

PerformanceMagazine



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FOREWORD



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The investment management industry continues to evolve amid considerable challenges and strategic opportunities. As we close one year and approach the start of another, we're given a unique chance to reflect a bit more on the past and plan—as much as one can—for the future. This edition of *Performance* examines the groundbreaking shifts, thoughtful insights, and innovative trends that will guide us through this period of transformation.

India's adapted regulatory framework now encourages more foreign investment.

From registering as a foreign portfolio investor or establishing alternative investment funds (AIFs), Rajesh H. Gandhi, Vijay Morarka, Nikki Mutreja and Krisha Shah explore several ways to access and benefit from investing this emerging market.

The flourishing growth of private markets also reveals a significant opportunity—

US\$8 trillion, to be precise. Mark Stockley, Chief Business Development Officer of Carne Group, details how UK and US fund managers are anticipating an influx of capital in private assets. While the surge could transform the market, effective partnerships and artful approaches remain critical, particularly for investors less familiar with the sector.

ETFs continue to gain traction. To harness the appeal of tax efficiency and liquidity, Paul Kraft, Lauren Jackson and Matt Romano explore **three key ways that investment managers could enter the ETF market.** Regardless of the point of entry, strategic relationships, thoughtful marketing and distribution, and efficient operating models will be crucial to tapping into their full potential.

The rapid innovation within **generative AI (GenAI) technology remains top of mind for its various business applications.** While the industry as a whole has had varied speeds of adoption, Snehal Waghulde, Jana Borer and Jad El Rez posit that investment managers can use GenAI to improve operational efficiency, enhance client servicing excellence, and drive innovation and growth.

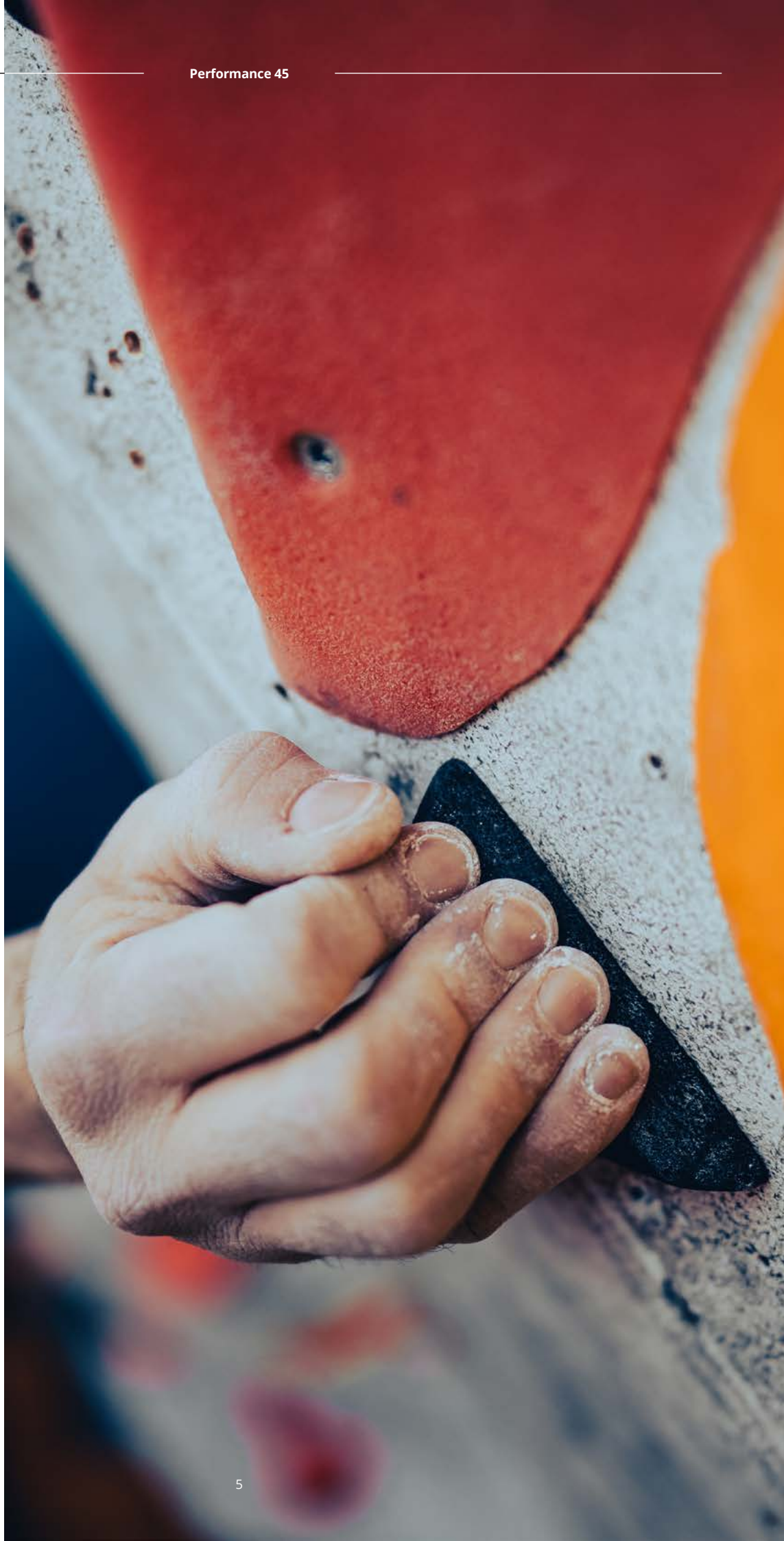
As **open-ended alternative investment funds gain popularity among high-net-worth individuals and family offices,** General and Limited Partners are meeting the demand. Arnaud Bon, Thorsten Heymann and Jeff Stakel explore how the appeal of perpetual capital and diversified investment options remains strong, even amid some operational challenges.

Digital assets also remain a salient point of discussion. Paul Kraft, Tim Davis and Lauren Campson exchange with Michael O'Reilly, who sheds light on how this nascent field continues to evolve. **As enterprises increasingly accept digital assets, the potential for tokenization to modernize the global financial services ecosystem is clear.** However, the journey to forward to its full integration could require careful evaluation and time.

Private equity funds in Europe have consistently proven themselves to be alpha generators. But how can this outperformance be sustained? From championing a smart beta strategy to active management, Claudio Scardovi and Elisa Galassi **explore how private equity can not only maintain its foothold, but drive even more value.**

Finally, Don Gerritsen, Jonathan Wiedeman and Thierry Langlois expand on private equity even further, as they examine its role in sustainable investing. By driving ESG efforts in companies in which they've assumed control, **PE firms are positioned to improve sustainable practices that promise not only brighter futures, but also improved valuations.**

As we make sense of many fast-paced shifts, it's important to consider the most critical information; determining what that is where the challenge lies. We hope this 45th edition of *Performance* has helped distill it all down to the most relevant topics, so that you can start envisioning your strategy for the months ahead. Happy reading.





EDITORIAL



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As the year closes in amid changes across the world on political, regulatory, and technology fronts, as well as conflicts that continue to escalate, the investment management industry remains vibrant and critical to the lives of millions of investors across the world. And while the United States (US) celebrates the 100-year anniversary of the mutual fund in 2024, innovation, technology opportunities, sustainability focus and the emergence of new asset classes were initiated across the globe. The mutual fund (and other pooled investment products) continues to be a mainstay that has transformed the lives of many investors. As a result, there is much to look back and reflect on, and much to look forward to, in the investment management industry.

In this 100th celebration year, the investment management industry continued to see innovative structures and

the emergence of new asset classes such as the launch of bitcoin and ethereum exchange-traded products (ETPs) in the US – moving them closer to countries currently leading in the digital asset space. The initial investor frenzy over these ETPs and the upcoming change in the US political administration in 2025 may spark more investment managers to develop digital asset products, including tokenization, to meet investor demand. One of the enduring qualities of pooled investment products has been its ability to innovate over time beyond new asset classes and structures; this has come to include exchange-traded funds (ETFs), alternative investment and private market opportunities through such structures as closed-end funds, interval funds, open-ended alternative investment funds, tender option funds and business development companies.

The growth in ETFs has been incredible, with each year's net flows beating the prior year's record net flows. In this edition, we explore the three paths to enter and participate in this exciting ETF growth market. Beyond digital and crypto asset classes, the "retailization" of alternative products is top of mind and believed to have a similar growth trajectory; this is resulting in many investment managers adding evergreen funds and alternatives products that access private equities and markets, infrastructure, and real estate to their strategic agendas.

Technology has been, and will continue to be, a differentiator among profitable growth firms. Front-runners in creating profits have strong cultures of investing in technology, a clear differentiated vision and investment products, an operating model that outsources non-core functions, and a robust execution approach. Investment managers now have the opportunity to lead on the adoption of artificial intelligence (AI) and capitalize on the immense data, speed, and computing capabilities within their operating models to gain operational efficiency, enhanced client experiences and a competitive advantage.

As excitement and growth continue to envelop the investment management industry, there are few topics that enjoy greater attention than digital assets and blockchain. Both traditional players and startups look to position themselves for success along the digital asset and blockchain ecosystem. Headwinds to any investment product growth are real, especially under the umbrella of sustainable investing. Education across investment manager teams, investors, and key stakeholders will also be warranted.

This *Performance* edition provides insights that can help contribute to the decision-making and success of investment managers in the future. In developing a forward-focused strategy, firms

should consider the impact of sustainable investing, global regulatory requirements, opportunities and potential of AI, and innovative products and structures to help meet the demands from their existing and potential clients.

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A guide to foreign investment in India

AN OVERVIEW OF INDIA'S REGULATORY
FRAMEWORK FOR FOREIGN INVESTMENT
IN SECURITIES



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INTRODUCTION

In 2023, foreign investment surged in India, flowing in from a variety of jurisdictions. The year also saw a spate of regulatory developments that underscored India's unwavering commitment to fostering economic growth, streamlining investment processes, enhancing transparency, and nurturing a favorable environment for foreign investors.

As the global economy continues to intertwine with India's financial markets, it's increasingly essential for foreign investors to understand the country's regulatory framework and keep abreast of its changes.

This article summarizes the different routes available to foreign investors, taking a closer look at the regulations governing foreign portfolio investments (FPIs) and alternative investment funds (AIFs) in India. It also breaks down the Securities and Exchange Board of India's (SEBI) rules and compliance requirements for these avenues.

When exploring investment opportunities in India, foreign investors have a range of avenues to choose from based on the type of securities and the nature of the investments.

Direct investment in India

- **Foreign direct investment (FDI):** This route allows foreign private investment in listed and unlisted Indian companies with a 10% minimum equity stake without having to register in India, subject to sectoral caps.

- **Foreign portfolio investors (FPIs):** This route permits investment in listed securities (such as equities, bonds, derivatives, and other securities) on public markets, once FPI registration is obtained with the sub-custodian bank on behalf of the Indian regulator.
- **Foreign venture capital investment (FVCI):** This route directs investments toward Indian entities operating in critical sectors, including technology, healthcare, biotechnology, e-commerce, infrastructure, and other emerging sectors.

- **External commercial borrowings (ECBs):** Foreign entities meeting specific eligibility criteria can extend loans to specified Indian entities, subject to conditions regarding maturity, fund usage, cost limits, borrowing currency, etc.

Indirect exposure to India

- **Depository receipts (DRs):** Foreign investors can gain exposure to Indian securities by investing in American depository receipts (ADRs) or global

depository receipts (GDRs). These foreign currency-denominated instruments are issued abroad and linked to the securities of Indian companies.

- **Overseas derivative instruments (ODIs):** Foreign investors can also invest in ODIs (which may be issued by Category I FPIs) with Indian securities as the underlying assets.

Foreign investors can also establish a presence in India in different ways, including:

- Setting up an **AIF**, which enables investments in both listed and unlisted securities;



- Establishing a **real estate investment trust (REIT)** to invest in the real estate market; or
- Forming an **infrastructure investment trust (InvIT)** for investments in India's infrastructure sector.

