QUARTERLY COMMENTARY LETTER

SUMMER OF CHANGE

Q3 2024

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MACRO ENVIRONMENT

This summer was a time of dramatic change: in politics, geopolitics and – in world's two largest economies – in economic policy and markets. Recession fears that loomed mid-summer unsettled markets only briefly, as US consumers kept spending and hopes for a soft landing grew. For investors, it seemed that a September shift to monetary easing in the US and an unexpected stimulus promised in China outweighed anxiety about worsening global conflict and political uncertainty. That may not last as oil prices are increasingly volatile in response to the broadening regional conflict in the Middle East. However, oil prices are unlikely to respond as happened in years past. The US is now a large energy producer, Saudi Arabia has committed to keep up production and renewables make up a bigger share of energy production.

By the end of the quarter, equities had notched up further gains both in the US, which has been the standout performer for some years, and internationally. The US saw a change in leadership with utilities, real estate, and industrials leading the S&P 500 to rise by 5.9% in the quarter while the late boom in Chinese stocks – which have underperformed over a ten-year period – helped to push up emerging and global markets by 8.7% and 6.6% respectively. Emerging markets outside China climbed by 4%. Bond investors in the US also fared well during the quarter. The Bloomberg US Aggregate Index was positive for all three months, returning 5.2% from July to September.

THREE THEMES TO WATCH AS THE YEAR ENDS

01 **RISING POLITICAL TENSIONS IN THE US AND GLOBALLY**
Will conflict – including potentially in the US – spill over to affect the economy and markets?

02 **INFLATION SUBSIDING, BACK TO PRICE STABILITY**
Interest rates are going down, but will not go back to zero.

03 **RETURN OF GLOBAL IMBALANCES?**
Strong US consumption and growth looks set to continue, lifting the global economy. China's leaders have now recognized the need for stimulus – but can they meet expectations or will continued uncertainty and absence of deep structural shifts mean that consumers continue to save rather than spend? Economic data in coming weeks – for spending, trade and growth – will be telling.

THE TURN OF THE CYCLE – FED JOINS THE REST

The Federal Reserve kept markets waiting for its first interest rate cut of the cycle. At the beginning of 2024, pricing suggested that easing could begin as early as June. Some unfavorable inflation readings in the spring meant that Chair Jerome Powell and colleagues were not convinced that inflation was sustainably heading to the 2% goal.

During the summer, inflation risks receded and labor market tightness eased further. By the end of Q3, the Fed finally delivered. A double-sized rate cut of 50 basis points in mid-September marked the turn. As Chair Powell had indicated in his Jackson Hole keynote a few weeks earlier, the Fed's dual objectives of inflation and employment were in balance. But at 5.3%, the Fed's policy rate was restrictive. It was time to shift the stance toward neutral. Other major central banks, including the European Central Bank and the Bank of England, began to ease sooner, but with a smaller 25 bp cut. In Europe, inflation has moved below the 2% price stability goal. In the US, prices on the Fed's preferred measure of core PCE eased to a little over 2.5% in July and August, with the monthly change in August of 0.1% below expectations.

Fears that Chair Jerome Powell and colleagues might have delayed too long before easing were belied by an unexpectedly strong labor market report for September and consumer price inflation that was somewhat less favorable than expected.

Job growth in Q3 averaged 185K a month, up from Q2. Unemployment ended the quarter just above 4%, an historically low level. Official data for real GDP growth in Q3 are not yet available. But early indications suggest that it will again be strong, perhaps as high as or even above the 3% annual rate recorded in Q2. At the same time, underlying consumer price inflation in Q3, while down from Q2, is not yet at the Fed's 2% goal. Headline annual inflation slipped to 2.4% in the year to September. But core price inflation, excluding volatile components of food and energy, has been higher. In Q3, it stayed at a 3.1% annualized rate, close to where it has been for the past year.

In the US, the economic recovery since the pandemic has been remarkable, on almost all measures. GDP growth has consistently exceeded expectations, after quickly making up the ground lost during the pandemic. In contrast, growth in the rest of the industrialized world has lagged in the post-pandemic period. In the US, unemployment dropped from its peak in April 2022 and has stayed below 4.5% even as monetary policy tightened and interest rates rose rapidly. Jobs have been plentiful and wages have risen, notably among low income workers. Corporate earnings have been strong. Financial markets have hit record highs. But the backdrop of sharply rising prices has tarnished this record in the eyes of a majority of Americans.

American unhappiness is a reminder of just how much people dislike inflation. What matters for consumers is the level of prices, not the rate at which prices are rising. The sharp rise in prices in the aftermath of the pandemic and the war in Ukraine has left households paying much more for the goods and services that they normally buy, including for basics such as groceries, housing, and childcare. Even if the rate at which prices are rising – the inflation rate – has now slowed from its peak, the price level remains considerably higher than its pre-pandemic level. Wage increases have recently helped to offset the impact on living standards.

CHINA'S LEADERS WAKE UP: BUT WILL THEY DO ENOUGH?

Investors knew that the Fed would eventually cut rates. What they did not expect was a shift in signals from the leadership of the world's second largest economy. In late September, a stimulus package from the central bank – the PBoC – was followed by further announcements from President Xi that promised fiscal support to buttress the monetary measures. These are aimed at attracting foreign investors as well as relieving household stress in the wake of the property collapse, boosting local government finances and raising household and business confidence. The announcements were spectacularly successful in the short-term in attracting foreign inflows and pushing up the stock market. But many China watchers are holding fire. They are doubtful that President Xi's government will prove able, or willing, to implement measures of the size that some market participants are now hoping for. An excellent panel discussion at the Center for Strategic and International Studies laid out the concerns.

