

The Future of Asset Management: the Macro Imperative

This note outlines an outlook for the asset management industry rooted in our view of the macro investment environment, which suggests that asset owners may need to reexamine their strategic allocations. A higher equilibrium level of inflation, high valuation multiples and less available diversification are not bearish per se, but they do prompt a need to change portfolio design, with the need to protect long-term purchasing power at its heart.

We see an increased role for investing in an explicitly multi-asset context, in part responding to needs of asset owners, but also reflecting a structural change in the pattern of capital raising in the contemporary economy. This shift raises the level of allocation to private assets in portfolios. A further example is a need to redesign allocations for pension plans in response to greater longevity and a reduced role for bonds as diversifiers.

An outlook of lower asset-class returns means that persistent sources of alpha need to play a greater role in allocation.

We also think that innovation, e.g., in the form of tokenization of real assets, is an important step toward incorporating diversifying return streams without compromising liquidity. Ultimately, this evolution subverts the notion of asset classes.

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There are plenty of views of the industry from a consultant perspective. Here, we try to offer a perspective that is intentionally different from that—in an attempt to be additive—and rooted in a strategic macro outlook. The recent uncertainty in the macro outlook, strong returns across asset classes and concentration of markets might have consumed the attention of the industry. However, we think there is a case that asset owners face a new paradigm in the investment outlook, one that changes how they need to operate compared with the norms of recent decades. This paradigm shift has implications for return assumptions, asset allocation, governance and organizational structure. In this note, we reflect on what this means for the asset management industry and how it will need to adapt.

The challenge that asset owners face has evolved. For years, the challenge was generating return in a low-yield world. Now, yield is apparently plentiful. For some investors, this might have made asset allocation easier; however, for most we expect that ease is ultimately illusory. This depends on what the objective is, but for DC funds, endowments, sovereign wealth funds and those advising individuals saving for retirement, the objective has to be real returns and the protection of purchasing power, which we think is becoming harder. The key elements of this macro outlook are:

- 1. Returns have been plentiful. However, they likely will not be in the future because valuations are high across asset classes and there are downward risks to long-term economic-growth rates (from demographic change, deglobalization and climate, only partly offset by gains from AI).
- 2. Inflation has apparently been tamed in this cycle, and market-based measures of forward-looking inflation are not unduly elevated. However, the pricing of gold and other non-fiat assets shows a very different picture. Our view of the structural forces at work is that inflation remains a risk long term (public debt, deglobalization).
- 3. The confluence of (1) and (2) is, ultimately, a governance issue. What should the target or benchmark be? Investors need to focus on the generation of real returns and protection of purchasing power in a way that has not needed to be core to the outlook for decades.
- 4. In addition, diversification had been plentiful in recent decades, but that changed in 2022. We think that finding diversifying return streams is going to remain a problem, requiring further shifts in asset allocation and rules of thumb about investing.

We are not going to lay out the evidence for this macro view in this note, as we have extensively covered it in our recent research. This macro view creates challenges for asset owners and suggests a shift both in strategic asset allocation and also in governance. This shift creates opportunities for the asset management industry to respond to it.

An important step in this process is educating asset owners and investors about the change in the investment outlook for the next 10 years and how its difference from the last 40 years implies a need to change strategic asset allocation and governance. By the latter, we explicitly mean a change in the objective function, with the need to protect purchasing power being elevated in importance over other targets for many types of investors.

Multi asset investing is active investing... and OCIO

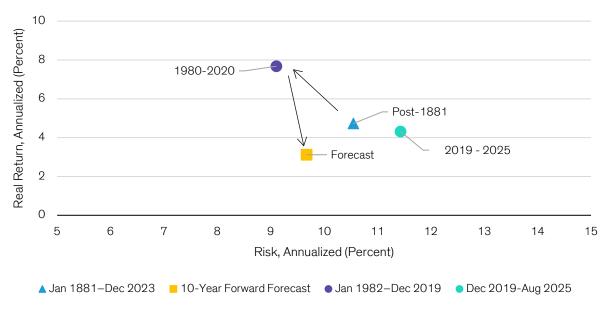
The vision of the investment environment that we have laid out suggests a change in the status of multi-asset investing. With hindsight (always a reassuring perspective), equities and bonds both delivered positive returns over the last 40 years and managed to do it while having a negative correlation between them. In that context, investors could be forgiven for thinking that they did not need to pay for multi asset investing. They might even have been led, falsely, to believe that there was such a thing as a "passive" approach to multi-asset investing in the form of 60:40. We think that the experience of 2022, with a simultaneous fall in both equities and fixed income, has shaken such comfort. We also believe that the need for a more active approach to multi asset, one that firmly embeds allocations to private assets and non-traditional assets (e.g., non-fiat assets, factor strategies), is essential. Moreover, in a world where the role of traditional active intra-asset class strategies has shrunk, such multi-asset active investing will be a larger part of what people understand active investing to be.

The death of the 60:40 portfolio has been proclaimed many times before (including by the current author), but 2022 provides an example of what can go wrong with such a strategy. A move away from the assumption that 60:40 provides a neutral basis for asset allocation is needed for investors to think more deeply about the need for a different approach to multi asset. *Display 1*

¹ See Instability: Debt, Inflation and Al's Impact on Investing

shows the real return against volatility for stocks, bonds and a 60:40 combination of the two in the US. The period from 1980–2020 provided a super-normal boost to both returns and the internal diversification of the strategy that has underpinned its popularity, but this experience was also far above the long-term normal. Our 10-year forward projection is much more sober, and indeed the return over the last five years (shown in green) has been much worse than this long-term trend, particularly in terms of the volatility experienced.

DISPLAY 1: RETURN/RISK OF 60:40 HAS BEEN UNUSUALLY STRONG IN RECENT DECADES

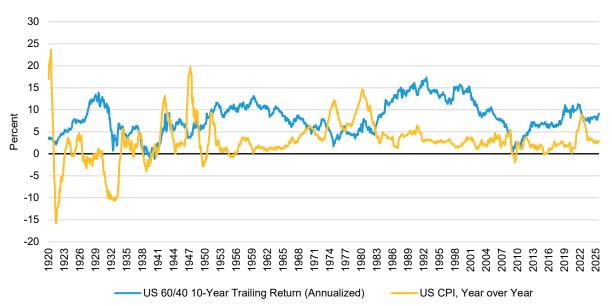


Past performance does not guarantee future results.