Investors can also establish a **presence in the International Financial Services Centre (IFSC)** located in the Gujarat International Finance Tec-City (GIFT City). This is India's global financial hub, designed to facilitate international financial transactions and provide an enabling environment for financial services firms to operate within the country. Foreign investors can also **trade securities** listed on stock exchanges within the IFSC.

The FPI route

With the FPI route, foreign investors obtain registration from the sub-custodian or designated depository bank on behalf of SEBI to trade on India's stock exchanges and invest in the debt securities market. The SEBI (FPI) Regulations, 2019 ("FPI Regulations") set out the compliance standards and guidelines for FPIs, including eligibility criteria, permissible investments, investment limits, and reporting requirements.

FPIs are classified into two main groups:

- **Category I FPIs** are typically entities with a higher level of regulatory oversight and lower risk profiles, such as government and government-related entities, pension funds, sovereign wealth

funds, and appropriately regulated entities. Unregulated funds can also qualify if their investment manager is appropriately regulated and registered as a Category I FPI.

- **Category II FPIs** include entities not meeting the Category I FPI eligibility criteria, such as corporate bodies, family offices, limited partnerships, and individuals.

Registering to trade as an FPI

To trade in Indian-listed securities, foreign entities must submit a common application form (CAF) with their local sub-custodian in India, along with supporting documents and know-your-customer (KYC) details. Upon approval, the CAF provides the FPI registration and a Permanent Account Number (i.e., the India tax ID) and establishes a security and depository account in India.

FPIs must identify ultimate beneficial owners (UBOs) and report this information to their local custodian. UBOs are determined based on ownership and control, and the FPI's senior managing official (SMO) is considered the UBO if none is otherwise identified. SEBI has recently mandated additional disclosures from certain objectively identified FPIs, which requires detailed information on entities holding an ownership or economic interest in the FPI on a full look-through basis, including natural persons, without any threshold.

Investments by non-resident Indians (NRIs), overseas citizens of India (OCIs), and resident Indians in an FPI are subject to an aggregate limit of less than 50%, with each NRI, OCI and resident Indian allowed to invest up to 25%.

Permissible investment and investment limits

FPIs can invest in a variety of securities, including listed or to-be-listed equity instruments, debt instruments (such as corporate bonds and government securities), derivatives, units of mutual funds, exchange-traded funds (ETFs), REITs and InvITs.

The FPI Regulations also stipulate that any FPI (along with its investor group) can invest less than 10% of the paid-up value (on a fully diluted basis) in the equity instruments of a listed Indian company. Entities with more than 50% common ownership or control are considered part of the same investor group. FPIs investing in debt securities must comply with allocation limits notified by SEBI or the Reserve Bank of India (RBI) and are subject to conditions.

Recent changes

Recent regulatory changes affecting FPIs include SEBI's requirement for all non-individual FPIs to obtain a legal entity identifier (LEI). Additionally, SEBI has introduced a beta version of a T+0 settlement cycle for the Indian equities cash market on an optional basis, alongside the existing T+1 cycle, for a limited number of scrips.

Overall, the FPI route provides foreign investors a regulated framework to make portfolio investments (<10%) in entities listed on India's stock exchanges.

AIFs in India

Foreign investors can also set up a presence in India through an AIF, which can pool money from investors (both in and outside India) and invest in portfolio companies, based on their registration category. The SEBI (AIF) Regulations, 2012 ("AIF Regulations") regulate the establishment and operation of AIFs in India, and are supplemented by the SEBI's issued guidelines and circulars. Additionally, certain requirements from other laws also apply to AIFs.

AIFs can be set up as trusts, limited liability partnerships (LLPs), companies, or other corporate bodies. They must appoint:

- A trustee, in the case of a trust;
- An investment manager to manage the assets; and
- A sponsor, who sets up the AIF and infuses sponsor contribution.

AIFs broadly fall into three categories:

- **Category I AIFs** invest in early-stage ventures, startups, social ventures, small and medium enterprises (SMEs), infrastructure, or other sectors deemed socially or economically beneficial by the government or regulators. Category I AIFs include venture capital funds (including angel funds), SME funds, social impact funds, infrastructure funds, and special situation funds.
- **Category II AIFs** do not fall under Categories I and III and do not employ leverage except for day-to-day operational requirements.

- **Category III AIFs** employ complex trading strategies and can use leverage within prescribed limits, including through investment in listed or unlisted derivatives.

Setting up an AIF in India

To register as an AIF, an application must be filed with SEBI along with the necessary fees and documentation. This includes a private placement memorandum detailing the fund's structure in a SEBI-prescribed format and a merchant banker due diligence certificate.

Key regulatory conditions for AIFs

AIFs must have a minimum corpus of INR20 crores (~USD2.5 million), with a minimum investment of INR1 crore (~USD 0.12 million) by each investor. They are restricted to a maximum of 1,000 investors and must raise funds exclusively through private placement.

Category I and II AIFs are typically closed-ended funds, with a minimum tenure of 3 years, while Category III may be open or close ended. A close-ended fund's maximum tenure is defined upfront and may be extended by 2 years with the investors' consent, post which further extension can be availed only for the process of liquidation of AIF investments.

Sponsors of AIFs must maintain the following continuing interest:

- Category I and II AIFs: 2.5% of the corpus or INR50 million (~USD0.6 million), whichever is lower.
- Category III AIFs: 5% of the corpus or INR100 million (~USD1.2 million), whichever is lower.



While Category I and II AIFs can invest a maximum of 25% of the investible funds in one investee company, a Category III AIF can only invest up to 10% of its investible funds or net asset value (NAV) in a single listed investee company.

Category I and II AIFs cannot borrow funds directly or indirectly or engage in leverage, except to meet temporary fund requirements. However, Category III AIFs may leverage or borrow, subject to the

consent of the fund's investors and no more than twice the AIF's NAV.

Other requirements

AIFs must appoint a custodian for securities safekeeping and only issue units in dematerialized form. They must periodically perform investment valuations and report the NAV to investors as per the AIF Regulations. Additionally, AIFs must provide periodic reports to SEBI and their investors.

Setting up an AIF in the IFSC

Foreign investors can also establish a presence in India's IFSC. Here, they can set up AIFs that pool funds from non-resident investors and invest worldwide, including in India.

Although their categorization and compliance requirements are similar to India's AIF regime, IFSC AIFs enjoy several regulatory advantages. These



include the non-applicability of diversification norms (allowing greater flexibility in investment strategies), no restriction on leverage, exemption from applicability of aggregate investment limit for NRI/OCI/RI (applicable to FPIs) and no requirement to provide a merchant banker certificate or to issue units in dematerialized form.

CONCLUSION

India's regulatory landscape for foreign investors is dynamic and evolving. Its

robust framework for FPIs, AIFs, and other investment avenues offers an attractive environment for foreign investment across various sectors. Establishing a presence in the IFSC also provides a range of regulatory advantages.

As India continues to integrate with the global economy, understanding and navigating its regulatory terrain will be essential for foreign investors seeking to capitalize on the country's investment opportunities.

TO THE POINT

- In 2023, India's regulatory framework was significantly adapted to encourage foreign investment into the country.
- There are numerous and varied ways to invest in India, including registering as a foreign portfolio investor (FPI) to trade in Indian-listed securities.
- Foreign investors can also establish alternative investment funds (AIFs) to invest in both listed and unlisted securities.
- Establishing a presence in the International Financial Services Centre (IFSC) allows foreign investors to unlock a range of regulatory advantages.

Private markets - US\$8 trillion growth opportunity



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INTRODUCTION

Over the last few years, private markets including private equity, private debt, infrastructure, venture capital, and real estate have seen substantial inflows totaling billions of dollars.

According to the Carne Atlas 2024 report, this trend is likely to persist, with the total value of global private market assets potentially reaching US\$21.08 trillion by 2030. This would represent an US\$8 trillion increase (62%) over today's estimated US\$13.01 trillion.

Several factors are likely to drive this growth, including the transition to a

greener economy, a dynamic financial system, and the end of zero-rate borrowing.

As opportunities expand and competition intensifies, asset managers face the challenge of quickly bringing new products to market while meeting stringent regulatory requirements. This pressure is leading more fund managers to seek support from third-party specialists who can help them navigate and comply with complex regulations. This approach allows asset managers to concentrate on their primary goal of driving returns and delivering positive outcomes for clients.



West side story

- US and UK fund managers – with whom Carne Group conducted its research – tell similar but subtly different stories. The research methodology included surveys from 201 investors (US and UK private market fund managers, UK and European wealth managers and DC pension schemes) representing US\$1.93 trillion in combined assets under management (AUM).
- On the western edge of the Atlantic, US managers expect huge growth. Over a quarter (26%) expect the market to almost double, reaching between US\$22 trillion and US\$24 trillion. This growth is driven by the increasing investor demand for attractive risk-adjusted returns and portfolio diversification.

- At the same time, the rising interest for private markets has coincided with more difficult capital-raising conditions. Geopolitical tensions, equity market volatility, high inflation, and rising interest rates all limit opportunities. As a result, US managers have expanded their focus to global private markets.
- Nearly nine out of ten (88%) US managers surveyed are raising capital in Europe. Of the 12% who are not, half plan to do so, with their varying timeframes. About 17% intend to raise capital in Europe within 12 to 24 months, another 17% plan to do so in three years or more.
- Other key factors driving North American fund managers to raise capital in Europe include portfolio diversification and the overall attractiveness of private markets.

Asset allocation

- US managers expect the level of fund raising to increase across all private asset classes over the next two years compared to the previous two years.
- For example, almost half of managers believe real estate fund raising will grow by up to 10%, while private equity and infrastructure are projected to see increases of between 10% and 20%.
- Additionally, just over 40% foresee venture capital fund raising to grow by 10% to 20%. Meanwhile, just under 40% expect private debt funds to experience an increase of up to 10%.

Optimum distribution

There are three ways in which US private asset fund managers can distribute their funds in Europe.

The first method is known as passporting. With this strategy, managers establish their fund within the EU and employ an EU-authorized Alternative Investment Fund Managers (AIFM). Then they use the latter's marketing passport to distribute their funds throughout the region.

The second option is the National Private Placement Regime (NPPR). This approach permits Alternative Investment Funds (AIFs) and managers located outside the EU to market their funds separately to individual Member States.

Hence, due to the lack of homogeneity in Europe, NPPR requirements differ from country to country, with some countries not permitting it at all.

The third method is reverse solicitation, which was popular among some non-EU managers during the early days of the Alternative Investment Fund Managers Directive (AIFMD). It allows foreign investors to initiate the contact with AIFs and managers within their own jurisdiction. However, this approach is now under stricter scrutiny by national regulators.

Our research indicates that passporting is the most likely of the three options to experience growth, largely because it provides the easiest and broadest market access when partnering with an AIFM.

Approximately, 6% of respondents say passporting will rise by between 25% and 50%, and 16% believe usage will rise by between 50% and 75%.

Outsourcing support

Given the many challenges facing non-domestic managers when entering the European market, 85% of US managers surveyed expect to increase the level of outsourcing of their European business over the next five years, with 28% predicting dramatic rises.

It's important to note that outsourcing offers several advantages. 70% of respondents find that it simplifies the launch of different product sets, while 60% appreciate the greater speed to market. Additionally, 46% value the enhanced transparency in reporting that outsourcing provides.

Among the available options, AIFM support is the most popular method for raising capital in Europe. 60% of fund managers chose this option as it provides the freedom to domicile their fund in any EU jurisdiction.

Optimist in the UK

UK private capital fund managers are just as optimistic about sector growth as their US counterparts.

They believe the sector will grow from the US\$13.01 trillion in June 2024 to an average US\$22.02 trillion by 2030. Almost all (94%) of the UK managers surveyed are currently raising capital in European markets, and the remaining 6% plan to start within the next 12 to 24 months.

Attractive risk-adjusted returns across all private markets serve as an obvious draw for investment. Therefore, the question that arises is: where do they expect client flows? Private equity, venture capital and infrastructure are predicted to see the biggest percentage gains, with 46% of managers expecting these to grow up by between 20% and 30%.

In real estate, almost three-quarters (70%) of managers expect fundraising to rise by 10% and 20%. For private debt, 40% of managers anticipate an increase of 10% to 20%, while 12% expect a rise of more than 30%.

