



QUARTERLY COMMENTARY LETTER

DOWNHILL SLEDDING

Q4 2023

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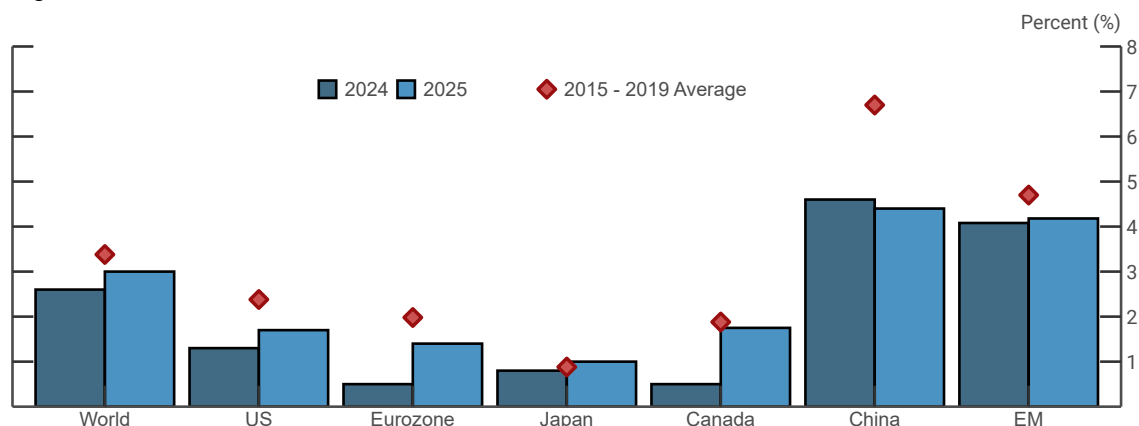


MACRO ENVIRONMENT

The U.S. economy was on a roll in the final quarter of 2023. Economic data cemented hopes of a soft landing. Inflation continued to slow and the Federal Reserve began to talk about rate cuts for 2024. Markets were exuberant, perhaps not irrationally. Despite continued tight money and heightened geopolitical tensions, GDP growth continued during the quarter, increasing at a faster-than-expected 3.3% annualized rate.

The economy is likely to slow in 2024, both in the U.S. and globally (figure 1). But the solid U.S. performance in Q4 rounded out a year that showed the resilience of the American economy – and consumers – in the face of multiple shocks. In contrast, most other major economies – with the interesting exception of Japan –underperformed in Q4. Europe’s major economy (Germany) slid into recession and China’s persistent property overhang, as well as a declining population and increasing youth unemployment, reinforced

Figure 1. Global GDP forecasts



Source: RockCreek, Bloomberg.



consumer caution and weak domestic demand. Although the Chinese government has reported narrowly exceeding its GDP target, with 5.2% growth in 2023, this was coming off depressed output in 2022. Japan notched up growth of an estimated 2% in real terms.

In the U.S., instead of the recession widely predicted for 2023, the year ended with GDP up by an estimated 2.5% on 2022, according to recent estimates. In Q4, inflation continued to slow, consumers kept spending, the jobs market stayed strong, and investor optimism soared. Equity markets reached levels penciled in for late 2024 a year ahead of time, with a rise of 11% during the quarter. Bond markets rose sharply in December on signals that the monetary cycle had peaked, after a dip early in the quarter. By the end of Q4, 10-Year yields had fallen below 4% and mortgage rates retreated dropped 140 bps from their 2023 high of 7.8%.

Some of the good cheer evaporated early this year. In a now-familiar pattern, markets got ahead of the Fed in late December with the anticipation of six rate cuts in 2024 rather than the three penciled in by central bankers at their mid-month meeting. Uncertainty remains high about the timing of likely rate cuts – and the 2024 outlook more broadly – after forecasters got economic developments so wrong in 2023.

AGAINST THIS BACKDROP, ROCKCREEK SEES THREE MAJOR THEMES FOR INVESTORS TO WATCH

01. GEOPOLITICAL RISKS: WAR AND ELECTIONS

Markets have difficulty pricing geopolitical shocks – particularly the near-term impact – even of such major events as Russia's 2022 invasion of Ukraine or the October 7 Hamas attack on Israel in 2023. But with dangerous wars continuing in both the Middle East and Europe, and elections in countries that contain more than half the world's population, 2024 holds unusual geopolitical risks. The November Presidential election in the U.S. is the one most likely to affect markets and the rest of world. It will cast a long shadow over 2024. The fall-out of Taiwan's January 13 election, with a narrow win for the more independent minded candidate, will also play out

for the rest of this year. Other key 2024 elections are due in India, the UK, Europe (the EU parliament), Mexico, and Indonesia.

02. TIMING AND EXTENT OF MONETARY EASING IN THE US AND EUROPE (AND TIGHTENING IN JAPAN)

The Fed signaled in mid-December that it expects to ease monetary policy in 2024 as the balance of risks tips from inflation to over-tightening. Indeed, Chair Powell noted that if the central bank waited for inflation to hit the 2% target before cutting rates, it would have waited too long. But a move before mid-year remains unlikely. Across the Atlantic, the European Central Bank (ECB) is more hawkish, with its single inflation objective for monetary policy, but President Christine Lagarde has now indicated that rate cuts could come. Both central banks will be eyeing developments in jobs and prices in Q1 to guide policy after the pandemic and post-pandemic surprises. Japan is the outlier, welcoming inflation above 2% and likely to wait longer than markets expect before allowing rates to rise.

