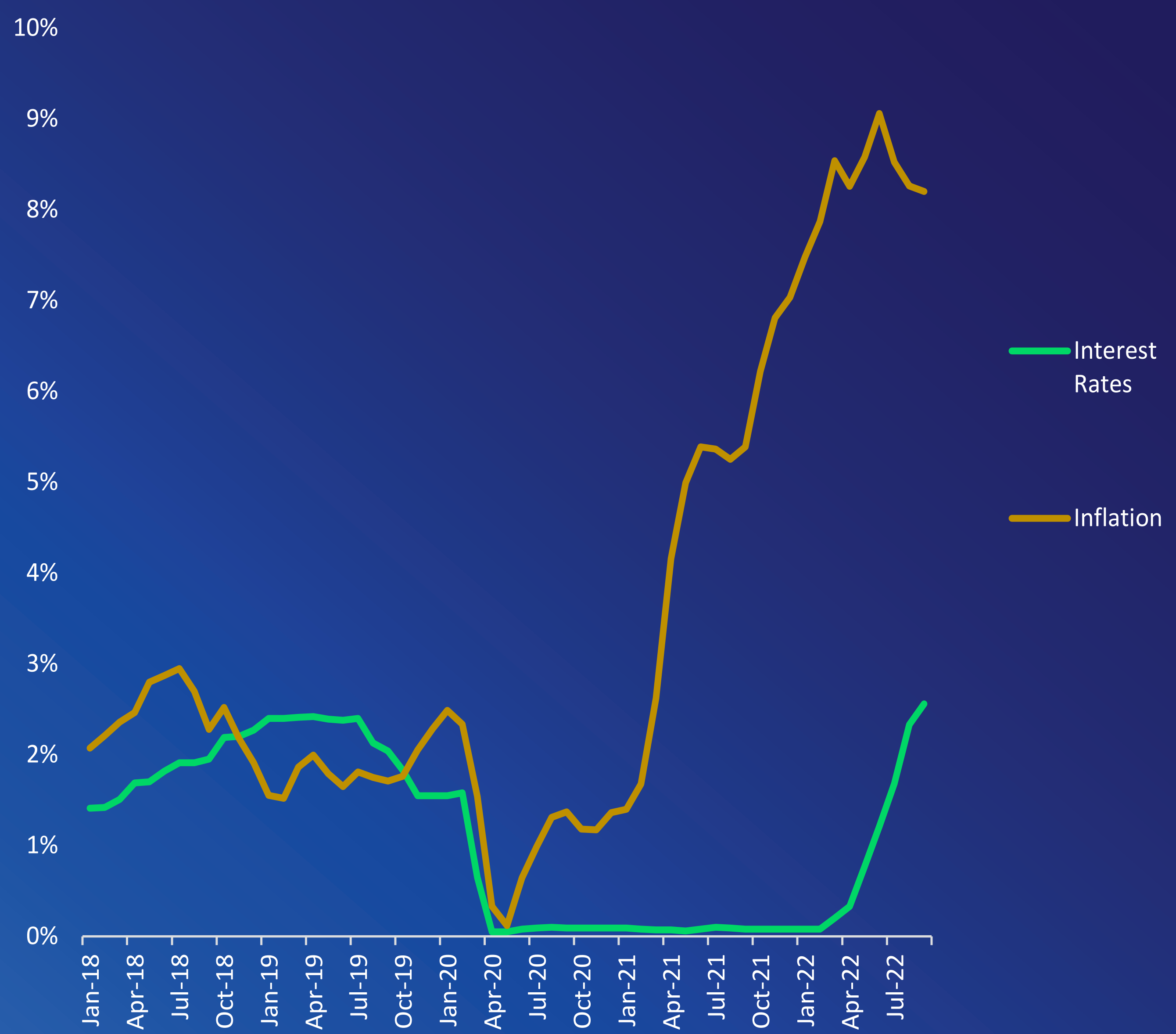
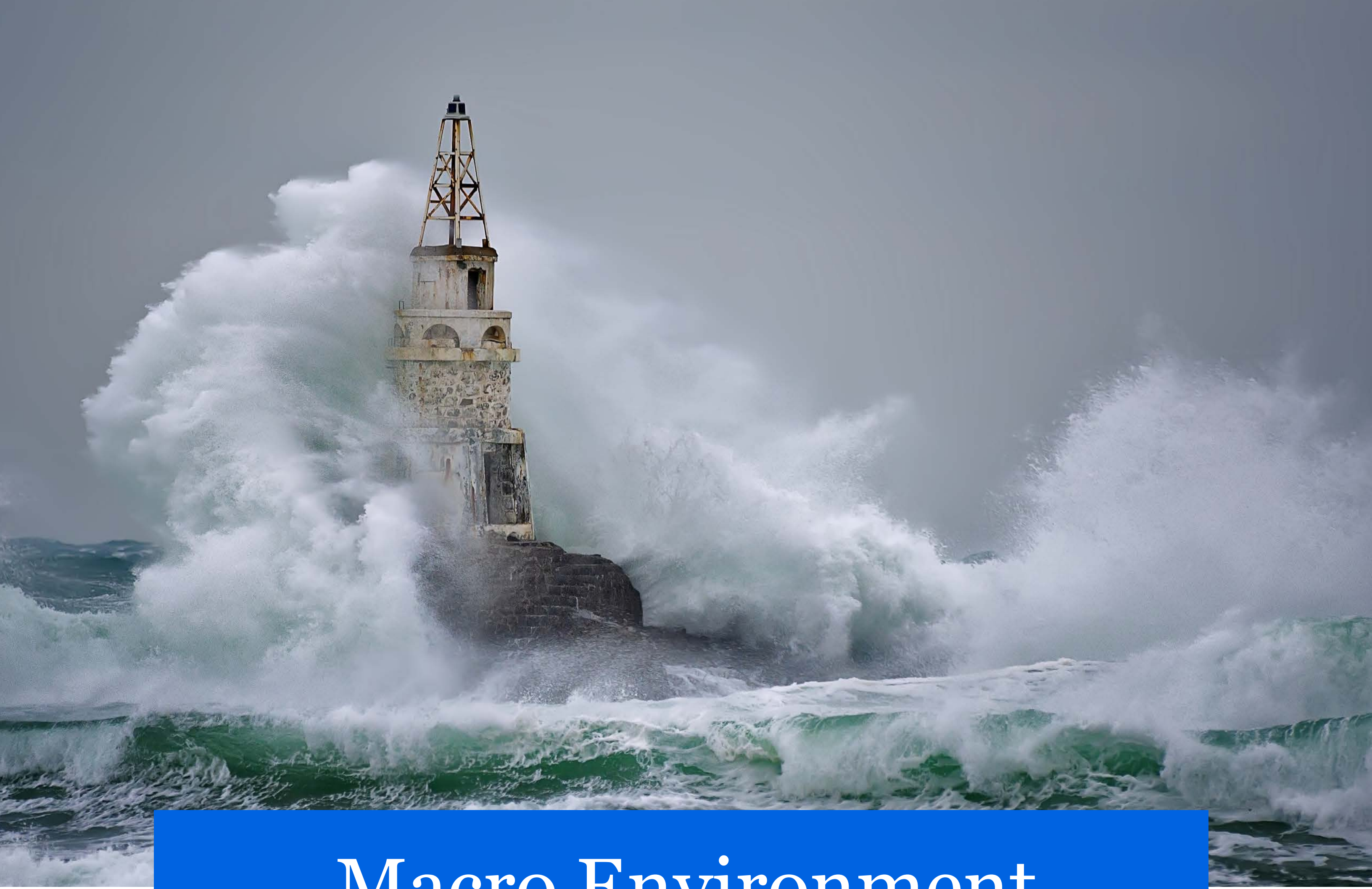


Q3 2022 Commentary Letter

A Tightening Grip

RockCreek

Contents



Macro Environment

The summer began with a strong rally in US markets. By quarter's end, that bounce was but a distant memory.

As interest rates marched higher, and the Federal Reserve grew steadily more hawkish, both equities and bonds suffered. By the end of the quarter, the S&P 500 finished down 5%, bringing the overall year-to-date drop to nearly 25%. For US equities, this marked a third consecutive quarterly fall – a first since 2008.

Will this outlook tempt central banks to ease up? Our short answer is no. At RockCreek, we continue to believe the Fed will keep its focus on fighting inflation, waiting for clear evidence – and consensus – that price stability is in sight.

Reaching the Fed’s 2% inflation target will take some time and will likely involve economic pain, as Chair Jerome Powell acknowledged in September. He and his colleagues spent Q3 trying to shore up their inflation fighting credentials in both words and actions. They want no doubts about their commitment creeping back into markets.

In July, financial markets shrugged off the battering of the first half of 2022, hoping for a pivot to easier money. By September, reality had set in: central banks have a lot more tightening to do.

As we enter the final quarter of 2022, investors have again wondered if central banks will stay the course. Signs are accumulating of slowing global growth. Finance officials from around the world shared gloomy assessments of the outlook in October at the annual Washington gathering for the meetings of the World Bank and IMF, where RockCreek took part in the discussions.

But while we see more restrictive financial conditions ahead, we expect that debate may build around the pace of tightening. So far, the Fed has moved with record speed to raise rates, breaking with past practice of gradual 25 basis point moves and delivering three consecutive jumps of 75 basis points each from June to September. Speed was appropriate with credibility at stake and a starting monetary stance of considerable ease.

But rapid changes, whether in markets or in life, are hard to manage smoothly. Sudden pricing shifts can wrong-foot financial institutions and lead to the “selling vortex,” with further downward pressure on assets exacerbating liquidity problems and then raising solvency issues. We witnessed this vortex at the end of Q3 with the collapse of sterling and cascading sales of UK government bonds. Triggered by an announced fiscal expansion, the downward spiral gathered pace because of over-leveraged pension funds caught in a liquidity squeeze. It took immediate emergency intervention by the Bank of England (BoE), followed in mid-October by a dramatic reversal of government policy – and the shocking resignation of new Prime Minister Liz Truss – to calm the UK government bond market.

