

Geographic Diversification in Private Equity Markets

March 2022



In partnership with



OXFORD
ECONOMICS

For informational and educational purposes only.

These materials do not constitute an offer to sell or the solicitation of an offer to buy securities. Any offer or sale of securities shall be made solely to accredited investors and solely pursuant to a definitive confidential private placement memorandum and related documents, including definitive subscription materials.

Executive Summary

Investors in private markets can benefit from geographic diversification to help minimize their specific market downside risks and to participate in global economic growth, as well as to reduce their exposure to inflation risks and stretched valuations. Investors are starting to take notice, with allocations to traditional U.S. based private markets showing signs of decline.

The Beneficient Company Group, L.P. (Ben) uses its Total Portfolio Management (TPM) framework and private market risk/return forecasts to illustrate the potential diversification benefits to investors. Three broad themes emerge from allocation analysis over the next five years. First, our analysis makes a clear case for geographical diversification in private equity markets, showing that it may help to deliver higher risk-adjusted returns compared to a domestic-focused portfolio. Second, we see an increased exposure to Asia as a key consideration for most investors. Third, our bear scenario analysis illustrates that a simple shift of allocation toward advanced European economies can help mitigate key inflation risks while potentially maintaining a high level of risk-adjusted returns.

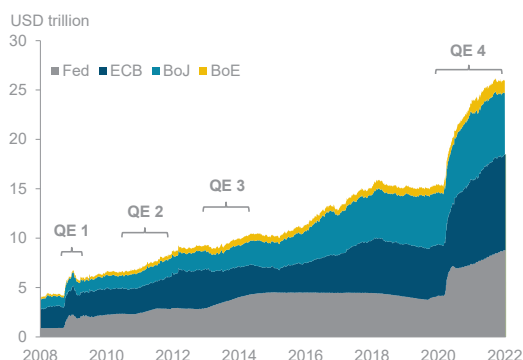
Foreign Exchange (FX) risk represents a significant hurdle to investing outside the U.S. The dollar can move in long swings that magnify non-dollar returns and add substantially to their downside risk. The outlook for the dollar remains highly uncertain. Although it is strong on an historical basis and relative to some fundamental anchors, its ongoing position as the reserve currency and the depth of its capital markets are important supportive factors.

The potential for an extended bout of inflation also supports the case for diversification. Inflation risks are higher in the U.S. than elsewhere in the global economy, given the speed of the recovery, and could lead to different correlation structures between asset classes. In that environment, greater geographical diversification could help investors pursue their financial goals while striving to minimize their downside risk.

Introduction

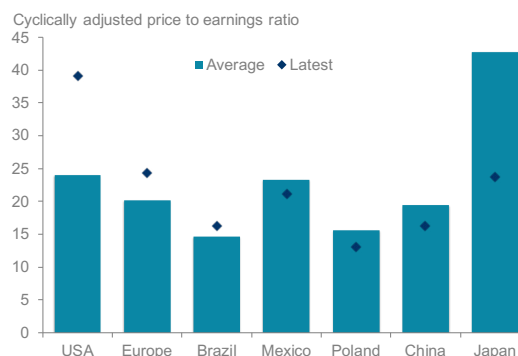
Private markets continue to attract record capital inflows as investors seek to exploit the higher returns those markets have the potential to provide in a challenging economic environment. Despite the economic damage wrought by the pandemic, 2020 saw a record \$73.6 billion raised in the U.S. for venture capital and a respectable \$203 billion for private equity.¹ Fundamentally, these inflows reflect soaring global liquidity as central banks and governments adopt ultra-accommodative policies to combat the impact of the pandemic (**Figure 1**). The balance sheets of the four largest central banks have expanded by around \$11 trillion during the crisis, indirectly helping to finance swelling government deficits. As with any period of abundant liquidity, a large number of funds are chasing relatively few assets, which has resulted in lofty valuations in both private and public equity markets (**Figure 2**).

Figure 1 – Central Bank Total Assets



Source: Oxford Economics/Haver Analytics

Figure 2 – Global: High Equity Valuations



Source: Oxford Economics/Barclays

While the abundant liquidity and high valuation environment may last, particularly if policy makers are forced to provide more support, this will place a strong emphasis on managing risk and diversifying portfolios. In our February 2021 publication, *Maximizing the Opportunity in Private Markets: The Case for Rebalancing Private Portfolios and Secondary Market Liquidity*, we demonstrated the importance of looking across private asset classes rather than relying on fund selection but, as this paper makes clear, geographical diversification is an equally important consideration.

Although the experience of the pandemic—and the global financial crisis before that—has been one of synchronized global downturns, there are good reasons to expect an uneven recovery across the global economy, including differing levels of policy support, vaccination rates and exposure to vulnerable sectors (such as tourism).

Similarly, the medium-term outlook for inflation (usually damaging for equity returns) could be materially different across regions. In the U.S., where fiscal support for the economy has been significantly larger than anywhere else in the global economy, an extended period of high inflation is a greater risk. Such a period of high inflation could be bad for asset returns, possibly prompting investors to think twice before continuing to allocate heavily to U.S. markets.