03. GLOBAL GROWTH TRENDS AS THE WORLD MOVES BEYOND THE PANDEMIC ERA

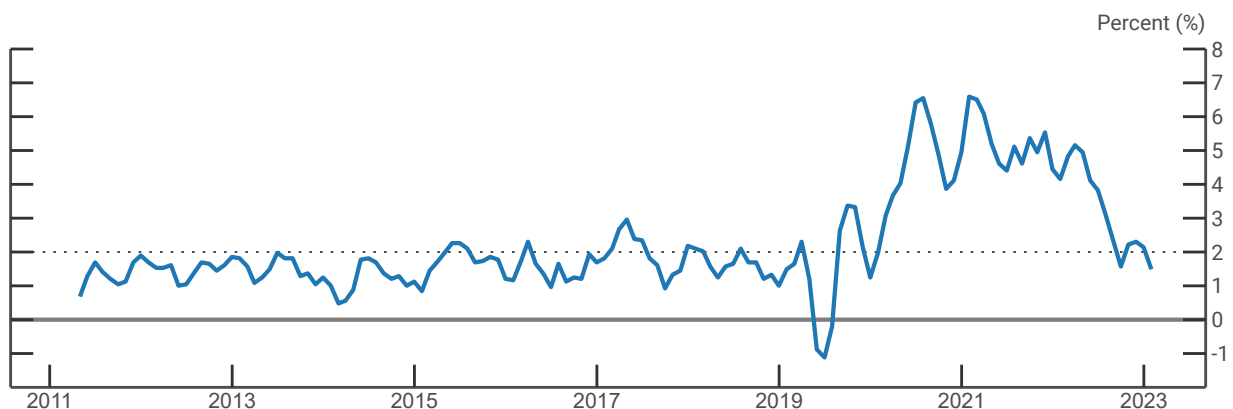
The U.S. economy has exceeded expectations in the post-pandemic period, relative to the pre-pandemic trend. Can this continue? Japan surprised on the upside in 2023. Will it finally move out of the deflation that has dogged its economy since the bursting of the bubble nearly 35 years ago? Will China regain its footing, despite the lack of significant stimulus, growing investor concerns about government policy, and continued real estate problems? The forecasting record since the pandemic was badly flawed in the case of both of the world's two largest economies. China's growth was expected to accelerate in 2023 as U.S. GDP slipped. Investors should remain flexible as we now move into what could be seen as the first "post-post-pandemic" year. Fundamental relationships embedded in economic models appear to have shifted. A sharp tightening in monetary policy has not cratered the U.S. housing market nor crippled interest sensitive sectors more broadly. Jobs continue to be plentiful and unemployment contained in both Europe and the U.S., even as inflation has fallen sharply. Some economists still expect a sharp rise in joblessness will be needed to get inflation down all the way to 2%. But that view is increasingly in the minority, at least in the U.S.

THE INFLATIONARY SURGE IS OVER

It may take years before consensus forms on what caused the global surge in inflation in 2021-2022. Was it a lock-down fueled increase in demand for goods at a time of lock-down constrained supply? Was it too much fiscal and monetary stimulus, in the U.S. in particular? What is easier to agree is that the surge was clearly over by the end of 2023, almost two years after central banks around the world began to tighten policy, raising rates, and reversing quantitative easing. Peak inflation rates in the U.S. occurred in the summer of 2022, when prices rose by just under double digits.

In Q4, with the Fed's policy interest rate remaining unchanged at the 5.25% to 5.50 % level reached in July, inflation dipped further toward the 2% target. Over the six months to December, core PCE inflation – the measure most closely watched by the Fed – was just 1.9% at an annual rate, and three-month annualized fell to its lowest level since August 2023 (figure 2). This progress is reassuring. But inflation remained above target on other measures and is likely to continue to do so throughout this year. The headline annual rate for CPI, which reflects what average Americans face, was 3.4% in December. Wage growth topped that, with hourly earnings up by some 4% in the year. Although Americans remain gloomy according to polls, real wages have now begun to rise.

Figure 2. Core PCE MoM Annualized, 3mo rolling average

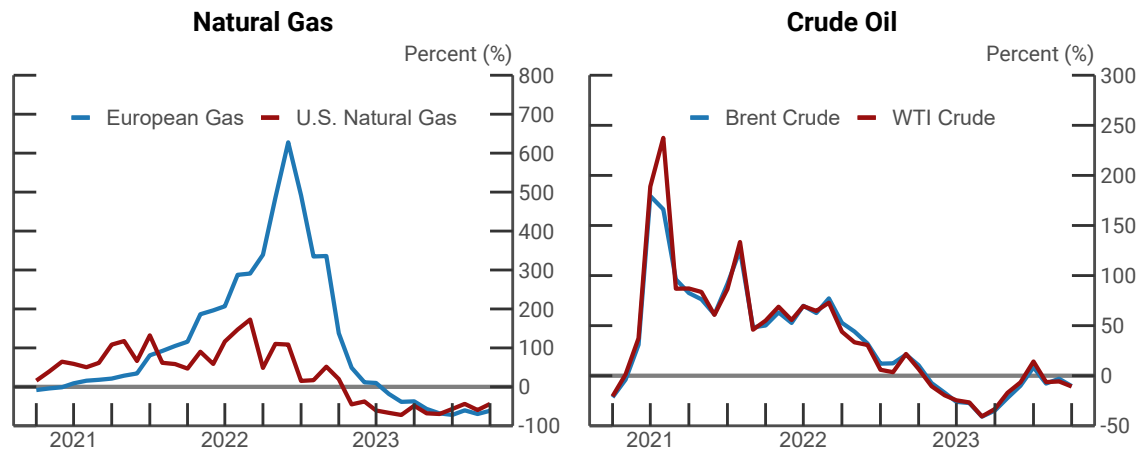


Dotted line = 2% inflation target.
Source: RockCreek, Bloomberg.

