White Paper
Asset Allocation

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Global Market Portfolio 2024
Rise of the Middle East

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A Brief History

The idea of a global market portfolio (GMP) — a portfolio of all risky assets proportionally weighted by their market capitalization — was originally proposed by James Tobin in 1958 and subsequently refined by William Sharpe in 1964.

Given its intrinsic diversification, the market portfolio is subject only to systematic multi-asset class risks — that is, risks that affect the market as a whole — and not to unsystematic risks inherent to a particular asset class. This idea has since shaped the asset management industry, playing a crucial role in the formation of concepts of asset allocation and the Capital Asset Pricing Model.

The market portfolio provides exposure to a broad set of global asset classes and market factors, such as equity risk premia, interest rate term premia, credit risk premia and, to a lesser extent, liquidity risk premia through the inclusion of less liquid assets.

In 2014, an important research article presented the methodology for a Global Multi-Asset Market Portfolio, an aggregate portfolio of the market as a whole, containing all types of investable assets available globally.[2] What was at the beginning a cornerstone of the Modern Portfolio Theory over time became a tangible investment reality: Over 90% of the aggregate market portfolio's exposure and composition can now be accessed by all categories of investors using easily tradable financial instruments.

Contents

Constructing the Global Market Portfolio

We define the Global Market Portfolio as consisting of all investable capital assets corresponding to its market value divided by the sum of the market values of all assets.

As the sum of all holdings that result from the collective decisions of investors and issuers, as well as suppliers and demanders of capital, the Global Market Portfolio can be seen as a de facto proxy for the investable opportunity set available to all investors globally, where weights are a function of their respective market capitalization at any given point in time — and thus a reasonable benchmark for the average investor.

It is important to understand that there can be a huge variation of portfolios centered on the Global Market Portfolio. Different investors have different investment preferences and objectives, which lead to different portfolios.

For example, a corporate defined benefit (DB) plan will have a sizable weight in long-duration bonds to match its long-term liabilities, while a bank's investment portfolio will consist largely of short-term bonds and cash equivalents held against its short-term liabilities. Endowments and foundations with longer investment horizons can take advantage of the illiquidity premium in their long-term allocations to illiquid investments, such as private equity (PE) or private credit.

In our framework, we use broad indexes to obtain invested market capitalizations for different asset classes. However, we exclude cash and commodities, except gold, from this portfolio as our focus is on capital and store-of-value assets.

We are interested in the gold that central banks, sovereign wealth funds, institutions and individual investors treat as a store of value. The World Gold Council estimated that as of end-2023, approximately 212,582 tons of gold had been mined over the course of human history. Excluding most gold that is used to make jewelry, along with the smaller amounts found in devices from mobile phones to medical equipment, we find that around 40% of available gold can be considered for its total capital asset value — that is, the sum of public and private investment holdings of gold.

This framework allows us to monitor changes in the Global Market Portfolio over time. We present below our estimates of the Global Market Portfolio's capital market values and weighting as of June 2024, as well as its expected risk–return profile over different forward-looking horizons. Then we evaluate the risk contribution of each asset class to the Global Market Portfolio as a percentage of total variance. We compute the values of the various assets in the US dollar.

Truly Global

As of Q3 2024, recession odds have decreased in most countries, with declining inflation and the global policy rate easing cycle in full swing. However, challenges remain, such as softer global growth, the retreat from peak globalization, the prolonged period of high rates and geopolitical uncertainty. These trends — along with energy and climate focus and tech disruption — have substantially shifted the global economy and investment landscape.

The Global Market Portfolio encompasses the universe of all investable assets, and their market value at a given point in time. It represents the positioning of investors in aggregate and reveals insights into their attitudes and preferences. The Global Market Portfolio, therefore, could be considered as a natural benchmark for investors' strategic asset allocations, much more diversified and theoretically sound than the iconic 60/40 equity–bond benchmark. Over the years, we have refined our framework, become more granular as we covered more markets and sub-asset classes and expanded the scope of the Global Market Portfolio to these markets and asset classes that have become either larger in size or more relevant for investors.

With this in mind, it was natural for us to expand within our 2024 vintage publication the coverage of Middle East capital markets, given the increasing relevance of that region within the global investment world.

As market conditions continued to remain favorable for most of H1 2024, the Global Market Portfolio had seen a rise in H1 2024, reaching an all-time high of USD 175 trillion as of the end of June 2024.

To achieve their financial goals, investors need to get the most out of their portfolios. Questions related to asset classes that should be considered for the long term, their respective risks and merits, and how to combine them efficiently continue to be top of mind. The recent historical trends may provide insights to help make educated decisions regarding these investment opportunities, with a truly global mindset.

Given our proprietary capital market assumptions, the expected return for the Global Market Portfolio over the long run is 5.3%, which is much higher than the forecasts we have published over the last three years and our first Global Market Portfolio estimates in 2014.[3] This largely reflects the higher-interest-rate environment since 2021, the higher expected return for fixed income markets and the still positive expected returns on equity markets.