DC Pensions

Private market assets are severely underrepresented in the portfolios of UK-defined contribution (DC) pension investors compared to their global peers.

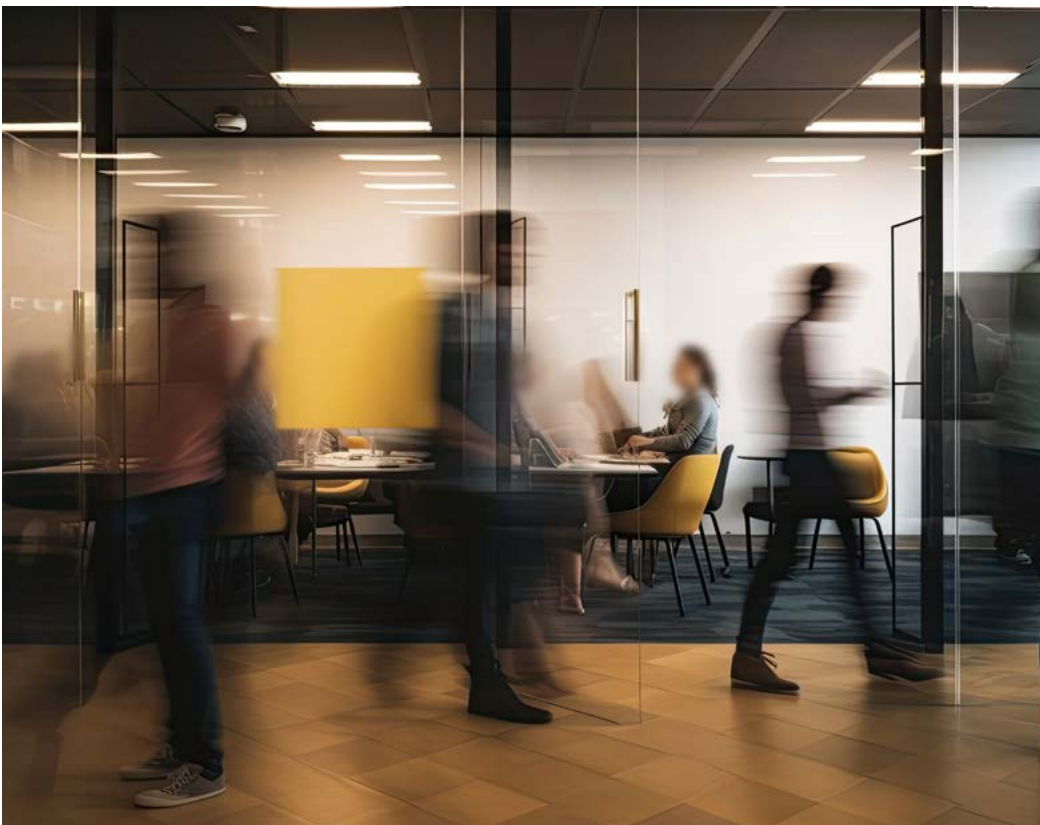
While UK DC schemes invest only 0.5% in private markets, other countries are much higher: Australia at 20%, the Netherlands at 7%, and Spain and Denmark at 5%.

The UK government is making concerted efforts to encourage more DC investment in private markets through a series of reforms announced in July 2023. These reforms include an industry-driven initiative in which several of the UK's largest pension providers pledge to allocate at least 5% of their default funds to unlisted equities.

Regulatory Barriers

Despite recent efforts from policymakers to make it easier for retail investors to allocate to private markets, US fund managers still face significant challenges in Europe. The main obstacle they cite is corporate governance, followed by a complex regulatory environment.

Three-quarters of US respondents find EU and UK ESG regulations to be a deterrent in raising capital in Europe. However, 8% believe these regulations are not restrictive, and 16% see them as presenting opportunities.



Thus, as the regulatory issues facing fund managers increase, it becomes even more appealing for them to work with specialist third-party solution providers to help them address these challenges.

CONCLUSION

Ultimately, the financial services sector is facilitating access to private markets, especially for new entrants, such as UK DC schemes. Despite this progress, private markets still face significant challenges. These include navigating non-domestic markets, dealing with regulatory complexity, overcoming technology limitations, addressing gaps in in-house expertise and knowledge, and finding suitable investment products.

To tackle these obstacles and support growth in private markets, partnering with third parties offers a way to overcome such obstacles and to facilitate the successful growth in private markets. Asset owners and wealth managers need to tap into specialist expertise across all areas of the fund lifecycle and in all relevant jurisdictions to leverage providers with robust infrastructure and access to the latest technology.



Download the full
Carne Atlas report

TO THE POINT

- Private market fund managers in the UK and US are expecting a wave of client money into private assets, ranging from private equity to real estate.
- This surge in capital will include contributions from investors who are less familiar with the sector, such as UK defined contribution schemes.
- In a world of complex regulation, effective partnerships will become a crucial factor for success.

ETF

What is your ETF strategy?

THREE PATHS TO SUCCESS

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INTRODUCTION

The first exchange-traded fund (ETF) was launched in Canada in 1990, fundamentally transforming the landscape of investment management. Between Q2 of 2019 and Q4 of 2024, the AUM of actively managed ETFs in Europe has grown by 177.88%.¹ As of March 2024, ETFs reached \$12.71 trillion in global assets,² further cementing ETFs as a significant growth engine for the industry. In the United States, ETFs have grown about 15% annually over the past 13 years, almost three times faster than traditional mutual funds.³ While investment managers should consider several product development trends underway for 2024 and beyond, ETFs should be at the forefront of the strategic growth conversation.

ETFs saw nearly \$975 billion in global inflows in 2023, serving as the preferred vehicle for indexed strategies.⁴ With all the market volatility over the past several years, the pricing, tax, and liquidity advantages of ETFs have led to an expansion of their use, while placing competitive pressure across the industry. ETFs have an edge in terms of tax efficiency due to their in-kind creation and redemption capability. This feature

is more beneficial for ETFs with frequent trades, strategic beta, or concentrated active funds. Actively managed ETFs are growing in prevalence, as traditionally active managers grow increasingly comfortable with newer transparency rules and seek to open new distribution opportunities. In Europe, active ETFs rapidly grew their market share by 125% in 2023.⁵ A healthy slate of mutual-fund-to-ETF conversions contributed to the significant growth of US actively managed ETFs in 2023, with 36 mutual funds converting to ETFs in the United States during the year.⁶

Many investment management firms are seeking to meet this demand for actively managed portfolios within an ETF wrapper. ETFs are growing in popularity in Europe likely due to their low costs and speed to market. In the United States, as of December 31, 2023, 34 of the top 50 investment managers had entered the active ETF market—16 since 2021⁷—signaling interest and optimism are high. Here we explore three paths to help make a strategic play in the ETF market.

1. Morningstar

2. ETFGI, "ETFGI reports that assets invested in Global ETFs industry reached a new record of US\$12.71 trillion at the end of Q1 2024," press release, April 12, 2024.

3. Kamil Kaczmarek and Douglas Yones, "The renaissance of ETFs" (webcast), Waystone, September 12, 2023.

4. Morningstar Direct, Casey Quirk analysis.

5. European Central Bank, "Investment fund statistics," accessed September 4, 2024.

6. Fuse Research Network, "ETFs converted from mutual funds approach \$100 billion in AUM as of year-end 2023," Fuse Blog, January 23, 2024.

7. SEC Edgar database, accessed February 2024

Old-fashioned ETF launch

For investment managers yet to enter the ETF market there are various matters to consider in executing an ETF strategy. If the choice is to launch a new ETF, one difference between a mutual fund and ETF relates to disclosure of portfolio holdings on a daily basis, and whether to shield their ETF portfolio holdings through the semi-transparent active wrapper, which would require US Securities and Exchange Commission (SEC) exemptive relief. The selection of third-party service providers will generally be a critical part of the launch decision, including the distributor, custodian, transfer agent, Authorized Participants (APs), and legal and audit firms. One area that takes time to get right is the basket creation and redemption process done by the front-office team, which is consistently highlighted by investment managers as one of the most time-intensive processes in launching an ETF. This will likely involve developing relationships with APs and market makers, executing AP agreements, and establishing creation/redemption order guidelines. A fresh look at compliance processes will also be warranted as changes to existing fund policies should be evaluated and expanded, including ETF basket construction policies. Launching new ETFs reaches the widest audience of the three paths mentioned in this article, and offers similar processes, managers, and portfolios as their mutual fund counterparts but with potentially lower fees, making

this the preferred path for entering the ETF market globally.

Tax “efficiency” is often considered a key benefit of an ETF in the United States. Much of the tax efficiency from the ETF comes from the ability to utilize “in kind” redemptions to defer the recognition of gain by the ETF shareholder. For ETFs that register with the SEC under the Investment Company Act of 1940 and elect to be taxed as a regulated investment company (RIC), the ETF can avoid recognizing gains on appreciated securities that are distributed to the APs in exchange for redeeming shares of the ETF. Since the gains are not recognized for tax purposes at the ETF level, they are also not distributed to the shareholders. As such, shareholders can avoid recognizing the gain on those appreciated securities until they ultimately dispose of their investment in the ETF.

Convert a mutual fund to an ETF

Since March 2021, more than \$60 billion in mutual funds have converted to ETFs in the United States.⁸ The conversion path has a number of advantages, including the ability to retain the fund’s performance track record and brand recognition, lower operational costs, and more tax efficiency than a mutual fund. There are some potential challenges to consider, including that mutual funds that are widely used in 401(k) plans may not be a good fit for an ETF conversion due to plan recordkeeper limitations associated with intraday trading, and fractional shares and ETF shares are always held

in a brokerage account, which can be a logistical challenge for mutual fund shareholders. ETF conversions also present some regulatory risk as they were highlighted as an examination priority by the SEC in 2023.⁹ It is important to have good relationships with third-party service providers as they can help with conversions. Conversion of a mutual fund into an ETF is less burdensome; assuming the shareholder base and the fund holdings remain consistent. The transaction will likely qualify as a tax-free reorganization under IRC section 368(a)(1)(F) (“F reorganization”). Time will tell whether the more strategic path will be to convert mutual funds to ETFs, to launch an ETF, or to wait on SEC action to register an ETF share class of an existing mutual fund.

A new path unlocks: ETF share classes

Prior to the patent expiry in May 2023 for ETF share classes, this was not a path for investment managers. However, since then, several investment managers have applied to the SEC to establish similar structures for their existing passively managed mutual funds. The SEC has not approved ETF share classes for actively managed ETFs in the United States. Thus, the success of this path depends on positive regulatory action. This path is becoming more relevant in Europe where the cost benefits and speed to market are the primary drivers, and the headwinds there being resistance from market players involved in distribution. However, the benefits of ETFs as a share class of a mutual fund might make the wait

worthwhile and lucrative, which include the following:

1. ETF share classes are exempt from the daily portfolio holdings disclosures required by ETFs, which fall under Rule 6c-11.¹⁰
2. Tax “efficiency” for both the ETF and mutual fund share classes through the use of custom baskets for in-kind redemptions (CIKRs), reducing the distributions of capital gains tax to investors. An ETF share class extends the tax benefits of CIKRs to the mutual fund share classes unlike stand-alone mutual fund products. On the other hand, cash redemptions through the mutual fund can provide tax losses that can be used to offset capital gains liabilities generated in other share classes.
3. The ETF share class will have the existing performance and investment strategy of the mutual fund.
4. Investors can convert their mutual fund shares into ETF shares of the same fund, without realizing capital gains, but they are unable to convert vice versa.