Chair Powell and colleagues are keen to bring down inflation. But they have no wish to see financial instability.

Against this backdrop, RockCreek sees three themes continuing to play out for the rest of this year:

1. **Rising global interest rates.**
2. **Synchronized global slowdown.**
3. **Currency complaints, as dollar strength tests other nations' efforts to curb inflation.**

It's the Inflation Rate, Stupid!

To paraphrase the famous campaign quip of some thirty years ago, today's overriding economic concern in much of the developed world is inflation. And that means rising interest rates.

In Q3, it became clearer that the pessimists were right: the extraordinary circumstances and policy choices of the past two years have dislodged price stability across developed markets. Returning inflation close to the 2% target espoused by most developed market central banks will take interest rates that are "higher for longer" than many had hoped – or positioned – for.

It is true that temporary factors, notably pandemic-related supply constraints and the fall out of war on energy and food prices, accounted for much of the initial price surprises. But during Q3 – as Chair Powell acknowledged in September – US inflation remained stubbornly high, despite slowing economic growth, some easing of supply constraints, and a drop in oil prices from their post-Ukraine invasion peaks. Different price measures – whether monthly, quarterly, core, or median – all told the same disappointing story. In Europe, as well, headline inflation has run far above target, topping 10% year-over-year in September, another record. In the US, the CPI headline figure reached 8.2% in September.

So it is not surprising that central bankers in the West reinforced their commitment to fight inflation over the summer, backing up their words with continued policy rate increases and shifts from quantitative easing to balance sheet reduction. They were not alone: as many as 90 central banks raised rates in the quarter, according to the IMF.

Some emerging markets began tightening early – and have benefited from that. Chair Powell signaled a tougher stance in late August with a short, pointed speech at the traditional Jackson Hole gathering of central bankers. His speech was intended to send a message to financial participants who doubted the Fed's resolve – or to question the need for more restrictive policy. Any hint of an early pivot – or even just a pause in raising rates – had seemed enough in Q3 to buoy spirits, reversing the underlying trends of rising yields, a strengthening dollar, and weakening stock markets. Since financial conditions depend on market prices as well as central bank actions, rising stock prices and falling yields threatened to undo the Fed tightening. By the middle of Q3, officials from Chair Powell on down pointed repeatedly to the risks of "premature easing," guiding markets away from hopes of a pivot.

Message received. Market rates have now climbed decisively. The all-important mortgage rate ended Q3 above 6.5% – its highest level since 2007. And the Fed raised its own expectations of where rates need to go.

Policy rates may need to go even higher. Few believe that the "terminal" federal funds rate can be lower than the 4.5% currently envisaged in the Fed's September dot plot, or that rates will come down rapidly. Indeed, as market consensus has moved to incorporate a 4.7% federal funds rate next year, some analysts now expect the Fed to need to go as far as 5-6 %, as noted by former Treasury chief economist Karen Dynan. The reason: the US economy is still relatively strong.

What could halt the third quarter message, that central bankers will keep on tightening until inflation is vanquished? Financial markets showing systemic cracks. Signs of financial stress appeared across the Atlantic in late September – notably in UK markets as well as a sharp rise in credit default swap prices for Credit Suisse. But despite heightened volatility, increased uncertainty about post-pandemic global trends, and sharp price declines across many investment strategies, Fed officials did not see the kind of problems in US institutions or markets that would cause them to rethink.

The UK fiasco that led to Prime Minister Truss's resignation after 45 days in office – the shortest period of any leader in British history – has been blamed on the new government's planned fiscal boost. The unexpected and poorly handled tax cuts and energy subsidies were just the trigger. They caused UK government bonds (gilts) to plunge in value as markets anticipated higher government borrowing pushing up interest

What turned the fall into a crisis was over leverage and poor regulation in Britain's large pension fund industry. In a classic liquidity squeeze, collateral calls on pension funds led to forced selling of their gilt holdings, which in turn sent prices down further, causing more collateral calls and so on. The chaos spilled over slightly into US markets, before emergency intervention by the Bank of England kicked in and markets realized that the British pension problem was not mirrored in the US. In the UK, it took a wholesale reversal in mid-October of the new government's initial fiscal plans, coupled with the Prime Minister's resignation, to steady bond markets.

Growth Slow-Down – or Global Recession?

With the world's central banks moving almost as one to raise rates, growth is set to slow. Much of the pain is likely to come in 2023, as tighter financial conditions gradually feed through to the real economy. At the same time, the energy shock delivered by Russia's invasion of Ukraine and its consequences will continue to impact the global economy. The third major factor undermining global growth comes from China, the world's second largest economy. As we have pointed out throughout this year, widespread lockdowns under China's extremely tight zero Covid policy, coupled with a property collapse, have severely undercut growth. In addition to the impact domestically, China's Asian neighbors and trading partners in Europe have felt the loss of import demand.

The supply shock to growth from Russia's invasion and consequent energy crisis is particularly sharp in Europe. We now expect the impact there to be even worse in the spring and winter of 2023. In Q3, it became clearer that Russia's war in Ukraine would be a prolonged and messy conflict, as we have expected from the start. Europe has done well in filling gas storage for this winter, with tanks now nearly full. Cutbacks in demand have helped, amid dramatic price increases, as well as purchases of gas from alternative sources. But there is much to be done to prepare for the long haul.

Continued constraints on energy supply will keep pressure on both prices and industrial production in Europe. OPEC's October decision to cut oil production by 2 million barrels a day will obviously not help. Surprisingly, the initial impact was less than expected. Indeed, oil prices fell shortly after the decision. The decline was a reflection of lower demand in a slowing global economy, including the significant drop in China's growth prospects, rather than a market that is balanced for long-term recovery.

Governments in Europe are trying to soften the economic blow from higher energy prices without completely undoing incentives to curb energy use. Expensive subsidies also carry a fiscal risk. There is little that governments can do to boost economic growth without undermining their central bankers' fight against inflation. The debacle in UK markets is a major reminder to policy makers worldwide about the limitations of what they can achieve fiscally at a time of rising interest rates.

The International Monetary Fund (IMF) did not mince words in its latest economic outlook, warning that "global economic activity is experiencing a broad-based and sharper-than-expected slowdown, with inflation higher than seen in several decades." The IMF did not tip its hand on whether the slowdown would amount to a global recession, although it warned that one-third of its global membership would likely fall into recession next year. What matters more than the name is how it feels to the individuals and companies who lose jobs and earnings as growth slows. So far, consumer spending in the US has remained strong, buoyed by continued demand for labor and low unemployment. That is both good and bad news.

The good news is that spending and jobs remained firm in Q3. Consumers and businesses also had shock absorbers in the form of strong balance sheets going into the tightening cycle.

The downside of this continued strength on the demand side? As markets fear, it will likely require the Fed to push interest rates higher to meet its inflation goal. Over the summer, labor markets – singled out by Chair Powell as a key indicator of underlying risks to inflation – remained tight.

By September, there were only a few signs that labor demand was easing. Vacancies still far outweighed job seekers, and unemployment ended the quarter at its pre-pandemic low of 3.5%. Strikes – including of railway workers – also showed worker strength. The key to a soft landing will be a quick response of wages and prices to higher rates and a slowing economy. The IMF was not optimistic, predicting US growth of only 1% next year.

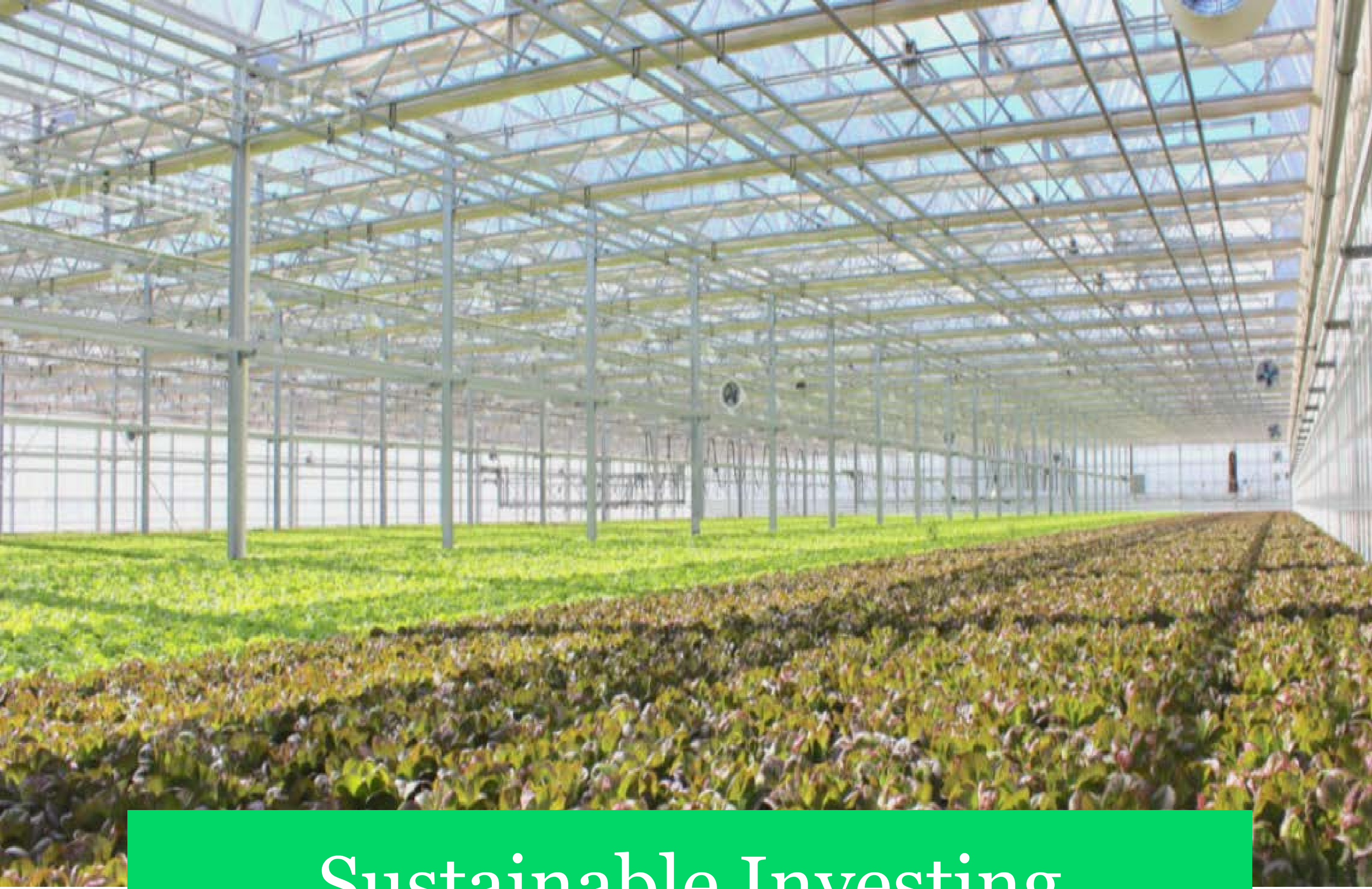
Currency Moves: Square the Circle?