Private market investors are cognizant of these realities. Private capital allocation is beginning to become more diversified, with the traditional destinations of the U.S. technology sector seeing its share of venture capital funding falling to the lowest in a decade at 22.7%.² With the U.S. widely regarded as the most attractive country for private equity investors³ for a wide range of practical reasons, including depth of capital markets and prevalence of opportunities, the case for geographical diversification is likely to be nuanced alongside other investment goals such as liquidity, returns and ease of access.

¹ PitchBook

² PitchBook, <https://explodingtopics.com/blog/vc-trends>

³ <https://blog.iese.edu/vcpeindex/>

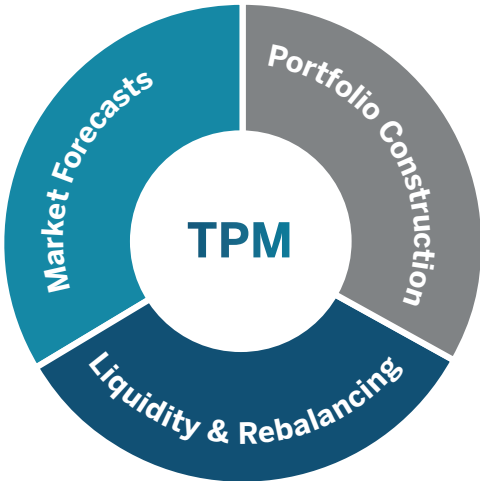
Ben's Total Portfolio Management

By providing liquidity to alternative asset owners and managing loans collateralized by such assets, Ben always had a strong focus on developing multi-asset class inventory management capabilities. To fully harvest value from private markets we believe strategic asset allocation and active portfolio management are crucial. At Ben, we call this framework "Total Portfolio Management" (TPM), with capabilities extending across private fund strategies and markets (e.g., private equity, venture capital, private credit, real estate, natural resources, infrastructure, hedge funds, etc.). Ben's portfolio management framework employs modern, quantitatively-driven portfolio construction, market forecasts and factor-based risk management techniques, enabling an unbiased portfolio management style rooted in data and rigorous research. Active management allows for dynamic response to market changes and the ability to offer high quality liquidity to otherwise illiquid alternative markets. Our portfolio management framework is best understood through its three individual yet highly interconnected areas of focus:

Market forecasts and fund valuations. Incorporating global economic forecasts, risk-premiums, and fund alpha into fair valuation of alternative assets is an essential part of a coherent framework. We believe that a strong integration between bottom-up research and quantitative modelling of fund dynamics creates a robust valuation process that accounts for market risk, liquidity and other drivers of fund performance such as sector and strategy focus.

Portfolio construction framework. Balancing risk/reward trade-offs within complex portfolios of alternatives requires a systematic and data-driven multi-asset portfolio allocation framework. When a private asset is added to a large portfolio, a diversified manager using modern risk management can extract many synergies, economies of scale and risk-adjusted benefits. A strong integration between portfolio optimization and fund valuations enables to maintain balanced portfolios of illiquid assets.

Liquidity and rebalancing. Accessible and transparent secondary liquidity is a crucial component of efficient markets, and necessary for investors to actively manage their rebalancing needs. Ben's TPM framework is designed to unlock efficiencies that can be passed to clients in the form of competitively priced offers against illiquid alternative investments.

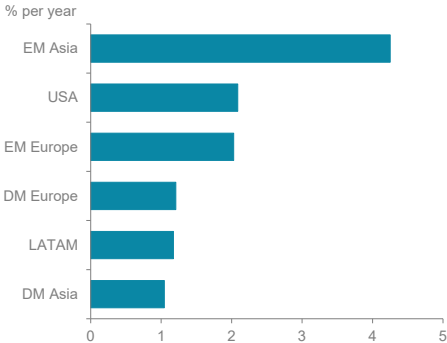


In the following sections, we examine the latest macroeconomic forecasts to draw implications for public and private markets, and portfolio allocations for investors in private assets.

The Global Macroeconomic Environment

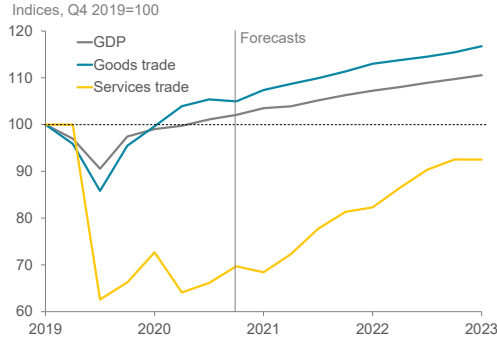
Ben considers private equity across six key geographical regions over the next five years to understand what geographical diversification might look like. Our starting point is baseline forecasts for key drivers of equity returns, such as GDP and inflation.

Figure 3 – World: GDP Growth By Region 2019-2024



Source: Oxford Economics * Regions weighted by MSCI index weights

Figure 4 – World: Activity Levels



Source: Oxford Economics

The world economy regained its pre-pandemic size in Q2 2021 and we expect it to continue to grow robustly in the near term, with world GDP rising 5.7% in 2021 and 3.8% in 2022. Importantly, though, the global economic rebound will be uneven (**Figure 3**). With progress on vaccination and the lifting of restrictions uneven, some economies will grow much faster than others. Future waves of coronavirus infections continue to pose challenges for economies with low levels of immunity and/or vaccination, where restrictions may have to remain in place for some time.