ENERGY DEVELOPMENTS

Undoubtedly, one of the biggest contributors to global inflation during recent years has been energy prices. From global reopening boosting oil and gasoline demand to Russia's invasion of Ukraine sending European natural gas off the charts (figure 1.1). In 2021 and 2022, energy was a main driver of the world's inflation problems.

Figure 1. Changes in natural gas and crude oil prices from prior year



Source: RockCreek, Bloomberg. As of December 31, 2023

Europe was hit particularly hard via natural gas, which rose by more than 900% from the prior year in the immediate wake of Russia's invasion of Ukraine. That followed a near 4x increase in 2021. All told, European natural gas rose from \$4.25/MMBtu equivalent at the beginning of 2022 to nearly \$100/MMBtu equivalent in August 2022. U.S. Henry Hub traded higher in sympathy, particularly as traders positioned to benefit from increased demand for U.S. Gas once Europe pivoted from Russia. However, it increased a relatively modest 4x from Jan 2020 to its 2022 peak. Crude oil also rallied sharply, but less dramatically.

European natural gas has since traded back down to \$9.08/MMBtu, while U.S. Henry Hub has fallen to \$2.54/MMBtu, a mere 20% above its early January of 2020 price. Crude oil has fallen by roughly 40% from its late Spring/Summer highs of 2022, despite repeated efforts by OPEC+ – and Saudi Arabia in particular – to curtail production. Several factors have conspired to drive energy prices lower.

While a decrease in global demand, particularly for oil, has contributed to the declines, one of the most notable drivers has been supply growth in the U.S. (figure 1.2). According to data compiled by the U.S. Energy Information Administration (EIA), the U.S. now produces 22.3 million barrels of oil per day (mbpd). This compares to 9 mbpd for Saudi Arabia and 10.5 mbpd for Russia. In addition, the U.S. exported a record amount of oil in the first half of 2023, averaging nearly 4 mbpd. Over 70% of that oil flowed to Europe and Asia.

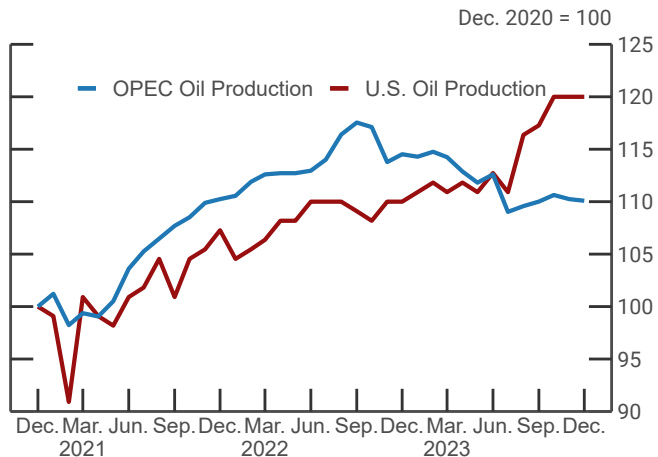
Similarly, the U.S. experienced record natural gas production in 2023, which outpaced total demand and helped drive prices lower domestically over the year. Much of those exports went to Europe,

ENERGY DEVELOPMENTS – *continued*

helping to ease price pressure created by crimped Russian supply. U.S. LNG exports to Europe increased 141% in 2022 compared to 2021. In 2023, U.S. LNG exports increased by a further 15% with 68% of exports going to Europe. This trend is only likely to persist as more infrastructure is developed to shuttle increasing amounts of natural gas to the Gulf where multiple new LNG export facilities are waiting with more under construction (figure 1.3). The recent Biden administration freeze on new export licenses will, at best, slow additional export capacity but will not affect already approved projects.

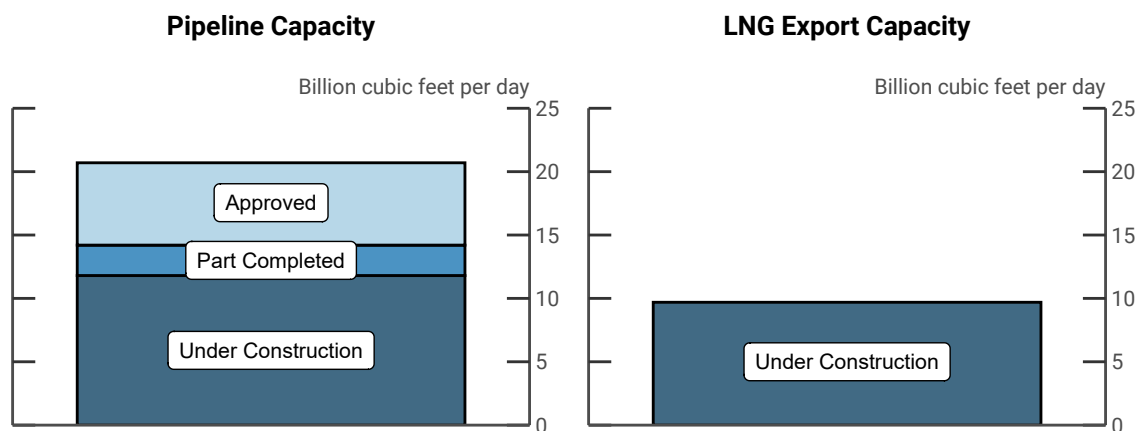
Overall developments have been good for headline inflation and will hopefully continue to be. The main risk, however, seems to be linked to geopolitical tensions. Both the War in Ukraine and escalation of the Israeli conflict hold the potential to disrupt the current balance. Attacks on Red Sea vessels by Houthi rebels in recent weeks, and the escalating naval deployment from Western nations as well as Iran, has caused numerous spikes in oil prices, however none of that price action has been sustained.