Flexible exchange rates allow economies to adjust to changing circumstances. In Q3, the dollar raced ahead, climbing 7.1% on a trade-weighted basis, and by an astonishing 9.0% against the pound sterling and 7.0% against the euro. Some governments tried to resist. Japan intervened in currency markets for the first time since the late 1990s.

But unless intervention is matched with fundamental policy change, it does little to affect long-lasting change. By mid-October, the yen was back at roughly 150 to the dollar, already below the level that had triggered government intervention in late September.

As China has struggled, the renminbi has fallen sharply, despite continued government restrictions on capital outflows, declining by 6.3% during Q3 to a level that is now 10.9% weaker against the dollar than at the beginning of 2022.

Looking ahead, dollar strength is likely here to stay, at least for a while. The stronger US economy and higher core inflation than in Europe and elsewhere means that the Fed will probably push rates up higher and faster than in much of the world, making dollars more attractive to hold. The US and the dollar remain the preferred safe haven for investors in today's uncertain world, with war in Europe, potential strains from tight financial conditions, and weakness in China.



Sustainable Investing

For years, the sustainable investing community has been looking for US politicians to step up and join other nations in making a clear commitment to address climate change. In Q3, that call was answered with the Inflation Reduction Act (IRA).

With $369 billion in incentives for scaling solutions across clean energy generation, electrification, energy efficiency, electric vehicles, sustainable agriculture, environmental conservation, and numerous other areas, the U.S. is now on a course to reduce 40% of its emissions by the end of the decade.

What sectors will benefit from the IRA? Kerry Duggan, RockCreek Senior Advisor and former Biden policy director, highlighted that the IRA notably focuses on scaling and deploying existing technologies. During an interview as part of RockCreek Climate Week events Duggan said, “There are ambitious goals for a net zero economy by 2050. You need to deploy what works now while we continue to also invent the technologies of the future.” The IRA relies on a series of incentives, subsidies, and tax code changes to make these solutions more economically attractive and develop complementary ecosystems necessary to support cleaner industries.

For example, solar – already well established and economically attractive in many US zip codes – will receive a boost from an increased tax credit locked in for the next decade. Energy storage solutions will benefit, as many batteries complementing solar systems will now also qualify for tax credits for the first time. The developers, installers, financers, and others up and down the growing value chain will be able to invest in building capacity to install systems, knowing that incentives will last longer than a few years. Workers interested in green jobs will benefit. For more details on the IRA and resulting investment areas, check out RockCreek’s Investor Brief.

Now that the climate bill is law, the real work begins.

Everyone from government agencies to state legislatures are figuring out how to implement the IRA’s provisions to start the hard work of reversing the centuries-long trend of increasing emissions.

If the IRA was a source of optimism, hope, and a celebration, the weather during the third quarter was a sobering reminder that the planet is not impressed by policy alone. This summer brought a dizzying barrage of climate disasters ranging from horrific flooding that submerged nearly a third of Pakistan to wildfires across the Iberian Peninsula to Hurricane Ian damaging Caribbean islands and Florida. Shortly after the quarter ended, Nigeria’s worst flooding in a decade killed more than 600 people and injured 2,400 more; destroyed 200,000 homes; and displaced over 1.4 million people.

The impacts of climate change were not limited to these acute disasters – water levels in Europe’s major rivers dropped so low that they hampered electricity generation in France and supply chains in Germany. These impacts of climate change extend its reach beyond those unfortunate enough to find themselves in the pathway of a climate disaster and deliver it to the doorstep of nearly every person on the planet.

In the effort to fight back, cracks have begun to show among members of The Glasgow Financial Alliance for Net Zero (GFANZ). Morgan Stanley, JPMorgan, and Bank of America are among a number of major banks that are weighing an exit from GFANZ over fears of being sued due the alliance's stringent decarbonization benchmarks. These fears, in part, are stoked by the SEC's proposed rule to require formal disclosures in annual reports about governance, risk-management, and strategy with respect to climate change. Another source of this movement away from GFANZ is the sentiment that major financial institutions are better prepared to set their own climate benchmarks and standards, rather than comply with GFANZ's ever toughening rules and regulations and demands to meet real climate targets.

Strains on energy markets and supply chains continued during the third quarter. As the war in Ukraine trudged on, energy prices around the world spiked. Impacts on sustainability investing were mixed. On the one hand, increased energy prices made economic cases for renewable energy and energy efficiency projects stronger. On the other hand, energy security trumped climate goals in Europe as Germany turned back to coal to power its electric grids in lieu of Russian natural gas. Supply chain tensions were similarly a mixed bag during the quarter; there was some easing for some products (e.g., solar panels), while they remained tight in others (e.g., EVs).

But Q3 closed with some positive news in the sustainable agriculture sector. RockCreek participated in the latest funding round for hydroponic indoor farming company Gotham Greens. The company closed on a $310 million Series E round to rapidly expand its sustainable greenhouses nationally. Placed in close proximity to cities, these greenhouses require significantly less refrigerated shipping to get food to market. They are also proven to use up to 95% less water and 97% less land compared to conventional farms. Sustainable food and agriculture is a sector we will continue to watch in the years to come.

Public Equities

The equity market environment continued to highlight the uncertainty and unease of 2022 during the third quarter.

The market enjoyed a nice relief rally into July and mid-August, driven in large part by hope that the Fed would shift to a more dovish stance. That optimism soon faded over the second half of Q3, leading the S&P 500 to drop 17% from its August 16th high, passing through its earlier June low. The S&P 500 ended this rollercoaster of a quarter down just 5% but down nearly 25% year-to-date.

Equity Markets	Q3 2022
US Large Cap (S&P 500 TR)	-4.9%
Nasdaq	-3.9%
US Small Cap (Russell 2000)	-2.2%
Japan (TOPIX)	-0.9%
Europe (MSCI Europe)	-4.1%
China (CSI 300)	-14.3%
Global EM (MSCI EM)	-11.5%

Bond Markets	Q3 2022
US 2yr	132.5
US 10yr	81.6
US 30yr	59.3
German 10yr	77.2
German 30yr	47.7
UK 10yr	186.4
UK 30yr	126.1
JGB 10yr	1.3
JGB 30yr	15.1

Currency Markets	Q3 2022
DXY	7.1%
EUR	-6.5%
GBP	-8.3%
JPY	-6.2%
MSCI EM Currency Index	-4.5%

Commodity Markets	Q3 2022
Crude Oil (WTI)	-24.8%
Nat Gas	24.7%
Gold (Spot)	-8.1%
Steel (Rebar)	-12.6%
Ag & Livestock (Bloomberg)	-0.4%

RCG HF Indices	Q3 2022
All Hedge Funds	-1.1%
Equity Hedge	-2.7%
Absolute Return	2.1%
Equity Market Neutral	0.9%
Event Driven	-0.7%
Global Macro	1.7%

Source: RockCreek

While record profit margins and robust earnings for US corporations were the story in Q2, we wrote in last quarter's letter about how such record earnings would be unsustainable in the face of the inflation and policy tightening that were beginning to take hold. Consensus earnings forecasts were reflecting continued profit growth and not pricing in the evidently mounting risks.