Composition of the Global Market Portfolio

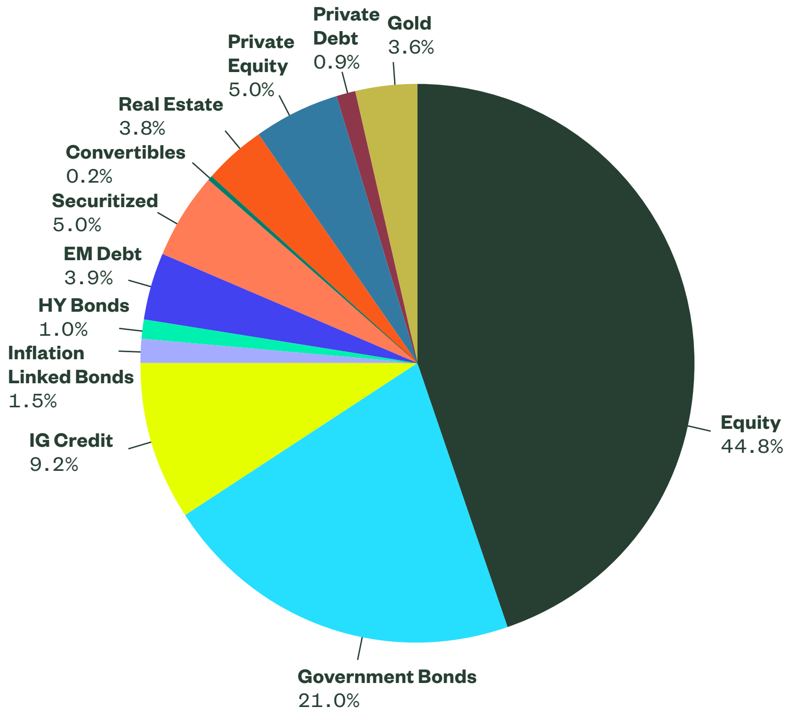
The Global Market Portfolio's total worth (Figure 1) can be estimated at USD 175.0 trillion (as of June 2024), an all-time high.

Equities represent the largest asset class, with a market value of USD 78.0 trillion, which equals 44.8% of the total market capitalization of all asset classes.

Core bonds of good quality represent USD 64.0 trillion, which equals 30.2% of the total. It embraces government bonds (DM) and investment grade (IG) credit, with a market value and weight of USD 36.8 trillion and 21.0%, and USD 16.1 trillion and 9.2%, respectively. Securitized assets account for USD 8.8 trillion, equivalent to 5.0% of the total.

The other asset classes represent a much smaller weighting as their market capitalizations add up to 19.8% of the GMP. Alternative asset classes (real estate, private equity, private credit, gold) represent 13.4% of the Global Market Portfolio.

Figure 1
Global Market Portfolio Weights



Note: Valued at USD 175.0 trillion as of the end of June 2024. Weights are as of the date indicated, are subject to change, and should not be relied upon as current thereafter.
Source: Thomson Reuters, Bloomberg, PreQin, World Gold Council, State Street Global Advisors, as of June 2024.

Equity

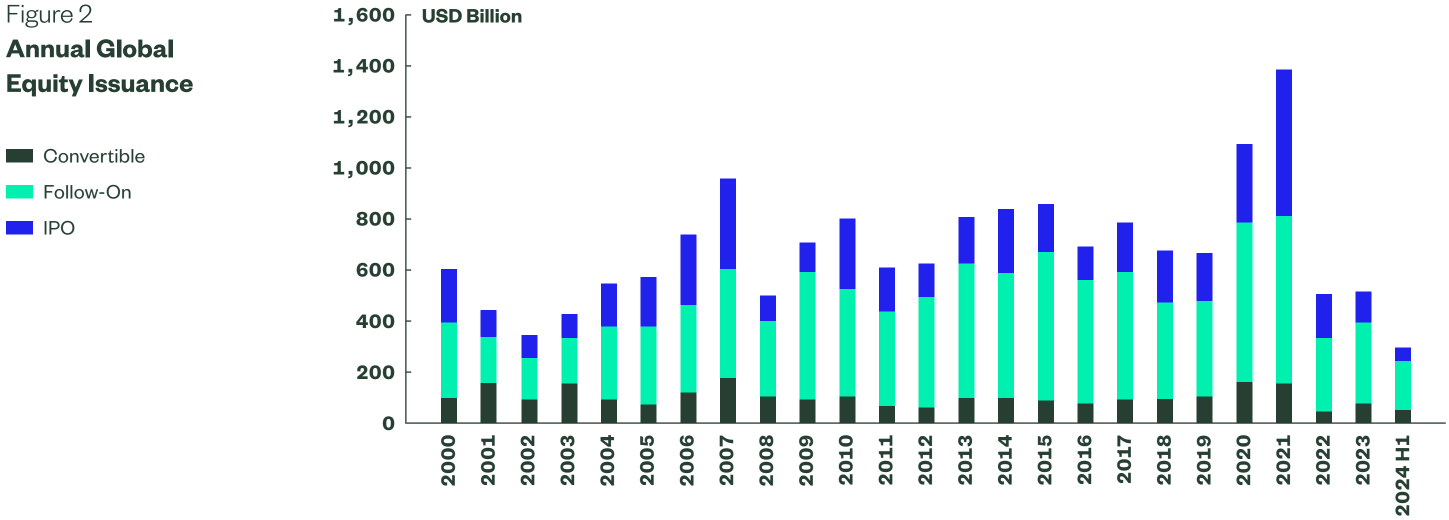
Since June 2023, global equities have seen an impressive rebound with a marked preference for technology companies related to artificial intelligence. As of June-end 2024, equities reached all-time high of USD 78.4 trillion, almost 10% higher than in December 2023. Their current market value is also four times their level during the Global Financial Crisis (GFC) in 2008. Equity weighting has also edged up to 44.8%.

