QUARTERLY COMMENTARY LETTER

SUMMER SHIFT

Q3 2023

RockCreek

CONTENTS

MACRO ENVIRONMENT

This summer saw a marked shift in sentiment among US investors and policymakers. Investors, fearing economic resilience would keep monetary policy tight, saw good news as bad in the third quarter. And by mid-October, the bond market rout that began in Q3 had pushed long-term interest rates to 15-year highs. But while markets became gloomy, the opposite was true for those monitoring economic developments. Hopes of a soft landing grew as the US economy outperformed and inflation held its summer gains.

Macro and market trends have not shifted significantly in October, despite geopolitical turmoil and disarray on Capitol Hill. The relative calm will only continue if the conflict in the Middle East stays contained, without spillover to energy markets or trade more generally. Washington political dysfunction also complicates international relations. Before the attack on Israel on October 7, President Biden was forced to reassure key counterparts of America's leadership role when aid to Ukraine was denied in the short-term funding bill passed on September 30. That came just before Congress essentially shut down, with the ousting of House Speaker Kevin McCarthy. Two Republican nominees for Speaker have since failed to win the necessary votes to win. One glimmer of hope is that the resistance to the second nominee, Jim Jordan, came from more traditional Republicans who rejected Jordan's previous scorched earth attitude to legislating and his willingness to see the government shut down or be unable to pay it.

Hopes of avoiding recession while restoring price stability were challenged late in the quarter by two new headwinds facing the economy. Rising energy costs, as Saudi Arabia and Russia joined in announcing production cuts, threatened to undercut progress on inflation and a strike by United Auto Workers (UAW) that extended into its second week by end-September risked economic recovery, with an estimated cost to the economy of some $100-$125 million every week it continues, according to estimates from Goldman Sachs. The strike has moved off the front page. But it continues, with attendant costs to the auto industry and the economy more broadly.

THREE THEMES TO WATCH IN Q4:

01 SLOWING GLOBAL ECONOMY
Have we seen the full impact of the global cycle of monetary tightening or is there more to come, for example, through a decline in bank lending in Europe and the US, real estate problems – notably in China – or weakening global trade?

02 US OUTLOOK
Unlike in Europe, where the economy has stagnated as the ECB fights inflation, the American economy has remained resilient. With headwinds from rising oil prices and the autoworkers' strike, as well as tight money, is a soft landing still in the cards?

03 HIGHER FOR LONGER
Will markets and the global economy adjust smoothly to a likely "new" new normal of "higher for longer" interest rates, held up in part by rising fiscal debt and deficits in the US and elsewhere? Developments in US bond markets in recent weeks may herald a regime change. As government deficits have grown, the demand for Treasuries is also slowing with QT replacing QE and traditional buyers such as Japan changing policies.

MARKETS VERSUS THE ECONOMISTS

The contrast between benign economic data and investor sentiment was striking in the third quarter. US equity markets, which had surprised on the upside during the first half the year, kept up the positive momentum in July before dropping sharply in August and September. The quarter ended 3.5% in the red. Bond markets began a sharp slide, with the 10-year Treasury yield reaching 4.6% towards the end of the month. At the same time, decelerating inflation during the quarter, alongside continued stronger than expected payroll expansion and healthy sales, saw hopes spreading that the US might succeed in bringing inflation down without a sharp rise in unemployment and a recession. The Federal Reserve itself revised growth forecasts up and unemployment down in its September Summary of Economic Projections (SEP).

Was the market reaction a case of good economic news being bad for investors? A stronger economy is good for American households and many companies. But it does mean higher interest rates for longer. In raising near-term growth projections, the Fed also pointed to higher

Figure 1a. Volatility remains elevated in equity markets

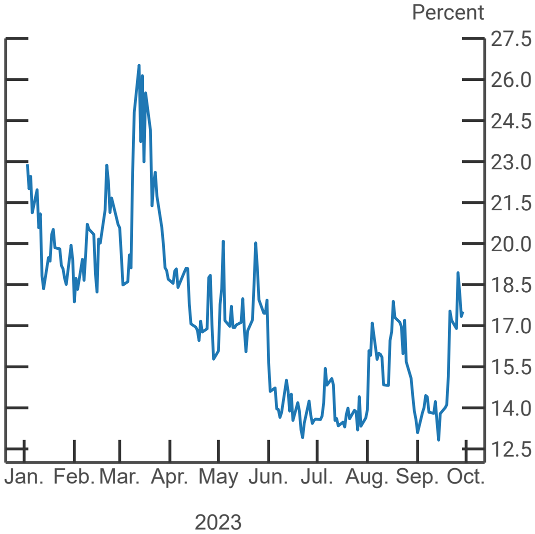
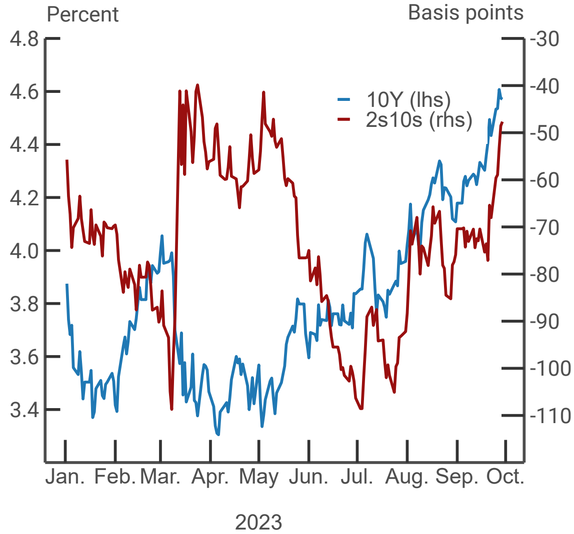


Figure 1b. The yield curve bear steepenes amid a surge in Treasury yields



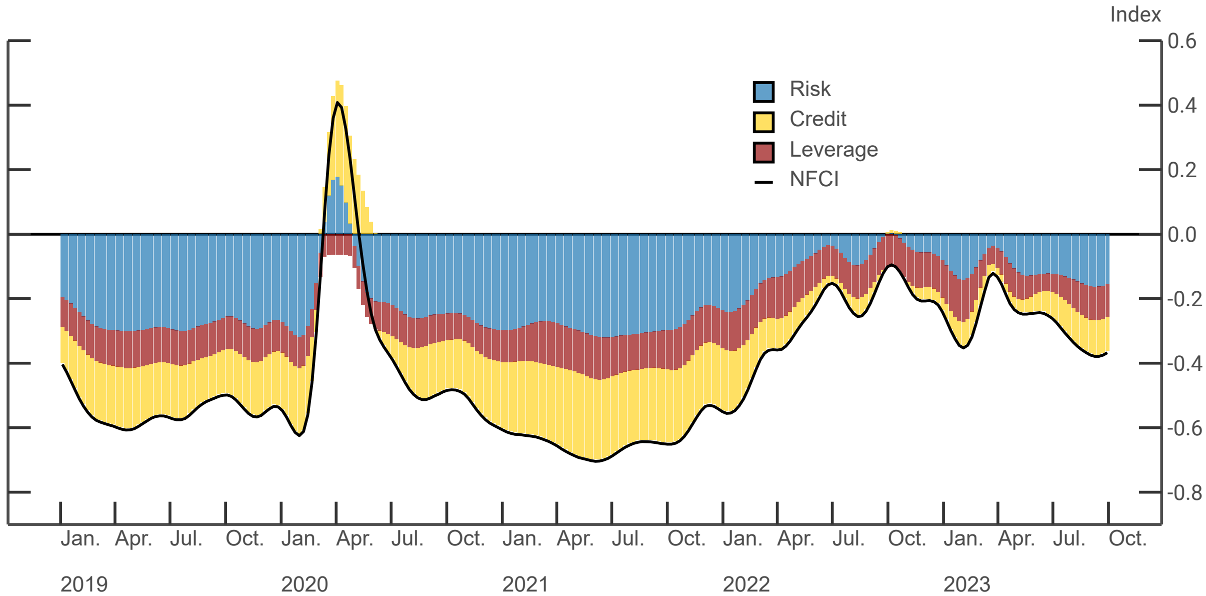
Source: RockCreek, Bloomberg.

interest rates during 2024 and perhaps beyond. That prospect weakens investor appetite for risk taking (Figure 1.a). In particular, the tech stocks that have powered the rise in equity markets look less attractive. And bond investors became wary, fearing that rates may have further to rise, thus pushing down prices (Figure 1.b).