POLITICAL UPHEAVAL ON BOTH SIDES OF THE ATLANTIC – AND POLICY CONSEQUENCES

President Biden's July decision to step out of the race for President and endorse Vice President Kamala Harris upended the US political outlook. What had looked increasingly like a probable win for former President Trump in polls by financial institutions and others the November election quickly became too close to call – and has stayed there. As Vice President Harris locked up the Democratic nomination and re-energized the race, support for the former President has stayed strong.

The upset in the US was the most important political shift in Q3. But it was not the only one. It followed a swift change of government in the UK in early July when the Labour Party led by Keir Starmer won power over Conservatives for the first time in 14 years. In France, the conclusion of snap parliamentary elections left that country with a parliament at odds with President Macron, leading to almost two months without a fully functioning government. Prime Minister Michel Barnier, a traditional conservative, was finally appointed in early September. In Germany, electors have handed defeats in European and local elections to the parties of the ruling coalition, led by Chancellor Scholz of the Social Democrat party, the SPD.

What is striking across all these developments is the disenchantment of voters and citizens with their lives and their leaders, and the attraction of populist messages. This seems as true in the US, where jobs and growth have outperformed significantly since the pandemic, as in Germany, where the economy has struggled and business sentiment declined each month over the summer. Across major developed and emerging markets, there is a growing push for governments to spend more with less concern about government debt and deficits. As new research from the IMF shows, this push comes from "political parties of all stripes."

Widespread rejection of open trade, immigration and other features of the globalized economic system may not be surprising. Change has accelerated in recent decades and communities dependent on industries most subject to global competition, particularly from China, have suffered. More recently, voters have grappled with rising prices since the pandemic, unaffordable housing, stagnant real incomes (until recently) and rapid and often unsettling changes in jobs and

communities. It is tempting for politicians to promise a better life at home, with a retreat from the globalized world.

Those promises worry many who point to the open global markets of recent decades as a major factor in driving global growth, holding down prices and improving living standards around the world.

IMF chief, Kristalina Georgieva, has talked of the need for economists in that institution to work to understand political constraints and be willing to look at second best solutions when the first best – such as carbon taxation – is not viable politically. Harvard professor and former Obama chief economist, Jason Furman, went further in saying economists advising leaders may need to examine fifth, sixth and even seventh best. But he stressed the importance of looking honestly at trade-offs. His defense of “the dismal science” of economics in late September was on the importance of using analytical tools and fact-based evidence to examine policy options. Wishing away trade-offs, whether by pretending that all government intervention was helpful or that it was all bad, was bound to lead to bad outcomes.

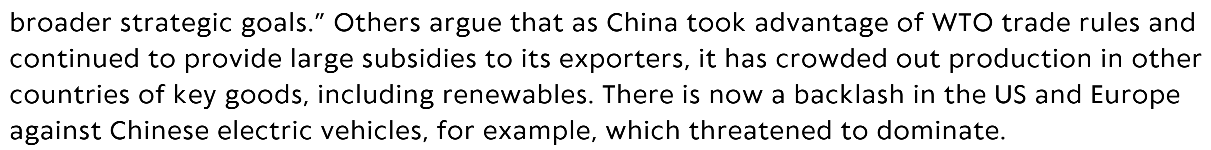
INVESTING IN AN UNCERTAIN WORLD

We know that there will be a new President in the US in just a matter of weeks. But with the race likely to go down to the wire, we do not know which of the two very different candidates, with differing visions for the country and economic policy, will be heading to the White House. The balance of power in the US Congress is also up in the air. The most likely outcome seems to be a Democratic House and Republican Senate, with only narrow majorities in each, though this could easily change in an election where polling is so close. Against this background, investors need to remain flexible and focused on the long-term fundamentals.

The economic proposals of the two candidates for the US presidency are now coming under scrutiny. In neither case are promises for spending increases and tax cuts matched by realistic estimates of revenues. The federal budget deficit is already high, at an estimated 7% of GDP, according to the Congressional Budget Office. Unless modified, the proposals would lead to still higher deficits and debt.

Former President Trump has argued that across-the-board tariffs on imported goods will make up the gap. Analyses by Goldman Sachs and the Wharton school, among others, however show that the tariff plan advocated by the Republican nominee would push up prices and yield little revenue. Perhaps more surprisingly, recent research by Michael A. Clemens (PIIE), Warwick J. McKibbin (PIIE), and Jonathan Portes (King's College London) suggests that immigration boosts jobs and incomes for the communities that they join. Mass deportation, on the other hand, could damage the US economy and cost jobs to those born in America. A majority of Americans do not see things that way, however.

Protectionist policies have been pursued by both Presidents Trump and Biden, without consideration of the costs and tradeoffs. Trade expert and Stanford and Johns Hopkins economist Anne O Krueger, author of “International Trade: What Everyone Needs to Know,” argues that unilateral tariffs and sanctions have “only raised prices for American consumers without achieving



broader strategic goals." Others argue that as China took advantage of WTO trade rules and continued to provide large subsidies to its exporters, it has crowded out production in other countries of key goods, including renewables. There is now a backlash in the US and Europe against Chinese electric vehicles, for example, which threatened to dominate.

In the last week of the third quarter of 2024, Hurricane Helene brought destruction and devastation to many parts of the Southeastern United States. Over 200 people to date have lost their lives, millions were left without power in the storm's wake, and flooding has wiped entire communities off the map. The worst of the destruction was in Asheville, North Carolina–a mountain town far from the coast where hurricanes often wreak the most havoc. Before debris from the storm was cleared, Hurricane Milton quickly followed bringing more death and destruction to the US These storms are the continuation of the ongoing trend of extreme weather that results from a warming climate and punctuates the need for the world to not only reduce emissions to help stave off further warming, but also think about adaptation and resilience.