The expiration of the patent provides for the benefits of the ETF share class to be applied to mutual funds more broadly, and CIKRs are an important piece of realizing the tax benefits of the ETF. Firms already utilizing CIKRs should expect to review their process as mutual fund managers and supporting teams adjust for the capital markets ecosystem and ETF life cycle. Additionally, these transactions are highly manual for operational teams and involve movement of securities and cash (often in the billions

8. John Hyland, “Mutual fund-to-ETF conversions: The wave of the future in four charts,” VettaFi, January 27, 2023.

9. Shubham Saharan, “SEC’s ETF scrutiny extends to conversions, single stock funds,” ETF.com, February 21, 2023.

10. Securities and Exchange Commission, [Exchange-Traded Funds, Release No. IC-33646](#), footnote 433, September 25, 2019.

of dollars for large firms), which require appropriate controls and oversight. The inclusion of mutual fund holdings in these already large and manual transactions increases risk and requires appropriate controls and oversight across the ETF operational process.

Although the ETF share class may create a beneficial tax environment, it is possible for tax liabilities to be passed to ETF investors if the mutual fund realizes significant capital gains, and conditions could affect the ability of the ETF share class to remove the capital gains. For firms experienced with ETFs or those looking to launch their first ETF, an ETF share class provides a potential

opportunity to expand the product offering while benefitting both ETF investors and mutual fund share class investors through decreased costs and taxes.

Is choosing a path a must?

Given their significant growth, ETFs are becoming the default vehicle for many new and active liquid products in the United States. With three paths to consider for ETFs, the investment managers' strategic direction is not easy. Regardless of the path chosen, success will likely depend on executing the

strategy and meeting investor demand. What follows are considerations for any path:

1. An investment manager should start with a seasoned ETF leader. It's important to work with one that has experience and relationships with the market and key shareholders, especially with APs.
2. The asset manager also needs to be committed to a well-thought-out marketing and distribution plan, given this would essentially be an extension of their existing business and product line; bolting it on as additive to the existing ETF operating model is not a recipe for
3. Lastly, an efficient and effective ETF operating model with digital capabilities and enhanced client experience capabilities can help widen the path to success.

It might be bumpy, but investment managers that stay the course and provide investors with viable ETF investment options could be rewarded.



TO THE POINT

- ETFs are experiencing significant growth for their appeal to investors seeking differentiated product offerings with tax efficiency and enhanced liquidity.
- To capitalize on this growth opportunity, investment managers can consider three strategic paths to enter the ETF market. These paths include launching a new ETF, converting existing mutual funds to ETFs, and applying to include an ETF share class of an existing mutual fund.
- Regardless, keys to success to go down any of these paths beyond patience and perseverance will likely be strong ETF talent and resources, strategic relationships with service providers, a well-thought-out marketing and distribution strategy, and an efficient operating model tailored to the unique considerations for ETFs.

Generative AI: Is it all hype or reality — or something in between?



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INTRODUCTION

The investment management industry is no stranger to the adoption of analytics and artificial intelligence (AI) across various parts of its business. This pioneering vision, coupled with continuous advancements in cloud technologies and improvement in data posture, created a perfect appetite for exploring the Generative AI (GenAI) advantage. Over the last 20 months (since the launch of ChatGPT in November 2022), investment managers have spent time and money in gathering perspectives, and educating their employees on GenAI, exploring use cases, experimenting, and in some cases, even productionalizing GenAI applications. As they try to keep up with the rapidly evolving

technology, uncertainties around costs/Return on Investment (ROI), and what their software vendors will build versus what they should focus on, the industry is faced with the questions around the go-forward approach.

In this article, we share our insights on just that. We start with describing the value drivers to help inform the strategic areas of focus for GenAI within your firm. Then, we will dive deeper into the adoption personas (personas are defined by risk and investment appetite, existing tech and data readiness, and talent availability). We will conclude with some key takeaways for all readers regardless of where you might be on the adoption spectrum.



Does GenAI still have the promise of being a new arrow in the “transformation levers” quiver? Yes, it does!

GenAI is novel in that it can create net-new content across various modalities, such as text, audio, video, and images based on how and what the models are trained on. When combined with other forms of AI and automation, there is great potential for investment managers to unlock value from these technologies. We see three key value plays in the investment management sector:

1. Improve operational efficiency.

Using GenAI across various middle- and back-office processes to reduce manual effort and improve productivity by doing more with less. Examples:

a) Reconciliation process: Automation for verifying and matching; machine learning models for dynamic adjustment of thresholds; automation for monitoring and reporting; leveraging GenAI to report trends in natural language

b) Exception handling: Leveraging a chat interface on top of a large language model to sift through operations manuals and databases to research and remediate discrepancies faster and simpler; drafting outreach when collaboration is required

2. Drive customer experience excellence.

Using GenAI to create hyper-personalized and simpler experiences and services for clients to drive retention and support growth. Examples:

a) Client reporting: Creating hyper-personalized content (reports, marketing materials)

based on unique client preferences, historical behaviors, alignment to moments that matter

b) Client servicing: Combining GenAI with automation to simplify client onboarding and ongoing servicing workflows designed to meet customers where they are in their journey.

3. Generate alpha and innovate.

Using GenAI to create transformational opportunities, such as supporting new product development and creating new channels for revenue generation. Examples:

a) Research: Leveraging GenAI to scan through news, market data, social media information, and other alternate data sources to identify market signals for potential innovative investment opportunities

b) Business expansion: Boosting the client lifetime value (CLV) and client loyalty index (CLI) models to refine customer segmentation; targeting models leveraging alternative datasets and layering in GenAI to equip distribution teams with preferences for target growth groups.

While the applications are endless, we see the potential for experimentation within operations, internal sales, distribution, and marketing teams. These areas provide a safe sandbox for experimenting with new technologies, as they are often internally facing, have the data available, and can drive quick value. We also find that the firms gaining the most

value from their investments in these technologies are often those that are transforming end-to-end workflows using a mix of GenAI workflow solutions, along with improvements with managing their teams, process, and risk.

It is important to note that not every investment manager has adopted this approach. As we zoom out across the investment management industry and study various strategies to the application of GenAI, we see three clear personas: possibility seekers, pursuers, and pioneers.

- **Possibility seekers** are exploring the potential of GenAI but are cautious about how far they go with it. They adopt a “watch and see” approach, potentially due to talent limitations, a risk-averse stance, or limited investment resources. These firms prefer to observe the effectiveness and tested value generation from GenAI at other peer firms before considering full-fledged implementation. We often see firms in this group learning through limited experimentation using easily available tools. They have also engaged experts to understand third-party risk management in preparation for the likely adoption of GenAI capabilities offered by their software vendors.

- **Pursuers** are widely experimenting and are in the early or intermediate stages of applying GenAI in production environments. They have completed several successful proofs of concept

and proof of technology and are moving toward scaling the technology to harness its full potential. They prefer a more federated approach that allows freedom within the business groups to try out various use cases. They also invest in defensive risk management capabilities for their specific use cases, as well as boost their third-party risk management capabilities to fully tap the potential of GenAI capabilities from their software vendors.

- **Pioneers** are trailblazing the adoption of GenAI across the enterprise. They have a strong understanding of the technology and are not afraid to take risks with implementing the technology at scale. They have deployed several GenAI solutions to production. Furthermore, they are centralizing some capabilities through Centers of Excellence (COEs) to foster shared usage of prebuilt components to enable faster implementation and deployment. They have also invested extensively in building their offensive risk management capabilities to safeguard against external attacks. Lastly, they are investing to address the human impacts (e.g., change management and workforce strategies).

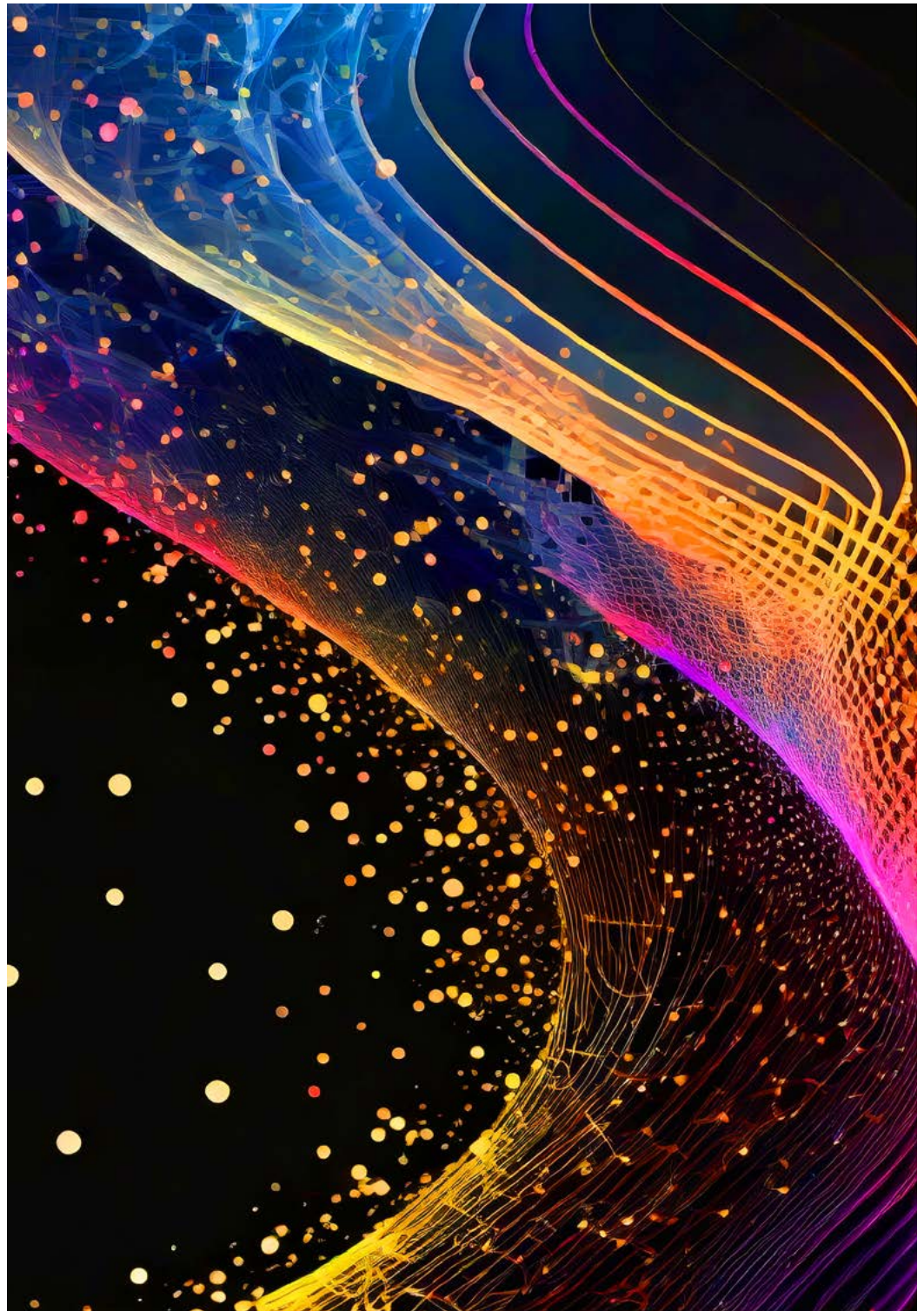
Similar to past journeys with breakthrough inventions (e.g., internet, cloud), as we learn more about the GenAI technology and regulations, we will likely see a shift toward more mature personas.

We are in the early stages of a paradigm shift, with GenAI use cases continuing to mature into enterprise-ready solutions in the coming months.

Regardless of where you are on this journey, the following considerations will help you stay at the forefront:

- Continue to focus on education for increasing GenAI fluency.
- Be bold. Don't be afraid to experiment (responsibly). GenAI allows you to do things differently but also do different things.
- Keep traditional buy versus build consideration in mind, but also note the unknown factors given evolving maturity of this technology and software vendors building similar capabilities.
- Don't make risk management an afterthought.
- Change management is vital.

In the coming years, GenAI will likely be embedded into almost all major software solutions, and new enterprise-ready solutions will emerge making using GenAI second nature. In the same way that employees should not worry about being replaced by GenAI, but do risk being replaced by employees who know how to use GenAI, investment managers should be focused on not losing market share to competitors who know how to successfully amplify their effectiveness using GenAI tools while staying true to their philosophy and business strategy.