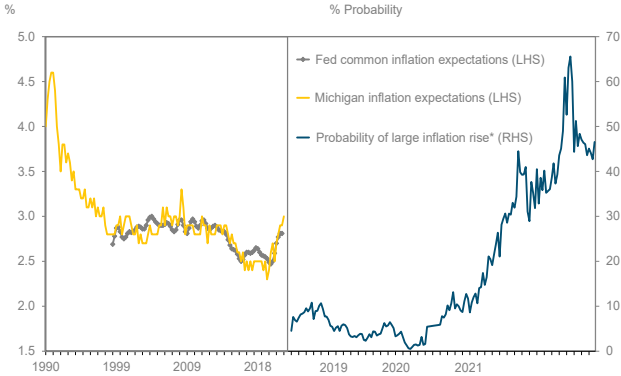
Lingering restrictions have already caused world services activity to rebound more slowly than production and trade in goods. Sectors such as travel and transport continue to operate well below capacity, and we do not expect world trade in services to return to pre-pandemic levels until 2025 (**Figure 4**). This has obvious negative consequences for economies specialized in tourism.

In terms of geographic regions, we expect emerging Asia to remain the fastest growing area from 2019–2024, expanding by just over 4% per year (**Figure 3**). Within this, Chinese growth is forecast at around 5% per year. The U.S. is expected to expand by 1.9% per year, thanks in part to large scale fiscal stimulus. Advanced Europe is expected to lag well behind, growing just 1.1% per year, reflecting more restrained macroeconomic policies and various structural drags. Growth in developed Asia is expected to be a little slower still, dominated by slow growth in Japan where the demographic drag remains powerful and capex growth slow.

Among other emerging markets, EM Europe is forecast to grow 2% per year while LATAM is the weakest performer with growth expected at just 1.2% per year. This weak performance reflects the fact that LATAM has been especially hard-hit by the coronavirus pandemic as well as various other headwinds in individual economies such as lagging reforms, fiscal austerity, macroeconomic instability and a debt overhang.

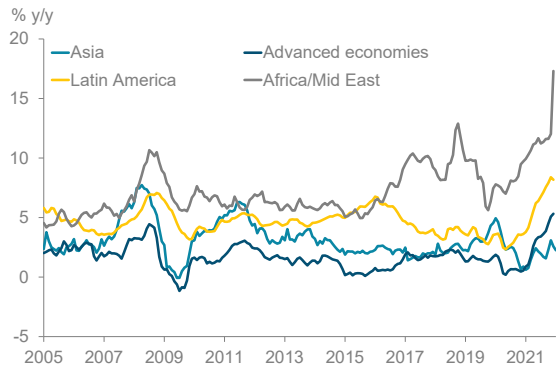
Global inflation is expected to run a bit hotter in the near-term due to the impact of rising fuel prices, economic reopening and strong macroeconomic stimulus policies in some economies—most notably the U.S. From 2021–2025 we expect inflation in the advanced economies at 2.5% per year versus 1.3% in the previous five years; for the U.S. we see inflation at 3.4% per year versus 1.8% in 2016–2020.

Figure 5 – U.S.: Inflation Expectations



Source: Oxford Economics/Haver Analytics * Options-based, from Minneapolis Fed (probability of inflation over 3% in next five years)

Figure 6 – World: Inflation By Region



Source: Oxford Economics/Haver Analytics

Inflationary pressures have already been substantial this year, but some economies are better placed to manage them than others. In the advanced economies, the accumulated anti-inflation credibility of central banks and resultant well-anchored long-term inflation expectations are key factors that explain why we do not expect the recent rise in inflation rates to persist or accelerate into the long-term.

Nevertheless, upside risks to inflation do exist in the advanced economies, as illustrated by some market-based measures of inflation expectations (**Figure 5**). This shows a notable increase in the probability of a big rise in inflation for the next five years. The danger is that high headline inflation, large budget deficits and perhaps some slippage in central bank resolve might dislodge long-term inflation expectations. We think the probability of such an outcome is around 10%, rising to 15% in the U.S.

For emerging economies, inflation risks are more elevated. Already, inflation has risen much further than in the advanced economies in some regions, notably Africa/Middle East and Latin America (**Figure 6**). Economies in these regions generally lack the long record of successful anti-inflation policy of most advanced economies, making it harder to contain price pressures.

Today's Private Markets

After slumping in March 2020, global public and private equity markets have rallied impressively. This reflects a combination of massive central bank liquidity injections, low interest rates (**Figure 7**) and economic recoveries. The strong rally in prices has pushed valuations to lofty heights, most strikingly in the U.S. Current cyclically-adjusted valuation levels have only been seen during the dot-com boom and have historically been associated with weak real returns over the following five years (**Figure 8**).