Prior to Helene, much of the sustainability investing world's focus was grappling with the potential impacts of artificial intelligence (AI). As AI's capabilities continue to expand, so do concerns about the strain it could place on the energy grid. While headlines often amplify these concerns, the true impact of AI on power consumption remains debatable. On one hand, AI will require unprecedented computing power, which is spiking energy forecasts that had been previously in decline. On the other hand, tech companies are exploring innovations that will make computing more efficient and are vowing to use green electricity from renewable sources to power their data centers. These dynamics have other impacts on sustainability investing: while demand for renewable power has never been higher, the near-term lack of supply is driving competition for the same electricity that is crucial to decarbonizing the power grid and other industrial processes. The result is an incredible opportunity for investors who understand and know how to navigate these dynamics but likely brings risks for those who do not.

Despite these opportunities and others resulting from the world's ongoing energy transition, climate-focused companies are facing funding challenges as climate investment funds hold onto capital. Over the past three years, funding for growth-stage companies (post-Series C) has declined sharply, with a 33% reduction in the first half of 2024 compared to the previous year. Sectors like transportation, agriculture, industrials, and carbon capture saw declines of over 20%. This supply and demand imbalance is leading to more reasonable valuations when compared to the past several years.

With US elections coming up in the next few weeks, the sustainable investing world is paying close attention to what outcomes could mean for the landmark Inflation Reduction Act (IRA). Although it is widely agreed that a large-scale repeal of this legislation and its core tax benefits supporting renewable energy is unlikely, a potential Republican victory could slow the flow of capital into other areas of the climate landscape covered by the IRA. However, many believe that, despite earlier statements, much of the planned initiatives will still proceed.

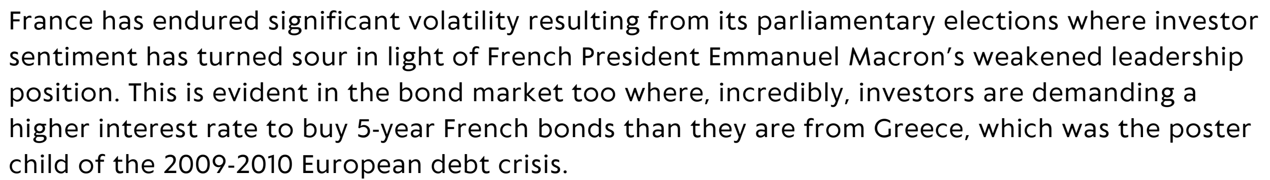
PUBLIC EQUITIES

Equity markets continued to climb higher during the third quarter, though unlike the first half of the year, performance was not dominated by AI-related investment themes. Instead, a definitive change in market leadership took place with small-cap and value stocks gaining traction as investors sought opportunities in less hyped areas. It remains to be seen whether this will last, but the broadening out of the rally bodes well for the market's ability to sustain itself. For the quarter, the Dow led the US large-cap indices with an 8.2% gain, followed by the S&P 500 up 5.5%, and the tech-heavy Nasdaq trailing with a modest 2.6% gain. Meanwhile, the Russell 2000 advanced 8.9%, making up some ground after a very slow start to the year. Even with the rise in small-caps, the Russell still ended the quarter 9% below its all-time high reached in November 2021.

For the first time since the AI craze began, investors seem to be asking whether all the billions of dollars being invested will translate into suitable profits. And even if so, over what time period? The incredible surge of Nvidia's stock price has been supported by eye-popping revenue and profit improvements. However, the major hyperscalers, namely Amazon, Microsoft, and Alphabet, who have been the main purchasers of Nvidia's most advanced GPUs, still need to prove their expenditures will translate into profits. Alphabet, which had nearly doubled its capital expenditures in its race to catch up with Microsoft and Google, saw its shares fall close to 9%. Amazon and Microsoft both ended the quarter nearly 4% lower. Meanwhile, Nvidia's gross profit margin has started trending down, contributing to its stock leveling out in Q3.

Q3 wasn't a lost cause for all of the Magnificent 7. Earnings results from Apple and Meta were strong enough to boost their shares 9% and 13%, respectively, for the quarter. Tesla shares surged 32% leading up to its earnings release and Robotaxi event which took place in October.

One area of the market that benefited the most from capital rotation out of mega-cap tech was utilities. The sector vaulted 18% higher thanks to two main factors. The first was the insatiable demand for dependable energy needed to power newer increasingly power-hungry data centers. Nuclear power plant operators, such as Constellation Energy and Talen Energy, are signing landmark deals with the likes of Microsoft and Amazon to provide dependable off-grid electricity at premium margins. Constellatio and Talen have surged 122% and 178%, respectively, YTD. The second factor was the appeal of the utility sector's dividends with bond yields now receding. Other bond-proxy stocks, including real estate and consumer staples, also performed well.
Europe lagged the US with the Stoxx 600 registering a modest +2.2% gain for Q3. With data pointing to an economic slowdown, the prospect of lower interest rates helped drive real estate, utilities, and health care stocks higher with energy and technology lagging the most. Germany led the way among Europe's biggest markets. However, much of the strength came from software company SAP, which gained +8% in Q3 and is up +46% since the start of the year. Meanwhile,



France has endured significant volatility resulting from its parliamentary elections where investor sentiment has turned sour in light of French President Emmanuel Macron's weakened leadership position. This is evident in the bond market too where, incredibly, investors are demanding a higher interest rate to buy 5-year French bonds than they are from Greece, which was the poster child of the 2009-2010 European debt crisis.