Figure 1. Changes in oil production



Source: RockCreek, Bloomberg. As of December 31, 2023.

Figure 1. Pipeline delivery capacity and LNG export capacity



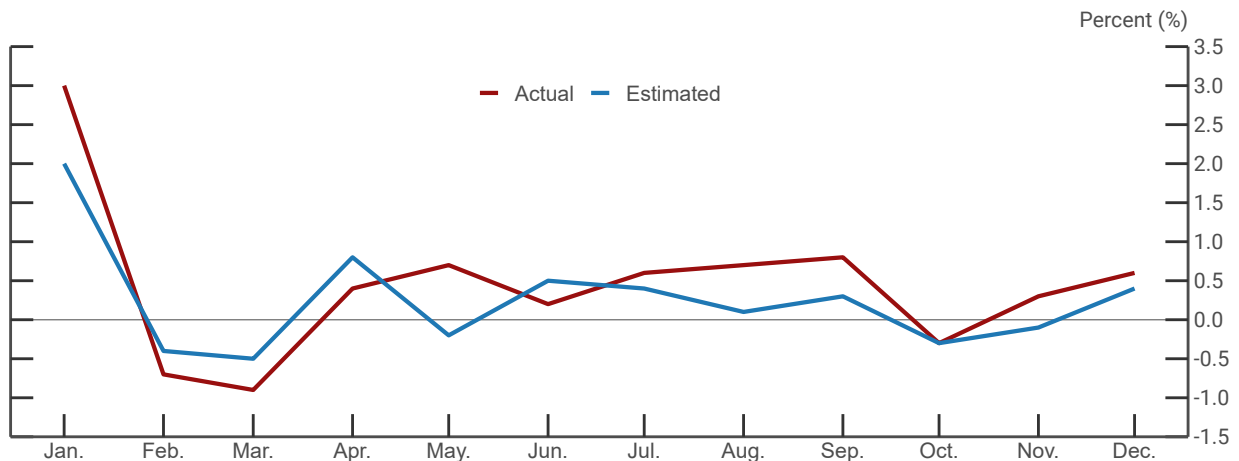
Source: U.S. Energy Information Administration Natural Gas Pipeline Project Tracker and Liquefaction Capacity File. As of December 2023.



JOBS AND SPENDING

One puzzle has been the continued buoyancy of consumer spending. Fading fiscal stimulus, tight money and a run down in savings built up during the pandemic were expected to depress consumption by the end of 2023. Instead, retail sales rose by 0.6% in Q4 (figure 3). The strong labor market is one likely explanation. Although vacancies have fallen back from the extremely high levels of a year earlier, payroll growth remains robust. The U.S. economy added an estimated 494,000 jobs in Q4, bringing the annual average monthly increase to 225,000. Unemployment ended the year at 3.7%, only slightly above the 3.5% level a year earlier. Labor shortages that made headlines a year ago have gradually eased with increased legal immigration and some increase in participation among prime age workers.

Figure 3. U.S. retail sales MoM, 2023



Source: RockCreek, Bloomberg.

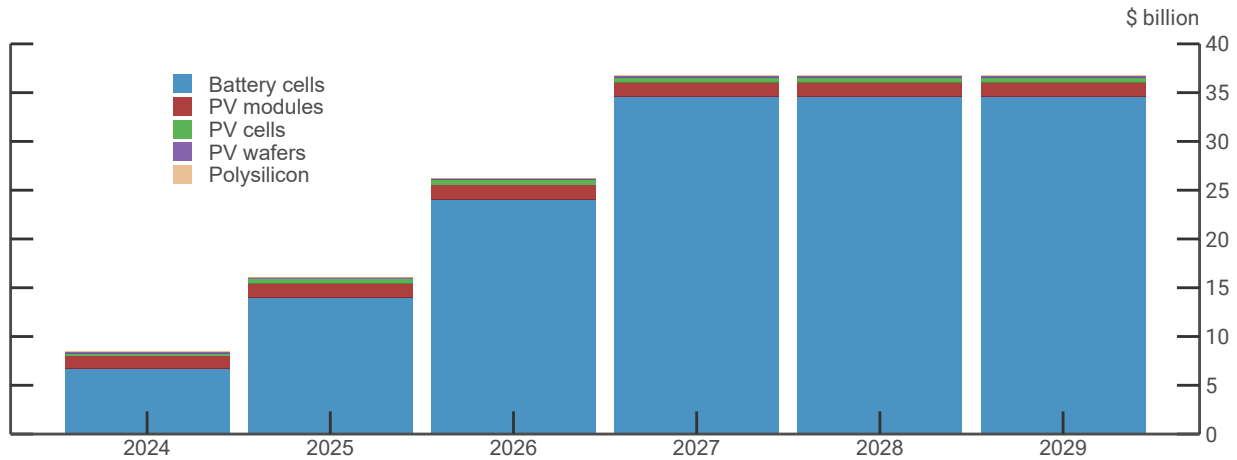


SUSTAINABLE INVESTING

After years of unwavering enthusiasm for sustainable investing, 2023 marked a decided shift in the mood. In the U.S., the flight from sustainable funds continued in the fourth quarter, marking the first full calendar year of outflows in over a decade. Meanwhile, private markets were unable to escape broader trends, with investors starting to tap the brakes on climate venture and growth equity. Sustainable investing saw a bumpy 2023 amid macro headwinds and a challenging regulatory environment. Nevertheless, the outlook for sustainability in 2024 looks favorable, as secular themes continue to drive investor focus on opportunities that provide quantifiable metrics and applicability across different sectors. Economic uncertainty and upcoming elections this year present some headwinds, but expectations on monetary policy easing will provide a boost to sectors most sensitive to a higher rate environment, providing more opportunities in the sustainable investment universe.