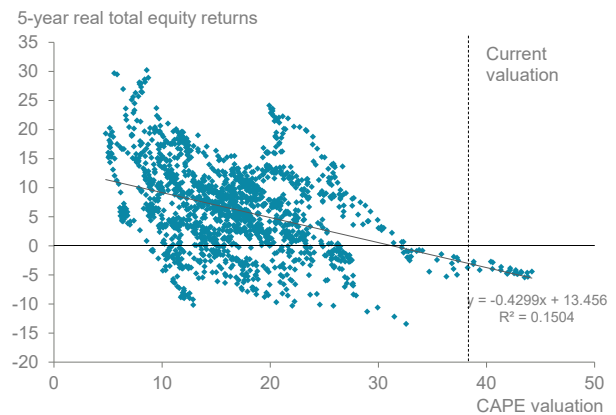
High valuations are therefore likely to be a headwind for markets in the years ahead and may induce some volatility. The rise in interest rates we forecast over the next few years adds to this risk. Set against this, there are still supportive factors for equity markets such as the high level of unallocated capital or 'dry powder'.⁴

Figure 7 – U.S. Stock Prices and Bond Yields



Source: Oxford Economics/Haver Analytics

Figure 8 – U.S.: Equity Returns and Valuations (1871–2017)



Source: Oxford Economics/Haver Analytics

Our equity price forecasts reflect a balance between high valuations, rising interest rates, robust growth, slightly elevated inflation and high levels of capital on the sidelines. After a more than 30% rise in 2021, we believe U.S. share prices could grow at a much slower pace from 2022–2025, and, as such, global ex-U.S. stocks could experience a significantly slower rise over the same period.

⁴ https://www.bain.com/globalassets/noindex/2021/bain_report_2021-global-private-equity-report.pdf

Private Market Forecasts

Incorporating broad capital market assumptions into private asset valuation and allocation is an integral part of Ben's portfolio and risk management. Leveraging macroeconomic forecasts, we develop long-term capital market assumptions (CMA) on a quarterly basis. These assumptions in turn inform proprietary alternative fund models which are tailored to private equity in each major economic region. We focus our analysis on private equity funds as an asset class, but for a fuller picture, we also show our forecasts and geographic allocation tilts for venture capital funds (**Figure 9, Figure 14**). As discussed in a later section, we also forecast private market volatilities for each region as part of our hypothetical scenario analysis of forward-looking five-year risk-adjusted returns, for both our baseline economic forecast and a downside scenario driven by higher global inflation.

Ben's **baseline forecast** envisions a continued normalization of the economy in the wake of the pandemic. As the threat posed by Coronavirus dissipates, consumer and business confidence has the potential to return and with it a release of the excess savings accumulated under lockdown. This impetus to growth may help to offset the drag from tightening monetary and fiscal policy. Inflation could remain elevated but has the potential to fall back closer to inflation targets while remaining above pre-pandemic averages, thanks to tight labor markets and rising wages.

Ben's **bear scenario** explores the impact of a marked deterioration in the inflation outlook with consumer prices surging on the back of higher commodity prices, higher inflation expectations and a disappointing recovery in labor market participation. The result is a sharp bond market sell-off, amid heightened expectations of early policy tightening and a correction to equity markets. Global growth slows to 3.1% in 2022 and the pace of recovery disappoints throughout the scenario.

Figure 9 – Private Market Forecasts (Five Years), Baseline and Bear Scenarios

Private Equity	Baseline	Bear Scenario	Venture Capital	Baseline	Bear Scenario
North America	8.9%	6.5%	North America	7.9%	3.3%
Latin America	9.7%	8.6%	Latin America	8.6%	7.0%
Europe, Developed	9.5%	8.9%	Europe, Developed	5.7%	3.1%
Europe, Emerging	10.9%	10.0%	Europe, Emerging	8.9%	7.1%
Asia, Developed	8.3%	7.9%	Asia, Developed	7.5%	5.5%
Asia, Emerging	8.5%	7.9%	Asia, Emerging	7.9%	4.9%

Sources: (1) Ben's proprietary expected return models, (2) Oxford Economics' macroeconomic forecasts, (3) Burgiss, Preqin and Bloomberg market data.

Foreign Exchange Risk

The above analysis suggests that some non-U.S. markets offer potentially large relative returns over the coming years. U.S. private equity returns are forecast to be among the lowest across regions in the next five years.

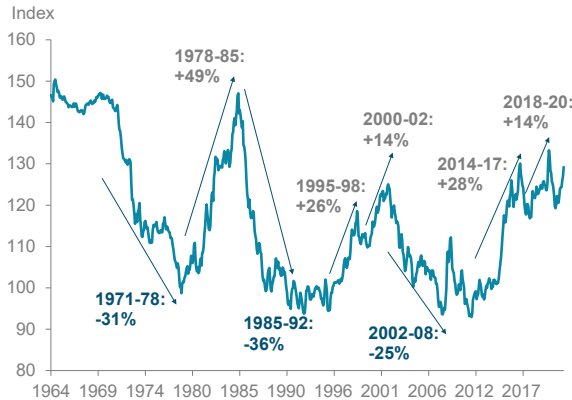
A major risk factor relating to returns in non-U.S. markets, and one which can dampen appetite for them, is exchange rate risk. The dollar tends to move in long swings that can amplify or wipe out returns from non-dollar markets and add substantially to their volatility. Three times over the last fifty years, the dollar’s real effective exchange rate has appreciated by over 25% in the space of a few years and three times it has depreciated by 25%–30%. Dollar moves can also be rapid, especially when associated with big shifts in global risk appetite (**Figure 10**).