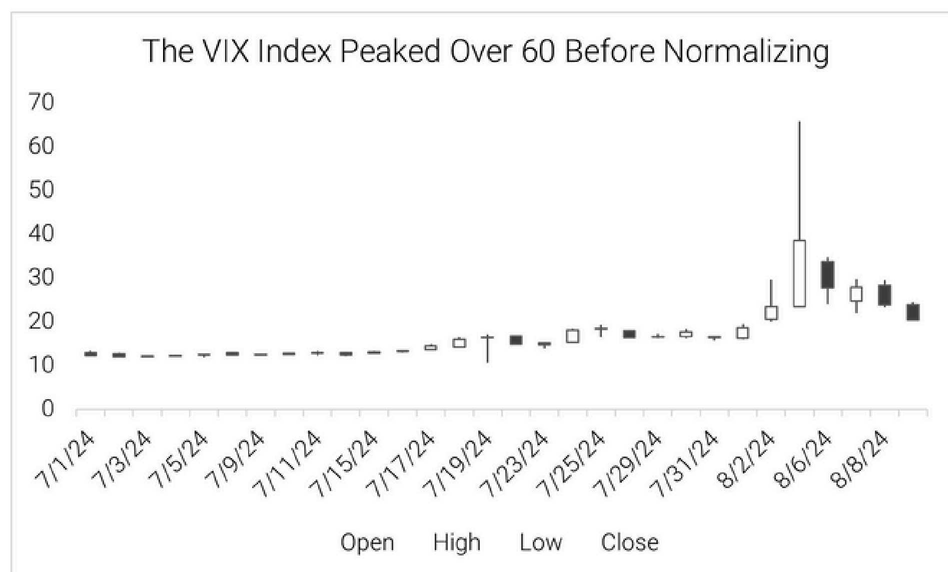
Asian markets reacted positively to China's announced stimulus though it was a choppy quarter for Japan with the Nikkei 225 ending the quarter -4.2% lower. Japan reached a new historical high in early July but towards the end of the month and into early August suffered a sharp correction, brought on by an interest rate hike on the part of the Bank of Japan and a spate of weaker economic data in the US. The shifted interest rate condition also caused major gyrations in the currency market with the yen strengthening rapidly versus the dollar as investors unwound yen carry trades. Consequently, Japanese exporter sectors such as autos and machinery underperformed domestic sectors like retail and construction.

Japanese equities overall soon stabilized after the initial shock and were supported by the combination of stronger US economic data and the Fed's 50 basis point rate cut. The market was also pricing in expectations that Sanae Takaichi, once a close ally of Prime Minister Abe, would win the LDP leadership election to replace Prime Minister Kishida. However, she lost to Shigeru Ishiba in a run-off and Japanese equities dropped again at the very end of September on fears that Ishiba would take a more hawkish stance.

In his initial remarks, Ishiba has indicated a continuation of Abenomics to help prevent a return to deflation. Meanwhile, corporate earnings and economic data out of Japan remain solid. Real wage growth turned positive in August for the first time in 27 months and continued to improve in September.

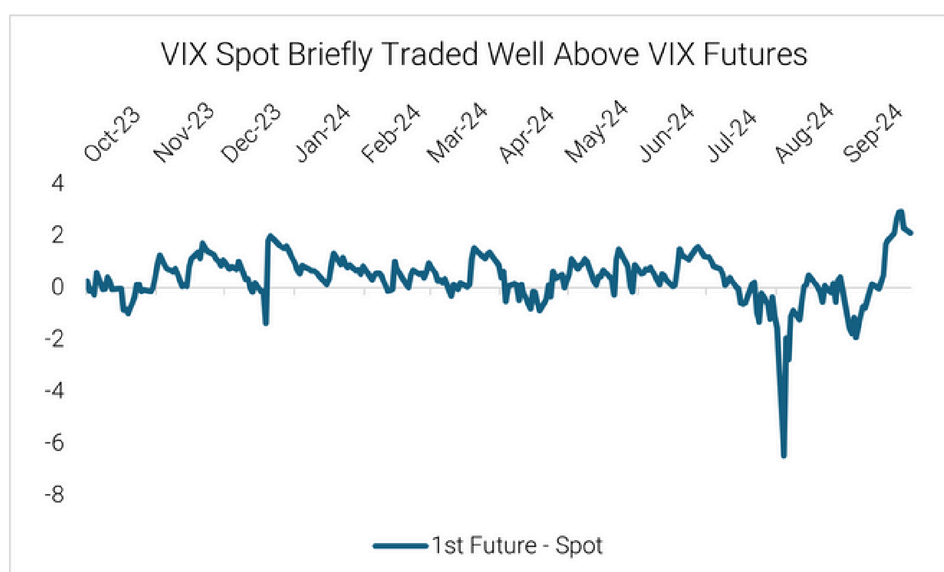
VEXING VOLATILITY – INSIGHT INTO AUGUST'S VIX SPIKE

August's bout of volatility began when the Bank of Japan unexpectedly raised interest rates on July 31, precipitating a strong rally in the Japanese yen against other currencies, most importantly the dollar. Then, only two days later, a rise in domestic unemployment and weak Nonfarm Payrolls sent rate cut expectations soaring and the dollar plunging. By this time, Japanese markets were closed and when they reopened on Monday, local indices traded limit down. Furthermore, investor demand for S&P downside protection was so immense that out-of-the-money put options across a variety of maturities and strikes exploded in value despite exceedingly illiquid marks given US exchanges had not yet opened for trading. As a result, the rapid increase in prices for these options caused the VIX to spike above 65 before US markets even opened and leaving investors to worry whether they missed the boat. By month end, however, equity indices largely recovered, implied volatility had fallen back to relatively normal levels, and rate markets pared back their rate cut expectations from the Fed. The violent nature of the move followed by a smooth recovery begs the question: what exactly happened and does this indicate fragility in markets today?



Source: Bloomberg Finance LP.

With much fanfare made about the rocketing VIX level, understanding how the VIX is created and traded paints a rosier picture than many headlines would've suggested. Firstly, the VIX index is aggregated using a wide variety of options across the volatility surface, with little regard to liquidity and bid/ask spreads. In stress periods where volumes are low and bid/ask spreads are wide as investors purchase downside protection at any cost, the VIX index level becomes increasingly skewed by these prices, since the index does not filter illiquid options or those with above-average bid/asks. Secondly, the VIX index itself is not tradable; the most straightforward way to trade the VIX are VIX futures, which traded at elevated levels but not anywhere near where spot VIX printed before US equity markets opened for trading that morning. In the days that followed, both VIX spot and VIX futures fell all the way back to where they began the month and a repeat of February 2018's "Volmageddon" was seemingly averted. Two key questions remained: "why were we spared another crisis" and "does this episode prove modern markets are resilient or broken"?