TO THE POINT

- The pace of innovation for GenAI technology is incredibly rapid. While AI is not new to investment managers, GenAI is a relatively new technology.
- Investment managers can drive value from GenAI through three plays: improving operational efficiency, driving client servicing excellence, and focusing on innovation and growth.
- In terms of adoption, we see a spectrum of personas: possibility seekers, pursuers, and pioneers.
- Regardless of where companies are on this spectrum, they can take several no-regret actions to prepare their firm to harness full potential of this technology.

Beyond the traditional

OPEN-ENDED ALTERNATIVE INVESTMENT FUNDS GENERATE OPPORTUNITIES FOR LPS AND GPS

INTRODUCTION

Over the past decade, global alternatives fundraising experienced steady growth, supported by a tailwind of favorable economic and market conditions. However, this trend reversed over the last two years, with fundraising declining to pre-pandemic levels amid macroeconomic challenges and turbulent geopolitical tensions. Institutional investors, cautious of market volatility, started slowing their allocation to alternative assets, amid portfolio rebalancing and slowdown in return of capital.

In contrast, private investors have defied this trend, demonstrating unwavering confidence in alternative assets, investing increasing amounts in asset classes once considered accessible only by ultra-high-net-worth individuals (UHNWIs) and institutions.

An emerging offering of semi-liquid funds has accompanied this trend for private individual investors seeking greater investment flexibility compared to usual closed-ended funds. This article explores the drivers behind this growing demand, the strategic responses from General Partners (GPs), and the operational challenges encountered in managing such funds.



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The surge in demand for Open-Ended Alternative Investment

In recent years, private individuals, and their wealth managers have outpaced institutional investors in their growing appetite for investments. Between 2018 and 2021, private individuals and family offices boosted their share in global private equity fund raising by over 5%. Despite 2022's economic uncertainties and a dip in their PE fundraising share, these investors still contributed around¹, matching the previous year's figures.

High net worth individuals (HNWIs) are drawn to investments offering long-term capital appreciation, intergenerational wealth preservation, and positive social and environmental impacts. Additionally, private investors enjoy the entrepreneurial approach of these investments, on top of various other benefits that this article will describe further. Steffen Pauls, Founder and CEO at Moonfare, noted, "We see a strong demand for open-ended structures as a number of factors coalesce. Demand is partially driven by increasing interest in liquidity. But other factors, including investor familiarity, supply trends, deal availability and regulatory developments are also important to consider."

Over the past 15 years, HNWI's allocation to alternative investments has doubled from 7% to 14% and is expected to keep rising, reflecting the growing acceptance of these asset classes.

The motivation to invest in open-ended alternatives includes access to a diverse range of asset classes, such as real estate, private equity, and private debt, with customized liquidity windows. Laura Warren, Global Head of Tax and Structuring at Hamilton Lane, explains, "Evergreen Funds are a relatively new way for retail/high net worth investors to diversify their portfolios and obtain exposure to the private equity market, historically reserved to institutional investors."

Vivian Sze, Principal, Global Product Strategy, at Apollo Global Management, adds "Such products extend the range of possible risk/return allocations for such investors, making this trend very powerful!"

Strategic response by Limited Partners

In response to this burgeoning demand, leading GPs have made private individuals and introducing open-ended alternative investment products a strategic priority. Blackstone's Stephen A. Schwarzman confirmed this on LinkedIn in May 2024, stating: "In the first quarter [of 2024], Blackstone's fundraising in private wealth accelerated meaningfully to US\$8 billion, and we now manage over US\$240 billion from the channel — representing the largest platform in our industry." This shift caters to the evolving preferences of semi-professional investors while securing perpetual capital.

GPs are transitioning from managing illiquid, closed-ended funds with 8- to 12-

year durations to evergreen structures, allowing constant inflows and outflows of investors throughout the investment lifecycle. This transformation creates more accessible, diversified strategies for a broader range of investors. While the market refers to the "retailisation" of alternative asset management, GPs primarily cater to mass affluent and HNWIs, with net wealth typically ranging from €1 million to €100 million. These new fund structures are designed to meet the distinct requirements and product preferences, time horizons, and risk tolerances of these investors, offering greater flexibility and access.

For GPs, launching open-ended alternative funds offers key advantages: access to a new and unexploited investor universe, continuous capital inflows, diversified offerings, and the ability to address liquidity demands. It opens access to a previously untapped source of capital from semi-retail investors, who until recently had limited to no exposure to alternative assets. For Vivian Sze, "Once we have made an effort to be committed in that space, it is a journey which unlocks a very large market, approximately ten times larger than the Ultra High-Net-Worth-Individual population globally."

Discovering a new world of distribution channels

Most GPs currently lack in-house capabilities to reach their new investor population. Moving from institutional investor relationships to distribution channels, such

as banks and distribution platforms, entails a significant shift in distribution methods. Not only must fund managers establish core strategic relationships with global (private) banks and regional champions to ensure the successful marketing and distribution of their products, but they must also engage in extensive discussions with distributors to align on key fund lifecycle events and distributor-specific constraints to smoothly operate subscriptions, redemptions, and reporting processes. When it comes to lock-up (soft or hard) for instance, distributors may handle them differently, with some tracking internally and others relying on external transfer agents.

However, there is a growing demand for B2B fund platforms, which private banks and family offices increasingly leverage to streamline distribution. Platforms, such as iCapital, Allfunds, FundsNetwork and Fund Channel are key players in this space. Meanwhile, Moonfare is emerging as a leading B2C platform, enabling fund managers to directly reach end-investors while simplifying administrative complexities tied to traditional distribution methods. Such platforms support industry trends by offering end-investors a familiar reporting environment, similar to those used with mutual funds and UCITS products.

New products with relatively consistent terms and features

The evolution from traditional to open-ended structures has transformed the investment

1. Invest Europe, "Annual Activity Statistics," accessed 14 November 2024.

landscape, introducing multi-asset investment strategies, varying investment horizons and ticket sizes, distinct product features like gating mechanisms, as well as liquidity windows and different lock-up periods based on share classes.

Most products' first wave were indirect alternative funds, with a core portfolio comprising secondaries and additional co-investments. Newer products launched by managers of varying sizes consist of wrappers that invest in the manager's existing products, essentially making them single-manager, multi-product feeder funds.

Minimum ticket sizes for semi-retail investors range from €10,000 to €50,000 for semi-retail investors, depending on the share class. While redemption windows vary, our research shows that 74% of the 23 largest products offer quarterly redemption, with Vivian Sze noting, "The market has quickly moved towards quarterly liquidity." The effort and operational complexities that come with more frequent redemption windows are generally not considered worthwhile. Some managers may also impose a soft lock-up period with a redemption fee of up to 5% or early withdrawals within three to five years. Finally, the data we hold shows an average management fee of around 1.4%, with performance fees structured based on the underlying asset type.

The focus on innovative solutions for deal sourcing, portfolio construction, and risk management has also become critical. High-level product regimes, such as the European Long-Term Investment Fund (ELTIF) have proven successful

in this domain, primarily due to their flexibility and direct distribution capabilities to retail clients. However, private investors vary greatly in their knowledge and capabilities regarding alternative assets, prompting the development of different fund types and product features tailored to cater to these diverse investor profiles.

New products drive long-lasting transformation in the Alternative industry

GPs accustomed to managing traditional closed-ended AIFs need to review their operational model and processes to manage open-ended alternative funds.

As observed by Laura Warren, "Offering private equity in a semi-liquid format creates significant reporting and management requirements not needed in typical private equity partnership funds. To comply with these requirements, managers need to build the right internal infrastructure and find the best service partners to operate effectively and create a good investor experience."

The investor-traded nature of such products calls for sounder valuation, NAV calculation and operational processes. To meet these requirements, Alternative managers are strengthening their valuation governance, enhancing fund finance functions, introducing real-time expense recognition, and deploying necessary technology. Liquidity management is

another example of a new challenge, where managers need to carefully balance capital inflow and outflow to meet redemptions, without compromising the fund's overall investment strategy and returns or activating gating mechanisms.

Managing liquidity risk involves stress testing, a liquid asset pocket, and continuous monitoring. To substantiate the aforementioned challenges, recent market observations have indicated valuation concerns in some related legacy vehicles, such as open-ended real estate funds. These concerns have led to significant valuation adjustments and a liquidity crunch as redemptions increase. Operational gaps can promptly lead to investor uncertainty and hamper market dynamics. However, Laura Warren added, "When those issues occur across the industry, while at first they cause friction, it often results in gained efficiencies for the manager."

Additionally, the entire investor journey needs to be revamped, as fund managers now face additional investor reporting requirements (e.g., PRIIPS), with a level of detail mandated by local authorities to safeguard these new investors' interests. One main risk with semi-liquid products is mis-selling to investors. "Individual investors often do not hear the 'semi' part of the phrase 'semi-liquid,' and without education could react in shock if redemption requests were to go unanswered in challenging markets," says Steffen Pauls. Vivian Sze emphasizes that "a lot of education has happened and still needs to happen, both toward distributors and toward end-investors."

Regulatory challenges also play a significant role, as these funds face increased scrutiny from regulators to protect non-institutional investors. Open-ended funds, just like traditional funds, are also subject to AIFM supervision but necessitate stricter compliance and oversight. The European AIFMD passport facilitates the cross-border distribution of funds within the EU but permits active marketing only to professional investors. Distribution to semi-professional or retail investors (within a regulatory meaning, i.e., non-professional investors) is at the discretion of each country's local authorities. The new ELTIF regime, benefiting from the EU passport for retail investors, is increasingly being used.

However, certain national requirements hinder progress, as some European jurisdictions require local products to be established (e.g., France for investor-product wrapped investments) or specific share class listings (e.g., Sweden). This means a GP venturing into this new market must carefully consider its target markets from both business and regulatory perspectives, weighing fundraising potential against the additional complexities of operating in such markets. Extensive coordination and a robust understanding of varying legal requirements across jurisdictions are essential to navigate these regulatory complexities effectively.

CONCLUSION

The rising demand for open-ended alternative investment funds reflects a significant shift in investment strategies among HNWIs and family offices. Leading GPs have responded to this demand by offering a range of flexible, diversified products that meet the nuanced needs of these sophisticated investors. While the benefits are clear, the operational, regulatory, and distribution challenges require careful navigation to succeed in this evolving landscape.

The future of alternative investments will likely see further innovations, driven by the desire of both GPs and LPs to maximize returns while managing risks effectively. By addressing the current challenges and leveraging strategic opportunities, the industry can anticipate sustained growth in open-ended alternative investment products.

TO THE POINT

- Demand for open-ended alternative investment funds is growing among high-net-worth individuals (HNWIs) and family offices.
- General partners (GPs) have strategically prioritized offering these products to secure perpetual capital.
- Open-ended funds offer GPs and Limited Partners (LPs) advantages such as continuous capital inflows and diversified investment options.
- Operational challenges include liquidity management, asset valuation, regulatory compliance and investor and staff education.
- Effective distributor management is crucial for the successful marketing and distribution of these funds.

Evolution of digital assets

A CONVERSATION WITH MICHAEL O'REILLY,
HEAD OF FIDELITY DIGITAL ASSETS ®



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INTRODUCTION

As the digital assets market continues to mature, retail and varying sectors of institutional investors are seeking different opportunities within the space. The [Fidelity Digital Assets® 2023 Institutional Investor Digital Assets Study](#) revealed that 67% of institutional investors surveyed view digital assets as having a role in investment portfolios. Despite tumultuous events in the market, investors still feel that there is a high potential upside to investing in digital assets, while carefully monitoring the trust and quality with these emerging and evolving products. Also, with the recent SEC approvals that allowed fund groups to sponsor and launch bitcoin exchange-traded products (ETPs) and ethereum ETPs the future seems bright for opportunities to attract retail investors. Thus, the possibilities across the digital assets ecosystem continue to evolve in a positive manner. With this backdrop, *Performance Magazine* sat down with Mike O’ Reilly, Head of Fidelity Digital Assets, to discuss the digital assets market and ecosystem.

Evolution of digital assets

Performance Magazine (PM): As the leader of Fidelity Digital Assets, tell us about the business growth and where you and other digital business participants are focusing?