The dollar has been relatively strong on a trade-weighted basis since 2014. In two phases, it gained over 30% from mid-2014 to early 2020. Even with some weakening since then, the real effective exchange rate is still above its long-term level, which would imply some weakening is possible in the medium-term. Our baseline forecasts reflect this to an extent, with a gentle trend of dollar depreciation seen to 2025.

However, several important factors support the strength of the dollar. The dollar’s importance as a currency for the invoicing of global trade and its dominant position in international financial market use (e.g., for bond issuance, FX reserve holdings and cross-border transactions) are undimmed. The size, liquidity and security of U.S. financial markets continue to attract inflows from around the world.

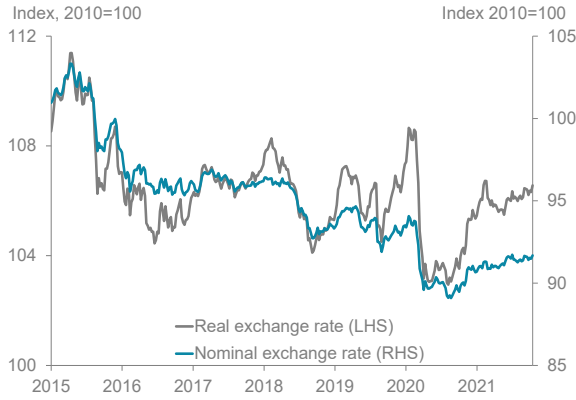
FX risks are also a major consideration for investors thinking about diversifying into emerging markets. Emerging currencies have been on a weakening trend in recent years and have also shown significant volatility (**Figure 11**), a fact which is also considered in our portfolio allocation section. It is worth noting that some markets cannot reliably be modeled or easily accessed, because of their low transparency, illiquidity, or political instability. For those reasons, we generally exclude such countries from our geographic regions (e.g., Argentina, Venezuela, Pakistan, etc.).

Figure 10 – U.S. Dollar Real Trade-Weighted Index



Source: Oxford Economics/Haver Analytics

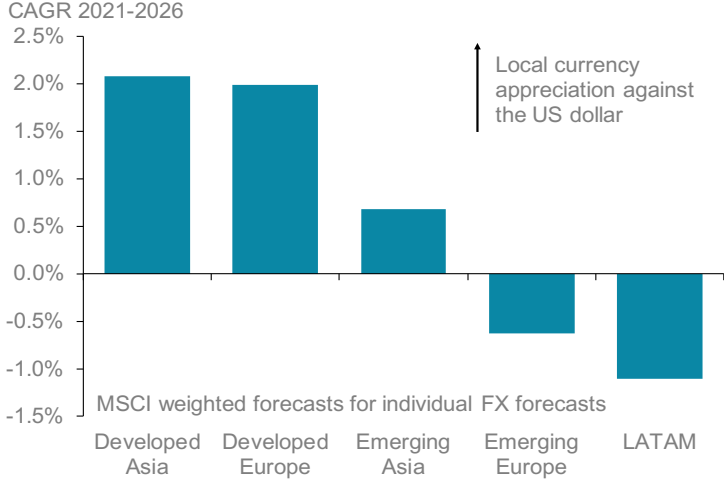
Figure 11 – Emerging Market Currency Indices



Source: Oxford Economics/Haver Analytics

Our FX forecasts over the next five years show considerable variation across regions. We assume the dollar could weaken modestly on a trade-weighted basis from its currently relatively strong level. The biggest gainers would potentially be currencies in developed Asia and developed Europe, with smaller gains in developing Asia; the losers emerging in Europe (chiefly, Russia and Turkey) and Latin America—continuing the latter region’s recent history of significant volatility (**Figure 12**).