Activity in sustainable funds was marked by a growing divide across geographic regions in 2023. According to Morningstar, quarterly flows this year were largely driven by Europe, which remained the only major market to record inflows for all four quarters. Nevertheless, global funds notched their first quarter of net outflows in Q4 as U.S. funds shed over \$5 billion over the last three months of 2023. Still, sustainable assets under management grew in Q4 by more than 8% to \$3 trillion, thanks to broader equity and bond price appreciation. In the U.S., this price appreciation helped sustainable equity funds grow by 12% year-over-year, though returns generally lagged conventional peers.

The drop in climate tech funding reflects the broader market pullback seen this year in VC funding, which fell 29% year-over-year. In Q4, climate tech funding fell to \$5.7 billion – its lowest level in two years – and brought the year’s total investment to \$32 billion, a 30% decrease from 2022 and

Figure 1. Estimated investment for tax credit 45x, 2024 - 2030

Source: RockCreek, BloombergNEF.

28% decrease from 2021, according to Sightline Climate. Growth and later-stage companies took the brunt of this slowdown with a slow IPO market and the overhang of high valuations from 2020 to 2022 cooling the market. As capital in this space becomes harder to come by, down rounds are becoming more common, and we are starting to see even some once-high flying public and private companies face the threat of shutting down altogether.

Amid these economic headwinds, energy transition markets finally received some much-needed guidance on how several crucial components of the Inflation Reduction Act (IRA) will be rolled out. In December, the U.S. Treasury and IRS released proposed guidance on several tax credits for [low-carbon hydrogen markets](#), [domestic clean energy production](#), and [sustainable aviation fuels](#). These announcements are catalytic and expected to result in explosive growth for each of the markets that they touch. Notably, new guidance on tax credit 45X, which seeks to promote domestic manufacturing of renewable components and critical materials, will likely spur additional investment in manufacturing infrastructure beyond the more than \$80 billion in investment already committed since the IRA was announced (figure 1).

The tailwinds created by the IRA are partially responsible for the strength seen in commercial energy transition solutions in 2023. According to estimates from the U.S. EIA, solar remained the fastest growing energy source in the U.S., with capacity up more than 30% from 2022. Texas and California continue to be the largest contributors to this growth at 41% of total solar gigawatts

installed. Falling equipment costs and rising demand, coupled with new tax credits, are expected to spur further installations as new opportunities open across markets where solar potential is large but current penetration is limited.

Not to be outshined by solar, the EV market also posted impressive numbers this year, with sales in the U.S. surpassing 1 million vehicles in November 2023, marking a 51% growth rate over the previous year, according to BloombergNEF. But at less than 10% of new car sales, there is still significant room for growth. Other markets for commercial energy transition solutions (e.g., energy storage/batteries, alternative fuels, etc.), likewise, reflected the benefits of policy tailwinds and strong demand from corporates and consumers. Companies both offering solutions and financing enabling these solutions saw strong growth in 2023.

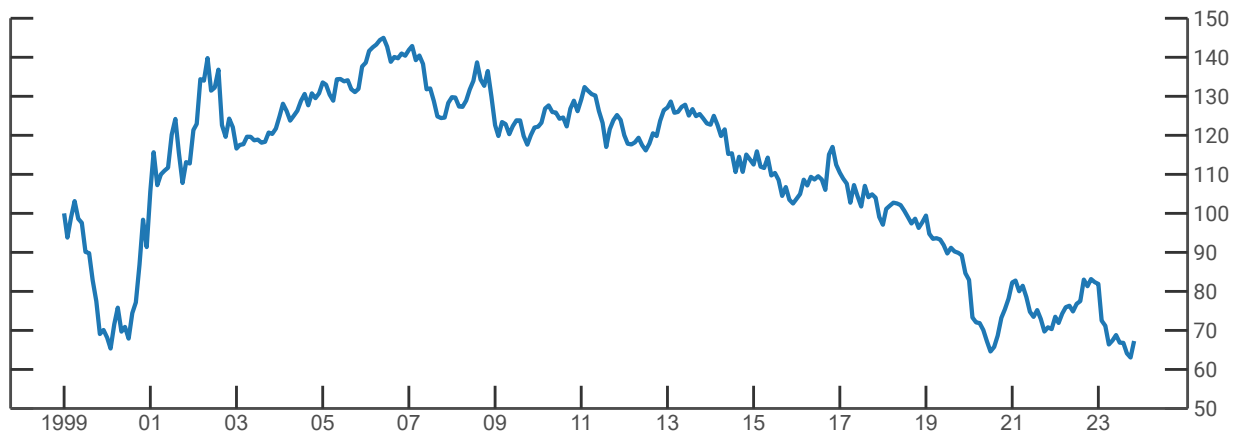
As we look forward to 2024, we continue to see tremendous opportunities in private markets for profitable companies with commercial solutions that are poised to take advantage of strong demand amid a favorable policy environment. We also expect to see further guidance from policy makers that will help identify further markets well-positioned for growth. One area of particular focus is a series of government funds earmarked for bringing energy transition solutions to all regions and socio-economic groups. This should help to develop capacity for populations that have historically been overlooked but are now an attractive market given the relative cost competitiveness of many energy transition solutions vis-à-vis legacy solutions. The energy transition provides tremendous investment opportunities, though knowing where to look in this market is more important than ever.