Mike O’Reilly (MO): Fidelity Digital Assets focuses on crypto custody and execution services for institutional and retail clients. Fidelity Digital Assets is different from Fidelity Digital Asset Management, which, under SEC approval, has launched ethereum and bitcoin ETPs. Looking at the digital asset marketplace, there has been evolution with increased investment, understanding, and knowledge across the institutional space. Trust and the breadth of offerings

continue to be important to be successful among digital asset investors.

PM: What is your view of the overall digital asset marketplace including where it started and its continued potential and opportunities?

MO: The digital asset ecosystem has evolved significantly over the past decade, transitioning from niche markets to mainstream financial instruments. Initially, digital assets like Bitcoin were primarily used for speculative trading and as an alternative to traditional currencies. As the market matured, a variety of digital assets emerged, including ethereum, which facilitates transactions on decentralized applications, and stablecoins, which are pegged to fiat currencies (currencies that are issued

by a central bank and do not have intrinsic value or backing by physical commodities) to reduce volatility. The financial ecosystem has expanded to include retail and wholesale central bank digital currencies (CBDCs) to facilitate cross-border payments within financial systems. The tokenization of real-world assets is seen as the next evolutionary step, accompanied by growing regulatory scrutiny and the need for robust risk management frameworks to mitigate potential market dislocations.

In terms of where Fidelity started in this space, the Fidelity Center for Applied Technology (FCAT) started looking at blockchain technology and networks back in 2014. They focused on innovation in the marketplace and how their clients would interact with innovative products. One such marketplace opportunity was the custody business, and from that idea, Fidelity Digital Assets was launched in 2018.

The key is to continue to innovate with investors to meet their needs but always know that they are a traditional financial services player that needs to get comfortable with continued innovation. There has been a focus on understanding and knowledge in the institutional space, which is good for the industry and the asset class. According to the *Fidelity Digital Assets 2023 Institutional Investor Digital Assets Study*, 67% of investors plan to buy or invest in digital assets in the future. That is an important maturity measure.

PM: Are there key offerings that are commonly requested from your user base—retail or institutional?

MO: We really try to meet each customer where they are, as that builds trust. Clients want the same interaction that they would have with any other part of a financial services organization. In order to meet investor expectations, organizations must be able to address key questions such as “What is the breadth of the product offering?”, “How many coins are you offering?”, “What are the right assets to invest in?”, and “What is the quality of your execution services?”

There is currently a retail and institutional divide in the marketplace. Institutional is a big market. We assess what a hedge fund wants versus corporate versus endowment versus ETPs. Clients have different viewpoints around quality, custody, the ability to generate yield, and the ability to protect your balance sheet so you don’t have to deposit across too many firms. It is different depending on what sector of institutional marketplace you are servicing. For retail, the goal was to tailor to what Fidelity’s existing clients want. The reason we turned the retail platform on is because we received feedback that people (retail investors) were buying crypto in other places but would have preferred to do business with an organization they already have a relationship with and trust.



PM: In the digital assets ecosystem, what risks need to be managed to have a successful offering and/or platform?

MO: This is often top of mind for customers thinking about getting into digital assets. Educating clients is still a priority, and we continue to invest in helping organizations to understand the underlying assets, the potential risks, and why an investment could be right for them. We are still in early days. It takes time for any asset class to be normalized

and understood. A more efficient marketplace will evolve more broadly over time.

From the perspective of the sponsor or service offeror, education internally is important. You should understand the control environment if you want to build a product offering that is institutional grade. Talk to boards, risk departments, compliance departments, legal departments within your organization. More mature organizations often have committees for new products that have a defined level of risk

tolerance. It is important that these types of committees are comfortable with the risk associated with digital assets. Be clear and articulate with the appropriate business line. There is just heightened sensitivity around digital assets. Intentionally, firms have set up operational processes for digital assets to look a lot like what they do for non-digital products and services. This includes front-, middle-, and back-office similarities, as well as client onboarding protocols and distribution channels. As a result, a lot of processes for digital assets align with other

asset classes. For example, some organizations have a books-and-records platform that functions as a dual-entry accounting platform, and there are controls around certain levels of movements. This platform and set of controls can be used to account for digital assets, as well as for other asset classes. There are differences in the processing of digital assets, but there are a lot of things that can be the same too.

Investor perspectives and opportunities

PM: What are your thoughts around distribution/future investors—institutional, retail, endowments, etc.? Where do you believe the puck is going?

MO: As mentioned, 67% of institutions said they will bring this investment type into their investment portfolio. The retail side has seen positive growth, and younger investors are noticing this growth, which could help drive the success in the space as well. Regardless of the strategy employed, a custodian is critical for those that lack the expertise or desire to make the significant investment in self-custody required by institutions.

PM: What is the future role of staking? What are the roadblocks?

MO: Staking is important to the overall ecosystem. It continues to be an integral part of the ecosystem. For roadblocks, it can depend on what you are talking about in the institutional marketplace. The risk appetite and the understanding of a firm can drive much of their decision making on staking. Large institutional players want to generate yield, so staking can be used as a mechanism for them.

What is staking?

Staking in the context of blockchain and cryptocurrency involves (the investor) locking up a specific amount of digital assets to participate in the network's consensus mechanism. Participants, known as validators, are selected to validate transactions and create new blocks based on the amount of cryptocurrency they have staked. In return, they (the investor) earn staking rewards, which are often treated as taxable income when received. This process not only secures the network but also requires careful tax accounting to track the basis and recovery of the staked assets.

PM: Where do stablecoins fit into the digital asset ecosystem?

MO: The marketplace for stablecoins has seen impressive adoption, with the potential for individuals to participate in the yield generated by the underlying assets. The ability to have a 24/7 marketplace, leveraging the power of blockchain and instantaneous settlement—that can be key for the longevity.

For tokenized treasuries or money market offerings, there is a lot of interest across the industry. It is another way to collateralize treasuries where you are providing a return to the holder in a way stablecoin does not. It is too early to tell if these two models can coexist. The market will determine that.

What are stablecoins?

Stablecoins are a type of digital asset designed to minimize price volatility by being pegged to a stable asset, such as a fiat currency (e.g., USD) or a commodity (e.g., gold). They aim to combine the benefits of digital assets—such as transparency, security, and speed of transactions—with the stability of traditional financial assets. Stablecoins can be categorized into fiat-backed, commodity-backed, and algorithmic stablecoins, each with different mechanisms to maintain their peg. Stablecoins have become a crucial part of the digital asset ecosystem, with peak market capitalization of \$181 billion in March 2022, and a total market capitalization of \$138 billion as of January 2023. More recently, the market capitalization of non-algorithmic stablecoins hit a new all-time high of nearly \$170 billion earlier this year.

PM: What are the most impactful use cases of tokenization that you see in financial services? What are the levers that would accelerate and decelerate tokenization adoption?

MO: It should be noted that Tokenization is not crypto as Tokens reflect the fair value of the underlying assets behind them. Thus, there are different use cases. Settlement of transactions, 24/7 basis, instantaneous settlements should drive scale and efficiency. You should have enough scale and efficiency to drive adoption, and that can

happen over time. Tokenization does have a place in the ecosystem. We have seen early entrants already, which is great. A lot of firms are thinking about tokenization, which should help accelerate it. If it looks and feels like traditional finance, it can help everyone to be more comfortable. Also, prominent brands standing behind digital assets can help. Still there are also some barriers to entry. To most effectively set up a custody business and do it in an institutional-grade way is not easy and not cheap. Also, here to there exists a lack of regulation and regulatory clarity, lack of secondary markets as well as resiliency and cyber security concerns.

PM: How would your response vary between US versus non-US opportunities? Is there a geography that is in the lead?

MO: Fidelity has a US entity and had a UK entity introduced in 2020. What we are seeing in Europe with Markets in Crypto-Assets (MiCA) and regulatory clarity is great since it helps firms navigate entry into the digital asset space. As we see MiCA applications become available from central banks, we should get even more clarity on how to understand the regulations. It is truly a global market, and we're starting to see the world economy evolve and normalize to welcome digital assets. MiCA is still in the early stage, but clarity is starting to come out. When looking at the market, we ask ourselves: 1) Economically does it make sense to play in that market? What is the potential upside/risk for the firm? 2) Can we expand and continue to give the same level of quality

and service to our clients in our existing business? 3) Can we deliver the same level of service in that market? Fidelity sees itself as a long-term player in the marketplace, and expansion is a part of that.

Regulation – Headwinds/ tailwinds

PM: What do you think is needed to better position digital assets for success in this regulatory environment? What are key hurdles, or unlocks, that would be pivotal for industry adoption of digital assets?

MO: Regulatory clarity, maturity of the marketplace, broader adoption by retail and institutional, and education is important for every segment. They should work together. It can happen over time. There are a good amount of industry groups in the US and more being formed outside the US that have had a positive impact because they help the industry coalesce. They help drive education and also provide an avenue to help connect with the regulators.

PM: The SEC approved the launch of both bitcoin ETPs and ethereum ETPs. What is next, and how is demand?

MO: A few high-level observations on this recent SEC development: With any asset class there is a law of diminishing returns with how many products you have (the number in the marketplace). I think it is good for the industry that the ETPs have come out. It provides the opportunity to see the success of these

offerings through the trading and custody platform (giving the opportunity for end-to-end servicing to the retail market). Regulators accepting these new products and providing some regulatory clarity has been good for expanding the investment management ecosystem. Investors can hold digital assets in custody in a way they are used to holding a more traditional asset (equity or fixed income security). It fits nicely into a lot of investment mechanisms at registered investment advisers and within large funds. A lot of the firms have investment committees and can understand what the ETPs are achieving, which is helping to drive the maturity of the marketplace. As the marketplace matures, one can envision individual coin ETPs competing with the future launch of basket of coins that are part of an ETP. As far as demand, there were huge upticks early on and the market entrant's great traction, but it is unrealistic to think that this will be sustained.

Predictions and final thoughts

PM: Any concluding thoughts or predictions you wanted to leave us with?

MO: It depends on where a firm is on adoption and their understanding of the asset class. If you have been involved in digital assets for multiple years, you likely have a good education on how the marketplace works. If you are a firm just starting to think this through, you should take the time to get educated. Think about what may be different and the same as traditional financial services. Like any other asset class, sometimes

it fits into a portfolio and sometimes it does not. That is not digital asset-specific or crypto-specific. It depends on what the portfolio is. It should start with a top-down tone that emphasizes the importance of understanding and educating—not only how do you educate your team but bring legal, risk, and compliance along in the journey. As firms think of risk tolerance, it can be helpful to bring these groups with you to help you make the most informed decision. The ability to do experimentation in a controlled environment can also be helpful. An innovation and education mindset can help you to learn more and can help an organization make the most informed decisions.

CONCLUSION

With over half of investors in the *Fidelity Digital Assets 2023 Institutional Investor Digital Assets Study* reporting that they already invest in digital assets, it is not surprising to see the market continue to mature, the regulatory environment providing more clarity and new offer products that are better tailored to investor needs. Predictions for the increased demand and offering of tokenization and stablecoins are slowly emerging. With global interest, evolving regulations, and new product lines, investors and organizations should navigate the complexities of the digital assets space in order to achieve the upside more effectively they are seeking.

Learn more about tokenization in financial services:



**Tokenization in Financial
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TO THE POINT

There are two key trends emerging in digital assets:

- The first is the growing acceptance among enterprises of digital assets as an investment or payment option. Education can be key for investors and firms alike. In determining if digital assets are the right fit for your portfolio, it is important to understand the underlying assets and their risks.
- The second is the potential for tokenization to play a role in modernizing the global financial services ecosystem. This could take time to reach the level of efficiency, liquidity, and scale of other products.

The path to offering digital assets is not dissimilar from launching other products. Evaluating the risks, controls, regulatory environment and investor demand should remain at the forefront.

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Sustainable alpha

SHAPING THE FUTURE OF PRIVATE EQUITY RETURNS



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INTRODUCTION

Private equity (PE) has long served as a vehicle for delivering superior returns, or “alpha,” to investors, consistently outperforming public markets. A detailed quantitative analysis of European PE funds has confirmed that this industry has indeed succeeded in creating alpha over the long term, surpassing public markets and similar-risk investment opportunities. However, as the investment landscape continues to evolve, sustaining this level of performance requires a fresh, more sophisticated approach.