Figure 12 – Regional FX Performance Against USD



Source: Oxford Economics/Haver Analytics

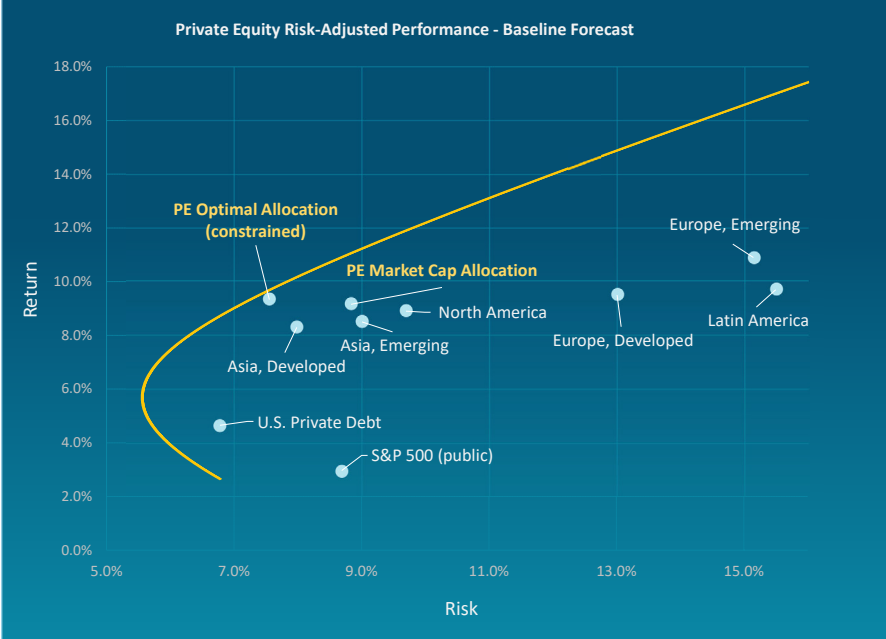
Optimizing Geographic Allocations

To demonstrate the benefits of geographic diversification in private assets, we illustrate opportunities available to investors with broad market access and secondary liquidity options to rebalance their portfolio. A key component of a healthy portfolio is the ability to actively rebalance based on available risk/reward trade-offs across market exposures, economic development and geographies. We analyze private equity investments (buyouts/growth funds as a key private market asset class) under our baseline/downside scenarios and propose how to best use their respective characteristics across regions to develop strategic portfolio allocations. This seeks to optimize risk-adjusted performance while preserving good protection against downside events.

It is generally advisable to assess the quality of an investment opportunity through risk-adjusted performance. The Sharpe Ratio is a widely used performance metric in traditional asset classes. While no similarly standard measure exists for private markets, we implicitly use risk-adjusted internal rate of return (IRR) as a core performance metric because we believe it is well-suited to private markets. A simple yet accurate way to compare risk/reward profiles of different portfolios is to plot them against a theoretical efficient frontier.

Figure 13 shows how private equity investments compare to each other across regions and economic development, and plot these against a theoretically derived “efficient frontier” using our baseline models for both risk and return.

Figure 13 – Private Equity Performance Forecasts By Region and Economic Development



Sources: (1) Ben’s proprietary portfolio construction, risk and expected return models, (2) MSCI Barra analytics, (3) Oxford Economics’ macroeconomic forecasts, (4) Burgiss, Preqin and Bloomberg market data. Note that S&P 500 Index volatility (risk) is smoothed for fair comparison with GP-based private fund longer-term valuations.

Portfolio Allocation – Baseline Forecasts (Private Equity)

As one can see in Figure 13, Ben currently forecasts a higher level of returns for emerging markets relative to their developed markets in each region. However, this is by no means a reliable standalone portfolio allocation metric since these higher returns often come at the expense of much higher levels of uncertainty (risk) which is typical across most emerging markets. The risk/reward efficiency level of a market segment can be assessed visually by its proximity to the overall geographic efficient frontier. To add to the complexity of finding an optimal allocation, the risk-adjusted performance per market segment does not quantify the potential diversification benefits of a global allocation on their own. This can be observed in Figure 13 by looking at the relatively low risk levels of the market cap portfolio and the optimal allocation portfolio.

Despite the historical attractiveness of private equity returns relative to public indexes, each individual geographic segment is relatively risk-inefficient from a portfolio allocation perspective. A more rewarding approach for investors with deep market access is to design a global allocation in proportions that respect an investor’s specific goals and risk appetite. Perhaps the simplest example of such a portfolio solution is to allocate following the aggregate private equity market capitalization, an important reference portfolio for large institutional asset owners.

A less constraining—and potentially more rewarding—approach for most investors is to target a geographic allocation that seeks to maximize long-term risk-adjusted performance, which we refer to as optimal allocation in **Figure 13**. This portfolio is the result of a constrained optimization routine in which we allocate to regions and economic development segments in proportions that seek to maximize the aggregate portfolio risk-adjusted returns while keeping each allocation within a range from an equally weighted reference portfolio. Allocating around an equally weighted mix avoids excessive concentration risks, from both predictable sources and unknown ones. Because of the imposed constraints, the resulting optimal geographic allocation is close to but not exactly on the efficient frontier; yet from a risk/reward perspective it is forecasted to remain a more efficient investment portfolio than any other alternatives.

Figure 14 shows the over/under-weight of the optimal allocation relative to a simple equally weighted allocation across all regions. Latin America’s underweight is primarily based on its relatively poor risk profile, some of which is due to the elevated FX risk in various LATAM countries, as previously discussed in the ‘Foreign Exchange Risk’ section. Also, while we expect good returns from overall European markets as the economy bounces back from the pandemic, we expect greater downside risks across both its EM and DM economies due to the lack of policy room to accommodate shocks, justifying a broad, bearish European allocation. Another notable observation is our general bullish stance toward Asian markets, both developed (dominated by Japan) and emerging (dominated by China). Where China’s allocation is driven by its high expected GDP growth and expanding influence in the world’s economy, Japan’s allocation ranks well because of its low expected market risk, stable economy and its diversification benefits at the total portfolio level. Modelling subtle interdependencies across different markets and capturing their correlation structures is indeed an integral part of portfolio construction.

Figure 14 – Optimal Allocations (Bullish, Bearish, Neutral)

Private Equity	Baseline	Bear Scenario	Venture Capital	Baseline	Bear Scenario
North America	+1	neutral	North America	-1	-1
Latin America	-1	-1	Latin America	-1	-1
Europe, Developed	-1	neutral	Europe, Developed	-1	-1
Europe, Emerging	-1	-1	Europe, Emerging	+1	+1
Asia, Developed	+1	+1	Asia, Developed	+1	+1
Asia, Emerging	+1	+1	Asia, Emerging	+1	+1

Source: Using Ben’s proprietary portfolio construction and risk environment and MSCI Barra analytics, Prequin and Burgiss market data.