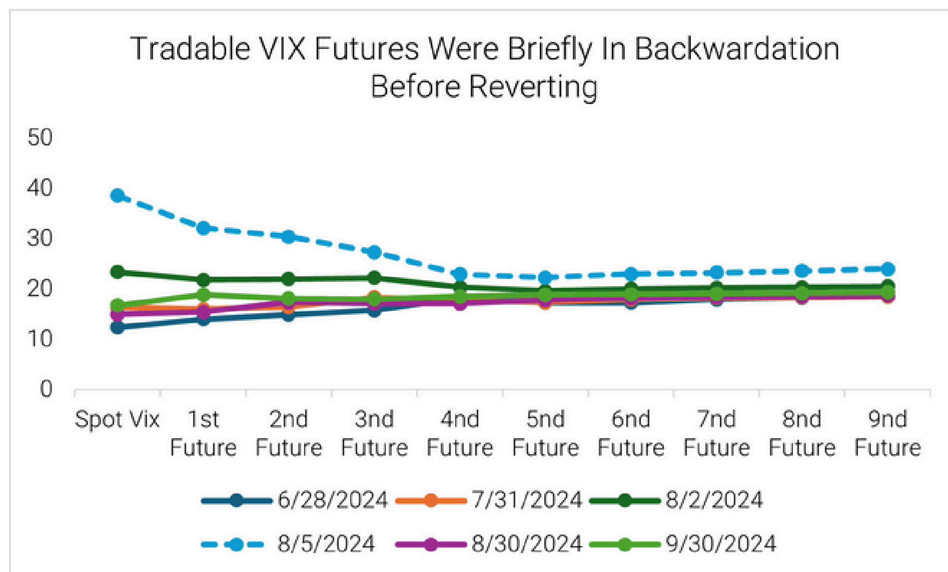


Source: Bloomberg Finance LP.

One contributing factor was that when the S&P futures and later cash equity markets opened later that morning (east coast time), the index closed down only 4% - a big loss, but not as severe as the Japanese Nikkei, which closed 13% lower that day. As a result, downside protection demand began to normalize as it became clear that if the market was to sell off, it would do so with a series of whimpers rather than one large bang. This became reflected in S&P options prices and, therefore, in the VIX normalizing in the subsequent days.

As Warren Buffet once quipped "only once the tide has gone out do you see who was swimming naked" leading us to wonder: who was most acutely affected by August 5's turmoil? Clearly not equity investors, given the S&P ended up on the month, with many other major indices, including the Nikkei, similarly resilient in the days that followed. Fixed income investors fared similarly well given the moves lower in yields and repricing of Fed rate cuts. It seems most likely that the most acute pain was felt in the volatility trading community amongst those who either explicitly or implicitly short volatility, essentially betting that the

future will be stable. Strategies like dispersion trading, which commonly short index volatility to purchase single stock volatility, likely came under pressure as correlations between index constituents spiked as investors sold all names indiscriminately. Importantly, though, damage inflicted on these strategies appears to be relatively minor, perhaps demonstrating that, despite the hysteria from August's mayhem, modern markets are much more resilient than headlines would've led one to believe.



Source: Bloomberg Finance LP.

EMERGING MARKETS

The third quarter of 2024 underscored the dynamic and unpredictable nature of emerging market investments. Chinese equities, the clear laggard for some time, rallied an impressive 23.5% during the quarter, positioning them alongside India and Taiwan as among the top performing markets of 2024. The rally catapulted the main MSCI EM benchmark well ahead of the MSCI EM ex-China Index (8.7% vs. 4.0% YTD).

China's rally was fueled by a knee-jerk change in sentiment as the government promised a flurry of stimulus. The People's Bank of China's (PBoC) aggressive monetary easing measures and the unexpected domestic policy shift outlined in the September Politburo meeting provided significant tailwinds to what was already an improving backdrop for emerging markets assets, given the Federal Reserve's initiation of its easing cycle.

While the short-term stimulus measures may provide temporary relief, the underlying structural issues, such as real estate debt, government interference, and geopolitical tensions, and the Chinese consumer still choosing savings over consumption, remain unresolved. The muted reaction of Chinese forward rates suggests that investors are skeptical that the current bout of stimulus is enough to stabilize the ongoing deleveraging in the economy and resultant deflationary pressures.

Source: Bloomberg Finance LP.

In contrast, some of the emerging markets ex-China–such as India and Taiwan relying on innovation, domestic consumption, etc.–continue to offer compelling investment opportunities. The easing global inflation environment, coupled with the anticipated shift in the Fed's monetary policy stance, is expected to bolster investor risk appetite. These countries, characterized by lower inflation growth and strong corporate earnings, are well-positioned to benefit from a more accommodative global monetary environment.

Opportunities in India and the ASEAN region for the moment appear more attractive. Indonesia and the Philippines stand to gain from monetary easing, while the Indian economy continues to grow at apace. Moving beyond Asia, in Mexico the inauguration of President Claudia Sheinbaum has prompted investors to remain cautious as they assess how her administration will address the challenging reforms left by former President Lopez Obrador. Nonetheless, Mexico’s equity market appears undervalued, having declined 18.5% in the first nine months of the year, while the Peso has depreciated by over 14% against the USD. This presents potential for positive surprises. The new administration aims to reduce deficits to 3.5% of GDP while maintaining social transfers that support consumer spending, which could benefit Mexican companies like Walmex and FEMSA, which are currently trading at record-low valuations.