PUBLIC EQUITIES

Developed market equities exhibited a strong fourth quarter rally driven by both hopes of future interest rate cuts, as well as expectations that earnings will maintain their resiliency. Secular growth led the way this year with defensives lagging and energy disappointing after a strong 2022. This year's market appreciation was driven by a combination of multiple expansion and improved EPS growth in the second half. At the end of Q4, the S&P 500 and Russell 2000 were at 22x and 27x for next year's earnings, respectively. This doesn't qualify as bubble territory, but it is still quite expensive and thus multiple expansion going forward will be challenging. Meanwhile, consensus earnings growth forecasts for the S&P 500 are already double digits for 2024 and 2025, which seems optimistic considering the likelihood of a potentially difficult macro backdrop this year. Per the BofA Global Fund Manager Survey, investor sentiment ended the year the most upbeat since January 2022. That's a good sign for contemporaneous returns but provides little guidance beyond that.

Figure 1. Russell 2000 versus Nasdaq Relative Return

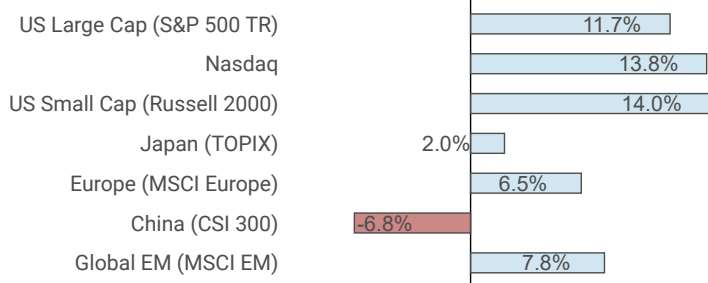


Source: RockCreek, Bloomberg.

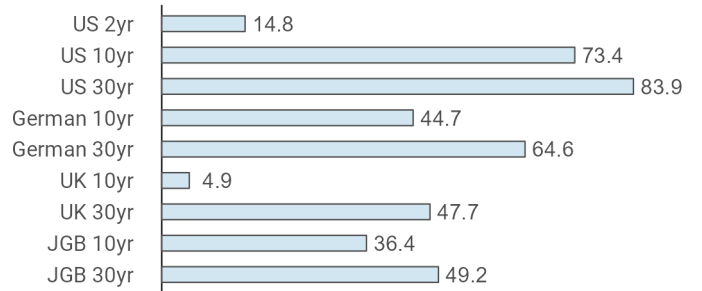


ASSET RETURNS Q4 2023

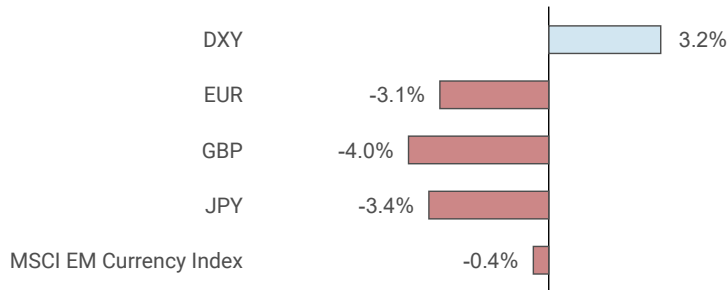
Equity Markets



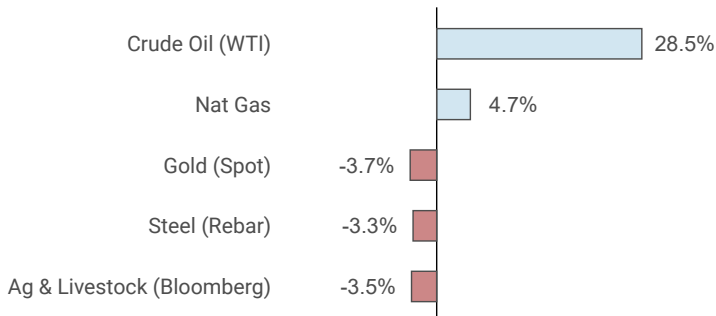
Bond Markets (bps)



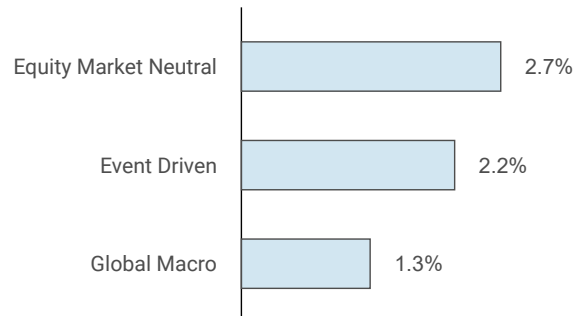
Currency Markets



Commodity Markets



RCG Hedge Fund Indices



A key development in this latest quarter was the much-improved breadth of returns. The equal-weighted S&P 500 was essentially flat year-to-date through September versus nearly 12% for the normal market cap-weighted index. During the fourth quarter, they both gained 11%. The Russell 2000 gained an impressive 22% over the final two months of the year. The spread between the Russell and Nasdaq had previously gotten back to the peak of the 2000 internet bubble (figure 1). Following the inflection in April 2000, small-cap stocks went on to massively outperform over the following two years.