Portfolio Allocation – Bear Scenario (Private Equity)

Ben's baseline forecast is by design our highest probability scenario, but capital markets are inherently volatile and prone to unpredictable dynamics. That makes the development of an optimal allocation under a more conservative scenario a crucial exercise. Given the recent uptick in global price pressures potentially leading to less accommodative central banks across the world's main economies, our downside scenario reflects a significant increase in inflation relative to our baseline forecast. This results in a sharp correction in bond markets and a somewhat milder one across equity markets, including private equity (**Figure 9**).

As can be seen in **Figure 14** above, the suggested portfolio tilts under inflation-driven market stress are affecting our North American and European allocations toward a neutral stance. This reflects the relative magnitude of policy support during the pandemic as U.S. monetary and fiscal support was significantly larger than in Europe, helping to support asset prices globally. Consequently, the removal of such support, alongside the higher inflation risk in the U.S., implies a worse outcome for U.S. assets. In aggregate due to its defensive positioning, the optimal allocation under our inflation scenario suggests slightly lower returns while seeking to maintain a healthy risk profile. As such, it is potentially better prepared to cope with both the expected and unforeseeable fluctuations of a potentially severe global recession.

The Need for Liquidity in Private Markets

While the business case for investing in alternative assets is compelling, dynamic portfolio construction and rigorous risk management of private fund allocations is inaccessible to all but a few large institutional investment groups. Smaller-sized institutions—and in particular mid-to-high net worth investors—tend to be constrained by limited resources when it comes to picking top managers and allocating towards a balanced portfolio of alternative assets. Complicating the process of investing in alternatives is the limited liquidity available in the secondary market, especially for smaller deals, which reduces the ability of these investors to effectively implement their target portfolio.

At the same time, the performance of different alternative strategies has varied in different market cycles (e.g., expansion of private equity outside of the U.S., venture capital after the dot-com bubble, etc.), which suggests that recent economic volatility and private markets evolution may warrant a review and potential rebalancing of private fund allocations. In addition to rebalancing based on the market impacts of financial cycles, the need for liquidity in private markets also arises based on investor's personal circumstances, geographic focus and fund-specific events.

According to Preqin, there were over \$6.5 trillion invested in private funds in 2019, yet less than ~1.4% of those assets were exchanged in secondary markets.⁵ While secondary liquidity transactions in private assets have nearly doubled in the last five years, the structure of the market remains inadequate to support broad participation, especially from small-to-medium sized investors. This is in stark contrast to liquidity demand in public markets, where in 2018 \$68.2 trillion worth of equities transacted vs. \$68.7 trillion of total market capitalization—representing close to 99% turnover.⁶

⁵ Preqin, Setter Capital, Ben analysis

⁶ World Bank Data

The uneven market environment can compound the need for liquidity in private assets especially during severe market corrections. During periods of market uncertainty, across all investment strategies, geographies and sectors, investors are more likely to experience financial distress. For example, during the 2008–2009 financial crisis period, when private investors faced capital calls from their GP/fund managers, nearly 15% were unable to meet them.⁷ We believe that more active and transparent secondary markets for private assets will lead to improved opportunities, better outcomes and more customizable risk-profiles for a wide array of private market participants — and in particular for smaller investors.

Conclusion

In this paper, we partnered with Oxford Economics to develop and transmit a range of economic forecasts through Ben's portfolio construction framework. We started with macroeconomic projections which we then transformed into global private equity forecasts across broad geographic and economic development segments. This enabled us to get a deeper perspective on the risk/reward trade-offs and efficient portfolio profiles available to investors in the coming years.

The potential benefits of geographical diversification in private markets are clear from this analysis. A diversified portfolio offers the possibility of superior risk-adjusted returns as well as providing investors with the opportunity to mitigate key risks such as inflation. Nevertheless, the case for geographical diversification is a nuanced one. North American assets are still likely to be a key part of any asset allocation given relatively strong U.S. growth as well as the liquidity and scale advantages of U.S. markets. Exchange rate risk can also be an issue for investors interested in geographical diversification given the dollar's tendency to move in large swings, sometimes rapidly. But for those investors with good market access and strong risk management capabilities, the value-add of foreign allocations far exceed their additional risks and management complexity.

⁷ NYPPEX, Private Client LP Delinquency and Default Rates

About the Authors



Samuel Hikspoors, Ph.D.
CRO & Managing Director, Beneficient

Sam is responsible for Beneficient's Portfolio Construction, Risk and Analytics department as well as the firm's Total Portfolio Management framework. Sam joined Ben from Sage Advisory where he managed multi-asset solutions and investment strategies, before which he served as Co-Head of Invesco's portfolio overlay solutions group. Sam holds a Ph.D. in quantitative finance from University of Toronto.



Innes McFee
Chief Global Economist, Oxford Economics

Innes is responsible for Oxford Economics' global macro forecasts and research. His research focuses on the intersection between the economy and financial markets. Innes joined OE from Lloyds Banking Group and prior to that he was an Economic Advisor at HM Treasury.



Adam Slater
Lead Economist, Oxford Economics

Adam is responsible for contributing to and helping to communicate Oxford Economics' global view, including writing for and helping edit regular publications. Adam spent more than ten years working as an economist and strategist in the City of London for Nomura, Rabobank, and Calyon. Adam gained a first-class degree in Economics from the University of Bath and holds an MPhil from Cambridge University.