FIXED INCOME

The third quarter of 2024 was a momentous one for fixed income markets. The Fed finally began to ease its historically aggressive policy stance as inflation in the US cooled and the risks to the central bank's dual mandate came more into balance. As measured against other developed market central banks, the Fed was in the unusual position of playing catch up. In September the European Central Bank cut for the second time this year, bringing its total policy easing to the same 50 basis points. The Bank of England delivered its first cut of 25 basis points in August, while Canada cut twice in Q3 bringing their total policy easing to 75 basis points for 2024. All told, 37 countries across developed and emerging markets cut their monetary policy rates in the prior quarter.

All of this monetary easing paved the way for a banner period for bonds. The Bloomberg US Aggregate's 5.2% rise was its second-best showing since the second quarter of 1995 (only Q4 of last year was better than both). Global bonds had similarly strong performance going back to 2010. Performance was in large part uniformly strong across sectors, with some credit outperformance (discussed in more detail below). Treasuries rose 4.7% and the two-year/ten-year segment of the yield curve steepened by 50bps, dis-inverting on a sustained basis for the first time since 2022. Most of the steepening occurred after the Fed's first interest rate cut on September 18, after which very short-term rates rallied while longer dated tenors sold off. Fixed income indices even gave back some of their gains following the cut.

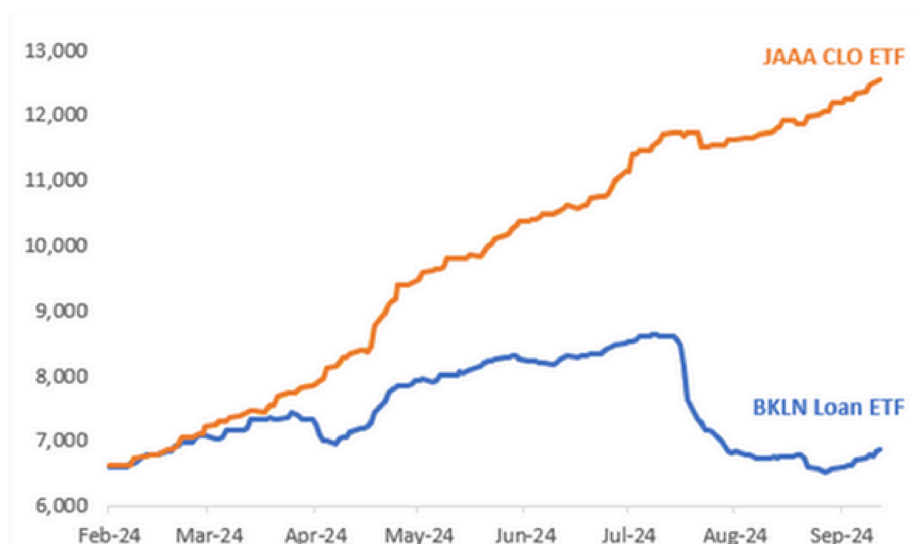
To understand why most of the rate curve backed-up post-Fed cut, it is worth pointing out the two distinct periods of bond performance in the quarter. The first and longer, larger magnitude move began gradually in July as markets started to hedge the deceleration in economic growth by buying duration. The US 10-year yield fell about 20 basis points from the beginning of the quarter through Friday, July 26. The following week brought three shocks to the market: a more-hawkish-than-anticipated Fed announcement; very disappointing payroll numbers; and a hike from the Bank of Japan (BoJ). These three events cascaded into a large risk-off move that caused the 10-year treasury to rally further, sending the yield another 40 basis points lower over five trading sessions. Duration continued to perform into the Fed meeting, bringing the total drop in 10-year yields to nearly one percentage point through September 17. Given that much of the rally seemed to be driven by slowing growth concerns and that the Fed's jumbo cut went some way in alleviating those fears, the opposing directional moves at both ends of the curve make a bit more sense. Front end rates moved down to reflect the reality of a lower policy rate, while some profit was taken in duration after a such a strong run and at least some shift in perception toward the feasibility of a soft landing.

PUBLIC CREDIT

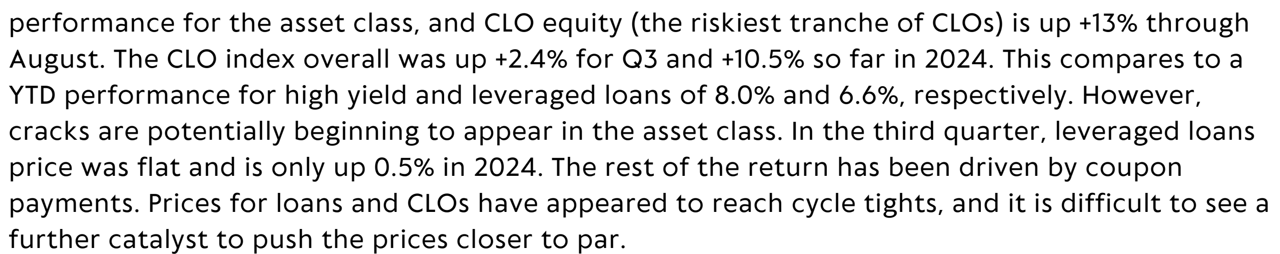
The downward move in the risk-free rate drove issuance in investment grade (IG) bond markets as corporates sought to take advantage of lower base rates. IG had its largest issuance in Q3 of this year as far back as Bloomberg data shows, just eclipsing Q1 of this year. Demand seems to be robust as well, as the Corporate index outperformed the broader US aggregate for the quarter.

Interest rate moves also reverberated through the loan market. For several years, investors heavily allocated to different types of floating debt, including bank loans and their corresponding structured product format, collateralized loan obligations or CLOs. Q3 of 2024 was the summer of CLO refinancings and resets. CLO issuers took advantage of tight spreads due to excess demand and high prices to restructure their debt and lower their cost of capital. $26 billion of CLO debt was refinanced in August, and Citi expects a further $80-100 billion for the rest of 2024. These refinancings account for 40% of all CLO issuance this year. Furthermore, this past month was the busiest September for loan sales on record, with $117 billion coming to market (well ahead of the prior high of $87 billion in 2016). 78% of these deals were for refinancing or repricing.