As of September 22, 2025

Source: Global Financial Data, LSEG Data & Analytics and AllianceBernstein (AB)





Past performance does not guarantee future results.

As of August 31, 2025

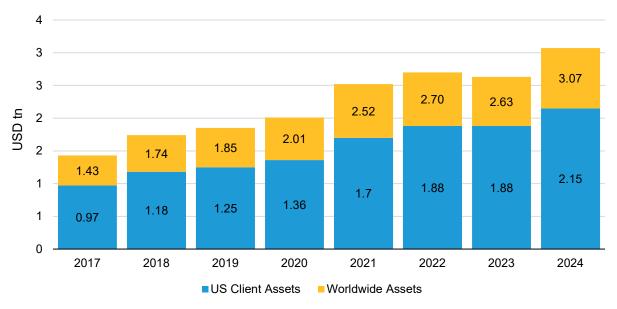
Source: Global Financial Data, LSEG Data & Analytics and AB

A recognition of the need for multi-asset active investing can take many forms. For example, there are funds that can invest across all asset classes with an objective of beating some cash-return or inflation benchmark. Another permutation would be multi-asset income funds. Perhaps a larger part of the recognition of an active approach to multi asset is via the growth of interest in Outsourced Chief Investment Officer (OCIO) arrangements.

Studies of the industry are awash with charts showing the growth of the OCIO market. Worldwide assets for OCIO are estimated to be \$3 trillion in 2024, up from \$1.9 trillion in 2019, a percentage expansion that is slightly below the total return on the MSCI World Index but likely ahead of the return on balanced strategies (*Display 3*). We agree that this seems set to grow, but given that the foundation of this note is changes driven by a macro imperative and not internal industry dynamics, for us the force of interest is less the scarcity of resources within asset owners or fulfilling fiduciary duty. It is more the greater difficulty of achieving a given level of real return relative to opportunities for diversification using traditional building blocks.

The growth of OCIO arrangements in the face of the macro challenges that we see does prompt questions about what skills are needed to successfully allocate, and whether this might involve an evolution from traditional approaches to OCIO, e.g., in regard to how actively to take positions across sectors and asset classes.

DISPLAY 3: THE RAPID GROWTH OF THE OCIO MARKET



Current analysis does not guarantee future results.

As of March 31, 2024

Source: "Investment Outsourcing Special Report", Pensions & Investments, July 15, 2024 and AB

Fundamentally, this situation leads to an increased willingness to take a Total Portfolio Approach (TPA). We have long been believers in a TPA, as opposed to a traditional approach to strategic asset allocation (SAA) that assumes predetermined asset-class silos. While the idea has been theoretically of interest for a long time, we have found a definitive step-up in questions about it in client meetings over the last 12 months. We think that several things prompt the uptick: worry about traditional sources of diversification not working; recognition that the growth of private asset classes raises questions about traditional asset-class silos; and realization that generating a given level of real returns is likely to be just a lot harder. We think that this is also a recognition that multi asset investing has to be active investing, taken to another level.

Implicit in this is a discussion of the role of factors in investing. The willingness to concede a role to factors in investing has had a checkered history. For much of the last decade, key style factors have delivered sub-par returns at a time when simple exposure to several asset classes has delivered exceptional returns. This underperformance dampened the appetite for factor exposure in portfolios. We have made the case in previous research² that factors can play both a return and diversifying role in portfolios. We believe there is a case that the return from factor risk premia is non-zero and that the pairwise correlation of factors may be more stable than the pairwise correlation of asset classes. Therefore, adding factors into a strategic allocation alongside asset classes is additive.

Recognizing a role for factors subverts the traditional taxonomy of investment decisions, and that development is enriching. Fundamentally, admitting a role for factors is an attempt to be as efficient as possible in the way risk is partitioned and allocated. It is a move that we believe makes sense in a world of lower real returns and diminished diversification potential.

Private assets and a spectrum of liquidity

Despite the significant allocation to private assets that has already occurred, we think there is a host of reasons why allocations are set to increase further (*Display 4*). From an asset-owner perspective, this is the confluence of the need for real returns and the hunt for sources of diversification. We always feel obliged to clarify the meaning of diversification when mentioned in the same breath as private assets. Investors need to be aware that diversification from private assets is categorically not derived from stale prices. Instead, where diversification exists, it comes from the ability to buy return streams that do not occur in public

² Asset Classes and Factors: What's the Difference?

markets (by either the nature of their underlying legal structure or their sector exposure). In addition, an exogenous reason for private asset allocation to increase is that it reflects a structural shift in how capital is raised in the contemporary economy, which we think is here to stay. This shift toward a greater proportion of capital being raised under the aegis of private "markets" is partly a result of the continued shrinking of public equity markets and also partly from a declining share of traditional credit creation by banks, and is set to continue in a structural way. This structural shift suggests that, aggregated across all asset owners, the allocation to private assets will continue to grow.

The implications for asset managers are not only in sourcing the investment in the private assets themselves, but also in helping asset owners combine public and private assets in thoughtful ways. This combination is likely to become more important as asset-class silos erode over time.

DISPLAY 4: THE CASE FOR FURTHER GROWTH IN PRIVATE ASSET ALLOCATION...AND THE LIMITS

A Need for More Private Assets

Demand (from Investors)

- Prospect of a lower nominal return on public markets
- · Need for diversification
- Need for inflation protection
- Exposure to sectors not represented in public markets
- · Need for active return streams

Supply

- · Dearth of young, high-growth companies coming to market
- · Buybacks driving a shrinking stock of public equity
- Retrenchment of traditional providers of credit
- Borrowers recognizing greater flexibility of private capital

Emerging Limits on Private Market Allocation

- · Liquidity is a greater concern:
 - Quantitative-easing-to-quantitative-tightening transition
 - · Asset-owner portfolios are more illiquid.
 - More fragile liquidity in public markets
- · Fees, which now constitute the lion's share of many fee budgets

Current analysis does not guarantee future results.

Source: AB

The real limitation is, we think, liquidity. That is not meant to dismiss limits set as rules of thumb or by consultant guidance, etc., but we think that these influences tend to be based on peer-group analysis, so they are contingent on a given state of the world and ultimately subject to revision. The reason that liquidity is likely to become even more important as a limiting factor is the observation that asset owner portfolios have become more illiquid, putting more pressure on the remaining liquid portion. Also, the liquidity available in public markets has become more fragile as a consequence of changes in market microstructure.