Alessandro Theiss
Associate Director, Oxford Economics

Alessandro works within the Stress Testing, Scenarios and Financial Modelling Team. He oversees financial modelling projects and Oxford Economics' IFRS 9 service that supports clients across the globe with calculating expected losses. He also specializes in building bespoke economic models for clients.

The authors would like to thank members of the Beneficient Board of Directors' Credit Committee, Dennis Lockhart, David De Weese and Richard Fisher, for their helpful comments on the paper.

Disclaimers

These materials are provided for illustration and discussion purposes and are not intended to be and do not constitute financial, tax, legal or investment advice or recommendations, or an offer to sell or exchange, or the solicitation of an offer to buy or exchange, any securities. Any offer, sale or exchange involving securities of The Beneficient Company Group, L.P., and/or any of its affiliates, subsidiaries and successors (collectively, "Ben") may be made only to qualified, eligible customers or investors and solely pursuant to applicable definitive agreements and documents, such as a confidential private placement memorandum, subscription agreement, purchase agreement or similar documents (collectively, "Definitive Documents"). These materials are not intended for, and do not take into account the particular business, investment or other objectives or financial circumstances of, any specific customer or investor or type of customer or investor. Investments involve risks and are not suitable for all persons.

Neither Ben nor its personnel make any express or implied representation or warranty as to the accuracy, timeliness or completeness of the information contained in these materials or shall have any liability resulting from your use of these materials. Ben is under no obligation to, and may not, update, correct, or supplement these materials. The information herein is as of the date indicated, is summary in nature, is not complete, is subject to change (including new information that may be included), is not intended to provide the basis for evaluating any transaction with Ben, and, as applicable, is qualified in its entirety by the relevant Definitive Documents, which in such case supersede these materials and contain important information, including about associated risk factors and conflicts of interests. As applicable, as disclosed in the relevant Definitive Documents, Ben entities will receive various fees in connection with the product and services provided, such as, but not limited to, brokerage commissions or trustee, administrative or custodial fees. No representation is made that the investment objectives of any investment or program participation will or are likely to be achieved or successful or that any investment or program participation will make any profit or will not sustain losses, including loss of principal. Past performance is not indicative of future results. Prospective customers or investors are encouraged to perform their own due diligence and to consult with their tax, financial and other professional advisors before making any decision to complete a transaction with Ben.

Certain information has been provided by and/or is based on third party sources. Although believed to be reliable, the accuracy, completeness and timeliness of such information, including any underlying assumptions, has not been independently verified by Ben. Any opinions, statements or the like (collectively, "Statements") regarding future events or which are forward-looking, including any targets or targeted goals, are for illustrative purposes, are based upon available information including third party information, and constitute or reflect only current subjective views, beliefs, outlooks, goals, assumptions, estimates or intentions, including business strategies, anticipated future plans and business financial projections of Ben, should not be relied on, are subject to change without notice due to a variety of factors, including decisions made by Ben management, fluctuating operating results, and business, economic, competitive and market conditions and factors, and involve inherent risks, changes and uncertainties, both general and specific, many of which cannot be predicted or quantified and are beyond Ben's control. Any performance targets or objectives should not be relied upon as an indication of actual or promised future performance, which will fluctuate, including over short periods, and are only intended as a guideline to help evaluate an investment or program participation's strategies and features along with any benchmarks or indices shown. Statements may be based upon underlying assumptions and analyses made by Ben or third parties. Future evidence and actual results could differ materially from those set forth in, contemplated by, or underlying these Statements and third-party information, and even if realized may not result in the expected results to, or have the expected effects on, Ben, any investment, or program participation. In light of these risks and uncertainties, there can be no assurance and no representation is given that these Statements are now, or will prove to be, accurate, realized or complete in any way. Ben does not undertake any obligation to revise or update these Statements, including to reflect events or circumstances after such date or to reflect the occurrence of unanticipated events.

Any benchmarks and financial indices are shown for illustrative purposes only and are provided for the purpose of making general market data available as a point of reference only. Such benchmarks and financial indices may not be available for direct investment, may be unmanaged, assume reinvestment of income, do not reflect the impact of any commissions, fees and costs, and have limitations when used for comparison or other purposes because they, among other reasons, may have different volatility, credit, or other material characteristics (such as limitations on the number and types of securities or instruments). No representation is made that any benchmark or index should be relied on as a measure for comparison.

Securities brokerage services are offered through Ben Securities Company L.P. ("Ben Securities"), which may provide certain materials to recipients. Ben Securities is affiliated with Ben and is a broker-dealer registered with the Securities and Exchange Commission and various states and a Member FINRA/SIPC. You can obtain more information about Ben Securities (see <https://brokercheck.finra.org/firm/summary/119441>) and its registered persons by visiting <https://brokercheck.finra.org/>. The registrations and memberships above in no way imply that any governmental or regulatory authority have endorsed the entities, products or services discussed herein.



The Beneficient Company Group, L.P.

325 N Saint Paul St. | Suite 4850 | Dallas, Texas 75201

Toll free: 888-877-8786 | **Main:** 214-445-4700 | **Fax:** 214-445-4701

www.trustben.com | askben@beneficient.com