Investors are going along with the plan to refinance their CLO debt due to their continued demand for exposure to the asset class. Low loss ratios supported by a strong economy has driven



Source: Bloomberg, Morningstar LSTA US Leveraged Loan Index (price).



performance for the asset class, and CLO equity (the riskiest tranche of CLOs) is up +13% through August. The CLO index overall was up +2.4% for Q3 and +10.5% so far in 2024. This compares to a YTD performance for high yield and leveraged loans of 8.0% and 6.6%, respectively. However, cracks are potentially beginning to appear in the asset class. In the third quarter, leveraged loans price was flat and is only up 0.5% in 2024. The rest of the return has been driven by coupon payments. Prices for loans and CLOs have appeared to reach cycle tights, and it is difficult to see a further catalyst to push the prices closer to par.

Investors have been using CLOs (and especially high-grade tranches) as a ballast for their credit portfolios for the past year. As the graph below shows, the AAA CLO ETF continues to see strong investor demand, while the loan market saw substantial outflows over the summer. Going into a cutting cycle, and a potential slowdown in the economy, investors have diversified their credit risk and moved up in quality by investing in high-grade CLOs. By allocating to these tranches though they also maintain an exposure to floating rate debt, which should continue to drive returns if the Fed needs to keep rates elevated.

CLOs overall offer dual protection in this uncertain cutting cycle. They will continue to provide a strong coupon from their floating rate structure in the near term while pooling the risk of leveraged loans, which will protect investor’s capital in a slowdown.

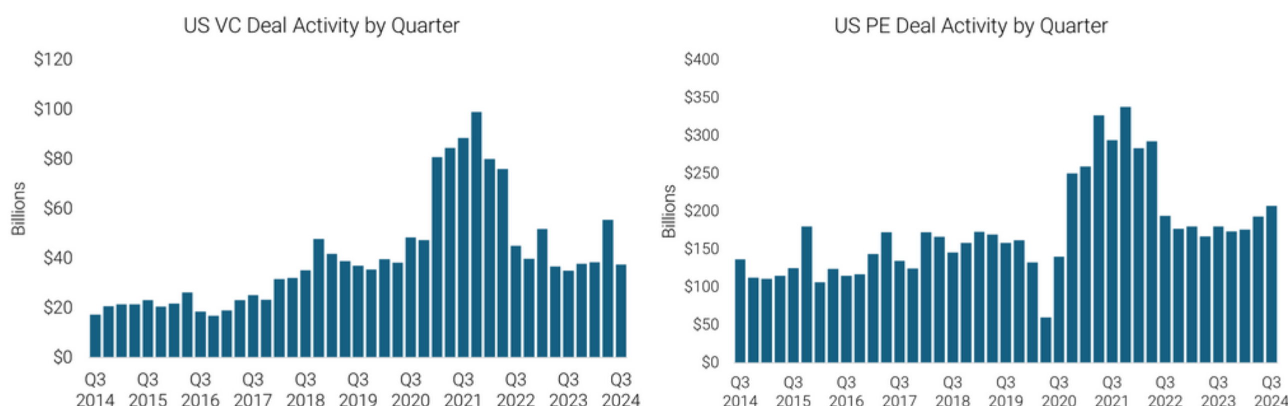
This past quarter witnessed developments in the broad distribution of private credit. Although private credit has been accessible to retail investors via interval funds - closed-end investment funds that offer periodic liquidity to investors - several large asset managers including Apollo, BlackRock, State Street, and KKR, amongst others, are in a foot race to see who can further penetrate the $150 trillion retail investment market. The latest contemplation is the private credit exchange traded fund (ETF); however, such innovations are not without risks.

For retail investors, the primary concern with the notion of a Private Credit ETF is liquidity, or the lack-there-of. Relative to other private market asset classes, Private Credit is admittedly quite liquid: offering investors regular distributions in the form of a coupon, other income (primarily fees), amortization, and maturities. These cash flows are contractual and predictable, but do not create near enough liquidity to combat excessive redemption pressures.

To institutional investors in private credit, there are several factors worth considering. Primarily, retail flows could have a material impact on the supply and demand of capital and competitive dynamics that characterize certain segments of the broader private credit market, resulting in a deterioration of the “illiquidity premium” that has persisted to date. Conversely, a more liquid market for private loans may contribute to transparency in valuations, while also providing a more appropriate benchmark for assessing manager talent.

PRIVATE EQUITY AND VENTURE CAPITAL

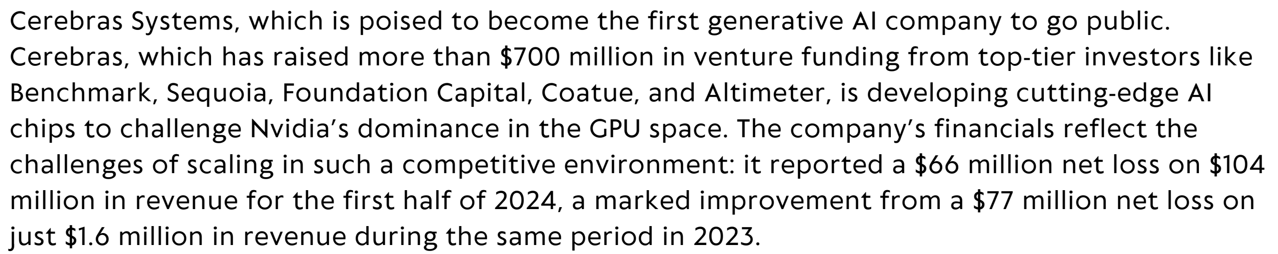
Private markets seem to be warming up again, with deal activity rebounding to levels more consistent with long-term trends. According to preliminary data from Pitchbook, US private equity deal volume for Q3 2024 reached $207.4 billion, marking the highest figure since Q2 2022. However, despite this surge in deal value, the number of deals executed was the lowest since Q3 2020, reflecting the dominance of larger transactions. In essence, while fewer deals were struck, their size inflated the overall market figures. Similarly, US venture capital deal activity remained stable, with volumes aligning with those seen between 2018 and mid-2020, signaling a return to a more familiar pace after the turbulence of recent years.