That is one narrative to explain the disconnect last quarter. It leaves open the possibility of a soft landing, as inflation continues to slow towards the Fed's price stability goal of 2% and the economy outperforms expectations for jobs and growth.

Another view is that financial markets were correctly anticipating a stronger economy in the run-up in the first half of this year (Figure 2). In turn, the recent market slide reflects anticipation of a likely slowdown in the coming months. As RockCreek has said before, the economy is indeed set to slow as the impact of tight money gradually feeds through to consumption and business investment. Much of the economic strength so far, and the reduction in inflation, has reflected a rebalancing of supply as the impact of the pandemic has worn off. As an example, and contrary to earlier fears, men and women of prime working age have been returning to the labor force in

Figure 2. Financial conditions continue to ease despite tighter money



Source: RockCreek; National Financial Conditions Index, Federal Reserve Bank of Chicago.

recent months. Labor force participation for this group averaged 83.5% in Q3, compared to 82.5% in 2019, the last pre-pandemic year.

The next phase of the fight against inflation will be on the demand side. The Fed's squeeze on demand tightened over the quarter even as the pace of its rate hikes slowed. The policy rate was raised just once, in July, by 25 basis points. But market rates rose sharply and are now clearly restrictive. Monetary policy spread into higher borrowing costs and tighter financial conditions. The real interest rate implied by Treasury Inflation Protected Securities (TIPS) climbed from a low of 1.59% at the end of Q2 to 2.20% by the end of September. Mortgage rates also jumped back up, to 7.31% by end-September, compared to 6.61% three months earlier.

The labor market stayed robust in the quarter, although the extreme pressures that concerned Fed Chair Jerome Powell earlier in the Fed's fight against inflation were reduced. Vacancies remain high but are down from their peak. The Job Openings and Labor Turnover Survey, or JOLTS, was unexpectedly strong in September. But for Q3 as a whole, the survey showed signs that labor markets continued to ease over the summer. Though the number of jobs available for every American seeking work held at 1.5, the rate at which workers are deciding to leave jobs declined. Unemployment rose slightly, ending the quarter at 3.8%. Payrolls surprised on the upside in September, consistent with the narrative of a strong Q3 economy. But average earnings moderated, to a year-on-year increase of 4.2% in September. Recent data shows that some of the good cheer that has kept consumers spending – even as this has meant running up debts – may now be ebbing away.

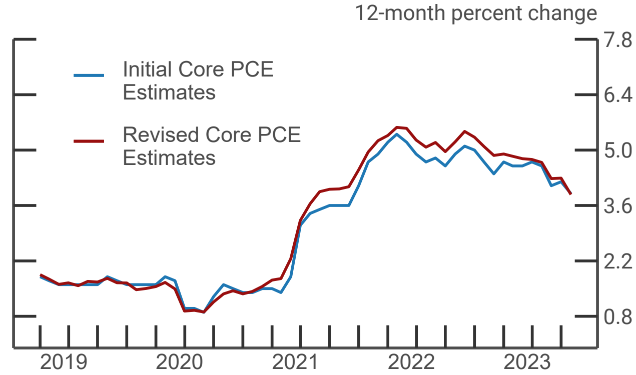
The path ahead for the economy depends largely on whether inflation continues to decline without further tightening, either directly by the Fed raising its policy rate or by financial market tightening as long rates rise. During the quarter, the balance of risks evened out between doing too much or too little further Fed tightening. But Chair Powell continued to emphasize the need for a credible and sustainable reduction in inflation. He and his colleagues do not want to take the risk of easing too soon. Their job is made harder by the difficulty of understanding what led to the inflationary surge of 2021-22 and why prices have decelerated with little economic pain so far.

THE INFLATION - JOBS PUZZLE PERSISTS

It is clear that the US economy has moved into better balance. Labor market pressures eased somewhat, and price inflation slowed. What is less clear is whether the squeeze on demand from higher borrowing costs will let the air out gently from the post-pandemic economy or whether tight money will eventually trigger a sharp pull back in spending and hiring that becomes self-fulfilling, as former New York Fed President William Dudley recently warned. The Fed appeared to move closer in Q3 to ending the tightening cycle that began in March 2022. But key decisions remain about how long to keep rates up at current levels.

History and theory are not helpful in answering the question. Nor have recent data offered a good guide. Covid lockdowns and accompanying policy responses in the US and elsewhere, together with the impact of Russia's attack on Ukraine, have blurred the economic picture to such an extent that sharply differing narratives can be supported by the evidence. GDP growth, driven by consumer spending, appeared to remain robust during Q3 after outperforming expectations in the first half of the year. Better price data in June and July encouraged the Fed to hold rates steady in September. In all of the third quarter, the policy rate was only increased by 25 bps, compared to the increase of 75 bps in the in the first three months of 2023. Initial August data for inflation and growth put pressure on the Fed to keep its options open on whether to raise rates later this year. Upward revisions to inflation over the last few years give them pause (Figure 3). But the sharp increase in market rates may be doing enough tightening of financial conditions.

Figure 3. Revisions to inflation data give central banks some pause



Source: RockCreek, Bureau of Economic Analysis, Bloomberg.

The most important economic phenomenon of the pandemic and post-pandemic period – the inflationary surge that characterized 2021 and 2022 – remains something of a puzzle and a matter of heated dispute among experts. Government policies around the world varied during this time. But the jump in inflation was widespread across the globe – with the exception of the two Asian giants, China and Japan.

The response to the inflation shock was similar among major central banks. All tightened policy in 2022 and 2023. Inflation has subsided around the world, but not simultaneously. And as the tightening cycle drew towards an end in Q3, economic developments diverged. In the US and Canada, economic resilience kept growth positive while inflation declined, to 3.7% and 4.0% year-over-year, respectively. Other major economies – with the unusual exception of Japan – did not fare so well. Europe continued to see sticky inflation, above target. Despite still negative real interest rates, economic output and sentiment dimmed over the summer, especially in Germany, which has complicated monetary policy. Some of the weakness reflected the challenges in China, the world's second largest economy, which continued to underperform in Q3 despite a series of measures– mostly monetary – aimed at boosting the economy.

If the price surge was fundamentally a result of supply shocks that are now easing, inflation could subside further without recessionary pain. In that case, the danger for the Fed and other major central banks is that they may tighten too much and for too long.

DEFICIT AND DEBT WORRIES RESURFACE

It has been more than three decades since James Carville, then political adviser to Bill Clinton, famously said he would like to return in another life as the apparently all-powerful bond market. Politicians feared a market thumbs down could scupper their spending and tax plans. The long period of low interest rates since then changed the calculus. It is now changing again. In a world of higher interest rates and more security dangers, concerns are growing about the burden of government borrowing and the growing share of government spending that must be devoted to servicing the debt. At the same time, there is little political consensus about how to cut the deficit. Generally, the argument is framed in terms of spending. Tax policy gets less attention. Given the relatively small proportion of federal spending that is truly discretionary – once defense, social security, Medicare and interest costs are put aside – it makes sense also to consider potential deficit savings on that side of the ledger. A deep dive into this issue at Brookings brought together experts to consider potential reforms that could garner political support and raise economic efficiency.