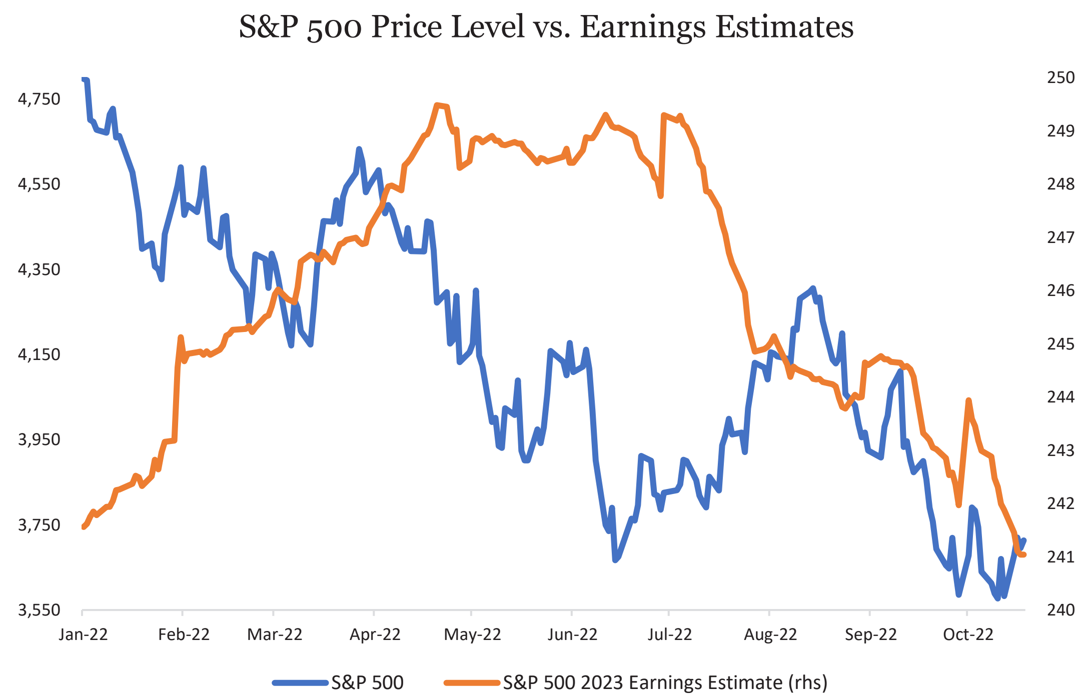
Sentiment indicators again reflect extreme bearishness, especially across the institutional investor community. While this could always set the market up for a potential Q4 rally, such a rebound would likely need to endure a potent dose of negative news on the earnings front to sustain itself.

FedEx's withdrawal of its full-year guidance while citing declining macroeconomic conditions was a clear warning to investors and a harbinger of more cautionary announcements to come.

More than 10% of S&P 500 companies preannounced Q3 earnings in an effort to manage investor expectations. This is consistent with very challenging and uncertain operating environments of the past.

Restoration Hardware reported decent numbers but soft guidance, Adobe was clobbered on news of its Figma acquisition and mixed guidance, Nike cited supply chain issues and an inventory glut in its cautious guidance, and Micron's earnings suggested we could see a sharper semiconductor downturn than expected. Warning signs have been plentiful and high P/E multiple companies will be under significant pressure to meet expectations.

As shown in the chart below, the Street was increasing 2022 earnings estimates through the first half of the year even as the S&P 500 was trending down, which meant the market's valuation did not come down as much as it otherwise would have. Earnings forecasts finally peaked in July though the market ignored this and continued its rally. Only in recent weeks has the S&P 500 latched on to earnings. The key question now is whether the market continues pricing in a real slowdown or finds renewed hope in a more accommodative Fed.



Source: Bloomberg

European markets also fell further in Q3 with the Stoxx 600 ending 5% lower for the quarter and 21% lower year-to-date. Every sector posted negative returns with the ongoing energy crisis, rising inflation, and deteriorating economic growth outlook weighing on market sentiment. Investors have largely abandoned the region in a manner not seen since the 2011-12 Eurozone crisis. European equity funds have suffered eight straight months of outflows approaching nearly $100 billion.

The saving grace for European companies has been FX declines due to European companies' high international exposure. While US corporate earnings were revised downward by 3%, European 2022 EPS was revised up by 4% (1% excluding energy). This may not be sustainable. The ECB and BOE are in tightening mode and euro area manufacturing PMI recently fell to its lowest level since June 2020, which is a strong indicator we will see earnings revisions to the downside, particularly within cyclicals. The European consumer has been quite resilient thus far, but winter heating season and other inflationary pressures will take a bite. Lastly, consensus is pricing in flat margin growth though European corporate margins look quite vulnerable to higher input, labor, and borrowing costs, as does the US.

New opportunities to benefit from this theme are emerging across many different areas from solar, energy storage, EVs, and carbon capture to the many materials and ancillary services needed to fill the growing demand for clean energy.

Until we begin to see some green shoots, defensive sectors and high-quality stocks seem to be the best areas to overweight within equities. A good example is renewable energy, which is getting overlooked because of its history of boom/bust cycles. However, the Inflation Reduction Act is the most substantial climate legislation in the history of the US and most of its provisions will be enacted over the next 10 years, which will help alleviate many of the past uncertainties afflicting the sector. Many experts in the space have commented that few investors recognize the magnitude of this imminent inflection point.

Emerging Markets

It was a woeful quarter for EM Asian equity markets, with China, Korea, and Taiwan all down double digits but the rest of EM fared noticeably better, led by India, Indonesia, and Brazil. Q3 encapsulated the bifurcation in performance between North Asia and the rest of the developing world that we have highlighted now for close to two years. Now that the leadership 'election' has taken place in China, we are paying close attention to the senior leadership roles that have been handpicked to support President Xi. While we are still deciphering the fallout, we believe a cadre of competent pro-growth and pro-business deputies will, in our view, be welcomed by the market and could usher in a short-term rally. But as we've seen over the last decade, President Xi values loyalty, and sometimes, we dare say, values loyalty over competency. To underscore the obvious, things remain uncertain, to the detriment of overall sentiment for emerging markets.

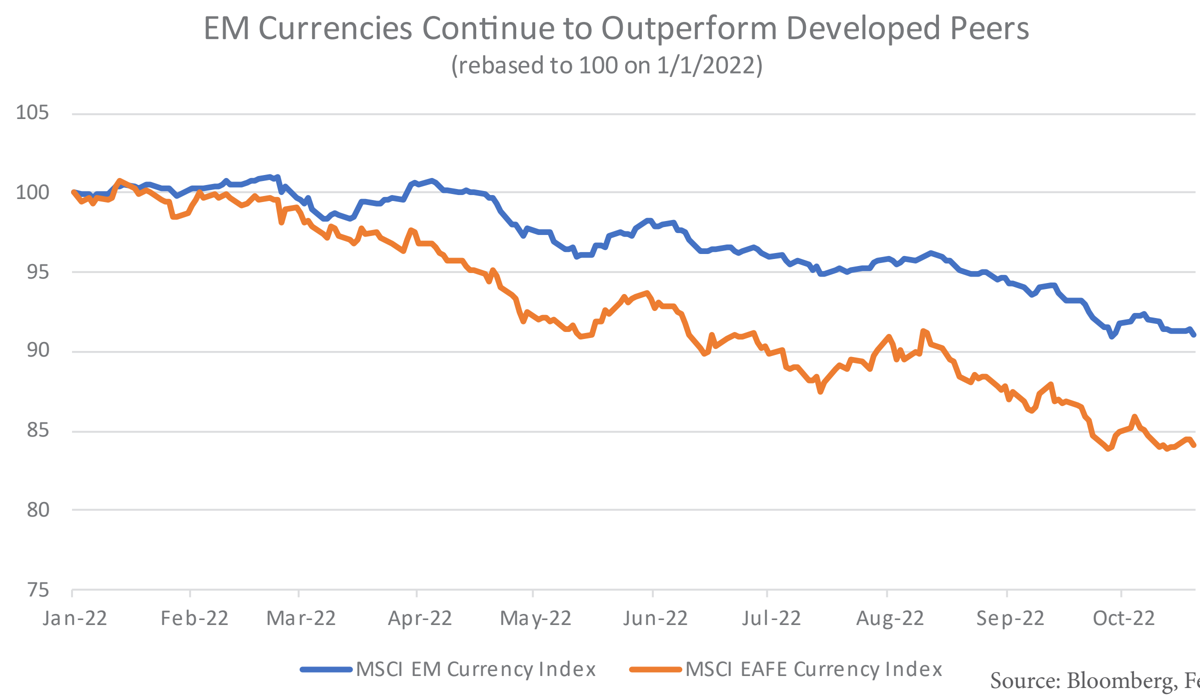
Nevertheless, it's in times of uncertainty, low investor interest, and cheap valuations that one discovers some of the best opportunities. As we've highlighted before, we have found these opportunities in India and the ASEAN region. Our bullish stance on these areas has served us well over the last year, and we see little reason to pivot away. Even if China leads a great North Asia re-opening in the coming year, investors have voted with their dollars, in ways both opportunistic and permanent.

In India, we continue to like banks, pharmaceuticals, and telecom, while underweight materials, consumer discretionary and industrial names given where we are in the cycle. While hawkish moves from the RBI have been largely priced in, the growth scare tied to a global slowdown has not. In the ASEAN region, we remain bullish Indonesia where we continue to see evidence the country has had one of the strongest post-pandemic rebounds globally, and Thailand where we are only in the beginning stages of that country's re-opening. We are also positioned well to take advantage of Vietnam's role as a source of both Western and Chinese capital flows as the world's supply chains are divided along spheres of influence.

We are willing to take more risk in consumer related names given the pent-up demand post COVID, but also because it makes sense in the long term. ASEAN's population is increasingly urbanizing with projections that over half a billion people in ASEAN countries will populate the major urban centers by the middle of the century.

The urban migration will bring with it significant social changes, creating huge demandfor additional infrastructure (both hard and soft) and housing, particularly in Indonesia and the Philippines. Inflationary pressures and a strong USD remain, but a manageable one.

On this last point, it's worth noting one bright spot in EM has surprisingly been currencies. As shown below, a Fed trade-weighted dollar basket of emerging markets has handsomely outperformed a similar basket of developed markets currencies. For USD based investors this is good news, particularly if exposures have been concentrated in star performers like the Chilean Peso, Brazilian Real, and Indian Rupee. The monetary policy discipline shown by these countries over the past 18 months has allowed them to weather the greenback's impressive run and put them in a position to stimulate growth in 2023 – an advantage developed markets central banks may well envy in a few months' time.



Source: Bloomberg, Federal Reserve

RockCreek 2022 Emerging Markets Conference
Join us on October 25th for an in-depth look at the opportunities and challenges of investing in emerging markets today, and where opportunities may like in the future. We will discuss global trends and regions and countries of focus with experts like Ruchir Sharma; World Bank Chief Economist Indermit Gill; Richard Haass, President of the Council on Foreign Relations; New York Times Correspondent David Sanger; Smithsonian Institution CIO Amy Chen; IFC's former COO and Senior VP Stephanie von Friedeburg.