This focus on liquidity as a limiting factor has a crucial consequence for allocations to private markets. Rather than bucket all illiquid assets together as an allocation, we think that investors will increasingly see a spectrum of liquidity. Seen in this light, the subset of private assets that return cash within a small number of years or that have pre-defined liquidity events will likely be favored over decade-long horizons (e.g., favoring private debt and asset-backed vehicles over private equity).

The lion's share of capital allocated to private assets over the last decade has been into private equity. We expect to see a broadening out of allocations driven by shifting macro opportunities. We are concerned that the *average* investor in private equity may be disappointed in the ability of future returns to keep pace with historical returns. We can model the returns from private equity in aggregate as:

Private Equity Return = (unlevered return) + Financial Leverage * (unlevered return - cost of debt) + Multiple expansion - fees

Where:

unlevered return = income yield + real growth

³ See Instability: Debt, Inflation and Al's Impact on Investing.

The problem, from a future return point of view, is that the cost of debt is now higher than it was over the prior history of the private-equity industry existing at scale, and the entry valuation, e.g., in terms of buyout multiples, is close to a record. Thus, we conclude that the average private-equity investment is likely to see a near-zero multiple expansion.

There is still a place for private-equity allocation, but the attraction derives more from the ability to pick top-quartile managers: the dispersion of outcomes within private equity is very wide versus dispersion within active public equity. That means there is still a case for an allocation, but investors need to be open-eyed about what that allocation is: this is about alpha and manager selection, not an asset-class beta. Bluntly, it seems likely that the illiquidity premium for the average private equity investment is zero.

DISPLAY 5: PRIVATE EQUITY RETURN FORECAST

								Net Real Return (Top Quintile)	Net Nominal Return (Top Quintile) 21.4%
				Real			Gross	18.4%	21.4%
Private Equity (Buyout Funds)	Income Yield	Real Growth	Debt/ Equity	Cost of	Levered Return	Multiple Expansion	Real	Net Real Return (Base Case)	Net Nominal Return (Base Case)
	2.0%	4.0%	1.2	4.0%	8.4%	0.0%	8.4% -	3.8%	6.8%
								Net Real Return (Bottom Quintile)	Net Nominal Return (Bottom Quintile)
								-8.2%	-5.2%

There is no guarantee that any estimates or forecasts will be realized.

 $Simulated\ or\ hypothetical\ performance\ results\ have\ certain\ inherent\ limitations.$

As of December 31, 2023

Source: Bloomberg, Factset, FRED and AB

By contrast, we think that other areas of private markets can fill a greater role in the investor need for positive real returns and diversification. Despite large inflows into private debt in recent years, we think that there is further to go. In part, this is the effect of the retreat by traditional lenders, i.e., banks, the shorter horizon to return capital, and the fact that the illiquidity premium can be observed ex ante. Private debt is a rapidly expanding area with numerous subsections.

DISPLAY 6: ATTRIBUTES OF SPECIFIC PRIVATE ASSET CLASSES

	Expected return, net of fees, real	AUM	Expected return time for majority of capital	Fixed of Floating Coupons?	Correlation with US equities
Direct Lending (incl. Senior and Mezzanine)	4%	~1Tn	5–6 years	Floating	0.55
Asset-Backed	Various	~6Tn	3-4 years	Mostly Floating	0.13
Private Equity	4%	~13Tn	>7 years	NA	1*

There is no guarantee that any estimates or forecasts will be realized.

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Note: Correlation data is from December 1991 through August 2025. Asset-backed security returns are proxied by the Bloomberg ABS Index and direct lending returns are from the Preqin Direct Lending Index.

*For private equity, we assume a correlation of 1.0 to represent economic reality; of course, others can choose to define this correlation differently if they so wish.

Expected returns are AB Institutional Solutions forecasts

Source: Bloomberg, Preqin and AB

This is not to dismiss the risks of private debt, which are legion. There is a macro concern that the growth of private debt moves the locus of systematic risk away from banks and toward pension plans, insurance companies and other asset owners. The worry from a regulatory perspective is that this risk might be harder to track. Ultimately, though, we worry less about this, because it is solvable through disclosure and transparency requirements. Our counterargument is that long-horizon unlevered

entities such as pension plans and insurance companies might be a better place for these risks to sit, as opposed to sitting with levered cyclical business, i.e., banks.

However, there is a micro risk, too. The asset class, at this scale, has not been tested in a real default cycle. This is indeed a concern and needs to be taken seriously. It means that the process of manager selection has to put a high degree of emphasis on tenure and process of managing defaults. A third risk lies in the scale of the capital inflow in recent years, to which retail capital is now being added. While we think that this shift in allocation is directionally right, it does change the bargaining power of investors versus those who are raising capital, be that through lower expected returns or in the quality of the available terms. A sector that has not been tested in a previous default cycle, that has seen substantial capital inflow, and that is now a destination for retail capital is an uneasy combination. People need to be open-eyed that the future will likely contain disappointments as a result—disappointments that have not been seen in the historical data. Having said that, unlike for private equity, for private debt one can observe the illiquidity premium ex ante and determine if it is attractive or not for a given investor.

None of these risks should be ignored, yet also they need to be assessed in the context that essentially all asset classes are fully valued, in our view. The task for strategic asset allocation, and for the asset management industry at large, is to thoughtfully allocate across these different kinds of risk.

The other side of this capital inflow is that part of the role of the asset management industry will have to be the democratization of alternatives. This has started, e.g., with private asset exposure for pensions in regions such as the US, UK and Australia, but it has further to go. This theme comes up in other sections of this note, for example in the future of pensions and the growth of tokenization. But as the locus of capital raising moves away from traditional sources, this demand for broader access will grow.

Insurance / asset-management tie-ups

Seen from a macro standpoint and irrespective of other industry dynamics, tie-ups between insurance companies and asset managers seem set to grow. This growth potential is driven both by a change in how capital is raised and also by the way that the macro outlook implies a changing demand for types of return streams.