Deficits and debt raise the supply of government debt. There is a separate reason for recent volatility. The demand for Treasuries was buoyed since the Global Financial Crisis by the extraordinary Fed purchases under QE as well as by foreign purchases, e.g. from China. These trends are now changing. It seems that markets started to wake up to the implications of that, together with a strong economy that is holding up private investment and spending.

PRODUCTIVITY MATTERS

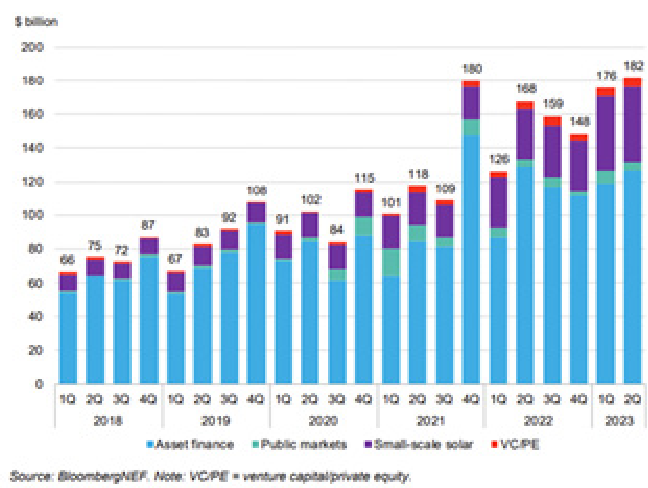
US GDP in Q3 likely grew by more than the 1-1.5% rate now widely thought to be the economy's potential growth rate – i.e., the rate of growth that is sustainable over the medium-term. The recent turn away from globalization, open markets and free trade in the US and other major economies will tend to dampen efficiency and productivity, according to research from three major international economic institutions – the World Bank, IMF and, most recently, the OECD. But there is better news for the US from research on the possibilities of Artificial Intelligence. American strengths in technology, flexibility and openness to innovation are likely to lead to US strength in capturing AI to make the economy more productive, according to McKinsey.

SUSTAINABLE INVESTING

As the world emerges from a brutal summer with record-breaking heat, we are once again reminded of the importance of the energy transition in reducing fossil fuel dependence. Unpredictable and extreme weather patterns have caused volatility in gas prices, and the falling costs of clean energy has made renewables an attractive opportunity from both a cost and energy security perspective. Despite the challenging economic picture over the last 18 months, the energy transition shift continues to gain momentum as policymakers seek to mobilize private capital and investors seek to take advantage of the emerging opportunities.

New investments into clean energy are expected to reach $1.7 trillion in 2023, and recent data from BNEF shows that the first half of this year saw a 22% surge in investments to a record-breaking $358 billion, with solar driving most of the performance (Figure 4). Nearly half of these investments came from China, but growing policy competition may upend their market dominance. In the US, clarification on incentives provided by the Inflation Reduction Act (IRA) – which marked its one-year anniversary in August – and easing supply chain pressures helped propel US investments to a 75% year-over-year increase to $35 billion. Other countries are following suit with their own policies to ease their dependencies, but it is important to note

Figure. 4. Quarerly investments into clean energy continues to grow.



that creating localized supply chains and diversifying supply chains will take significant capital and time to rival that of China, which currently represents 80% of total global solar manufacturing capacity. But as major markets now work to align incentives with regulation on longer-term objectives, we may see a meaningful shift towards a decentralized energy market in the coming years.

Inflation and higher rates have fed into higher financing costs, putting pressure on companies in this space. A slew of earnings among solar stocks that missed expectations last quarter and concerns over supply-chain bottlenecks for offshore wind didn't improve the sentiment. The S&P Global Clean Energy Index – which measures the performance of around 100 companies in the global clean energy industry – declined sharply over the quarter by 20.1%. Sustainability-linked funds continued to suffer outflows over the quarter, particularly for funds with high exposure to clean tech and clean energy stocks that were hit by revaluations. Nevertheless, assets continue to pour into climate funds, particularly for "climate transition" funds that focus on companies with a clear commitment to transition and are well-positioned to transition to the low-carbon future.
Climate venture is coming off a difficult first half of the year, but the dry powder for investment remains sizable. While investments into climate tech have largely reflected broader market conditions, the year-over-year decline of 40% in Q3 is much less stark than venture activity in other sectors. And climate tech as a percentage of startups continues to grow, representing just over 11% of startup investments in Q3 from a low of 0.6% just ten years ago. According to Pitchbook, more than $14 billion of capital deployed over the quarter to climate tech, bringing the year-to-date total to $43 billion across more than 2,200 deals. And recent estimates suggest there is still $33 billion of cumulative investable dry power waiting in the wings. Investments are also seeing momentum from some of the largest PE funds that are raising capital dedicated to the climate and energy transition. Though the current environment has slowed the rollout of dealmaking and commitments, there are some trends to watch as we head into the fourth quarter and into 2024, including the move in funding towards late-stage, growth, and private equity as climate tech companies mature.

There are plenty of headwinds in place. The global landscape for clean energy is rapidly evolving. Higher power prices and volatile energy markets; better efficiency, geopolitical concerns, long-run global fiscal support play positively into clean energy investment and adoption. Much of the discussion around transition investing has focused on developing new technologies. There are huge opportunities to invest in companies with smart commercial solutions and can be deployed today. The growing importance of the “time value of carbon” – whereby carbon reductions today are worth more than carbon reduced in ten years – means there should be a larger focus on adopting existing technologies and solutions that can be scaled rapidly to catalyze the energy transition. This is a space where investment goals and impact goals align well: sales growth comes from deploying energy transition solutions on a larger scale. This is not to say there shouldn’t be any investment in breakthrough technologies, but rallying funds for these efforts takes time and often comes with a slower rate of deployment.

PUBLIC EQUITIES

A combination of better-than-expected economic data, corporate cost-cutting measures, and enthusiasm around AI helped drive markets higher this year. However, since the end of July we have seen a distinct turn in sentiment as the Fed poured cold water on optimistic hopes for early interest rate cuts and more signs of a slowing economy emerged. Indices have since retreated to their lowest levels since early June with the S&P 500 and Nasdaq shaving 3.3% and 3.9%, respectively.

The main story during the first half of the year was how mega-cap technology stocks were driving an overwhelming proportion of the market's gains. But by July, those mega-caps were no longer a bargain. The S&P 500 was trading at an estimated 18.7x on a 12-month forward-looking basis, well above its 10-year average of 17.7x and the 16.8x multiple it traded at coming into the year. Market strength appeared to be broadening out into other areas like small-caps, value, and cyclical sectors which had been left behind. This was always a risk-on trade though and somewhat precarious during this late part of the cycle. As the market sold off in August and September, these stocks bore a disproportionate amount of pain. As shown in Figure 5 below, small-cap stocks are near trough trailing P/E multiples. Assuming we see further economic moderation in the coming quarters, companies with more stable revenue, earnings, and margins, regardless of industry or size, are likely to be rewarded. This bodes well for active management, which has been seeing a mini renaissance over the last year and half.