Equity capital market activity and overall issuance have rebounded in the first half but have still been affected by adverse market conditions. The IPO market remained depressed at USD 51 billion, as global initial public offering activity dropped by 19.4% in H1 2024 vs. H1 2023, and 84% vs. H1 2021. US-domiciled IPOs in H1 rose by 64% from a year ago to almost USD 15 billion, accounting for nearly 30% of global IPOs. Meanwhile, H1 2024 China-domiciled IPOs fell sharply by 82% from the 2023 level to USD 6 billion.

H2 2024 might be more positive as central banks started lowering rates, but the global issuance is expected to remain depressed for most of H2 2024. Global follow-on or secondary offering activity totaled USD 315 billion in 2023, 10% higher than the 2022 level, but still a significant decline vs. prior years. Secondary offering totaled USD 192 billion in H1 2024, 13% higher than a year ago, and the strongest first half since 2021.

Global convertible offerings totaled USD 78 billion in 2023, a 69% increase vs. 2022. H1 2024 saw USD 53 billion of offerings — a significant improvement vs. H1 2023, with technology, financials and industrials sectors accounting for more than half of overall issuance.

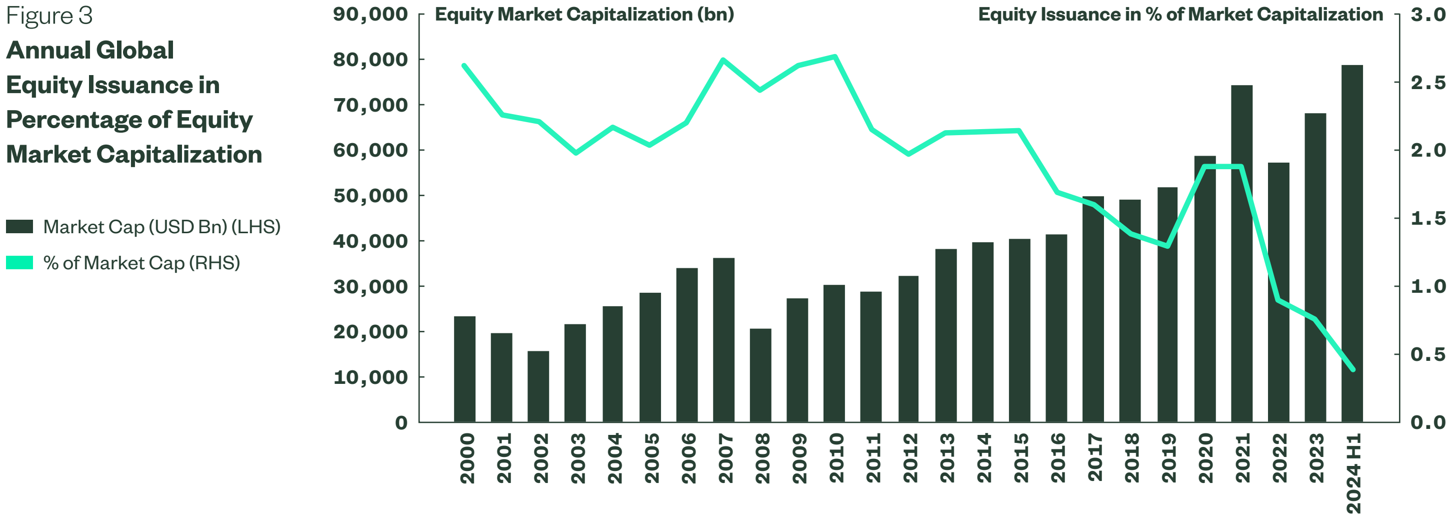
Figure 2
Annual Global Equity Issuance



Source: Thomson Reuters, Bloomberg, PreQin, World Gold Council, State Street Global Advisors, as of 30 June 2024. Data refers to live transactions.

As a percentage of the total market capitalization of the equity market, new issuance in 2023 represented 0.8%, which is by far the lowest level seen since 2000, and the trend observed insofar for 2024 is comparable to last year.

Figure 3
Annual Global Equity Issuance in Percentage of Equity Market Capitalization



Source: Thomson Reuters, Bloomberg, PreQin, World Gold Council, State Street Global Advisors, as of 30 June 2024. Data refers to live transactions.

Bonds

The first six months of 2024 were better for global bond markets, helped by a more perceivable disinflationary environment and more accommodative central banks. The market value of public debt securities appreciated by 8.5% compared to December 2023 and has reached USD 73.2 trillion as of June 2024. Bond issuance for the first half of 2024 had totaled USD 5.4 trillion, up 11% from a year ago.

Agency, supranational and sovereign issuances totaled USD 1.7 trillion, have been broadly in line with the levels seen in H1 2023 but were slightly lower than some periods in the previous three years. Federal Credit Agency debt increased 30% from a year ago to USD110 billion but was less than half of the level in H1 2020.