Insurance companies are potential providers of long-term capital. This means that they can play an important role in a world where the marginal unit of capital used to fund growth is now more likely to come via private assets than public markets. The shift for the asset management industry is that it likely elevates the importance of insurance companies as providers of long-term capital; one way this will likely manifest itself is via strategic partnerships. Third-party-managed insurance assets expanded by 25% in 2024 to hit an all-time high of \$4.5 trillion, according to data from Clearwater Analytics. Private market investments have grown to make up 21% of these assets.⁴

Separately, there is a need for return streams to respond to a different investment environment. What we describe as the contemporary retirement problem in another section of this note shows the need for return streams that can benefit investors in times of higher inflation and also offer protection for longevity risk. This implies a demand for products such as variable annuities, life products and other related offerings. Products that have a potential variable outcome become more attractive than fixed annuities in the macro environment we have laid out. Moreover, this solution set likely becomes a key part of retirement planning, because protecting against longevity risk is arguably more of an insurance problem than an investment problem.

Life-insurance assets have grown substantially. Using data from the Bank for International Settlements, life insurance companies managed total assets of about \$35 trillion, or 8% of global financial assets, in 2022, up from \$14 trillion two decades earlier. This expansion does not necessarily represent an increase in the share of total financial assets, but it is significant growth, nonetheless. Our case is that macro reasons imply this is set to grow further.

The counter to this is a social one. If variable annuities or life products are a larger share of what is needed for retirement, it means that risk is being transferred to individuals just as inflation is rising. However, we would argue that this is a decision that has been made already, with the decline of defined-benefit schemes and questions about the future real value of state guarantees.

⁴ FundFire - Managers Forge Strategic Partnerships, Hire to Crack Insurance Channel

⁵ https://www.bis.org/publ/qtrpdf/r_qt2409.htm

This situation implies that there are opportunities for joint action by insurance companies and asset managers. Insurers may need more expertise at generating long-term real returns and insurance companies are likely to play a central role in offering insurance against longevity risk in a higher-inflation world.

The contemporary retirement problem

We present an ugly cocktail:

- Higher equilibrium inflation (deglobalization, debt, demographics)
- Higher inflation volatility (extreme climate events, policy uncertainty)
- Lower expected returns across asset classes (lower growth expectations, high starting valuations)
- Less diversification available (equity-bond correlation remaining positive)
- Greater longevity (admittedly a good problem to have, just tough economically!)
- Need for greater savings juxtaposed with the loss of labor bargaining power and greater income inequality as a consequence of AI.
- Reduced DB availability, so risk transferred to individuals (smaller share of households benefiting from a DB pension).
- Real value of state safety nets under threat (public debt already high, higher dependency ratio, loss of peace dividend)

This mix constitutes an acute problem for traditional approaches to retirement. Some of the possible ways to address this lie outside the scope of the asset-manager / asset-owner dynamic, and are ultimately political questions about the social contract in the form of expectations around retirement age, the standard of living expected in retirement, immigration and assumptions about contribution rates.

Ultimately, we think that this cocktail threatens the ability for individuals to enjoy a retirement that can last decades, as has become normal in the last 50 years. However, older people turn up to vote, so presumably the need to defend retirement as an institution will be politically important. Short of addressing it by taxing younger people, which would create enormous issues of inter-generational fairness, the investment industry has a key role. We think that the social contract underpinning the funding of retirement will become a huge societal issue. It's not just the longevity issue that is often discussed, but also the damage caused by the outlook for lower asset-class returns, a reduced ability to diversify, higher equilibrium inflation, and a political rejection of immigration. Ultimately, this challenge will likely be a long-term driver of populism in years to come. The travails of certain European countries at present on this front are just the beginnings of a long-run problem in developed and middle-income countries.

To quantify this problem, *Display 7* plots the expected income in retirement, expressed as a share of national median income on the vertical axis, with the horizontal axis showing its bottom-fifth-worst percentile of expected outcomes.

The examples shown are the following:

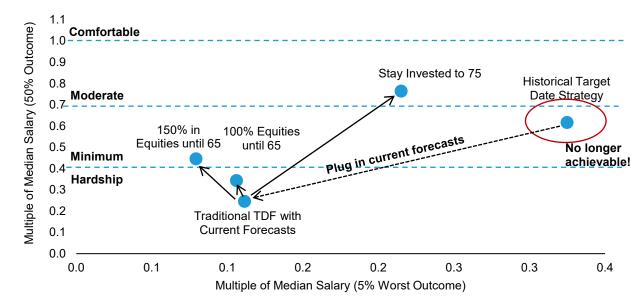
- 1. What has happened historically: a traditional, simple target-date strategy with 30-year historical returns. It holds 100% equities until age 45, then gradually evolves to 100% government bonds by age 55, with retirement at 65.
- 2. The same allocation structure, but using our predictions of lower real returns and a positive stock-bond correlation (i.e., a hardship outcome).
- 3. The simplest way to take more risk for longer: allocate 100% to equities for the entire glide path, retiring at 65. (It still doesn't generate enough return).
- 4. Take more risk for longer but still retire at 65; 150% exposure to equities throughout the whole glidepath until age 65 (This achieves just enough return but with an unacceptable level of risk in terms of the worst 5% outcome).

5. Stay invested in risk assets beyond 65 and work longer; hold 100% equities until 65, then shift on a sliding scale to 100% government bonds until retirement at 75 (Still not as good as history, but plausibly generates enough return).

We recognize that these are very simplistic approaches to glidepaths—one can be more efficient about blending different kinds of risk and also mitigating the sequencing risk of an abrupt conversion of savings into annuities. However, this way makes it easier to lay out the scale of the problem and possible remedies. In the context of these very simplistic glide paths, it should be noted that the risk with option five is that even though we show the 5% worst outcome on the horizontal axis, there is a short-term risk associated with this option for a potentially significant share of the population, therefore it might raise social questions.

Interpreting the conclusions from this analysis, the stark reality is that someone who earns a median income over their working life, paying 8% of their salary each year into a traditional simple target-date structure that reallocates from stocks to bonds over the midpoint of their career would face a hardship outcome in retirement. Here, we assume that the person retires at 65, and we define a hardship outcome as an annual retirement income that is less than one-third of the national median income, as defined by the Pensions and Lifetime Savings Association in the UK.⁶ It is this harsh break from what has been achieved in the past that prompts a need for change.

DISPLAY 7: THE SOCIAL ROLE OF OUR INDUSTRY? IS RETIREMENT STILL POSSIBLE? MAYBE, BUT NEED TO TAKE RISK FOR LONGER. BONDS ARE NOT LOW RISK!



There is no guarantee that any estimates or forecasts will be realized.