European markets continued to sputter, as the region dealt with higher inflation and lower GDP growth than the US but were helped by their relatively meager valuations coming into the third quarter. The Stoxx 600 retreated 2.0% in Q3 but managed to stay in positive territory for 2023

Figure 5. Russell 2000 Index nearing trough trailing P/E multiples

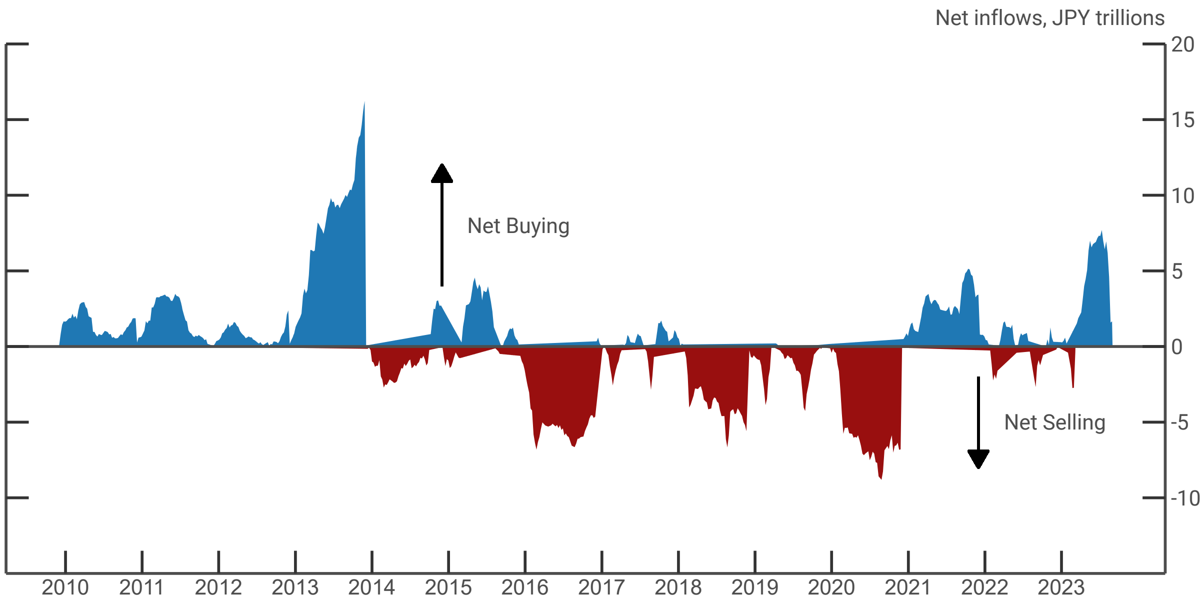
Russell 2000 Index (Trailing 12 Month P/E) (Lord Abbett)

so far with 4.96% in gains YTD. Also worth noting is the euro's significant depreciation, falling 6.6% since mid-July. Europe has a relatively high concentration of consumer goods companies, especially at the luxury end, and industrial sector companies. These are heavy exporters that have been impacted by China's weakness but nonetheless stand to benefit from the weaker euro.

As we've noted in previous letters, Japan has had arguably the most going for it among the developed markets given its relatively attractive valuation multiples, Yield Curve Control (YCC) monetary policy, return to positive inflation, and improving corporate governance culture. The Nikkei 225 has appeared to plateau but remains up 23.9% YTD. Some investors are asking whether it is too late to invest in Japan after such a strong run and the answer depends on whether we're seeing a structural evolution gaining momentum. We believe economic rationality points in a positive direction. The compounding effect of decades of deflation had a tremendous effect on Japanese companies, forcing them to focus on efficiency and preventing them from investing in R&D, people, and capital-intensive projects. This was necessary to keep the lights on. Progressing into an inflationary regime dramatically changes the calculus, encouraging more investment and providing cover for price increases. There now appears to be real potential for higher earnings growth as corporate attitudes shift and companies are more willingly pass on rising costs and seek to increase productivity through investments in automation, robotics, and software.

Foreign flows into Japan this year pale in comparison to the level of inflows seen following the introduction of Abenomics in late 2012 and the many years of outflows witnessed since then (Figure 6). Most institutional portfolios remain underweight Japan as much of the early flows have been fast money into passive funds.

Figure 6. Cumulative foreign inflows in Japanese equities (JPY Trillion)



Source: RockCreek, Bloomberg.

EMERGING MARKETS

The latest meeting of the G20, hosted by India, was capped by an important US-Vietnam partnership deal, underscoring the importance of 'friend-shoring' and 'near-shoring' strategies pursued by the Biden administration. The Vietnamese government has wasted little time capitalizing on the attention the country has received. It has been actively working to stimulate the economy while the issues that overshadowed the market last year have largely been addressed. Much of this year's momentum has been driven by domestic retail activity whereas foreign premiums - where they exist - are still low. We believe there is still room for further upside, even in the face of a slowing global economy.

China continued to dominate headlines in the third quarter. Despite a modest reprieve in July, equity markets continued their poor form, reacting to negative economic data and piecemeal stimulus measures. Investors withdrew a record $15 billion out of Chinese stocks in August alone, the largest monthly outflow since 2015. Fixed income assets fared little better, with over $5 billion in outflows in August. Chinese banks and property developers continue to play the part of the bogey man for the country's growth prospects. While the government has taken steps to remedy some of the issues by lowering capital ratio requirements and the interest rate burden for first-time home buyers, the property sector has a long way to go before finding a footing. Just as indispensable is China's small business ecosystem, which makes up 60% of China's economic output and is responsible for 80% of new jobs. Small enterprises have been systematically stymied by government lockdowns and credit crackdowns, but China's youth unemployment problems and challenging demographics means making such businesses a part of the solution more eminent.

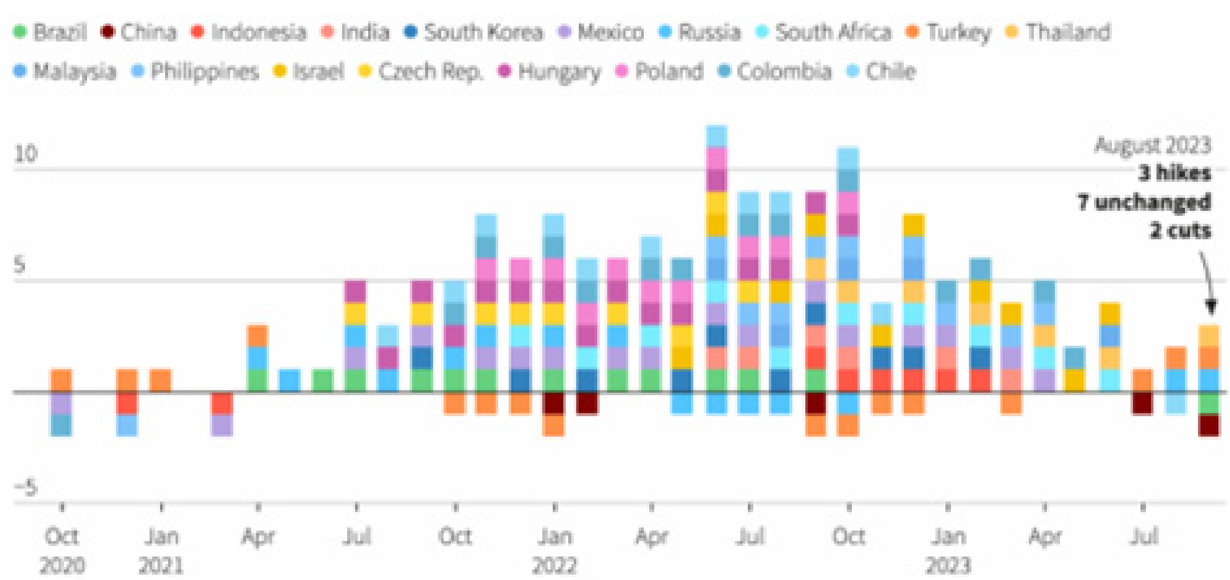
But it wasn't all bad news coming out of China. The quarter was capped by a speech by President Xi Jinping at a study meeting of senior leadership, where he emphasized the benefits of China's participation in the WTO and pledged to further open the country to foreign investors. More interestingly, the Chinese leader said relatively little on issues related to external and domestic security, a trademark of previous speeches. While nuanced, this shift in tone does serve as a belated acknowledgement that not all is well and that a course correction is badly needed. One source of confidence may come from third quarter corporate results which will begin their rollout later in October. We expect earnings to reflect strong consumption patterns on the back of the recent 'golden week' holiday, where both the Mid-Autumn Festival and National Day were celebrated in tandem. Data going into the holiday period looked promising. For instance, Chinese online travel operator Trip.com reported that airline booking volume rose nearly five times year-over-year and that hotel booking volume had increased by more than eight times. Similarly, China railway expected close to 200 million train trips would be taken over the extended holiday break. In a bid to boost consumption, many cities across the country issued 'consumption vouchers' at local shopping centers and markets. Even before this important holiday, there were signs the Chinese consumer was still open to spend, albeit differently, as evidenced by the impressive rally in discount online retailer Pinduoduo. Perhaps this is not surprising. The last time US consumers downgraded their spending habits, great companies like Walmart were born.