Check out the full lineup here and join us online here or here.

SPOTLIGHT: China's 20th Party Congress

In the weeks leading up to the Communist Party of China (CPC)'s 20th National Congress, few in China – or around the world – expected many surprises. In the first few days, at least, the Congress went largely according to plan.

Based on what President Xi outlined in the first week of the Congress, six aspects are important to pay attention to in the next five years:

1. China will aim to raise the status of innovation to a new height. Innovation will occupy a "core position" and be the "first driving force" to solve China's economic problems and its reliance on Western technology.

2. The country will promote green development, accelerate the planning and construction of a "new energy system," and exert efforts at both ends of consumption and production. President Xi called for a "proactive and steady" approach to decarbonization and highlighted the importance of setting goals for clean air, soil, and water and changing economic and energy structures to achieve them.

3. He reemphasized the supremacy of the people, pledging to provide better, more equal public services and social safety support; increase employment; and improve and regulate the distribution system.

4. China will aim to coordinate regional development and build a regional economic layout with complementary advantages.

5. President Xi reiterated the importance of remaining open and maintaining diversified economic and trade relationships. He emphasized the importance of market orientation and support for the private sector to assure the people that the Party's long-term policy orientation and direction has remained unchanged.

6.Finally, President Xi also aimed to take security to new heights, focusing on ensuring security across food, energy, and supply chains. At the same time, he emphasized China's necessity – ability – to achieve reunification with Taiwan and said that China reserves the option of "taking all measures necessary" against "interference by outside forces."

In the short to medium term, the market continues to look for guidance on the handling of "Dynamic Covid Zero" in China and any continued relief for the beleaguered real estate sector.

Read the full report here

Fixed Income

On February 4, 1994, the Federal Reserve initiated its first interest rate hike in five years, increasing the federal funds rate by 25 basis points from 3.0%. Over the next year the Committee would hike another six times taking the policy rate to 6.0% and setting off what would become known as the “Great Bond Massacre.”

Parallels are being drawn to today as the Fed’s 75 basis point hike in June was the largest since November 1994, and, following the most recent meeting in September, the Committee has now increased rates by 300 basis points in the latest hiking cycle.

Simpler Times for Fed Watchers


Federal Reserve Release

Press Release

Release Date: February 4, 1994

For immediate release

Chairman Alan Greenspan announced today that the Federal Open Market Committee decided to increase slightly the degree of pressure on reserve positions. The action is expected to be associated with a small increase in short-term money market interest rates.

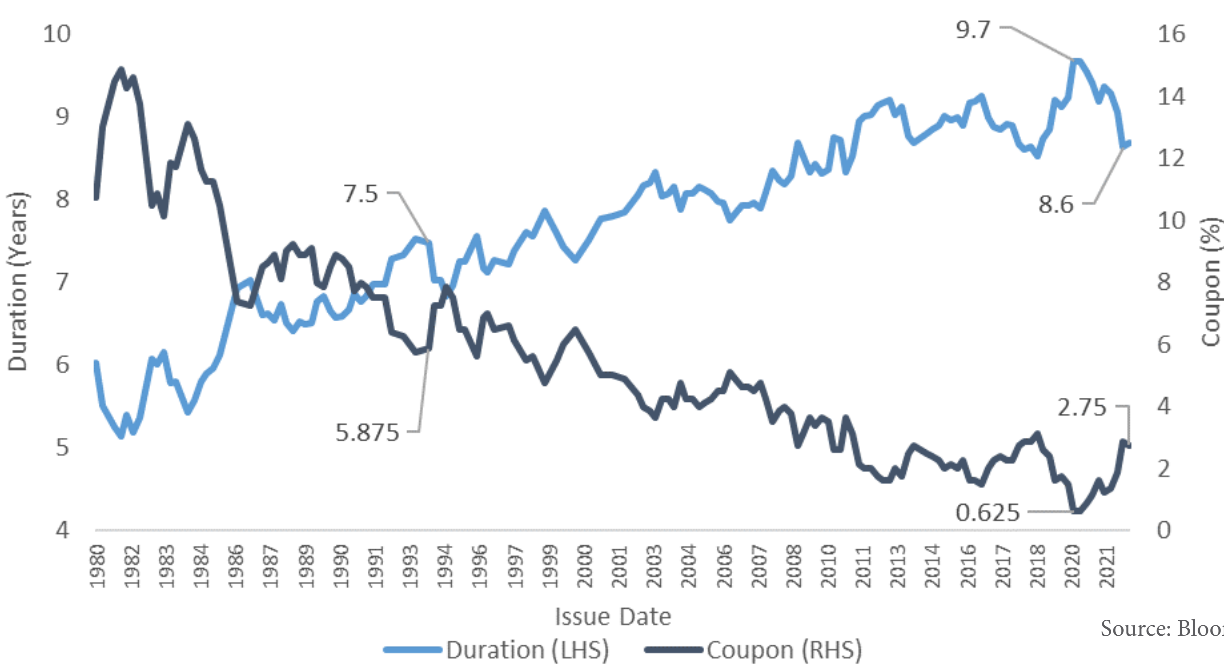
The decision was taken to move toward a less accommodative stance in monetary policy in order to sustain and enhance the economic expansion.

Chairman Greenspan decided to announce this action immediately so as to avoid any misunderstanding of the Committee's purposes, given the fact that this is the first firming of reserve market conditions by the Committee since early 1989.

Source: Federal Reserve

If that was a “massacre,” what should we be calling 2022? During the 1994 hiking cycle, the US Aggregate Bond Index declined -2.0% and 10-year Treasuries lost -6.8%, while the S&P 500 Index eked out a small gain. Compare that to the year-to-date performance of these indices through September – the US Aggregate Bond Index is down -14.6% and holders of 10-year Treasuries have lost -16.7%, while the S&P 500 Index has tumbled -23.9%. The difference between these two periods? The starting point in rates (2022: 0.25% and 1994: 3.00%) and inflation (2022: 8.6% and 1994: 2.5%).

Characteristics of 10 Year Treasury Bonds at Issuance

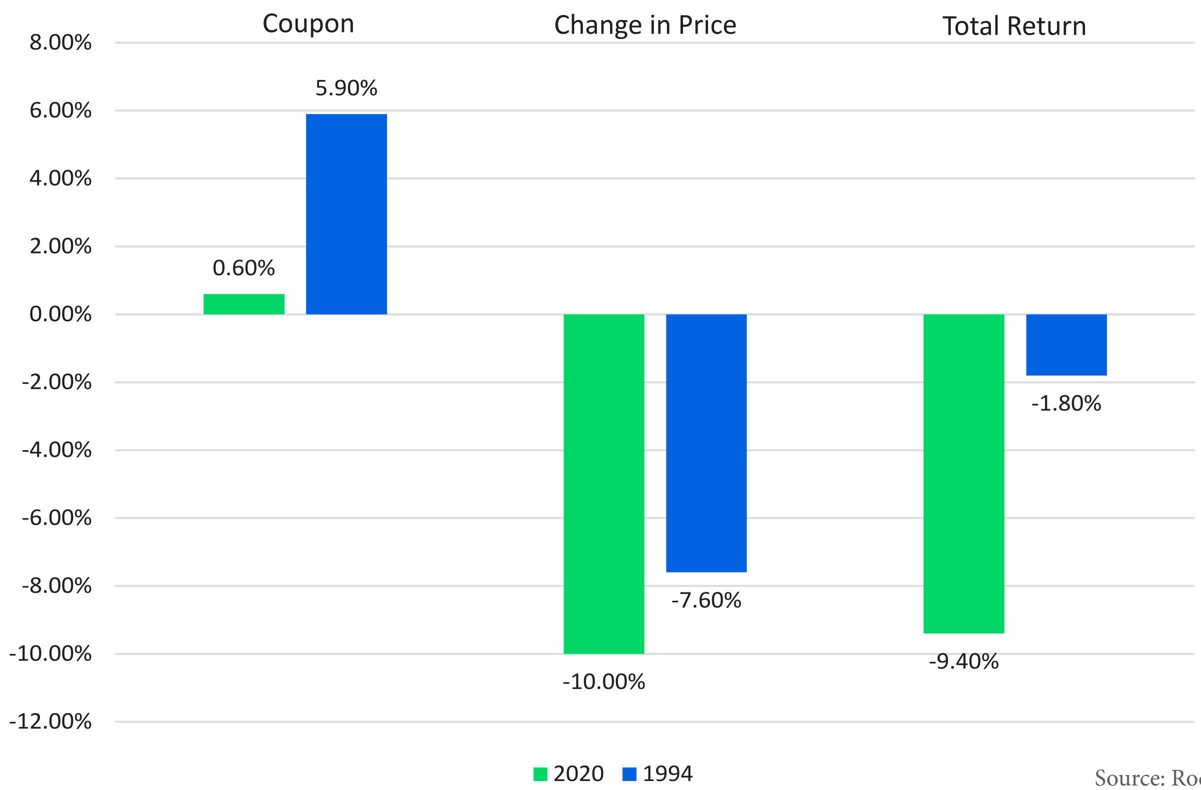


Source: Bloomberg

The duration of a bond is dependent on its maturity and periodic coupon payments. As a result, the interest rate sensitivity of a 10-year Treasury at issuance has grown as rates have declined steadily since 1994.

The starting point in rates is important as a bond issued in 1994 is significantly different than one issued in 2022 – even risk-free Treasuries of the same maturity. Shortly after the Fed's first rate hike in February 1994, the Treasury issued a 10-year note with a coupon of 5⅞ percent versus the ⅝ percent coupon 10-year notes issued in mid-2020. And because of the coupon differential, the interest rate duration of these bonds differed by approximately 2.2 years (7.5 years versus 9.7 years), i.e., the price of the bond issued in 2020 is much more sensitive to a change in rates. To illustrate – if the yield on 10-year bond increases 100 basis points during the year after issuance, a bond paying the 5⅞ percent coupon will have a total return of -1.8% versus -9.4% for the ⅝ percent coupon bond.