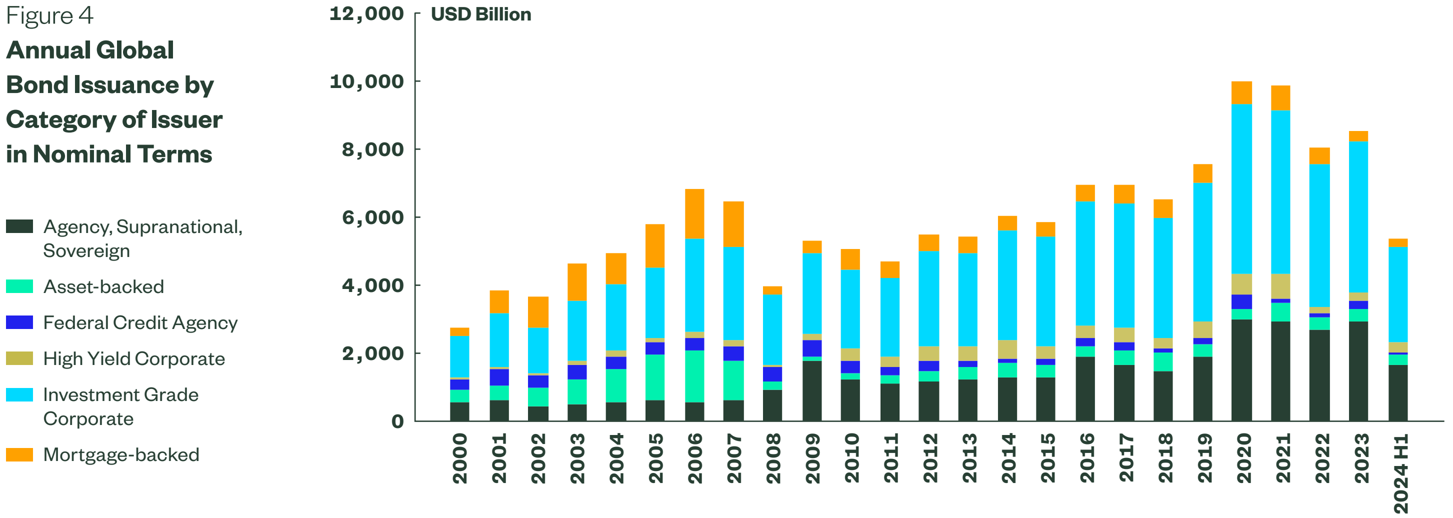
Issuance in investment grade credit totaled USD 2.8 trillion during H1 2024, up 14.2% compared to a year ago, marking the strongest opening period for global investment-grade corporate debt since 2020. We observed double-digit growth in sectors such as healthcare, retail and consumer staples. This is also the strongest first half since H1 2020, driven by increases in all issue types.

Global high yield debt activity also rose by 73% from H1 2023 to three-year high of USD 266 billion, while mortgage-backed securities totaled USD 278 billion, a 70.5% increase from H1 2023.

Regionally, US corporate issuers accounted for more than 20% of global market activity in 2023. Meanwhile, emerging market (EM) debt totaled USD 268 billion in 2023, a 12% increase from 2022, with more than half of the activity coming from corporates in India, Brazil, Thailand and Malaysia.[4]

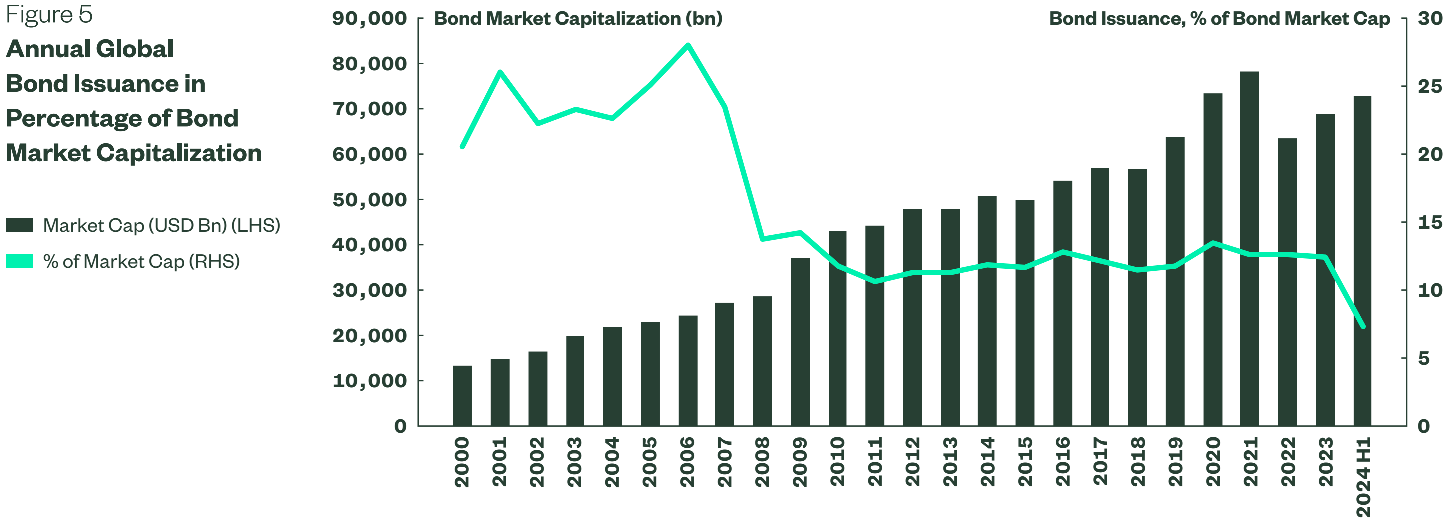
As of Q2 2024, EM countries were responsible for almost USD 170 billion debt issuance, up 13% from H1 2023. Corporate debt issuers from India, Saudi Arabia, Brazil and the United Arab Emirates accounted for 51% of emerging markets activity during the first half.[5] Continued property challenges in China had likely dragged credit conditions there and slowed its economic recovery.