Elsewhere in emerging markets, a subset of central banks showed a willingness to cut rates after a series of aggressive hikes in 2021 and 2022 (Figure 7). Chile, Brazil, and Hungary began their rate cutting cycles during the quarter in the hopes of an uptick in economic consumption. Expectations were that other central banks would follow as inflation abated. However, in the face of the Fed's 'higher-for-longer stance', most EM central banks have opted to keep policy rates unchanged or have continued to hike, particularly those with currencies sensitive to higher US interest rates and higher energy prices.

Indeed, the USD has shown significant strength against EM currencies, clawing back losses from earlier in the year following the Fed's September FOMC. Predictions of broad-based monetary easing across emerging markets may prove an exaggeration, or at the very least premature.

It was also a summit heavy quarter in emerging markets. The annual BRICS summit drew headlines for expanding membership to Saudi Arabia, Iran, Ethiopia, Egypt, Argentina and the United Arab Emirates, a largely symbolic move meant to underscore dissatisfaction with the current dominance of the US in the global financial system but an important development, nonetheless. Talk of moving away from the USD as the de facto currency for trade and financial settlements, while impractical in the short term, is a further development to monitor. As we previously wrote, new members may help BRICS symbolic presence grow, but it is unlikely that they will help the bloc transform into an effective and coherent group any time soon.

Figure 7. Monthly count of Emerging Markets hiking or cutting rates

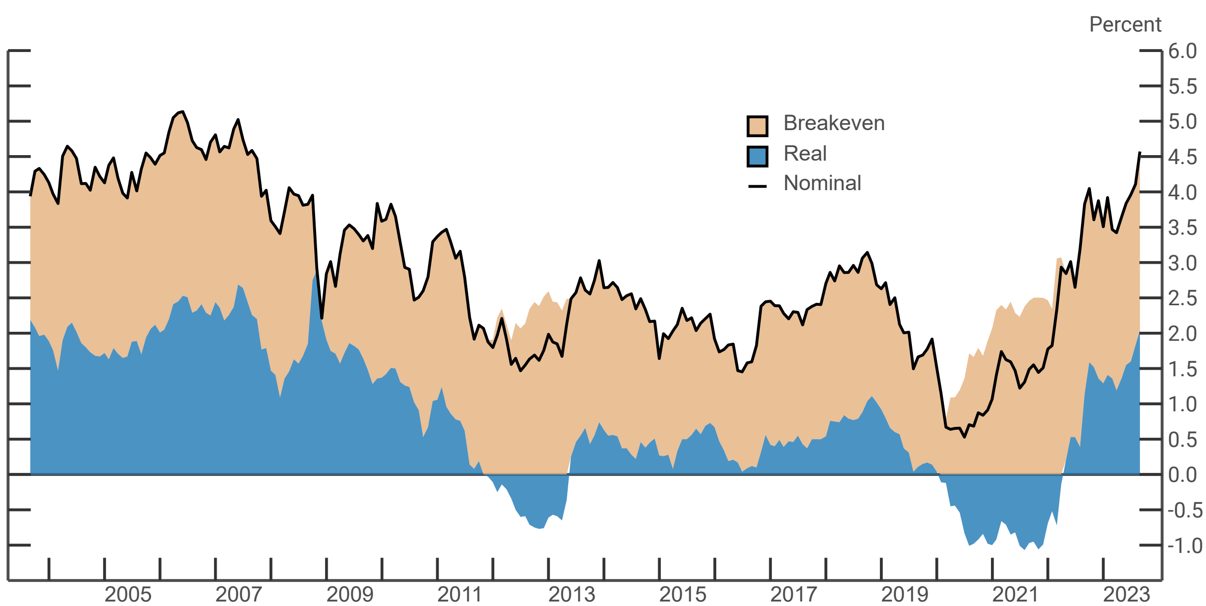


Source: Refinitiv Datastream.

FIXED INCOME

The sell-off in bonds continued in Q3 with rising real rates and sharply higher oil prices. inflation expectations. The Bloomberg US Aggregate Bond Index declined 3.2% as the 10-year TIPS yield rose 65 bps to 2.2% and the headline nominal 10-year yield climbed 78 bps to 4.6%, the highest level since 2007 (Figure 8). Unlike the prior two years that saw rates pushed higher by front-end rate expectations, this sell-off was most pronounced in the long-end as markets priced a "higher for longer" regime. Base rate expectations were not much changed as the market maintained a

Figure 8. Ten Year yields climb above 2% as markets reprice the longer-term economic outlook

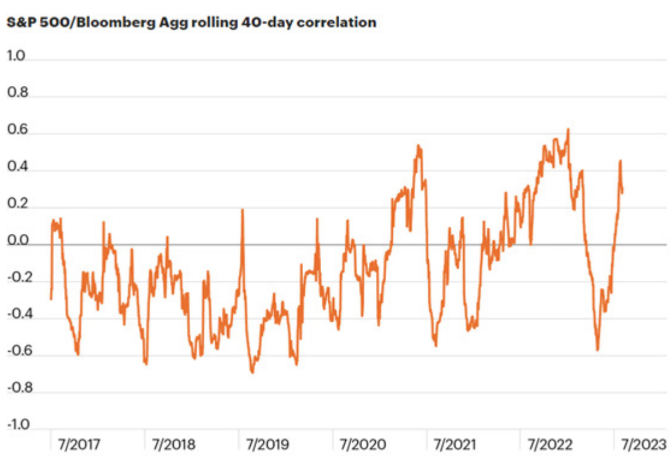


Source: RockCreek, Bloomberg.

year-end fed funds rate of 5.5%. As a result, we saw a rare bear steepening of the yield curve - the spread between the 2-year and 10-year Treasury ("2s10s spread") narrowed by nearly 59 bps to -0.47%. Credit outperformed for the quarter as investment grade spreads tightened by 5 bps to 1.25%.

Driving rates higher was a confluence of monetary and fiscal dynamics. As described above, the surprisingly resilient economy in the U.S. reignited hopes for the coveted "soft landing," pushing out expectations for when the Fed may cut rates. At the same time, the U.S. government's credit rating was downgraded by Fitch in August as a response to deficit spending plans that require the Treasury Department to issue even more long-term debt than previously anticipated. There were also technical market dynamics at play as speculative short positioning in Treasury futures reached record levels, which raised the alarm of the Bank for International Settlements (BIS) in their quarterly review.

Figure 9. The spike in correlation between stocks and bonds reflects the current challenge in building diversified portfolios



Source: Bloomberg. As of August 11, 2023.

The last six months have been painful for those who have extended duration. Cash has been king. Not only have the absolute returns of longer maturity bonds been abysmal, but the diversification benefit of interest rate duration has vanished (Figure 9). Is it time to throw in the towel and retreat to the 5.5% yield on cash? We think that might be short sighted.

We said last quarter that "with real yields near [now well through] cycle highs, credit spreads well off their recent tights, and a very low or negative equity risk premium, there is a bullish setup for spread products as we head into the second half of the year." We obviously spoke too soon, but timing these things is difficult. hard! The third quarter has simply provided the opportunity to buy at a better price.