Relying on traditional strategies — such as raising debt and cutting costs — will no longer suffice in the face of rising competition, increasing regulatory pressures, and new market dynamics. Our research, coupled with insights from a survey of around 40 Italian mid-market private equity funds, highlights the importance of adopting a “smart beta” approach. By identifying sectors with robust growth potential driven by long-term megatrends like sustainability and digital transformation, PE firms can ensure continued outperformance. In parallel, active management of portfolio companies will play a crucial role in driving operational efficiency and fostering innovation.

Moving beyond financial engineering: The changing role of private equity

Private equity has traditionally thrived on financial engineering—leveraging debt and reducing operational costs to enhance returns. However, the current economic environment presents challenges that demand a more nuanced, forward-looking strategy. While financial engineering remains a valuable tool, the future of PE success lies in its ability to adapt and evolve.

The investment climate is increasingly shaped by geopolitical instability, growing regulatory frameworks, and an expanding pool of dry powder

—uninvested capital sitting at record levels. With over US\$2.49 trillion in dry powder globally, PE firms face mounting pressure to deploy this capital effectively. The challenge is finding high-quality assets in an increasingly competitive landscape, where valuations are stretched, and the traditional playbook of debt-financed growth is no longer as viable.

As private equity adapts to these challenges, firms must prioritize long-term value creation. Success will come from targeting high-growth sectors that align with structural changes in the global economy, such as digital transformation and the shift towards sustainability. These sectors, including technology, healthcare, and renewable energy, offer robust growth potential and greater resilience to market fluctuations.

The smart beta approach: Targeting long-term growth sectors

In today's complex market environment, a "smart beta" strategy is essential for sustained alpha generation. Smart beta involves a more refined investment approach—focusing on sectors and industries that are poised for long-term growth, driven by global megatrends such as digitalization, sustainability, and healthcare innovation.

By targeting industries undergoing significant transformation, PE firms can tap into new areas of growth while hedging against market volatility. For instance, the global transition toward

renewable energy presents a prime opportunity for private equity. Investments in clean technologies, sustainable energy infrastructure, and energy storage solutions not only align with global environmental goals but also promise significant long-term returns.

Consider the rise of solid-state battery technology. As demand for renewable energy solutions intensifies, companies developing advanced energy storage systems are likely to see substantial growth. Similarly, sectors like healthcare are ripe for disruption, particularly in areas like biotechnology, telemedicine, and healthcare IT. The ongoing digitalization of healthcare systems, combined with aging populations, will continue to drive demand for innovative healthcare solutions.

Adopting a smart beta approach allows PE firms to position themselves to benefit from these long-term structural shifts, ensuring their portfolios are resilient and well-aligned with future growth opportunities.

Active management: Unlocking value through operational excellence

While identifying high-growth sectors is critical, generating alpha in private equity also depends on how effectively firms manage their portfolio companies post-acquisition. Simply acquiring assets and implementing short-term cost-cutting measures is no longer enough. In today's rapidly evolving business environment, PE firms must engage deeply with their portfolio companies, providing strategic direction and operational expertise to unlock value over the long term.

Active management involves becoming a true partner to portfolio companies — helping them navigate the complexities of digital transformation, embrace innovation, and drive operational efficiency. For example, deploying artificial intelligence (AI) in supply chain optimization or using advanced analytics to enhance customer engagement can lead to significant productivity gains and cost savings.

Moreover, active management allows PE firms to guide their portfolio companies in adopting Environmental, Social, and Governance (ESG) best practices. ESG has become a critical factor in driving long-term value creation, not only from a regulatory perspective but also in terms of market perception. Companies that prioritize sustainability, diversity, and governance are better positioned to attract both consumers and investors, while also mitigating risks associated with non-compliance and reputational damage.

Fostering a culture of innovation and embedding sustainability into core business operations enables PE firms to create more resilient, competitive portfolio companies — ones that are capable of delivering sustainable growth and outperforming their peers.

M&A and consolidation: A proven strategy for scaling operations

Mergers and acquisitions (M&A) remain one of the most effective levers for driving growth and alpha in private equity. In fragmented markets, consolidation allows firms to build platforms that achieve greater scale, operational efficiency, and market dominance. Mid-market sectors, particularly in regions like Italy, offer a fertile ground for consolidation strategies.

In many cases, mid-market companies struggle to grow

due to their limited size and resources. PE firms that pursue strategic acquisitions in these fragmented industries can unlock significant value by integrating smaller companies into larger, more efficient platforms. This approach not only drives cost savings through economies of scale but also enhances the strategic positioning of portfolio companies by increasing their market share and geographic reach.

For example, in the healthcare sector, consolidation enables companies to build end-to-end solutions that address critical needs — from biotechnology innovations to telemedicine platforms. Similarly, in technology, M&A activity can help firms capitalize on the growing demand for digital solutions by expanding their capabilities and client base.

The ability to scale operations through M&A is a key factor in driving long-term alpha, particularly in industries undergoing rapid transformation.



Sustainability as a driver of long- term alpha

The integration of ESG principles into private equity investment strategies is no longer a mere compliance exercise — it is a powerful driver of value creation. As sustainability becomes central to both consumer demand and regulatory frameworks, PE firms that prioritize ESG are better positioned to generate long-term alpha.

Sustainability-driven investments, such as those in renewable energy, clean technology, and sustainable agriculture, align with global efforts to combat climate change while offering significant growth potential. Moreover, investors and consumers are increasingly demanding that companies operate with a higher standard of social and environmental responsibility.

PE firms that embed sustainability into their portfolio companies' operations not only ensure regulatory compliance but also create businesses that are more resilient and attractive to a broad range of stakeholders. This includes integrating diversity, equity, and inclusion (DEI) practices, which help build more inclusive and innovative companies, fostering long-term growth and mitigating reputational risks.

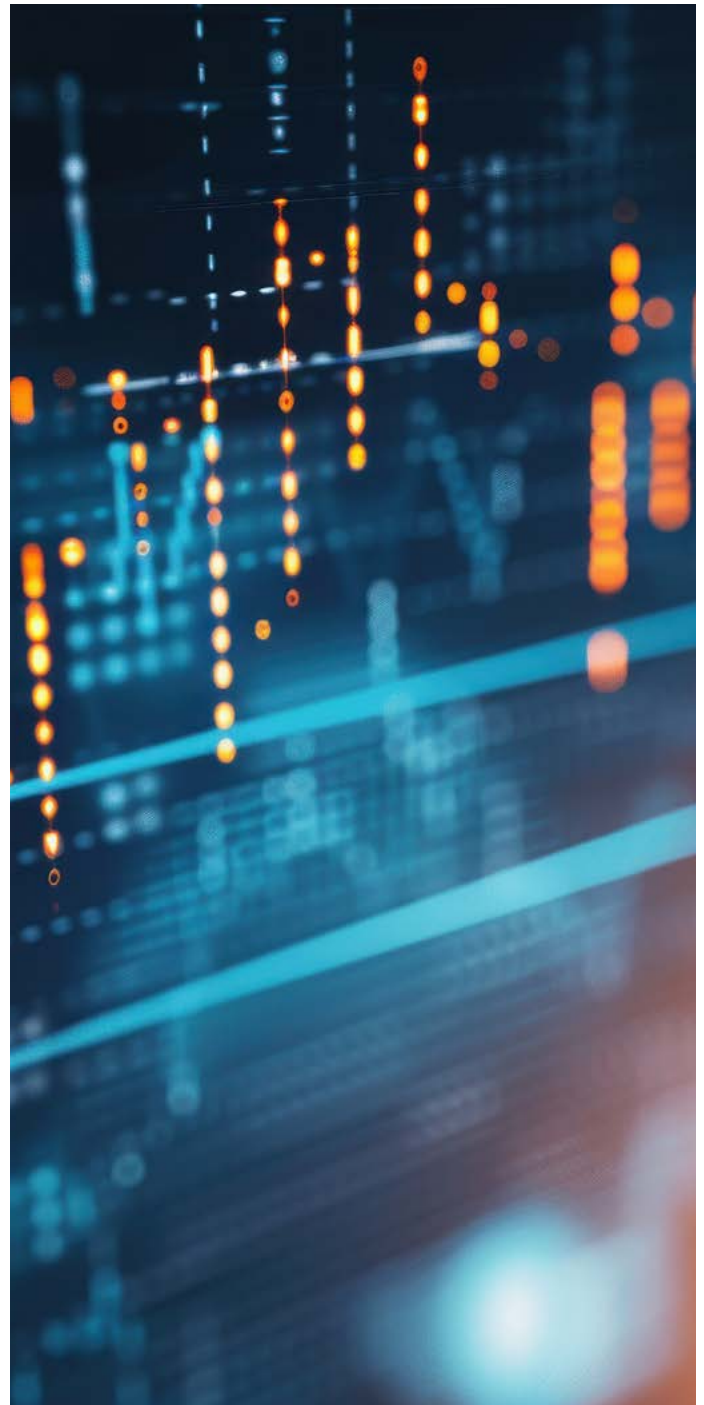
In today's market, ESG is not just a trend — it's a necessity. Firms that fail to integrate these principles risk falling behind their more forward-thinking competitors.

CONCLUSION

Ultimately, to sustain alpha, PE firms must move beyond traditional approaches, adopting smarter, more targeted strategies to maintain their historical outperformance. To further success, focusing on sectors shaped by long-term megatrends such as sustainability, healthcare, and digital transformation will be crucial, through a smart beta approach. Additionally, active management with portfolio companies is essential for driving innovation, implementing ESG practices, and improving operational efficiency.

M&A provide offer an effective path to scale operations, increase efficiencies, and establish market leadership in fragmented industries. With sustainability now central to value creation, firms gain not only a competitive advantage but also enhance long-term resilience.

Therefore, the future of private equity lies in its ability to embrace these evolving strategies. By focusing on smart beta, active management, and sustainability, PE firms can unlock sustainable alpha and continue to outperform in an increasingly competitive and complex market.



TO THE POINT

- European private equity (PE) funds have consistently generated alpha, outpacing public markets and similar-risk investments over time.
- Sustaining this outperformance requires evolving beyond traditional debt-financed, cost-cutting strategies.
- A smart beta approach — targeting high-growth sectors aligned with long-term megatrends — will be key to future success.
- Active portfolio management, supported by strategic M&A, will unlock operational efficiencies, foster innovation, and drive value creation.
- ESG and sustainability are no longer optional; they are fundamental to long-term alpha generation and competitive advantage.

How private equity can pave the way to a better future

TAKING THE LEAD

INTRODUCTION

PE is the leading asset class for impact

Sustainability is quickly becoming a categorical imperative for private equity firms. As frequent whole or majority owners of their holdings, General Partners (GPs) and Limited Partners (LPs) have unique access to the data and operations of European private companies

worth €744 billion¹ — something many investors in public companies could only dream of. They hold influential roles on the boards or management teams of these companies, have reasonably long investment horizons (3-12 years), and, with assets under management already exceeding €1.15 trillion,¹ they play a significant role in global economic outcomes. It's therefore no surprise that PE is the most highly represented asset class when it comes to impact investing.²



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REGULATION, LP DEMAND AND VALUE CREATION MAKE THIS MOMENT THE TIME TO MATURE IN SUSTAINABLE INVESTING

Regulatory pressures for GPs and their portfolio companies are driving newfound interest in sustainability, as larger holdings fall into the scope of the [Corporate Sustainability Reporting Directive](#) (CSRD) and GPs rush to comply with the increasingly complex landscape of frameworks and legislation (e.g., SFDR, CBAM, CSDDD, TCFD, ISSB).