Hypothetical 1-Year Total Return of 10-Year Bond on 1% Rise in Yield



Source: RockCreek

The duration of a bond is dependent on its maturity and periodic coupon payments. As a result, the interest rate sensitivity of a 10-year Treasury at issuance has grown as rates have declined steadily since 1994.

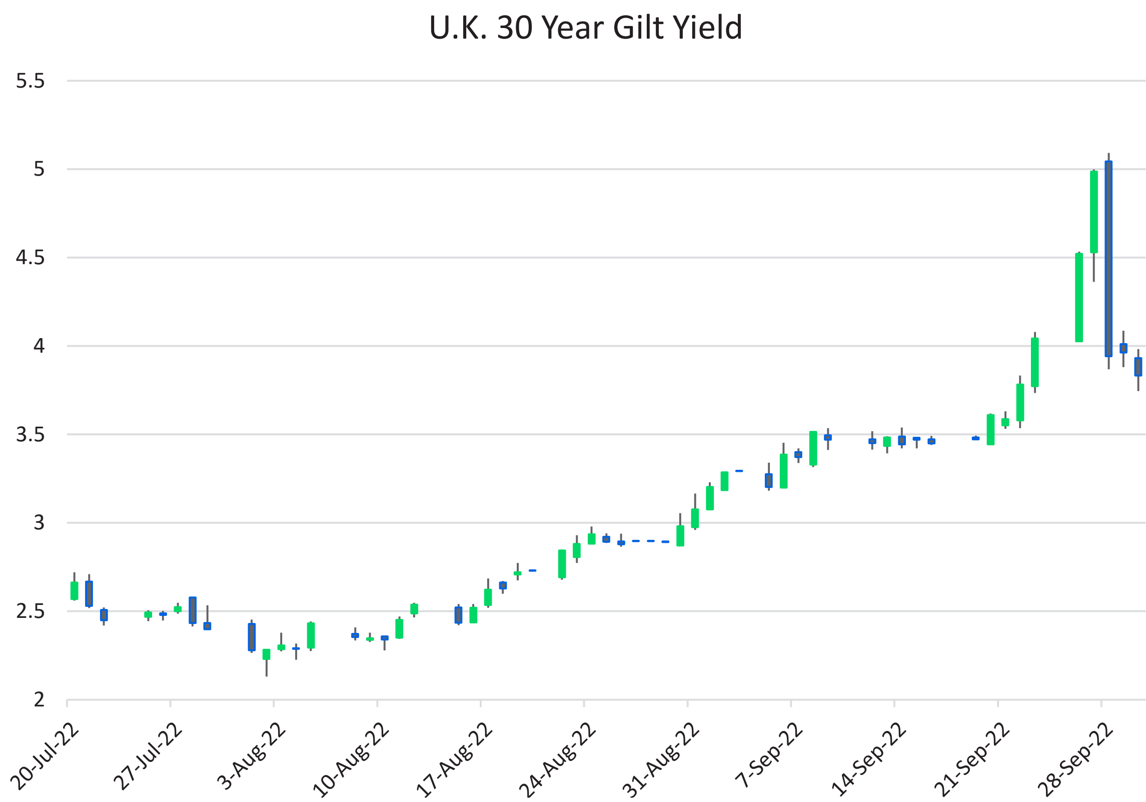
When the Treasury issues its next batch of 10-year notes in November, the coupon is likely to be in the 3½ to 4 percent range and with the fed funds rate on its way to 4%, the 1994 scenario may now be more instructive of go forward risks to fixed income than a parallel to 2022.

As is illustrated above, the risks are much more symmetric as compared to a year or two ago when the base rate was sitting near zero. TINA - “There Are No Alternatives” - no longer applies with TARA - “There Are Reasonable Alternatives” – recently being introduced to the financial nomenclature. With real yields near 2% and nominal yields on short- to intermediate-term Treasuries exceeding 4%, investors should be rethinking cash management as well as their risk tolerance in relation to these higher risk-free yields.

The Bloomberg U.S. Aggregate Bond Index declined -4.8% during the quarter as sharply higher real rates drove performance, not just for bonds but most other financial assets. The 10-year real yield jumped 103 bps to 1.68% because the Fed and other global central banks continued to hammer home their commitment to squash inflation through tighter monetary policy without a hint of letup. Breakeven inflation rates contracted to 2.15% as the 10-year nominal yield increased 85 bps to finish the quarter at 3.83%.

The MOVE Index, a measure of volatility for the U.S. Treasury market, jumped to its highest levels since the Global Financial Crisis. The dramatic pickup in volatility at the end of September was due in large part to knock-on effects of what occurred in the Gilt market. The new U.K. government released its “mini-budget” on September 23rd which included a proposal to abolish the 45% additional rate of income tax bracket. Capital markets reacted fiercely to the proposal as the benchmark 10-year Gilt yield jumped as much as 116 bps to 4.61% in the three business days following the release.

Just like in Q2, this environment of slowing economic growth expectations due to tighter financial conditions resulted in the outperformance of cash.



Source: FactSet

Long bonds saw their yields go parabolic as the initial reaction triggered a chain of margin calls on the nation's pension plans that get leverage via derivatives tied to these bonds to hedge their interest rate risk as part of LDI (liability driven investing) portfolios. The spiral forced the Bank of England to step back into the market on September 28th with an offer to buy Gilts in the secondary market with the objective of staving off "dysfunction" in the long-dated UK government debt market and reducing the risk of "contagion to credit conditions for UK households and businesses." While the operation was successful in avoiding a catastrophe, U.K. borrowing rates have resumed their march higher through mid-October.

Public Credit

High yield bond yields and spreads rose to 9.86% and 575 basis points at quarter-end. And while yields are well above their previous year-to-date high on 6/30 of 9.2%, spreads remain 63 basis points below their wide of 637 basis points with only CCC spreads reaching their 2022 wides. The average high bond is now down -19pts (+4% coupon) for roughly a -15% YTD cumulative return. Overall, investor sentiment worsened in September with high yield spreads increasing by the third most since August 2011 (+115 basis points) and retail fund outflows accelerating reaching $53.6bn year-to-date.

Spreads Across Corporate Credit, by Index and Rating (2022)

	(In Basis Points)					
	High Yield	IG	BBB	BB	B	CCC
9/30/2022	575	167	203	373	593	1320
2022 High	637	171	207	439	682	1320
2022 Low	370	94	115	248	399	718
12M Average	456	125	154	308	483	914
US Recession Average	971	252	355	561	925	2149
US Non-Recession Average	519	117	172	332	521	1054

Source: J.P. Morgan

Given the market backdrop, high yield corporates have avoided coming to market and a mere $9 billion of high yield bonds and $8.4 billion of institutional loans priced in September and overall capital market activity for the third quarter – $18.9 billion for high yield and $24 billion for leveraged loans was the lightest since the first quarter of 2009 and 2010 respectively.

Default/distressed volume in the third quarter totaled $23.4 billion, up from $10.4 billion in the second quarter and $8.6 billion in the first quarter. Year to date, a total of 15 companies have defaulted totaling $25.8 billion in bonds ($12.2 billion) and loans ($13.6 billion). Including distressed exchanges, both the US high yield bond and loan default rates have ticked up to 1.6%. Despite the modest rise in default rates, credit fundamentals remain generally strong. While real GDP growth is slowing, high inflation is sustaining nominal GDP growth – and debt interest is paid in nominal dollars. Moreover, during the past couple of years of extremely low rates, many companies borrowed to build their cash balances and extend out their maturities. As a result, much of the refinancing for US high yield debt, for example, won't be due until 2025, with only 8% maturing before then. Hence, we expect default rates to remain low for the foreseeable future not dissimilar to what we experienced in the late 1990s and early 2000s.

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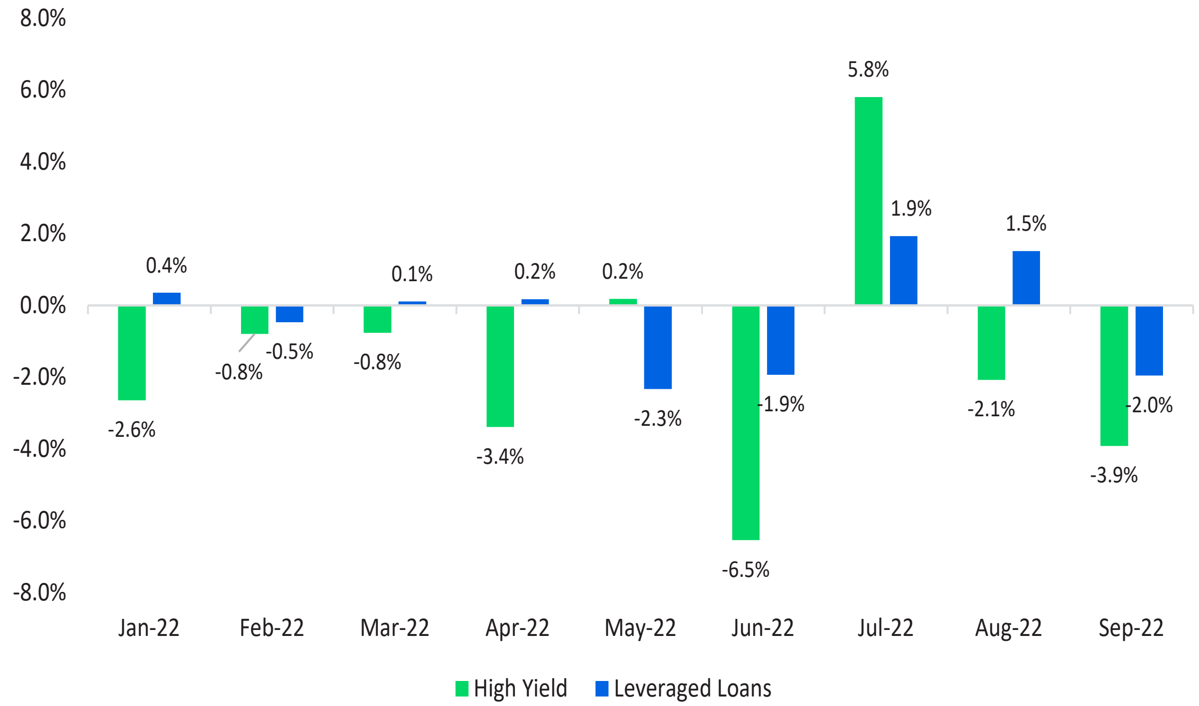
Leveraged Loans Continue to Outperform High Yield so far in 2022