There seem to be two reasons cited to remain short duration – one monetary and one fiscal: 1) real rates will continue to rise as the Fed hikes further and/or holds rates higher for longer; and 2) government spending and related debt burden remains unsustainable.

As it relates to the monetary outlook, the market may well be underestimating the Fed. While we believe the hiking cycle has largely run its course, it would be wise to keep some dry powder if we're wrong. In this case, buying shorter maturity spread products is attractive. The Fed is unlikely to be hiking into an environment where credit spreads are widening materially, and a deeply inverted yield curve still offers a significant yield premium in the front-end.

Fiscal concerns can push up real and nominal equilibrium interest rates, although there is little practical credit risk. The U.S. government can always pay its debt, which is denominated in dollars, whether by raising taxes, issuing bonds or printing money, via the Fed. But additional public borrowing will crowd out private borrowing, leaving real interest rates higher than otherwise. This is the opposite of the phenomenon of "secular stagnation" or the "savings glut" that was thought to be holding down equilibrium real interest rates in the period after the global financial crisis. If real interest rates are held down by monetary policy, or some form of printing money, inflationary pressures are likely to arise, making inflation protected bonds, i.e., TIPS, attractive. Earning 2.4% annually on 30-year paper that is free of credit and inflation risk seems like an effective way to get duration exposure.

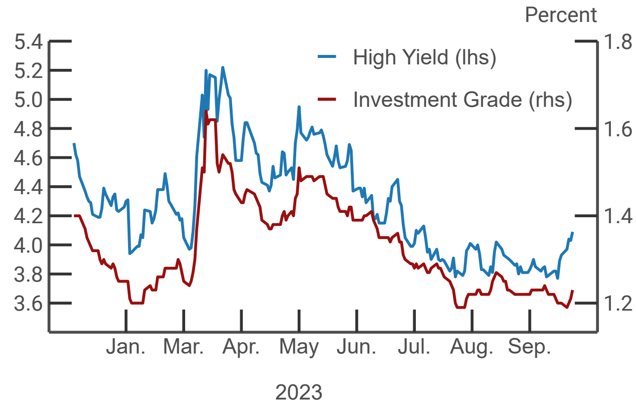
PUBLIC CREDIT

The third quarter marked a shift in credit markets over the summer from the continued trend of past performance and trends for the future. On the one hand, we witnessed continued robust performance in the lower-risk segments of the bond market, driven by factors such as peaking inflation expectations, healthy corporate cash reserves, and ongoing consumer strength. The Bloomberg Distressed Index saw gains of 1.4% in Q3 and is up 9.4% YTD. This trend extended upwards through the credit quality spectrum, with High Yield (HY) Index eking out gains of 0.5% in Q3, although the Investment Grade (IG) bonds lagged, losing 2.2% over the quarter.

As economic data began to take a notable turn during Q3, bond defaults once again started to concern investors. The S&P reported a provisional June default rate of 3.24%, a significant upswing from the low 0.5% seen in 2021, a peak default rate of 4.25% by 2024 Q2. Meanwhile, Fitch projects the HY default rate to reach 4.5% by the end of 2023, the single highest rate since the onset of the pandemic. Concerns also emerged regarding consumers, as US credit card debt crossed the trillion-dollar mark in Q3, and credit card delinquencies returned to a pre-pandemic rate of 2.8%. With student loan repayments looming in October, apprehensions about consumer stability are likely to persist and impact the markets.

The primary driver behind bond markets in this period was more technical than fundamental. Since the end of the COVID pandemic, credit markets have undergone a transformation. New issuances have remained low, as many corporations refinanced their debt during the low-rate environment of 2020 and 2021. They are now hesitant to issue bonds at higher interest rates and fixed coupons. Additionally, the rise of private credit has provided an alternative avenue for financing, with many corporations opting for short-term deals with floating rate coupons. This approach is attractive in the current market climate, and many companies see it as a bridge to a later bond offering.

Figure 10. Credit spreads widened amid rising rates



Source: RockCreek; ICE BofA, retrieved via FRED.

For those remaining in the public markets, there continue to be strong inflows into the asset class. As of July 2023, US Bond Mutual Funds have seen inflows exceeding $41 billion. This is a significant shift from 2022, when investors withdrew over $540 billion. In the HY sector, inflows are particularly focused on a smaller pool of bonds, due to lack of issuance and more upgrades to IG than fallen angels in 2023. This trend is exerting downward pressure on credit spreads, even if somewhat artificially (Figure 10). However, investors continue to seem willing to secure a higher absolute rate of return despite narrower spreads compared to historical averages.

Finally, collateralized loan obligation (CLO) instruments have rebounded in 2023 after a challenging 2022. In Q3, CLOs posted gains of 5.30%, bringing their gains to 12.83% through the first nine months of 2023. Two characteristics make this market particularly attractive. First, their floating rate structure, tied to leveraged loans, provides strong price convexity compared to traditional bond funds. While bond prices have been under pressure due to low coupons and longer durations, CLOs – with their shorter duration and floating rates – are less affected. Additionally, the ability to invest in a diversified portfolio of assets rather than individual loans offers downside protection.

PRIVATE CREDIT

With the US high yield and leveraged loan markets yielding 8.5% and 9.3%, respectively, it is not surprising that investors continue to view credit as attractive, relative to other asset classes. Private corporate direct lenders also continue to deliver a healthy illiquid premium (i.e., excess return over their public market equivalent), achieving spreads over SOFR of 600 bps to 800 bps for sponsored transactions and 750 bps to 1,000 bps or more for non-sponsored transactions. Considering the added return that can be achieved through upfront fees, call protection, and other structural features, private lenders may need to retire the adage, "generating equity-like returns" for the foreseeable future.

However, corporate credit yields and spreads – while attractive on an absolute basis – reflect the risk premium investors must receive for bearing elevated credit risk. This is particularly relevant for companies exposed to rising interest rates (and other inflationary pressures) through their debt structures or inability to pass high debt expenses on to consumers or customers. At RockCreek, we think we are still far from a true distressed cycle in the United States; however, the public markets have begun to show signs of stress. According to JP Morgan market research, year-to-date defaults and distressed exchanges in the US are currently on track to be the market's third largest annual total on record by year end. Although par-weighted high yield bond and leveraged loan default rates remain near their 30-year monthly averages, there has been a clear upward trend that will likely only accelerate into 2024 and 2025 at or ahead of upcoming maturity walls.

Corporate credit risk is heightened, and investors should not be complacent or blinded by the promise of attractive total returns. RockCreek has continued to recognize opportunity in the breadth of the private credit markets and ability to generate superior risk-adjusted returns outside of the corporate sector, whether it be through taking asset-based risk or identifying less-discovered, more esoteric market opportunities.

One such opportunity is the $14 trillion mortgage servicing rights (MSR) market. MSRs are a contractual agreement governing the right to service a residential mortgage, thereby generating a stable source of revenue through a monthly servicing fee that is based on the borrower's mortgage balance. MSR payments are senior to the mortgage and bear similar risk characteristics to a mortgage IO derivative. Every agency mortgage originated must have an MSR. Despite its size, general complexity and significant barriers to entry have discouraged new alternative entrants into the market, while existing participants – primarily the large money center banks – are decreasing their footprint due to burdensome regulation. Despite bearing no credit risk through an implicit or explicit guarantee from the GSEs, agency backed MSRs pay a 9% to 10% unlevered yield in the current market environment. This return can be enhanced through simple interest rates hedges and modest leverage. While prepayment risk on current vintage MSRs is a consideration, the retrenchment by banks is creating an interesting market dynamic to buy 2020/2021 vintage MSRs, whereby the underlying mortgages are 300 bps to 400 bps below the prevailing mortgage rates – the risk of refinance is low. Although this opportunity may be more complex than private corporate lending, it would appear to present a superior risk-adjusted return.