Simulated or hypothetical performance results have certain inherent limitations.

This display shows the expected median income in retirement (annuity rate) plotted against the likely worst fifth percentile of retirement outcomes. We overlay lines showing how these outcomes relate to different levels of comfort in retirement, using the Pensions and Lifetime Savings Association (PLSA) definitions of retirement needs as a percentage of national median income. The baseline target-date strategy simply invests 100% in equities until age 45, then has a linear reallocation over 10 years to become 100% bonds by age 55. The examples shown are as follows: (1) the historical target-date strategy shows the median outcome of returns from such a strategy over complete lifetime-savings cycles since 1970, while the distribution of returns uses a longer look-back period to all outcomes since 1941; (2) the same target-date structure, applying our forecast of lower returns and positive stock-bond correlation; (3) a simple approach to taking more risk of 100% equities through the entire career; (4) 150% equites through the entire career; (5) 100% equities until 65 and then linear reallocation to 100% bonds at age 75; retire at age 75.

As of May 31, 2024

Source: Global Financial data, LSEG Data & Analytics, PLSA and AB

⁶ "Picture Your Future: Retirement Living Standards," Pensions and Lifetime Savings Association, accessed on July 25, 2024, https://www.retirementlivingstandards.org.uk.

Of course, one might push back on this whole notion of a low-return future. Techno-optimists would point to the advent of Al as a potential boost to productivity and hence growth rates. A transformational uplift in growth rates would underpin the case for a rally in growth assets and also potentially give governments a route to grow out of current debt levels, thereby reducing inflation risk. Such a view would not be our base case, but, anyway, for pension systems that is not necessarily an unambiguously positive prospect. Our recent work on the interaction of Al-led productivity gains versus job displacement suggests that belief in a productivity boost from Al sufficient to offset downward forces on growth would need be very destructive to the labor market. This in turn raises questions about the ability of workers to save for retirement, i.e., one would face a distributional question.

What does this mean for the asset management industry?

- Traditional models for target date glide paths need to be re-thought for a world of lower returns, higher inflation and
 positive stock-bond correlation. Part of this shift is the need to thoughtfully consider how to take enough risk to
 ensure that retirees don't run out of money. There has already been a shift to increase equity allocations, but we think
 there is a case for this to move still higher with a view with how to protect purchasing power from higher equilibrium
 inflation.
- Re-think the range of assets that are held. One obvious area for focus is increasing the holding of private assets. We
 have made the case for private assets more generally elsewhere in this note. The key attraction from a pension glide
 path point of view is the ability to offer diversification and link to real returns.
- Reduce the role of long duration nominal bonds, especially the idea of "de-risking" just as the savings pot starts to reach a significant size in mid-career. We covered this point in more detail in our note, <u>Pensions and Bonds: The End of the Affair?</u>.
- Increase focus on the need for retirement income, driven by increased longevity and also higher inflation
- Possibly rethink benchmarks. We have long held the view that there are no real financial-market benchmarks for
 cross-asset investments. However, of course, the industry loves benchmarks and needs something by which to assess
 value added. In a target-date context, this can lead to benchmarks essentially based on a peer-group averaging, but
 this might not be the most rational benchmark economically. We expect more discussion in the industry on this point,
 and we suspect that trying to beat long-term future inflation might play a more explicit role.

Ultimately, these shifts are about recognizing two fundamental aspects for the asset management industry. First, saving for retirement is necessarily an active decision. There can be no such thing as a passive glide path or allocation for retirement. Second, for those concerned about there being a social role of the investment industry, one of the two key roles is enabling individuals to retire (the other social role being to help the efficient allocation of capital in a capitalist economy). The days are long-gone when corporations would try to differentiate on the strength of their DB offering, though a greater recognition of the increased challenge of generating real returns could conceivably prompt providers to consider differentiation—at least translated to a DC context.

The need for active, concentration of markets, and the active opportunity set

The active management industry has hardly covered itself in glory over the last two years, with the high concentration of returns within the market making it very hard for long-only managers to outperform benchmark indices. The result, in principle, could be a loss of belief in active management. However, when we speak to asset allocators tasked with forming portfolios for the long term, we hear a lot of support for allocating to active strategies.

The problem for asset owners is that the confluence of high valuations and expectations of lower future growth rates implies lower returns from broad exposure to a cap-weighted passive market index. We forecast global real returns on equities to be 4% pa over the next 10 years. This might sound horrible compared with the norms of recent decades, but it is not bearish; it is at least a positive return in real terms.

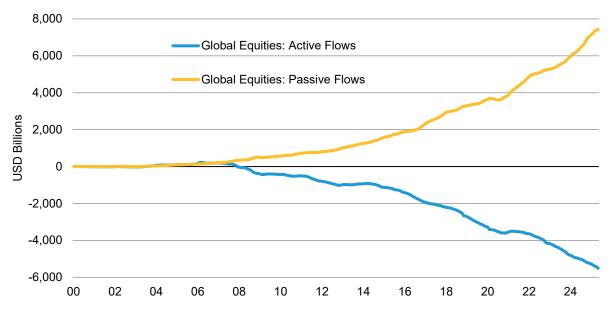
⁷ Al vs. Demographics: Or might shrinking populations not be so bad if robots are taking jobs, anyway?

In a lower-return world, investors need more exposure to alpha. Over the last 10 years, global developed-market passive equity returns over inflation were 9% pa, and the top quartile of active managers produced an extra return of 1.65% pa (net of fees). Perhaps with hindsight this does not seem very impressive, adjusted for all the work that went into sourcing that alpha. However, in the context of our forecast of a 4% pa real return, the extra return would be proportionately much more significant.

We stress that this is definitively not a plea for more tactical asset allocation (TAA). Proving skill at timing requires an enormously long period, and that becomes especially hard if there is a legitimate case for regime change. While timing certainly plays a role as one of the alpha engines that underlie an active approach, there are many other routes too, including security selection and implementation. A broad range of alpha-generation tools is likely important, e.g. across public and private as well as quantitative and fundamental, and also taking advantage of time-horizon diversification where possible. An expanded role for alpha can also make use of approaches such as portable alpha, which we see is having a renaissance as awareness grows about how to thoughtfully separate alpha and beta, and also given the ability to source alpha from markets that might not be such a significant part of overall asset allocation.