Positioning across the “Magnificent Seven” (Mag 7) stocks was a major determinant of active management success, and after such a strong 2023, multiple compression would not be surprising. That being said, they could still have another solid year driven by earnings growth if they can meet lofty expectations. With a current P/E to growth ratio of just 1.4x based on consensus estimates, the Mag 7 sit comfortably below the historical average. While these stocks have solid growth characteristics, they also exemplify quality and would benefit from a flight to quality should economic growth dissipate more than expected.

It is important to have diversification within equity portfolios though caution is warranted. This is particularly true for cyclicals, with many investors focused on infrastructure and more defensive plays, such as aerospace, where engine manufacturers have large backorders, strong pricing power, and predictable service-related cash flows. Other areas of focus are homebuilding materials and construction aggregates. New U.S. housing starts jumped nearly 15% in November - well ahead of projections. Increased spending related to the IRA should also help support construction and materials.

Selectivity is also vitally important for small- and mid-cap stocks. There is currently a wide valuation spread between large and small companies, but investors need to take an active approach given the large measure of struggling and unprofitable companies in the small-cap universe. The percentage of unprofitable companies in the Russell 2000 has grown to almost half the index, driven by IPOs of early stage biotechs and SPACs in past years.

We believe it is a good time to be searching for quality outside the U.S., and Japan offers perhaps the best quality for value prospects. Japanese small-caps and U.S. large-caps both register as



high-quality with median gross profit/asset ratios of around 22%. However, Japanese small-caps are far cheaper with a 6.8x median EV/EBITDA compared to U.S. large-caps valued at 13.6x. While Japan's corporate sector growth certainly lags that of the U.S., it can still offer attractive returns and diversification. The case for Japan is supported by both structural factors in the form of corporate governance reforms targeted at shareholder returns and cyclical factors. Consistent inflation above 2% is supporting a gradual move from savings to investment, particularly for people in their 30s and younger. This is also now being furthered by the government's latest expansion of the tax-free program NISA, the Nippon Individual Savings Account. Kishida has made NISA a pillar of his vision for a "new form of capitalism". Meanwhile, the BOJ is leaning towards monetary policy normalization (i.e., ending YCC) but subdued domestic demand and weaker-than-expected wage growth are likely to prevent a large step change.

Like the U.S., a handful of large- and mega-cap companies accounted for a large portion of market gains in Western Europe last year. For example, UniCredit and Novo Nordisk were major respective standouts in Italy and Denmark, two of the better performing countries in Europe. Market drivers were more diverse in southern Europe where Italy and Greece have made recent economic progress versus their northern counterparts. Risk aversion across most of the region has left many segments, particularly domestic-focused small-caps in Europe's largest markets, with decent valuation support though it may take some time before we see riskier stocks narrow the gap. Higher inflationary dynamics across the region will delay BOE interest rate cuts, likely extending the prevailing market headwinds. With the region experiencing economic stagnation and a hawkish ECB, investors should focus on alpha opportunities through stock selection.

The U.S. represents Europe's single largest export market, with the total revenue European corporates earn from the U.S. being roughly equivalent to that of the UK, Germany, and France combined. European multinationals may still be the most favorable opportunity in the region through the first half of the year with U.S. strength translating to better-than-expected results from some of these companies.



EMERGING MARKETS

Compared to developed markets, the fourth quarter capped a tough year for emerging markets equities, weighed down by another, albeit less severe, *annus horribilis* for Chinese stocks. The losses in Chinese equities were indiscriminate across sectors, reflecting an economy still trying to find its bearings. Outside of China, it was not all doom and gloom. Return dispersion across countries and sectors reached a new high in Q4 with the MSCI EM ex-China Index returning 13% versus 7.9% for MSCI EM and -4.2% for MSCI China. Of the top ten countries in the MSCI EM Index, seven outperformed the overall EM Index. The clear winners among the larger EM markets in Q4 were Mexican and Brazilian equities, up 17.8% and 18.6%, respectively. India, South Korea, Taiwan, and the CE3 also performed well.

The divergence in performance between EM and EM ex-China in Q4 and for all of 2023 was not, in our view, a fluke. It is, rather, a very real reflection of the so-called ‘near-shoring’ and ‘re-shoring’ phenomenon being undertaken by the world’s multinational companies. From Apple announcing its plans to build more than 50 million iPhones in India over the next two to three years to Nike and Adidas shifting more production to Southeast Asia, the trend is clear. In more sensitive sectors, such as semiconductor manufacturing, the CHIPS and Science Act continued to incentivize the likes of Intel and TSMC to expand their U.S. and near-U.S. operations in 2023. Decades of investments in infrastructure, free trade deals, and relatively stable politics have put Mexico, in particular, on the map, and investors have taken notice.

Credit must also be given to the EM consumer (ex-China), which, in Q4, showed signs of resilience and recovery after two years of belt tightening. It helps that some EM central banks began to cut interest rates earlier in 2023 and continued to signal easy monetary policy in the quarter. We believe this will prove a boost to domestic growth prospects in large economies such as