Another theoretical question is around the value of non-US exposure, particularly when it comes to assessing income-oriented strategies. While most investors recognize the value of geographic diversification, they also highlight the lack of risk premium that can be achieved for taking jurisdictional risk. Generally, we would agree and have concentrated much of our focus on opportunities located within the US. However, certain markets may offer outsized risk-adjusted returns relative to the US, where prevailing regulations and barriers to entry have created a unique market environment to exploit. One such area is asset-based lending in Australia and New Zealand – two smaller markets that have been predominantly served by a small number of local banks. The combination of market size, Basel IV implementation, demographic trends and net migration, and undersupply has created a unique opportunity to provide debt financing for residential development. These asset-backed loans can achieve high teen returns in a region that arguably has better creditor rights than the United States and developed capital markets to facilitate inexpensive currency hedging.

Although corporate lending in the United States can generate attractive total returns for investors, there are notable risks, and the opportunity set today is broad for investors willing to source through a wide aperture. And while corporate direct lending will likely remain a core component of most institutional private credit allocations, we believe the inclusion of other risk factors can significantly enhance the risk-adjusted return profile of a portfolio.

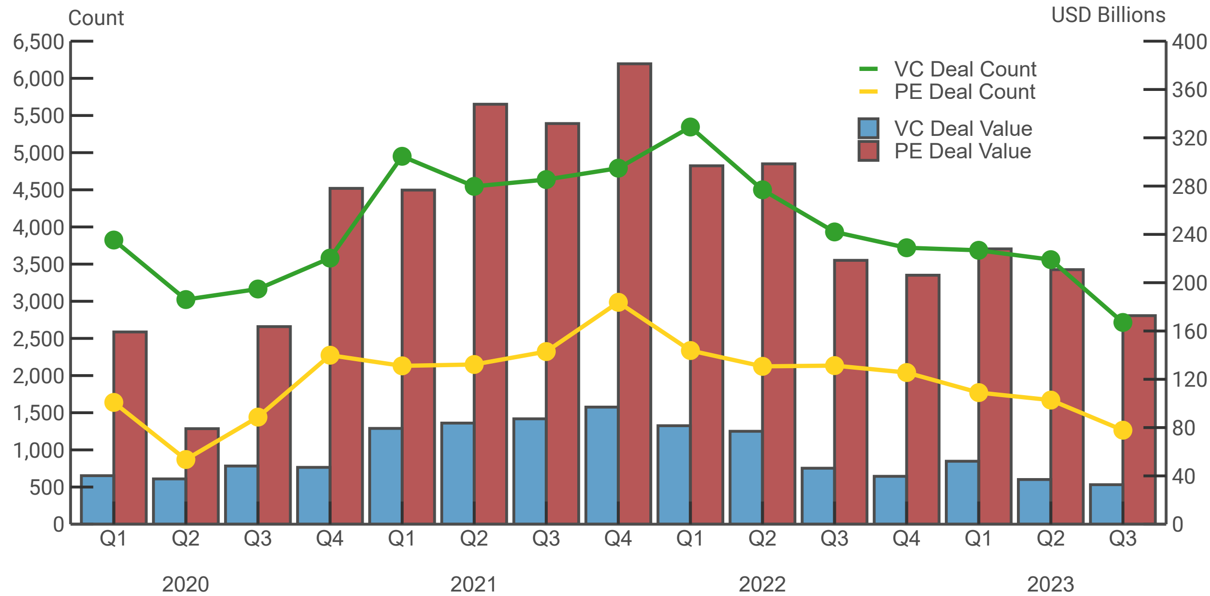
PRIVATE EQUITY & VENTURE CAPITAL

The third quarter represented both the persistence of existing trends and long anticipated signs of new developments within the venture capital (VC) and private equity (PE) markets. With regards to existing trends, deal values have reached recent lows, fundraising velocity continued to languish as investment dollars shifted towards larger and more established funds, artificial intelligence startups continued to buck broader venture capital fundraising trends, and late-stage venture rounds remained sparse.

The quarter's deal activity highlights the massive slowdown that has occurred within the venture and private equity worlds (Figure 11). Deal values for VC fell to the lowest figure since mid-2018, and deal value for this year is pacing towards the lowest year since 2019. One notable exception to the poor performance across stages was late-stage, where deal volume was buoyed by large corporate-backed deals within the Generative Artificial Intelligence (AI) space. Global private equity valuations have dropped nearly 15% year to date, and the number of transactions has fallen over 30% over the same time period. Just three LBOs have been valued at more than $10 billion this year.

Similarly, fundraising activity continued its downward trend since the beginning of 2022. According to Pitchbook and NVCA, venture capital fundraising through the third quarter is on pace to set a nine-year low. Over the 17 months ending in May of 2023, the ten largest venture capital firms raised 28% of capital commitments, up from 10% during the four-year period from 2018 to 2021. Similarly, the ten largest private equity managers raised 30% of commitments, up from 17% from 2018 to 2022. Funds are now forced to hold more closes, as "one and done" closes have largely gone the way of the dodo bird.

Figure 11. Pace of private equity and venture capital dealmaking continues to grind lower



Source: RockCreek, Pitchbook.

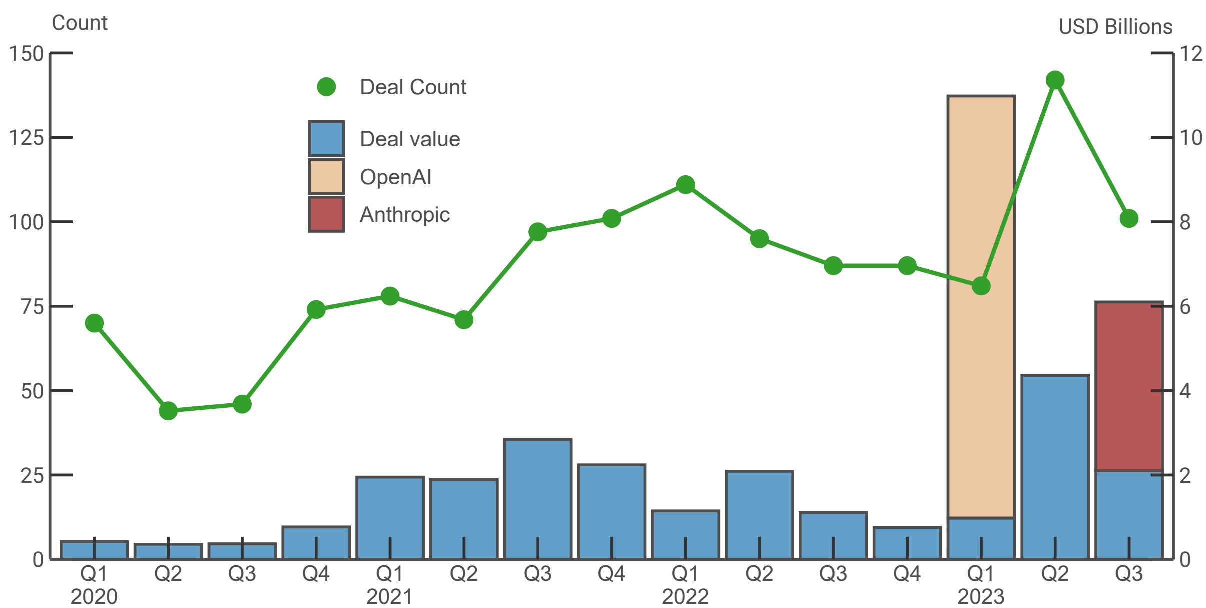
Amid the funding doldrums, Artificial Intelligence (AI) remained the one bright spot. This trend is expected to persist, with an estimated $200 billion invested into AI companies by 2025. One notable development this year has been big tech's investment in generative AI, highlighted by Amazon's $4 billion investment in ChatGPT's rival Anthropic at the end of the quarter. VC investment into Generative AI companies totals roughly $21 billion across over 300 deals through Q3 (Figure 12). However, the hype around this space has led investors in both public companies and startups to wonder if AI is the next big bubble.