We have often been asked: At what point will the proportion of equity markets managed passively reach a peak? The hypothesis is that at some point the existence of "too much" passive causes some break, either in terms of market correlations or market inefficiencies. We view such thinking as fallacious. Even our own published view from a decade ago⁹ that passive investing breaks down the capital-allocation function of capitalism recognizes that such things can never be known in real time, and so it does not constitute a feedback mechanism to "save markets." In any case, the cumulative flow of assets from active to passive is one of the few things in finance that looks like an actual monotonic line (*Display 8*). Is anyone, in all seriousness, going to call a turn in this series?

DISPLAY 8: GLOBAL FLOWS INTO ACTIVE AND PASSIVE EQUITY FUNDS



Current analysis does not guarantee future results.

As of June 30, 2025

Source: EPFR Global and AB

There have been good reasons for this monotonic reallocation: At the beginning of this period, too many managers were charging active fees but delivering passive performance. Another reason only became apparent with hindsight: a period of very strong returns meant that the extra return from active management was less important. There was also a less-good reason,

⁸ Fraser Jenkins et al. *Global Quantitative Strategy – Time-horizons in Finance: Bayesian trees for market allocation,* Bernstein Research, February 16, 2016

⁹ Fraser Jenkins et al. Fund Management Strategy - The Silent Road to Serfdom: Why Passive Investing is Worse Than Marxism, Bernstein Research, August 23, 2016

which is the industry's views of fees. Fees are, of course, critical, and minimizing them is a central goal for investors. However, there has been a (misguided) focus on minimizing headline ex ante fees as opposed to viewing fees through the lens of wanting to maximize ex post net-of-fee returns. The latter is more difficult, of course, as one cannot observe them ahead of time. Nevertheless, that has to be the true goal.

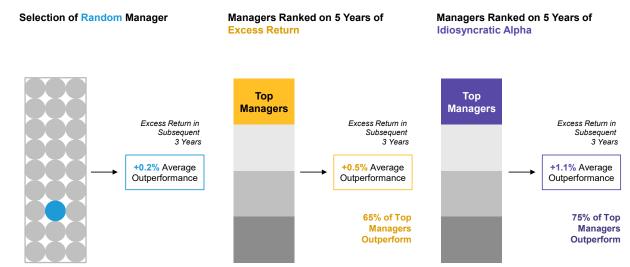
A realization that returns to capital market indices are unlikely to remain at this high level and a more nuanced view of fees should slow the trajectory of the active-to-passive line. It still won't reverse it, but that is a story we will keep for a separate essay in its own right.

The central strategic case for an allocation to active today is that, in a world where asset class "beta" delivers low returns, that persistent alpha becomes a higher share of the end-investors' return. The return has to be persistent for this argument to hold. In our research, we have shown that idiosyncratic alpha is more persistent than the traditional alpha measured as excess return over a benchmark (*Display 9*). Note that in this display we show returns gross of fees. On a net-of-fee basis, the randomly selected manager would likely underperform, making the difference between the random manager and the high idiosyncratic manager even more stark.

Idiosyncratic alpha, i.e., alpha shorn of simple and persistent factor exposures, is a better candidate for being persistent, as portfolios run in such a way are less likely to be damaged by switches in factor performance.

DISPLAY 9: FINDING "IDIOSYNCRATIC" ALPHA

IDIOSYNCRATIC ALPHA IS MORE PERSISTENT



Historical analysis and current forecasts do not guarantee future results.

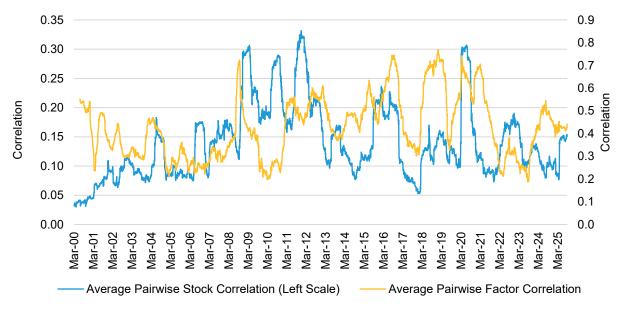
Based on a sample of 2,000 globally benchmarked managers.

Returns are gross of fees. January 1, 2006, through December 31, 2014.

Source: eVestment, Morningstar, MSCI and AB

Concentration remains a challenge tactically, but there are other aspects of market structure that are more benign, such as the low average pairwise correlation of stocks and factors (*Display 10*).

DISPLAY 10: AVERAGE PAIRWISE FACTOR AND STOCK CORRELATION IS LOW



Current analysis does not guarantee future results.

Stock correlations are the average pairwise correlations of daily stock returns for the constituents of the MSCI All-Country World Index over a rolling six-month window.

From July 4, 2000, through August 28, 2025 Source: FactSet, I/B/E/S, MSCI and AB

Conclusion: the commentary might be all about the active industry being under pressure, but on a forward-looking basis, the bigger challenge is probably for asset owners. A future of low returns from asset-class betas implies a need to thoughtfully add alpha as part of an SAA process.

Digital assets: tokenization, crypto and stablecoins

Much, if not most, of the commentary about blockchain-based assets in investment starts by extolling the virtues of the technology. Here we suggest a different take, one rooted in the macro outlook and the needs of asset owners. It suggests that the uptake in digital assets will be significant. We group these assets in one section, as they are stepping stones to each other from a regulatory and operational point of view, but really they perform very different roles in portfolios.

The digital asset most in demand for investors now is crypto. For some asset managers, offering access to crypto and an ability to include it in multi asset solutions will likely be the initial focus of investment in digital assets. Though, really, the biggest change for the asset management industry ultimately is likely to be the growth of tokenized assets.