Figure 4
Annual Global Bond Issuance by Category of Issuer in Nominal Terms



Source: Thomson Reuters, Bloomberg, PreQin, World Gold Council, State Street Global Advisors, as of June 2024. Data refers to live transactions. Data for 2024 only covers the first six months.

Figure 5
Annual Global Bond Issuance in Percentage of Bond Market Capitalization



Source: Thomson Reuters, Bloomberg, PreQin, World Gold Council, State Street Global Advisors, as of June 2024. Data refers to live transactions.

Alternatives

Private debt continued its robust performance in 2023. As of end-2023, global private debt totaled USD 1.6 trillion, up 2.6% from 2022. Fundraising recorded USD 215.5 billion, 12% lower than 2022 and 26% lower than 2021, but was in line with the 2020 level. Direct lending continues to be the preferred strategy within private debt and accounted for 31.8% of capital raised, followed by mezzanine (17.2%), credit special situations (14.1%) and distressed (10.2%).[6]

Global private equity markets are still under pressure from market conditions. Their estimated total as of end-2023 was around USD 8.7 trillion, a 13.9 % increase from 2022. This is the lowest pace of growth since 2017. Private equity is currently estimated to represent 4.9% of the GMP, compared to levels closer to 4% over the prior years.

As of the end of June 2024, we estimate gold to account for 3.6% of the GMP, compared to the 3.1% level of 2023. Its total value went up by 12.8% to USD 6.3 trillion, which is its all-time high value. Gold's current weighting now is closer to the 3.7% level seen in 2011–12, when central banks were very active in quantitative easing and asset purchase programs in the aftermath of the global financial crisis and the beginning of the eurozone crisis.

Real estate market is on the mend, and is up to USD 6.7 trillion as of June 2024, from USD 6.5 trillion a year ago. Real estate's market value is now significantly lower than its pre-pandemic December 2019 level. Real estate was estimated to account for 3.8% of the GMP as of end-June 2024, which is the lowest proportion since 2009.

Rise of the Middle East

The size of the Middle East (ME) bond and equity markets has significantly increased over the last two decades, thanks to economic and financial development of several regional financial centers, initial public offerings, lower regulations and changes in foreign ownership restrictions.

As of June 2024, the total investable market capitalization of both equity and bond markets from Middle East countries was USD 1.1 trillion, equivalent to 0.6% of the total Global Market Portfolio (Figure 6). Five years ago, this number was only USD 552 billion.

Within equity, Middle East currently accounts for 0.7% of the global equity market cap, compared to 0.2% as of Q4 2019, four times more than in 2019, currently standing at USD 557 billion. Among the Middle East countries, Saudi Arabia weighting of the total Middle East equity is the biggest at 59.6% as of 28 June 2024, followed by the United Arab Emirates (16.7 %), Kuwait (11.9%) and Qatar (11.8%). The IPO of Saudi Aramco in December 2019 was a milestone in that impressive rise.

Similarly, GCC bond market is growing markedly over the last five years. These countries' debt capital market growth was 5.8% YoY on average over the past five years, reaching USD 547 billion in Q2 2024. More than one-fifth of Middle East countries' bond market capitalization was sukuk at end-Q2 2024, with the rest in bonds. Government bonds represent USD 317.6 billion, which equals 58.1% of the total Middle East bonds. That is followed by corporate IG and inflation-linked bonds with market value and a weight of USD 128 bn and 23.4%, and USD 60.6 bn and 11.1%, respectively. Corporate HY was only USD 41 bn, accounting for 7.5%. Agency, Supranational, Sovereign and Investment Grade accounts for most of bond issuance in GCC> Among the countries, Saudi Arabia has the highest share of Middle East bonds (31.4%), followed by United Arab Emirates (26.6%). In terms of bond issuance, Saudi Arabia has the highest share of GCC bond issuance (54.2% in H1 2024), followed by UAE (29.5%) and Qatar (10.5%).

Figure 6 **Middle East Global Market Portfolio (Q4 2019 vs. Q2 2024)**

As of Q2 2024 (USD Billions)

Middle East Countries	Corporate IG	Corporate HY	Government Bonds (Local Currency)	Inflation-linked Bonds	Total Bonds	Sukuk	Equity	Total
Bahrain	—	1.0	24.0	—	25.0	—	—	25.0
Iraq	—	—	1.3	—	1.3	—	—	1.3
Israel	6.3	17.7	—	60.6	84.6	—	—	84.6
Jordan	0.5	—	6.4	—	6.9	—	—	6.9
Kuwait	9.5	1.2	4.4	—	15.1	—	66.5	81.6
Lebanon	—	—	1.0	—	1.0	—	—	1.0
Oman	—	1.7	25.9	—	27.6	—	—	27.6
Qatar	18.3	0.8	49.4	—	68.5	—	65.6	134.2
Saudi Arabia	47.9	5.3	118.4	—	171.5	—	331.6	503.1
UAE	45.4	13.3	86.8	—	145.5	—	92.9	238.4
Total ME	**127.9**	**41.0**	**317.6**	**60.6**	**547.1**	**122**	**556.7**	**1,103.8**

As of Q4 2019 (USD Billions)