Source: Preqin; IT Juzi. 2024 data ends in August and is incomplete; funding data is YTD.

In contrast, the venture capital landscape in China has taken a significant downturn. Chinese venture-backed companies have raised only $26 billion in 2024 so far, with only 19% of that coming from foreign investors. This represents less than 20% of the peak level in 2021, which is less than half of what has been raised in any given year over the last decade. The dramatic collapse of the Chinese venture capital ecosystem has been surprising, especially as many US-based venture firms have shuttered their operations in China. Even domestic RMB-denominated funds are experiencing a sharp decline in funding. This significant pullback highlights broader economic and geopolitical challenges that have hit China's innovation sectors particularly hard. This structural shift in private markets also highlights the uncertainty of the sustainability of the recent rally in public Chinese equity markets.

Meanwhile, the IPO market is cautiously reopening, especially for biotech companies, which have seen increased activity. Among the notable biotech firms to go public during Q3 were BioAge (a RockCreek portfolio company), Bicara Therapeutics, CAMP4 Therapeutics, MBX Biosciences, Upstream Bio, and Zenas Biopharma. Another highly anticipated IPO on the horizon is that of



Cerebras Systems, which is poised to become the first generative AI company to go public. Cerebras, which has raised more than $700 million in venture funding from top-tier investors like Benchmark, Sequoia, Foundation Capital, Coatue, and Altimeter, is developing cutting-edge AI chips to challenge Nvidia’s dominance in the GPU space. The company’s financials reflect the challenges of scaling in such a competitive environment: it reported a $66 million net loss on $104 million in revenue for the first half of 2024, a marked improvement from a $77 million net loss on just $1.6 million in revenue during the same period in 2023.

REAL ASSETS

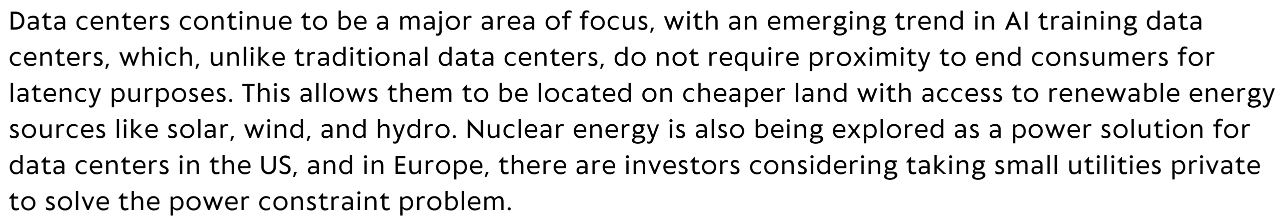
Current investment opportunities are centered around data centers, industrial real estate, and niche sectors such as cold storage and self-storage which present attractive acquisition prospects as "mom and pop" owners increasingly exit the market, creating opportunities in otherwise low-inventory areas. At the same time, investors are adjusting strategies to mitigate the risks associated with over-leveraged deals, with particular caution being exercised in the office sector, which continues to face challenges.

The decarbonization trend is another major driver of infrastructure demand, offering investment potential in clean technology for public transportation. The energy transition is also prompting increased focus on early-stage decarbonization firms, especially those engaged in clean energy, such as solar and wind. This shift aligns with the growing global emphasis on sustainability and climate-resilient infrastructure.

The market for secondaries has also shifted significantly. In 2023, a record $7 billion in LP-led transactions occurred as a result of liquidity crunches, while GP-led transactions faced slower volumes. However, the GP-led secondaries market is expected to see robust growth for the remainder of 2024 and into 2025 as GPs increasingly opt for capital raises rather than outright sales, particularly in sectors requiring ongoing capital investment. The debt markets are also showing signs of recovery, with debt originations and CMBS volume for 2024 doubling compared to the previous year. This renewed availability of financing is fueling market activity, particularly in defensible residential assets with sustainable cash flows. As the capital markets gradually normalize, a steady flow of acquisitions and dispositions is anticipated in the coming months.

In the second quarter of 2024, core real estate experienced a positive turn, delivering a 0.51% gross return driven primarily by gains in the logistics, residential, and self-storage sectors, with the trend expected to continue for the remainder of the year. As capital markets recover, core funds are expected to ramp up investment activity, particularly in modern logistics and attainable housing, which are seen as resilient sectors poised for growth.

In the industrial market, most areas outside of Southern California are seeing a rebound, although cap rate compression is not expected. Southern California's unsustainably high rents are not dragging down portfolios, but new leases in the region are up by 40-70%, significantly boosting net operating income (NOI). Mark-to-market valuations in the industrial sector, which had become frothy, are now correcting, with the issue largely attributed to pricing outpacing demand rather than a lack of demand itself.



Data centers continue to be a major area of focus, with an emerging trend in AI training data centers, which, unlike traditional data centers, do not require proximity to end consumers for latency purposes. This allows them to be located on cheaper land with access to renewable energy sources like solar, wind, and hydro. Nuclear energy is also being explored as a power solution for data centers in the US, and in Europe, there are investors considering taking small utilities private to solve the power constraint problem.

In summary, the real assets landscape is marked by dynamic shifts across sectors, with growth opportunities in industrial, multifamily, and data centers, alongside challenges in office and select geographic markets. As markets stabilize and financing becomes more accessible, the outlook remains cautiously optimistic.

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