At the same time, Limited Partners (LPs) are demanding greater action and transparency from their asset managers. Among PE respondents, 44% reported that more than half of their LPs require ESG reporting, while the rest noted that 25% to 50% of their LPs mandate such reporting.³

Yet, the most compelling reason for this shift is burgeoning evidence that sustainability performance can drive measurable value creation for companies, and, thus, higher returns for PE. In a survey performed by Deloitte with 500 respondents across the PE and corporate M&A marketplace, it was found that 83% of M&A leaders are willing to pay at least a 3% premium for assets with strong ESG profiles, a 21 percentage point increase since 2022.³ Additionally, 14% would consider a premium of 6% or higher. In another exercise, Deloitte Switzerland found through regression analysis that, “a 10-point higher ESG score is associated with an approximate 1.2x higher EV/EBITDA multiple.”⁴ As a result, “(...) a company that increases its ESG score by 10 points experiences an increase of

approximately 1.8x in its EV/EBITDA multiple.”⁴

All of this is happening against a backdrop of global climate-related events that are affecting people and companies worldwide, driving new demands from financial institutions and the public, altogether underscoring the urgency for PE firms to better integrate sustainability into their core investment strategies and practices.

GPS CAN TAKE PRACTICAL STEPS TO LEAD IN SUSTAINABLE INVESTING

As we work with managers to help them advance in their sustainability goals, we have identified a set of actions which are critical to every firm:

GET A BASELINE UNDERSTANDING: Sustainability and sustainable investing are infinitely broad topics, and the complexity and uncertainty of the subject can lead to inaction. To avoid this, put structure to your firm’s Strategy, Investment Process, and Enablers, to allow for a more objective assessment of your current position and rapid prioritization for where to turn next.⁵ At Deloitte we have defined best practices for each topic within these pillars, to help firms gauge where they stand and identify areas for improvement. Below are a few examples of these best practices.

ARTICULATE YOUR DIRECTION: The market is saturated by firms claiming to be responsible investors. Leaders must go further and specify the topics and outcomes they aim to impact. Managers need a clear vision that aligns with the firm’s overall goals and resonates with stakeholders. Ambitious, guiding targets should be set at the corporate level to

inform how progress will be measured elsewhere in the firm, and leaders should hold themselves accountable to drive continuous improvement towards that vision.

- **Impact ambition:** Develop a statement of themes or topics in which the firm and its holdings intend to have an impact, and translate this into clear implications for relevant stakeholders (e.g., employees, investors, society). Firms should focus on finding their sweet spot between addressing high unmet needs and targeting areas in which they can have a differentiated impact.

- **Investment strategy and beliefs:** There should be clear alignment between investment strategy (thesis for how the firm will drive differentiated returns) and material topics (driven by the overall direction of the firm and its operating environment). Managers should be able to state the investment strategy of each portfolio and how it contributes to a broader impact ambition. Leaders should also be bold in articulating the relationship between the Firm’s approach to sustainability and delivering financial returns for its clients.

INTEGRATE SUSTAINABILITY THROUGHOUT THE INVESTMENT PROCESS: 57% of respondents (up from 39% in the previous year) stated that they were using clearly defined ESG metrics when determining potential acquisitions or divestitures.³ All GPs should actively consider both positive and negative sustainability metrics throughout the origination, transactions and ownership periods, for example:

- **Screening:** Nearly all firms apply some level of negative screening criteria to avoid acquiring poorly performing sustainability assets. Far fewer firms use positive screening to actively prioritize opportunities which positively contribute to firm sustainability targets. Both types should be tailored to the specific needs of the GP/ LP and their material topics.
- **Valuation:** Develop methodologies to incorporate discounts or premiums for sustainability performance when monitoring your investible universe and assessing individual transactions. Various multi-variate options are available to isolate the impact of sustainability performance on asset valuations, but all are greatly improved by direct access to the target and its non-public data.⁶ Work with target companies to better quantify long-term sustainability risks that could impact future cash flows but may not be fully priced into initial valuations.
- **Due diligence:** Use your existing due diligence processes to collect and assess data relating to critical sustainability risks and opportunities. We recommend seeking advisors who can offer Integrated Due Diligence, addressing ESG metrics in a single engagement alongside traditional Commercial Due Diligence (CDD)/ Operational Due Diligence (ODD). Recognize the challenge of finding an integrated due diligence process that can scale while effectively addressing the highly individualized risks and opportunities linked to any target.
- **Active ownership:** To actively improve the sustainability performance of their portfolios, GPs must navigate a difficult dilemma, demanding actions on the part of often small or mid-sized portfolio companies without impeding their primary focus of growth and development. A key first step is to set expectations with portfolio companies before acquisition. Once acquired, GPs can minimize the burden by communicating expectations clearly and only requiring actions that directly contribute to defined sustainability ambitions. Be prepared to invest time and resources to support holdings and ensure they recognize this commitment.

DEVELOP INTERNAL

CAPABILITIES: 91% of respondents stated that they have a high level of confidence in accurately evaluating potential target ESG profiles.³ However, firms often struggle the most with enabling factors, such as data, reporting, and people. Building internal capacity through targeted recruitment and training ensures that ESG considerations are deeply integrated into the firm's culture, providing a foundation for achieving its broader sustainability goals.

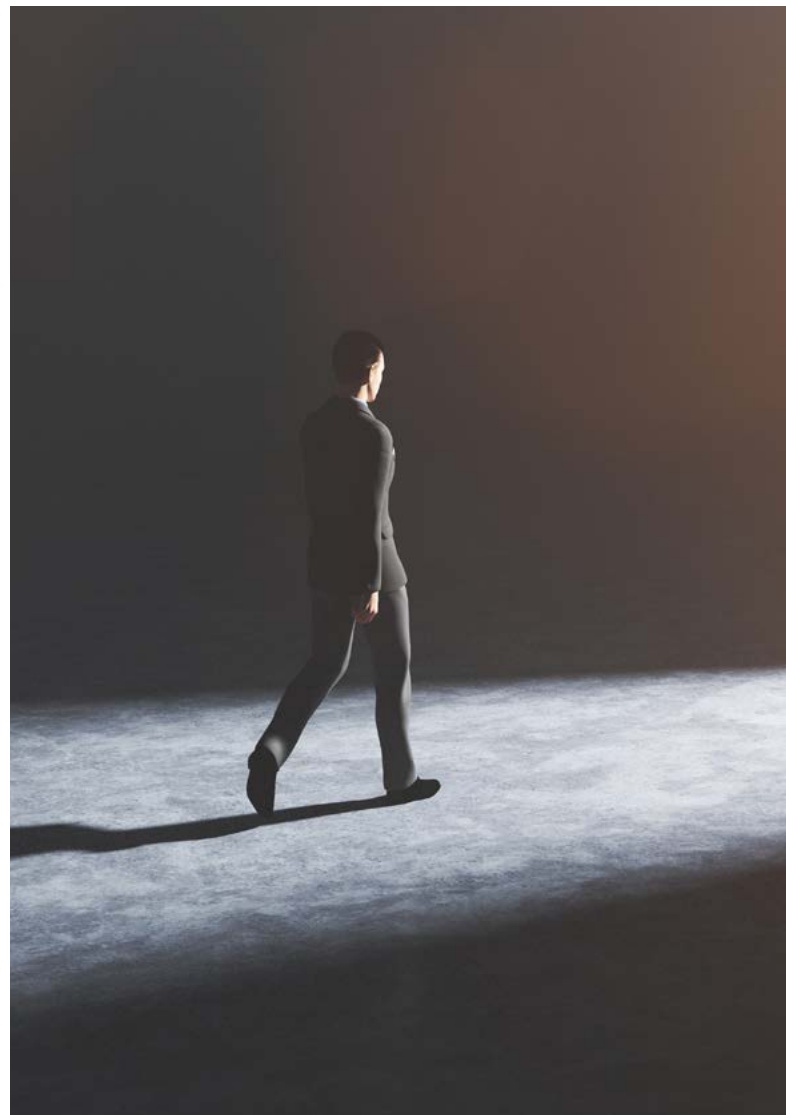
- **Transparency and reporting:** European reporting regulations are rapidly driving firms to mature in their approach to sustainability, yet they have created a cavern of ambiguity, particularly for investment managers. Firms should act fast to understand what is required for compliance and whether they are on track for upcoming deadlines.

The most forward-thinking leaders will use this as an opportunity not only to meet minimum requirements but also to reaffirm their vision and strategy, and enhance their brand.

- **Data and tooling:** Smaller, younger portfolio companies often lack the robust data that General Partners (GPs) would like to use to measure and enhance sustainability performance.. However, a lack of complete data should not be a limitation to action, as firms can make real strides in addressing existing gaps. Regulations and respected authorities offer methodologies for data collection and analysis

relevant to your firm. GPs should use their scale to support holdings in deploying these methodologies and offer simple software tools to compile and manage the data.

- **Innovation through AI:** For instances where data is not a constraint, players are looking to develop ways to automate and accelerate. Some firms are already using machine learning to analyze external data and source deals, and conduct document review for discrepancies during due diligence.⁷ GPs should go further and experiment with AI for portfolio management, using historical performance, pricing data and forward-



looking macroeconomic factors to inform risk, valuation and exit strategy.

• **Training and development:**

Given the greater demand for intricate knowledge, reporting requirements, and the vast array of available data, training and development of deal teams and management are crucial. GPs are seeking new recruits to bring ESG knowledge to the firm but make a mistake in failing to develop initiatives that embed this knowledge throughout its ranks, advancing the education and commitment of its people.

CONCLUSION

In summary, the integration of sustainability into private equity investments and operations is no longer optional. Regulatory pressures, investor demands, and risk-adjusted financial opportunities are driving this shift. Firms unsure about their next steps can start with a maturity assessment and begin making prioritized decisions to articulate a direction, integrate sustainability throughout their investment process, and build out required capabilities. Now is the time for private equity to reap the benefits from achieving its potential as the most impactful asset class for a sustainable future. Oh, and by the way, it's the right thing to do.

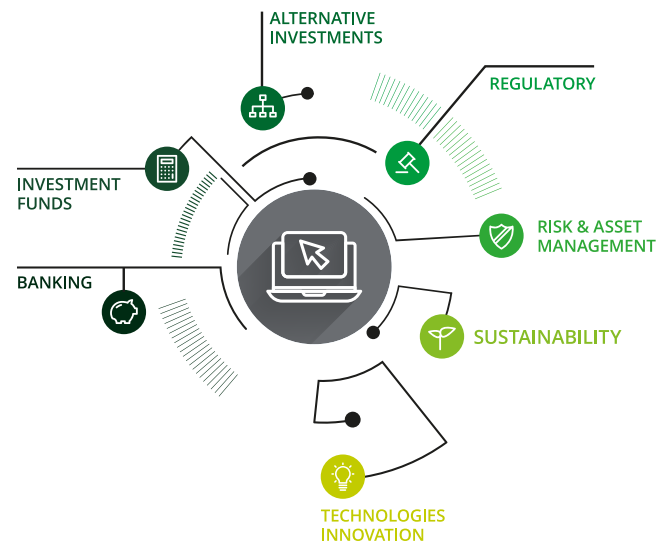
1. Invest Europe, "[New record for European private capital under management as industry reaches €1.15tn in 2023.](#)"
2. Global Impact Investing Network (GIIN), "[State of the Market 2024.](#)"
3. Deloitte, "[2024 ESG in M&A Trends.](#)"
4. Deloitte, "[Does a company's ESG score have a measurable impact on its market value?](#)"
5. Deloitte, "[How mature is your organization really in sustainable investing.](#)"
6. WBCSD, "[Guiding the integration of sustainability in valuation.](#)"
7. Blackstone: "[Accelerating Value with AI.](#)"

TO THE POINT

- Private equity (PE) is uniquely well-positioned to take a leading role in sustainable investing.
- Regulatory pressures, LP demands, and the financial value of sustainability performance are increasingly pushing PE firms to improve their sustainable practices.
- Firms should start with a baseline understanding of their own material topics, and articulate the impact they intend to make, supported by investment beliefs of how this can be done in a financially robust way.
- Firms can work to mature their investment processes, for example by incorporating both positive and negative screening criteria, improving sustainability risks quantification within the portfolio, and defining processes for active ownership.
- Delivering on all the above requires firms to secure and manage their data better, engage their people effectively, and ensure transparency to impacted stakeholders, among other key enablers.

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