We have held the view that crypto assets such as Bitcoin and Ethereum are potentially useful assets in portfolios for some time, ¹⁰ and since 2024 we have been explicitly recommending crypto as part of a broader non-fiat asset exposure in our SAA advice for clients. ¹¹ For us, the macro case for non-fiat assets rests on the view that equilibrium inflation is likely to be elevated, so investors will need to have significant allocation to real assets, including equities. Around this, they will need assets that provide an attractive trade-off of real return and an ability to diversify. The central asset here, of course, is gold. Its key attribute, in this context, being that its correlation with equities remains invariant with inflation level. Over and above the case that rests on

¹⁰ Fraser Jenkins et al., *Portfolio Strategy: Cryptocurrencies in asset allocation – I have changed my mind!* Bernstein Research, November 30, 2020

¹¹ Five Themes for '25 and their SAA Implications for US Equities, TIPS and Crypto

correlation, the trend of de-dollarization and the need for central banks to buy gold provide a potential extra level of support for returns. 12

Thus, this is mainly a strategic case for gold, but our view is that other non-fiat, zero-duration assets can ride on the coattails of gold. We have seen this with silver and platinum over the course of 2025, and we think that major cryptocurrencies can benefit in the same way. An extra catalyst for them is the promise of greater regulatory clarity. At present, we fully recognize that the empirical evidence does not support crypto as a hedge. After all, its correlation with gold and with risk assets has seen numerous changes—indeed crypto has shown a tendency to behave more like a risk asset when risk is especially elevated. However, we think this is inevitable in the early stages of adoption with a high degree of retail investor involvement. We also recognize, just to be clear, that cryptocurrencies have zero intrinsic value. However, that is also the case for gold and in no way precludes them from having a role in portfolios.

Stablecoins have been the digital asset that has probably gone through the most change over the last year, with much greater regulatory acceptance in the US and also a signal from the current US administration that stablecoins are the preferred approach to digital money in the US—not central bank digital currencies. That is to say, there is a strong preference for private money over public money. Our view is that stablecoins are set to grow and will be important for the macroeconomy. They are part of the discussion about whether the dollar can retain its status, and stablecoin issuers have become a larger part of the aggregate demand for US government debt. They also form part of the debate about the future of the banking system, and hence credit creation. For asset managers, while there will be a need to transact with stablecoins; we do not see stablecoins as a game changer in terms of the way that investment views are formed. Presumably, it will be attractive for some players in the industry to launch coins and the facilitation of clients' wishes to include them as part of their investment assets will be important. However, given their status of being tied to a fiat currency, they don't change the range of investment options in a way that crypto assets do, for example.

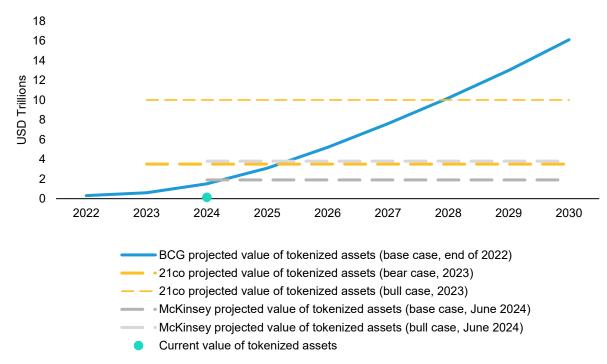
We think that the real prize, though, is tokenization, especially of real assets. For us, there are strong macro reasons to drive adoption, stemming from a need that asset owners are going to face—to hold greater exposure to real assets combined with a need for greater liquidity. The need for real assets stems from the case for higher equilibrium inflation and lower growth. The need for liquidity comes from the confluence of the more-fragile liquidity in public markets and the higher share of illiquid assets in many asset owner portfolios, creating more pressure on the liquid component in times of stress. By holding the promise of fractionalizing exposure to illiquid assets, we think that this becomes an important element of portfolio design.

We have been making the case for tokenized assets for some years, and so far real-life allocations remain small (*Display 11*). The area needs greater regulatory clarity in order to grow, and more asset owners need to be convinced of the case for increased real asset exposure, but we think that this will come with time. As with other areas that are at the heart of more complex multi-asset investing, the need for advances has been somewhat clouded by rampant returns from public equities. The first steps in this area so far have been to tokenize funds, but this area really comes into its own when there is an availability to buy tokenized exposure to previously hard-to-access assets.

There is a bigger narrative here. Our vision is that tokenization will ultimately subvert the concept of an asset class and is critical to more efficient cross-asset active investing, i.e., something more akin to a purer form of a total portfolio approach, in which we have long been believers. For asset managers, the steps are to help the origination of tokenized assets and also the building of them into multi asset portfolios.

¹² Investing in a Post-Global World

DISPLAY 11: PROJECTIONS OF UPTAKE OF TOKENIZATION



Current analysis and forecasts do not guarantee future results.

Note: Current value of tokenized assets as of July 30, 2024 $\,$

As of July 30, 2024

Source: 21co, Boston Consulting Group (BCG), Dune Analytics, McKinsey, World Economic Forum and AB

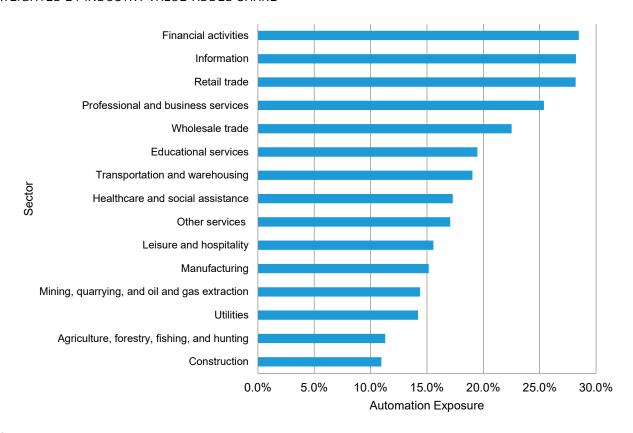
Al tools and Al exposure

Our recent work on the aggregate impact of Al discussed how finance is one of the sectors most exposed to Al. The most common way to measure exposure is to start by measuring the Al exposure of individual tasks and then aggregate it to occupational and sector levels. For example, Eloundou (2023) sourced occupational data in the US economy from the O*NET occupational database and employed human annotators as well as GPT-4 itself to construct a dataset of how much different tasks are exposed to Al. The O*NET database provides information on generalized work activities and detailed tasks for more than 900 occupations, with each occupation typically including 20–40 different tasks. The individual task automation exposure scores can then be combined with the task weights for each occupation to calculate the aggregate automation exposure.

The financial industry workflow contains many tasks, such as summarizing large documents, synthesizing and transforming data, editing and writing code, and providing feedback on documents, all of which large language models (LLMs) are very effective at. It is one of the most automation-exposed occupations, together with Computer Science & Programming, Office & Administrative Support and Legal. Because economic industries can also be viewed as a combination of individual occupations, this process can be taken one step further to aggregate the automation exposure to the level of major economic sectors. As we show in *Display 12* below, weighted by the sector value-added share, the financial sector is the most exposed to Al.