Source: Bloomberg

As you can see above, one of the brighter spots in the fixed income market this year has been leveraged loans which have been the most resilient fixed income asset class down only 2.7% on a year-to-date basis. This outperformance is mostly due to lower sensitivity to interest rates than other fixed income asset classes as well as the general supply/demand dynamics in the loan market. Similar to high yield, new issuance for the year has been down significantly, but demand has remained robust as investors sought protection from rising interest rates. However, as economic growth is slowing, the question now turns to whether loan issuers can continue to service higher debt payments especially as borrower fundamentals weaken. In fact, investors are becoming more concerned with leveraged loans beginning to see outflows with September's $4.8 billion outflow representing the 10th largest on record.

Emerging Market Debt:
An Opportunity?

Emerging markets debt are on track for their worst performance since 2008. Consequently, investors are reevaluating trends that underpinned investment in emerging markets over the last two decades. Until 2020, many EM countries enjoyed (a) declining interest rates, which often approached the levels seen in developed markets; (b) robust economic growth; (c) strong capital inflows; and (d) the benefits of globalization. These trends enabled these countries and companies to accumulate substantial amounts of debt.

However, many of these trends now appear to be weakening or reversing entirely. Moreover, be it in investment grade sovereigns that continue to face headwinds from continued Fed hikes or high yield sovereigns which face significant credit issues largely stemming from a stronger dollar, there is literally no place to hide.

We remain cautious about the near-term outlook for the asset class, as the combination of massive debt burdens and tightening global financial conditions can further exacerbate the situation.

Private Credit

With market optimism fading in response to continued macroeconomic and geopolitical uncertainty, certain private credit sub-strategies were validated this quarter (as they have been throughout the calendar year), as a truly reliable and uncorrelated source of cash flows.

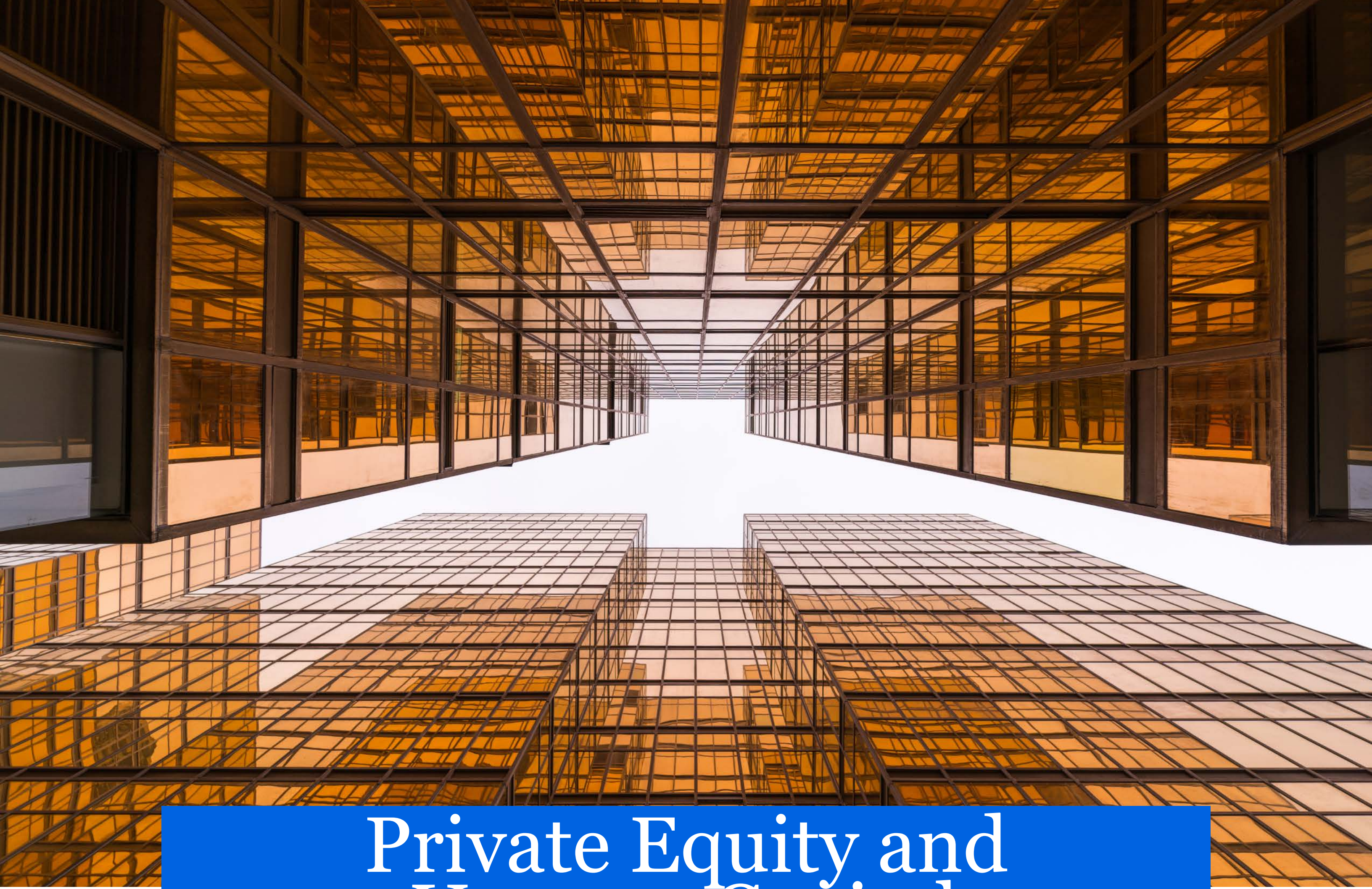
Specifically, those strategies that are geared towards delivering downside-protected, contractual sources of income have remained steadfast, providing valuable capital to investors whose liability payments, strategic asset allocations, and opportunistic endeavors have been frustrated by mark-to-market pressures. Floating rate, senior secured risk – when underwritten properly – has provided minimal exposure to either credit risk or interest rate duration. It also comes in many different forms from corporate loans to asset-based loans to bank risk sharing transactions, providing additional diversification benefits though diversification of underlying income source and collateral type.

In the context of already diversified portfolios, we've been focused on understanding how illiquidity premium – the spread over what can be achieved in the public markets – has repriced across different income-oriented sub-strategies. Pre-quantitative tightening, with a risk-free rate of zero, most income-oriented strategies were delivering gross unlevered yields in the high single digit, low double-digit range. Now that the rates have moved 300-400 basis points higher, one would expect gross unlevered yields to increase by at least this much.

However, we have found that private corporate lending has actually seen spread compression and a degradation of illiquidity premium. Even more interesting, the exact opposite is true with asset-based loans. Despite the asset-based (often inflation resilient) collateral, the misperception of risks has caused certain asset-based strategies in the consumer and real estate sectors to experience spread widening and a build of illiquidity premium. Not all income-oriented strategies are created equal, and we are remaining vigilant in our pursuit of superior risk-adjusted returns.

Optimizing income and building durable, all-weather portfolios does not preclude us from looking to opportunistically purchase mispriced risk. While we believe there are opportunities to be found in the United States, we also recognize that recent currency movements and the ever-strengthening US dollar has kept many investors tethered domestically, missing a potential opportunity set abroad. Europe is a less competitive, heterogeneous market that is facing the ubiquitous and interrelated developed market problems of rising rates, inflation, and supply chain constraints, but also dealing with a systemic energy crisis and a financial system still plagued with several trillion euros of unresolved loans stemming from the Global Financial Crisis.

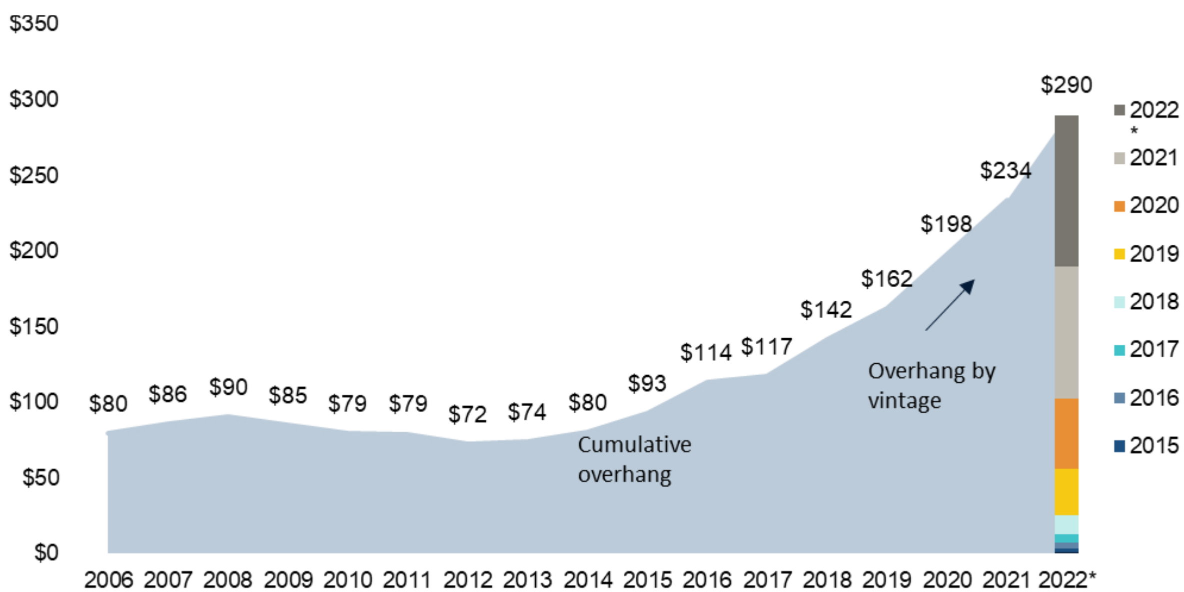
Increased credit defaults and the disposition of non-performing and challenged assets at a steepening discount appears inevitable. Separately, the further conservatism and bank retrenchment that results from the implementation of the Basil IV regulations should increase opportunities to buy performing assets from distressed sellers in regions like Australia and New Zealand, which have already seen a mass exodus of foreign alternative capital providers.