Middle East Countries	Corporate IG	Corporate HY	Government Bonds (Local Currency)	Inflation-linked Bonds	Total Bonds	Sukuk	Equity	Total
Bahrain	—	0.9	18.9	—	19.8	—	—	19.8
Iraq	—	0.7	3.8	—	4.5	—	—	4.5
Israel	5.0	20.5	—	67.5	93.0	—	—	93.0
Jordan	—	—	3.3	—	3.3	—	—	3.3
Kuwait	8.2	0.8	4.9	—	13.9	—	—	13.9
Lebanon	—	—	7.4	—	7.4	—	—	7.4
Oman	—	3.8	24.9	—	28.7	—	—	28.7
Qatar	15.5	0.5	42.0	—	58.0	—	31.8	89.8
Saudi Arabia	13.6	3.0	74.9	—	91.5	—	88.1	179.6
UAE	39.5	8.8	44.1	—	92.4	—	20.5	112.9
Total ME	**81.8**	**39.0**	**224.0**	**67.5**	**412.3**	**77**	**140.4**	**552.7**

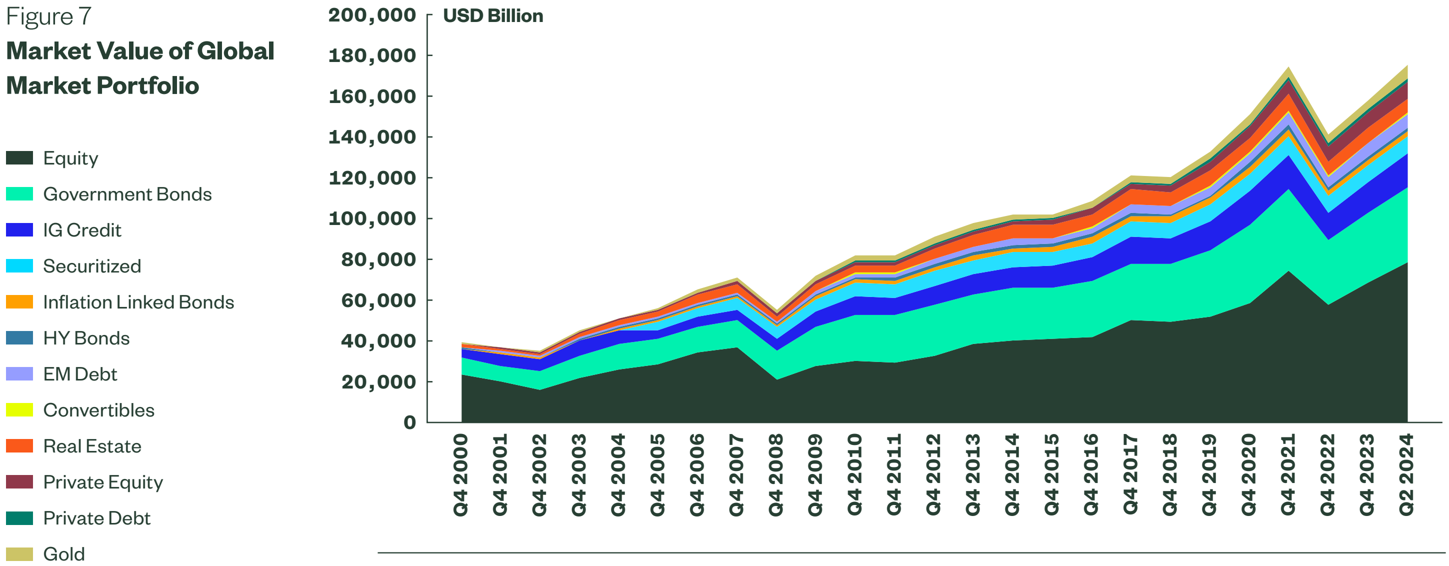
Source: Thompson Reuters, Bloomberg, PreQin, World Gold Council, State Street Global Advisors, as of 30 June 2024.

The Middle East, especially the GCC region, has also witnessed a significant expansion of private equity investments. In the past 10 years, annual deal value has surpassed USD 10 billion on five occasions with deal counts ranging between 101 to 159. However, the tough market has slowed down the deal making activity in the past three years. In H1 2024, PE deal activity decelerated, with USD 5.9 billion invested across 49 deals, compared to USD 15.4 billion for full year in 2023.[7]

Evolution of the Global Market Portfolio

Figure 7 highlights the evolution of the total value of the Global Market Portfolio over time, which shows an increase of 213% from 2005, when it was valued at USD 55.8 trillion, to USD 175.0 trillion in June 2024.

Figure 7
Market Value of Global Market Portfolio



Source: Thomson Reuters, Bloomberg, PreQin, World Gold Council, State Street Global Advisors, as of 30 June 2024.