And yet, there are signs of a light at the end of the tunnel within the VC ecosystem. One of the largest stories in August was the opening of the IPO window. As we noted in a recent weekly letter, Klaviyo shares have made solid gains while Arm Holdings and Instacart were more or less flat from their respective IPO prices. These exits represent some reprieve for investors who have seen liquidity in their private equity portfolios dry up. According to a report from Ernst & Young, LP distributions as a percentage of NAV have fallen to their lowest levels since the Global Financial Crisis. Per Pitchbook, estimates suggest that there are roughly 75 companies waiting to go public, and the hope is that this pipeline will start to flow in 2024. Much of the IPO forward calendar looks more SaaS heavy, with private markets behemoth Databricks being closely watched. While much has been written in the press about how these companies are coming public at valuations well south of their most recent private rounds (e.g., Instacart's IPO priced at a $10 billion valuation, down from a $39 billion peak), we shared in our above mentioned note that we are encouraged by the fact that the recent IPO class represents a broad swath of sectors while in the case of Instacart, the company is trading at a discount to both DoorDash and Uber on an EV/sales basis.

Similarly, while year-to-date global M&A activity at its lowest level in a decade according to LSEG, U.S. M&A activity in Q3 actually saw a 17% increase year over year. One recent bright spot was Thomson Reuter's $650 million acquisition of Casetext, an AI company which builds automated workflows and tools for legal teams. Casetext was a part of Y Combinator's S13 batch and previously raised $64 million in venture funding from leading VCs including Union Square, Susa Ventures, and 8VC.

While the venture capital and private equity industries are by no means out of the woods after a rough 21-month stint, green shoots are finally appearing, indicating that 2024 may see more positive developments than 2023.

Figure 12. VC funding for AI sees banner year in 2023



Source: RockCreek, Pitchbook.

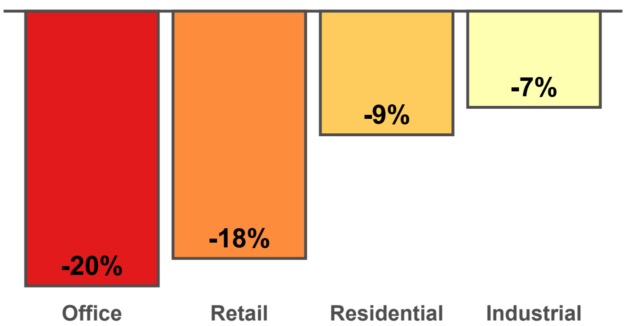
REAL ESTATE

The commercial real estate sector is currently in a state of transformation, with the era of low interest rates driving soaring transaction activity and widespread cap-rate compression seemingly behind us. In its place, the environment is characterized by higher income yields with normalized transaction activity and tenant demand. Despite these changes, real estate remains allocation, offering diversification, durable cash flows, and inflation protection. However, with increasing dispersion in property types, investors must prioritize growth in net operating income. Recent real estate headlines often sensationalize events, potentially causing the enduring strength of real estate fundamentals to be overlooked or underestimated.

Fundamentals have shown signs of strength: net operating income (NOI) has grown 5% since September 2022 and consistently outpaced inflation, but values have been the focus, having depreciated by 10%. This is primarily due to higher interest rates on capitalization rates and discount rates. While the office sector has faced the brunt of negative attention due to both cyclical and structural challenges related to job shifts and hybrid work models, the broader commercial real estate market has also felt the effects of this association bias. Over this period, capitalization rates have experienced significant increases, resulting in a spread between expected unleveraged returns and comparable bond yields that is 30 bps wider than the long-term average (Figure 13).

Additionally, the impact of rising interest rates on cap rates, along with a substantial $1 trillion in maturing debt over the next three years has contributed to challenges in an environment with tighter debt financing (Figure 14).

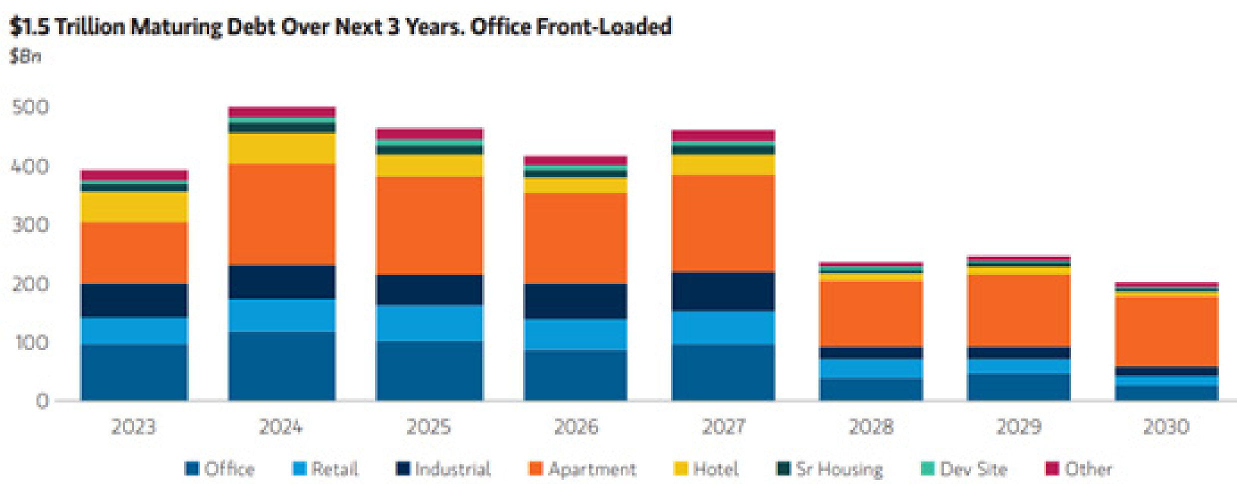
Figure 13. The bifurcation of value across real estate segments



Note: Percent change from unlevered peak to current value.
Source: RockCreek; NCREIF Property Index (NPI), National Council of Real Estate Investment Fiduciaries.

The industrial sector has experienced a prolonged period of strong performance, marked by an average rent growth of 11% over the past five years, primarily driven by the rapid expansion of e-commerce and the reconfiguration of supply chains. This remarkable growth has been evident across various markets, asset sizes, and product types. However, as the pace of retail sales growth decelerates and tenants become more discerning, rent growth has moderated to a still healthy 5%. The forces driving demand are shifting towards onshoring and increased manufacturing investment, favoring specific segments and markets within the industrial sector. Furthermore, isolated pockets of oversupply, particularly in larger asset sizes, have led to divergent performance trends, necessitating a more nuanced approach to investment in this sector.

Figure 14. A maturing wall of debt on the horizon



Source: Real Capital Analytics, MSREI Strategy. As of August 2023.

Like the industrial sector, multifamily has seen rent growth exceeding the norm over the past five years, buoyed by inflation, robust household formation, and limited affordable housing options for sale. Although rent growth has now stabilized, due to increased supply and more normalized demand, the overall fundamentals remain relatively solid. Unlike the office sector, the multifamily sector faces substantial debt maturities totaling $600 billion over the next five years. However, apartment values have appreciated considerably during the same period, resulting in lower effective loan-to-value ratios. Furthermore, multifamily assets have better access to financing due to government agencies such as Freddie Mac and Fannie Mae needing to meet their annual allocations.

At RockCreek, we have been focused on allocations to affordable multifamily and specific industrial sectors where fundamentals are strongest and have monitored other sectors for potential signs of distress that may warrant an interesting entry point for new investment. Additionally, we have placed an emphasis on digital infrastructure strategies as data demand has continued to grow in excess of other sectors as we emphasize NOI growth and durable cash flow in this market environment.

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