Private Equity and Venture Capital

Private markets remained relatively frozen during the summer months, with the volume of U.S. venture capital deals down approximately 20% from the quarterly record high achieved in Q1, and the lightest quarter in terms of dollar value since Q2 2020. Private equity markets saw an even larger pullback, as global M&A volume declined more than 40% from the prior quarter, representing the slowest third quarter in a decade.

As we noted last quarter, these markets are being buoyed by record amounts of dry powder. Decibel Partners, a venture capital firm created in partnership with Cisco, estimates that venture capital funds are currently sitting on $290 billion of dry powder, of which approximately $160 billion is being earmarked for new investments. With primary activity in a lull, our expectation was that venture firms would refrain from marking their portfolios down until the end of this year or early 2023 at the earliest; however, it appears as though many late-stage venture and growth-oriented firms have reduced their valuations of late-stage private companies by 15-25% from prior marks.



Source: Pitchbook

In addition to public market comps being down significantly, we suspect that many mutual funds with high allocations to illiquid investments are under pressure to reduce the valuations of their private holdings. Such a reduction would help remain below their mandated illiquidity thresholds, putting further pressure on the valuations of private companies that are being reported in the press. With the IPO window remaining shut, we expect many venture-backed companies to focus on M&A exits. A recent Pitchbook report suggests that there are expectations for significant M&A activity in the $200mm to $1.0bn range, with Big Tech companies among the most likely acquirers. A welcomed bright spot in our portfolio during the third quarter was the $20 billion acquisition of Figma by Adobe, representing one of the largest ever exits in RockCreek's portfolio.

Despite this environment, fundraising figures look stronger than ever, as 2022 has already set a new annual high for US venture capital fundraising, with over $150 billion raised through the third quarter. That said, this is largely being driven by fewer firms raising ever-larger funds. Take-privates are emerging as an attractive opportunity in the buyout space, with high profile deals like Citrix (being taken private by Vista) and the ongoing, off-and-on saga of Twitter (being taken private by Elon Musk) taking the limelight. We expect to see more companies being taken private going forward, assuming choppy debt markets aren't an overhang.

Among the areas where our team has spent time is biotech, with both a focus on public and private markets as the last 12 months have seen a significant dislocation in the sector, with the Nasdaq Biotechnology Index down more than 30% since August 2021. Capital markets were wide open in 2021 and many early-stage biotech companies rushed to go public, often before key clinical milestones. Disappointing clinical data coupled with broader negative sentiment in the technology sector resulted in many of these companies trading below their cash balances, and according to some estimates there are now more than 200 of these stocks.

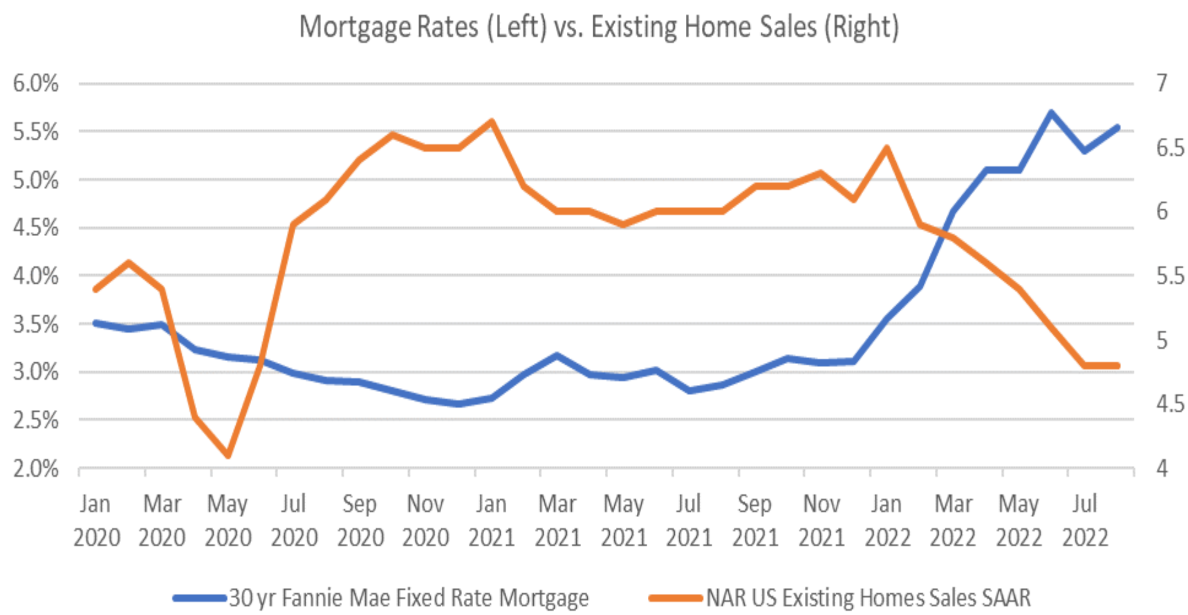
Accordingly, early-stage biotech investors are contemplating launching hybrid private structure funds intended to provide PIPE financings into a certain subset of these companies. Similarly, many crossover biotech funds are currently allocating a greater percentage of their funds into public securities, though many of these companies are still considered to be early stage from a milestone standpoint. Despite tepid capital markets, innovation remains robust, as the number of new drugs approved by the FDA in 2022 is on track to achieve the same historically high levels that have been reached in each of the last five years, and we continue to be long-term bullish on the sector, both in public and private markets.

Another sector we continue to watch, with careful consideration of valuations, is enterprise software, particularly around AI, automation, and cybersecurity, as software is likely to be the primary tool companies utilize to combat wage inflation and declining growth. The software sector has always been considered "expensive", and while valuations are still elevated relative to historical levels, revenue growth and fundamentals remain strong, and the pace of new company formation in the sector remains strong, so we continue to find opportunities to invest in software. Conversely, we remain more cautious on software and technology companies primarily serving consumers, and these companies are facing increasing marketing spend and have been hit the hardest in public markets.

Another notable event during the third quarter was the merge of the Ethereum network from a proof-of-work consensus mechanism to proof-of-stake – a much less energy intensive method for securing the network. We continue to embrace technologies and innovation that are driving towards a more sustainable world and will focus on investment opportunities across the climate sector. Investment in the climate tech sector was relatively insulated during the summer slowdown. RockCreek Private Market and Venture Capital team member Drew Reid recently interviewed Andrew Beebe, a managing partner at Obvious Ventures, one of RockCreek's co-investments, about key topics including carbon accounting, electrification trends, and the impact of the Inflation Reduction Act on the climate landscape.

Real Estate

The Fed's interest rates have increased financing costs for residential and commercial real estate and investors must now consider the impacts to their real estate holdings in the new environment. In the residential sector, 30-year fixed rate mortgages ended the quarter at 6.7%, the highest level in 15 years. The effect has been a cooling in existing home sales as shown in the chart below leading investors and homeowners to now monitor potential price declines as buyer demand recedes from the Fed action.



As we discussed in our prior two quarterly commentaries, the slowing home sales velocity has begun to come through, with potential value declines on a year over year basis in certain submarkets as the next step. The sales volume decline has been a leading indicator for cooling demand, while another has been homebuilders canceling home construction and slashing jobs as the market has cooled down. According to a homebuilder survey by John Burns Real Estate Consulting, Texas has a 27% cancellation rate, compared to 12% last year; Northern California is up to 19% compared to 6% last year. As sellers and homebuilders look to find buyers for existing homes, price declines are expected in certain markets with high inventory, especially as increasing mortgage rates make home buying even more unaffordable.

With mortgage rates around 3% in early 2021, if you wanted to spend $2,500/month on a home you could buy a house that cost $750,000. Now, with mortgage rates more than double that, that same monthly payment would get you a house that costs $475,000.

As a result, people are sidelined, waiting for affordability to improve; many are continuing to rent until the market turns in their favor. As a result, multifamily investments are poised to continue their outperformance among real estate property types as the renting versus owning equation has evolved. August marked the first month since June 2020 with no month over month rent growth: according to Yardi Matrix's latest survey, US rent growth decelerated 170 basis points to 10.9% on a year over year basis. While investors have enjoyed an unprecedented post-covid catch-up of 15%+ year over year growth, the remainder of the year is expected to moderate as affordability becomes an issue in a cooling economy.

At RockCreek, we continue to look at affordable housing investments where there is the largest supply/demand mismatch, both in the regulated and market rate segments, where residents can maintain their ability to pay, despite rising inflation and a slowing job market.

Industrial real estate and digital real assets continue to exhibit positive fundamentals, and agriculture related real assets strategies show promise in an evolving geopolitical and environmental climate where, year-round, reliable food production is a necessity for an ever-growing population.

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