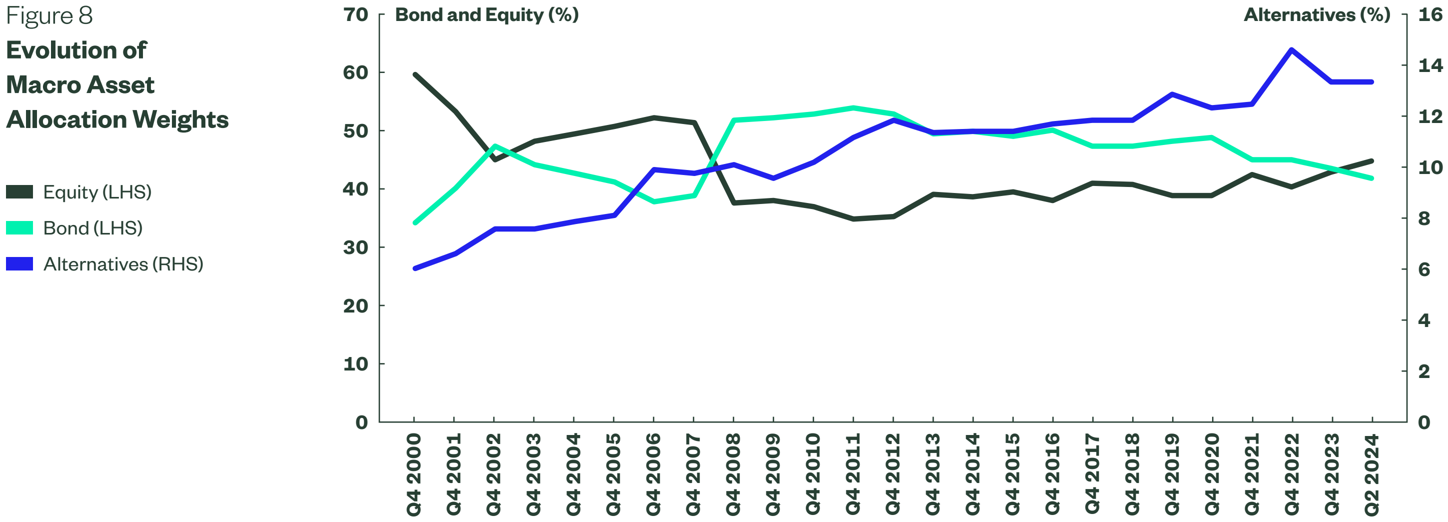
Of interest should also be the evolution of the weighting of macro asset classes over time that we show in Figure 8. At the peak of the equity markets bubble in 2000, the weighting of equity reached an impressive 59%. It has steadily and visibly declined since then, reaching 51% in 2007 and oscillating between 35% and 45% since 2008.

During bear markets and major corrections (2008, 2011 and March 2020), equity weighting tends to reach the low end of this range as depressed equity prices negatively impact equity weighting.

Conversely and unsurprisingly, given their more defensive characteristics, bonds tend to increase in weight in equity bear markets, reaching close to 55%. Examples of this include December 2008, the eurozone crisis of 2011, and March 2020. As of June 2024, global bonds represented 42% of the Global Market Portfolio.

The weighting of alternative asset classes has been steadily increasing, more than doubling in weight in two decades, reaching more than 13% in 2023 from 6% in 2000, thanks to their developments over time, greater acceptance by investors and the rise in value experienced by key alternative asset classes such as private equity, private credit and gold.

Figure 8
Evolution of Macro Asset Allocation Weights



Source: Thompson Reuters, Bloomberg, PreQin, World Gold Council, State Street Global Advisors, as of 28 June 2024.

Performance Outlook

We expect the Global Market Portfolio to return 5.7% over a year (gross of fees and any transaction costs) in local currency terms, while not taking into account currency fluctuations or costs of hedging. The most important positive contributors of this return are likely to be equities and risky debt.

Although relatively low, the Global Market Portfolio's return remains positive and above the current level of realized and anticipated inflation in most advanced countries.

Figure 9
Risk–Return Forecasts for Global Market Portfolio

	USD Billion	Weights (%)	Annualized Return			Intermediate term Risk (Std Dev) (%)
			1 Year (%)	3–5 Years (%)	10+ Years (%)	
Equity	78,412	44.8	7.1	6.6	6.2	14.1
Government Bonds	36,804	21.0	3.1	3.2	3.0	4.3
IG Credit	16,129	9.2	4.4	4.1	4.3	7.6
Inflation-Linked Bonds	2,662	1.5	5.9	4.7	4.1	5.7
HY Bonds	1,668	1.0	6.2	5.4	5.4	8.4
EM Debt	6,737	3.9	6.0	6.7	7.9	10.6
Securitized	8,788	5.0	5.9	6.0	5.5	3.4
Convertibles	378	0.2	5.5	5.5	5.5	10.5
Real Estate	6,720	3.8	4.7	5.9	5.8	16.5
Private Equity	8,693	5.0	8.4	8.1	7.6	9.4
Private Debt	1,654	0.9	6.9	6.9	6.9	5.4
Gold	6,295	3.6	2.7	2.7	2.7	15.1
Global Market Portfolio	**174,941**	**100**	**5.7**	**5.5**	**5.3**	**8.3**

Note: The above forecasts are estimates based on certain assumptions made and analyses run by State Street Global Advisors. There is no guarantee that the estimates will be achieved. 10+year returns for convertibles, private credit and gold are used as proxy for 1-year and 3–5 year returns for these assets.
Source: Bloomberg, Thomson Reuters, PreQin, World Gold Council, FactSet, State Street Global Advisors, as of 28 June 2024.

In the longer term, we expect the Global Market Portfolio to deliver a rate of return of 5.3% per annum. We also estimate the portfolio's long-term risk using expected volatility (standard deviation) of each of the asset classes and the correlations between them. As of June 2024, this stands at 8.3%.

How to Use the Global Market Portfolio?

Given the high inflation and the much higher cash yield conditions, the return from the Global Market Portfolio appears to compensate for the risks borne by investors, making a strong case for the Global Market Portfolio's continued importance for investors.