DISPLAY 12: LLM AUTOMATION EXPOSURE BY SECTOR

WEIGHTED BY INDUSTRY VALUE-ADDED SHARE



Current analysis does not guarantee future results.

Note: Occupation level automation data provided by Acemoglu. Value Added data comes from BEA Input-Output tables As of May 12, 2024

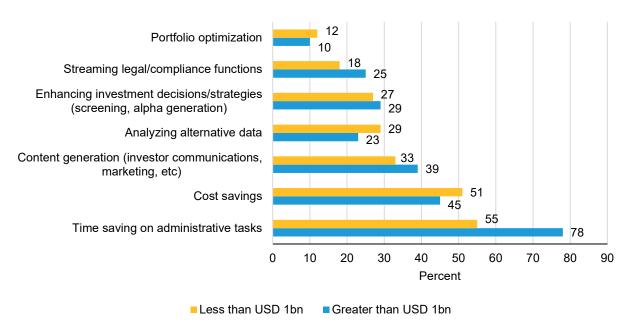
Source: Daron Acemoglu, BEA and AB

There are two parts to this debate. One is the extent to which a given industry is exposed to Al. The other is, to the extent that there is a productivity increase, does it derive from displacing jobs and replacing them with an automated process or by making a unit of labor more productive?

Surveys of the industry suggest that the bulk of Al use at the moment is focused on administrative tasks within finance, communication and the analysis of alternative data sets (*Display 13*). An example would be the hyper-personalization of distribution.

DISPLAY 13: AIMA Q42023 HEDGE FUND SURVEY

THE MAIN ADVANTAGES HEDGE FUNDS SAY WILL COME FROM EMBRACING GEN AI TOOLS



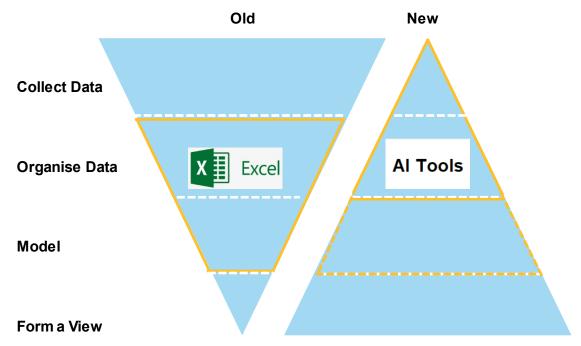
Current analysis does not guarantee future results.

As of March 14, 2025

Source: Bernstein Research and AB

Al can be expected to evolve the role of an investment analyst, as well. We display this potential shift of emphasis in *Display 14*, which is an update of a chart that we first published seven years ago in the context of Python automating some analytical tasks.

DISPLAY 14: THE CHANGING USES OF RESEARCH ANALYSTS' TIME



Current analysis does not guarantee future results.

As of October 22, 2025 Source: AB

More fundamentally, we think that Al will herald a profound change in model structure—that is to say, the structural underpinning of the approach used for financial analysis. A mini history of the financial model for a company can serve as an example. In theory, a revolution in financial analysis took place in the early 1990s with the transition from paper-based spreadsheets to Microsoft Excel. However, we would argue that, from a model structure point of view, this was not, in fact, a profound change at all. Models did become far easier to update, as there was no longer a need to rub out a number and pencil in a new one. As a result, models had more lines added to them, but the structure of the model didn't change in the progression from paper spreadsheets to digital ones.

Much later, it seemed plausible that the ubiquitous use of Python would bring about a change in model structure, and we argued as such a decade ago, ¹³ but it never really happened. The practical change was that the inputs to the model could evolve to become a function of mass web-scraping, with an order-of-magnitude increase in input data. However, the structure of models used to value companies did not really change—it was merely able to have a broader range of inputs. It turned out that, despite the ability of technology to revolutionize the approach to modelling, a host of other factors slowed innovation (organizational inertia, lack of demand and regulation in terms of formal dissemination requirements for sell-side analysts).

The ease of access to AI seems set to offer a new approach that could lead to the largest change in financial-model structure since paper spreadsheets. We would raise an epistemological issue at this stage: if this happens, it is entirely possible that predictive efficacy increases, but possibly not the ability to explain. Of course, many people may shrug their shoulders and be perfectly content with explanation-free prediction if it leads to outperformance. In finance, that may be good enough most of the time, though not, we would argue, when the model goes wrong. When that happens, an explanation is actually needed.

We think it might be hard to use AI in automating investment decisions, in part because financial markets are self-referential in such a way that finance can never have any laws, like a science, and at best has contingent rules of thumb that change over time.

¹³ Fraser Jenkins et al., *Global Quantitative Strategy: Why company models need to move out of Excel and into Python*, Bernstein Research, October 4, 2018

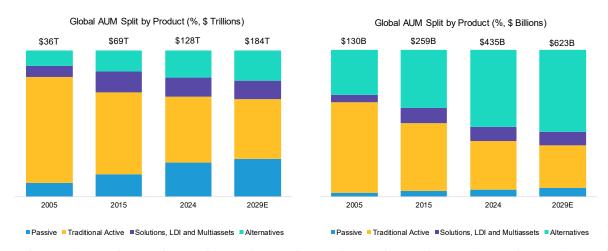
More prosaically, investors might want to have someone to blame when things go wrong, and also, crucially, to offer explanations.

Fees

A lot of flows in the industry are determined by fees. This is, of course, understandable, though we think misguided in terms of what it means in practice. Our specific worry is that the focus on headline upfront fees should not really be the key point. The thing that matters most is maximizing the net-of-fee ex post return. But one cannot observe that ahead of time, hence the focus on the former as a mental shortcut. Our view that the macro outlook requires a more efficient way to partition and allocate to risk also implies, ideally, a shift to thinking about a view on fees that is more focused on maximizing the net-of-fee return across the book. Though we realize it would be naïve to assume that such a step can happen swiftly.

In the meantime, the barbelling of allocations to passive and alternatives seems set to continue (*Display 15*), but our outlook described here implies that these silos, in time, will become less distinct.

DISPLAY 15: ALTERNATIVE INVESTMENTS GENERATE MORE THAN 50% OF GLOBAL REVENUES, WITH LESS THAN 25% OF GLOBAL AUM



Current analysis does not guarantee future results.

As of December 31, 2024 Source: BCG and AB

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