statements. Certain Sub-Managers have historically directed most, if not all, of their trades to outside firms. Information provided by Sub-Managers concerning trade execution away from Morgan Stanley is summarized at: www.morganstanley.com/wealth/investmentsolutions/pdfs/ adv/sotresponse.pdf. For more information on trading and costs, please refer to the ADV Brochure for your program(s), available at www.morganstanley. com/ADV, or contact your Financial Advisor / Private Wealth Advisor.

We may act in the capacity of a broker or that of an advisor. As your broker, we are not your fiduciary and our interests may not always be identical to yours. Please consult with your Financial Advisor to discuss our obligations to disclose to you any conflicts we may from time to time have and our duty to act in your best interest. We may be paid both by you and by others who compensate us based on what you buy. Our compensation, including that of your Financial Advisor, may vary by product and over time.

Clients may elect Tax Management Services for an account by notifying their Financial Advisor, and indicating what Maximum Tax or Realized Capital Gain Instruction is desired for an account, if any. The Tax Management Terms and Conditions attached to the Morgan Stanley Smith Barney LLC OCIO ADV Brochure as Exhibit A will govern Tax Management Services in the account. Review the Morgan Stanley Smith Barney LLC OCIO ADV Brochure carefully with your tax advisor. Tax Management Services are not available for all accounts or clients and may adversely impact account performance. Tax Management Services do not constitute tax advice or a complete tax-sensitive investment management program. There is no guarantee that Tax Management Services will produce the desired tax results. The performance of tax-managed accounts is likely to vary from that of nontax-managed accounts.

Morgan Stanley Smith Barney LLC, its affiliates and their employees are not in the business of providing tax or legal advice. These materials and any statements contained herein should not be construed as tax or legal advice. Individuals should consult their personal tax advisor or attorney for matters involving taxation and tax planning and their attorney for matters involving personal trusts and estate planning.

Parametric is a part of Morgan Stanley Investment Management, an affiliate of Morgan Stanley Smith Barney LLC.

There is no guarantee that tax-loss harvesting will achieve any particular tax result.

With the exception of a margin loan, the proceeds from securities based loan products may not be used to purchase, trade, or carry margin stock (or securities, with respect to Express CreditLine); repay margin debt that was used to purchase, trade or carry margin stock (or securities, with respect to Express CreditLine); and cannot be deposited into a Morgan Stanley Smith Barney LLC or other brokerage account.

To be eligible for a securities based loan, a client must have a brokerage account at Morgan Stanley Smith Barney LLC that contains eligible securities,which shall serve as collateral for the securities based loan.

Important Risk Information for Securities Based Lending: Clients must be aware that: (1) Sufficient collateral must be maintained to support the loan and to take future advances; (2) Clients may have to deposit additional cash or eligible securities on short notice; (3) Some or all of the pledged securities may be sold without prior notice in order to maintain account equity at required collateral maintenance levels. Clients will not be entitled to choose the securities that will be sold. These actions may interrupt long-term investment strategy and may result in adverse tax consequences or in additional fees being assessed; (4) Morgan Stanley Bank, N.A., Morgan Stanley Private Bank, National Association or Morgan Stanley Smith Barney LLC (collectively referred to as "Morgan Stanley") reserve the right not to fund any advance request due to insufficient collateral or for any other reason except for any portion of a securities based loan that is identified as a committed facility; (5) Morgan Stanley reserves the right to increase the collateral maintenance requirements at any time without notice; and (6) Morgan Stanley reserves the right to call securities based loans at any time and for any reason.

Securities based loans are provided by Morgan Stanley Smith Barney LLC, Morgan Stanley Private Bank, National Association or Morgan Stanley Bank, N.A, as applicable.

Other Risks

Asset Allocation and diversification do not assure a profit or protect against loss in declining financial markets. Investing in the markets entails the risk of market volatility. The value of all types of investments may increase or decrease over varying time periods.

Past performance is no guarantee of future results and not necessarily a guide to future performance.

Equity securities may fluctuate in response to news on companies, industries, market conditions and general economic environment. Companies paying dividends can reduce or stop payouts at any time.

Investing in fixed income securities involves interest rate risk, credit risk, and inflation risk. Interest rate risk is the possibility that bond prices will decrease because of an interest rate increase. When interest rates rise, bond prices, and the values of fixed income securities generally fall. Credit risk is the risk that a company will not be able to pay its debts, including the interest on its bonds. Inflation risk is the possibility that the interest paid on an investment in bonds will be lower than the inflation rate, decreasing purchasing power.

Environmental, Social and Governance ("ESG") investments in a portfolio may experience performance that is lower or higher than a portfolio not employing such practices. Portfolios with ESG restrictions and strategies as well as ESG investments may not be able to take advantage of the same opportunities or market trends as portfolios where ESG criteria is not applied. There are inconsistent ESG definitions and criteria within the industry, as well as multiple ESG ratings providers that provide ESG ratings of the same subject companies and/or securities that vary among the providers. Certain issuers of investments may have differing and inconsistent views concerning ESG criteria where the ESG claims made in offering documents or other literature may overstate ESG impact. ESG designations are as of the date of this material, and no assurance is provided that the underlying assets have maintained or will maintain and such designation or any stated ESG compliance. As a result, it is difficult to compare ESG investment products or to evaluate an ESG investment product in comparison to one that does not focus on ESG. Investors should also independently consider whether the ESG investment product meets their own ESG objectives or criteria.

There is no assurance that an ESG investing strategy or techniques employed will be successful. Past performance is not a guarantee or a dependable measure of future results.

Morgan Stanley Wealth Management has not considered the actual or desired investment objectives, goals, strategies, guidelines, or factual circumstances of any investor in any fund(s). Before making any investment, each investor should carefully consider the risks associated with the investment, as discussed in the applicable offering memorandum, and make a determination based upon their own particular circumstances, that the investment is consistent with their investment objectives and risk tolerance.

Alternative investments often are speculative and include a high degree of risk. Investors could lose all or a substantial amount of their investment. Alternative investments are appropriate only for eligible, long-term investors who are willing to forgo liquidity and put capital at risk for an indefinite period of time. They may be highly illiquid and can engage in leverage and other speculative practices that may increase the volatility and risk of loss. Alternative Investments typically have higher fees than traditional investments. Investors should carefully review and consider potential risks before investing. Certain of these risks may include but are not limited to:

- Loss of all or a substantial portion of the investment due to leveraging, short-selling, or other speculative practices;
- Lack of liquidity in that there may be no secondary market for a fund;
- Volatility of returns;
- Restrictions on transferring interests in a fund;
- Potential lack of diversification and resulting higher risk due to concentration of trading authority when a single advisor is utilized;
- Absence of information regarding valuations and pricing;
- Complex tax structures and delays in tax reporting;
- Less regulation and higher fees than mutual funds;
- Risks associated with the operations, personnel, and processes of the manager; and
- Risks associated with cybersecurity.

As a diversified global financial services firm, Morgan Stanley engages in a broad spectrum of activities including financial advisory services, investment management activities, sponsoring and managing private investment funds, engaging in brokerdealer transactions and principal securities, commodities and foreign exchange transactions, research publication, and other activities. In the ordinary course of its business, Morgan Stanley therefore engages in activities where Morgan Stanley's interests may conflict with the interests of its clients, including the private investment funds it manages. Morgan Stanley can give no assurance that conflicts of interest will be resolved in favor of its clients or any such fund.

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