But it is equally possible that these forecasts may fall short of the long-term objectives of certain investors. In such a scenario, investors will need to look at other ways to engineer a higher rate of performance — for instance, by way of a more aggressive asset allocation strategy, with a larger emphasis on growth assets, active security selection, tactical asset allocation or private assets. As this means assuming greater risk, requiring greater care, an alternative way forward is to get investor expectations and objectives revised and updated in line with the reality that the current Global Market Portfolio reflects.

Balancing Risks and Returns

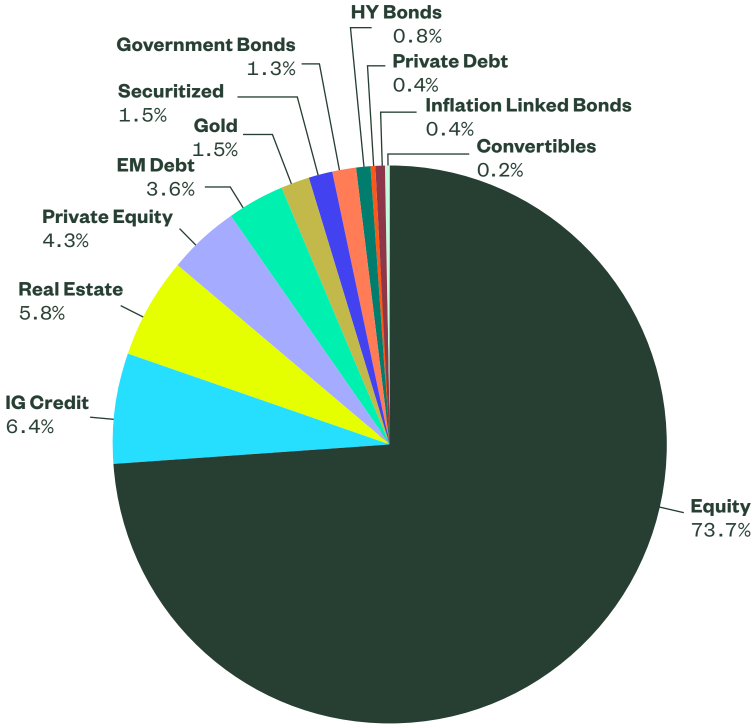
Another key consideration is the risk contribution of each asset class (Figure 9). The concept of risk contribution or risk attribution is widely used for asset allocation, active portfolio management, risk management and risk budgeting. Put simply, calculating the risk contribution allows us to evaluate how much risk comes from each asset class as a percentage of the total variance of the Global Market Portfolio.

Global equity risk continues to dominate. With a 44.8% capital allocation, equities account for 73.7% of the total risk of the Global Market Portfolio as an asset class. Although some investors may take issue with this, given the need for equity returns in the current low-yield rate environment, we would caution against reducing this allocation too drastically. Investors could, instead, consider a number of risk management approaches to reduce the risk — either at the equity level or at the total portfolio level. Such approaches could include, for instance, managed-volatility equities, target volatility triggers or option overlays that are either strategically or dynamically adjusted.

Dynamic asset allocation could also play a key part in both engineering higher returns and reducing risk, by adding a set of shorter-term exposures based on a tactical market outlook, as well as investor sentiment, regarding the Global Market Portfolio.

The Global Market Portfolio, more than ever, is an important starting point and these options allow investors to improve the risk and return profile of their individual portfolios and assess them relative to the Global Market Portfolio in order to target better outcomes.

Figure 10
Risk Contribution by Asset Class



Note: Figures are as of the date indicated, are subject to change and should not be relied upon as current thereafter.
Source: Bloomberg, Thomson Reuters, PreQin, World Gold Council, FactSet, State Street Global Advisors, as of 28 June 2024.

Conclusion

The Global Market Portfolio has continued its upward trend, rising to USD 175 trillion in value at the end of Q2 2024.

Equity market cap reached an all-time high in the first half of 2024, driven by the continuation of the AI boom. Equity weight as a percentage of the total Global Market Portfolio stands now at 44.8%, the highest since 2007. Fixed income markets have also been positively influenced by a stabilization in inflation expectations and more constructive monetary policy.

Going forward, equities and fixed income assets should continue to find support amid low but steady growth, declining inflation and interest rate cuts.

The Global Market Portfolio framework continues to provide investors with an effective tool to guide them in their asset allocation decisions. For those investors who wish to achieve a higher rate of return, they should consider a more aggressive asset allocation with a larger emphasis to assets delivering higher risk premia such as equities and risky debt and active strategies (through tactical asset allocation and security selection) in these markets where alpha can be achieved with higher confidence.

Endnotes

1 CFA® and Chartered Financial Analyst® are trademarks of the CFA Institute. FRM® is trademark of the Global Association of Risk Professionals, Inc.

2 Doeswijk, R., Lam, T., & Swinkels, L. (2014), "The Global Multi-Asset Market Portfolio, 1959–2012," *Financial Analysts Journal*, 70(2).

3 Dodard, F., & Greenway, A. (2015), "Using the Global Market Portfolio as a Natural Benchmark," State Street Global Advisors.

4 LSEG, Global Equity Capital Markets Review, Full Year 2023.

5 LSEG, Global Equity Capital Markets Review, H1 2024,

6 Global Private Debt Report, H1 2024.

7 H1 2024 MENA Private Capital Breakdown, PitchBook.

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