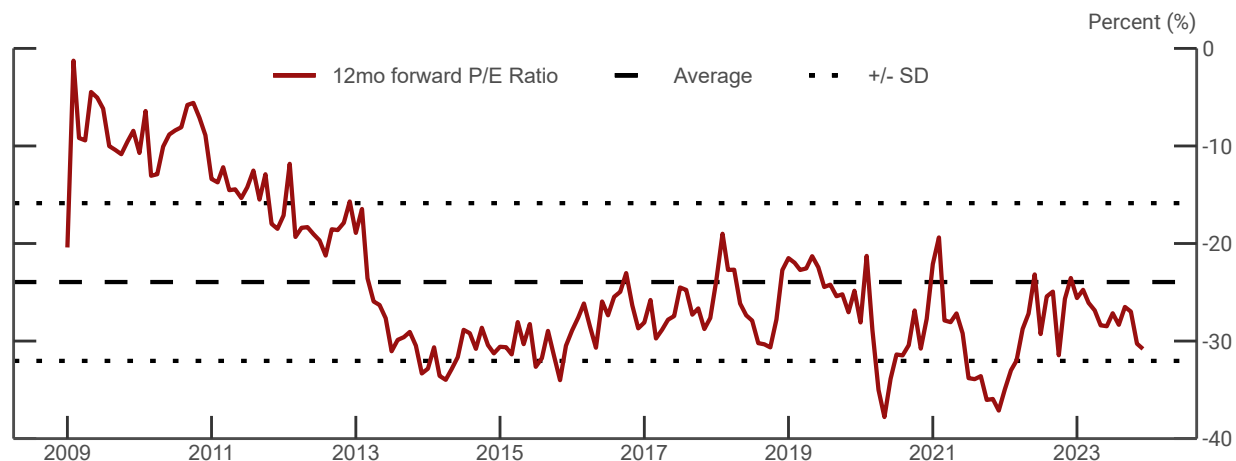


Brazil and Mexico. While the Reserve Bank of India has yet to cut rates, we remain structurally bullish on India. Favorable demographics, political stability, already-implemented reforms (e.g., digitalization, tax rationalization, etc.) that are percolating through the economy, deepening market liquidity, and rising capital issuance all support strong ongoing risk-adjusted returns. At the same time, because of higher FDI and/or higher commodity exports, local EM currencies are expected to remain stable versus the dollar.

With regards to China, it is too early to call a turning point. Since its peak in 2021, more than \$6 trillion in value has been wiped out in its stock market. Although individual opportunities to invest remain, especially in the domestic A share market, it will take an unlikely combination of massive domestic stimulus and geopolitical rapprochement to turn the tide in size. Both fiscal and monetary policy remain too tight to reflate growth. The Chinese equity market is one where the current discount of 60-70% to the U.S. is somewhat merited. Nonetheless, we will watch for evidence that the housing sector is bottoming out and a shift in Chinese economic policy – both basic prerequisites for any relative re-rating of Chinese risk assets.

As we enter 2024, investors should take note of how relatively cheap and under-owned EM equities are compared to the rest of the world (figure 1). As economic performance meets or surpasses expectations, flows into EM could inevitably return, though some countries will be beneficiaries while other will decline. The lack of positioning should also provide support for early movers, along with strong corporate balances sheets, more M&A activity and stock buybacks.

Figure 1. EM equity valuations versus Developed Markets



Source: RockCreek, Bloomberg.

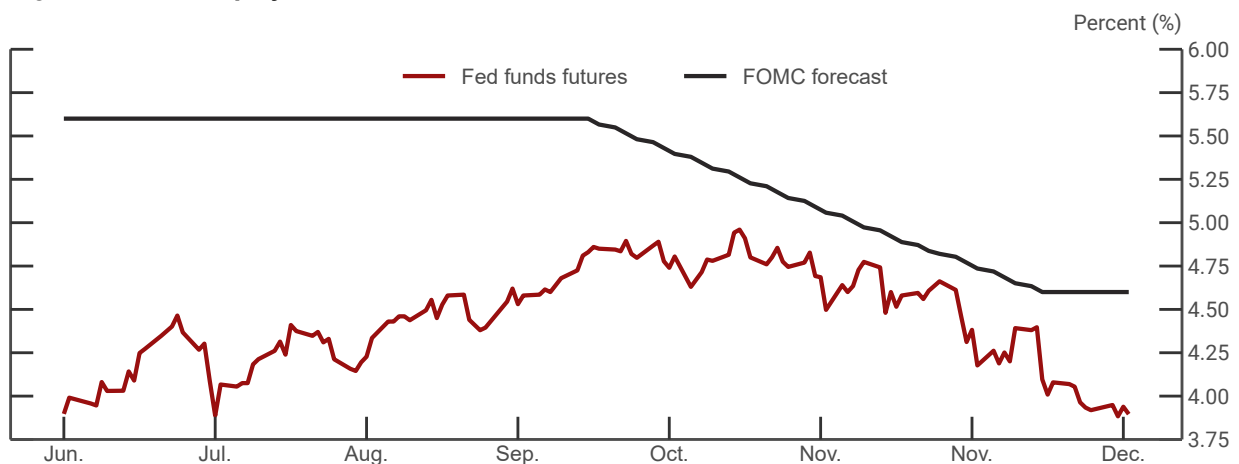


FIXED INCOME

A quarter ago the narrative was “higher for longer” with the relentless bear steepening of the yield curve extending three weeks into the fourth quarter. In the fourth quarter, however, sentiment shifted, as better-than-expected U.S. data supported a soft-landing narrative. In October, data showed that U.S. GDP grew 4.9% year-over-year in its fastest pace in nearly two years. Meanwhile, inflation - as measured by core PCE - slowed to an annualized 2.4%, which has since been revised even lower to 2.0%. After entering the quarter down 1.2%, the Bloomberg U.S. Aggregate Bond Index gained 6.8% to help bond markets notch a 5.5% gain for the year. And after flirting with 5% in mid-October, the 10-year U.S. Treasury yield ended the year at 3.88%, its largest single quarter drop since 2008.

Markets responded to the good news in kind, kicking off a rally that saved bonds from ending 2023 with an unprecedented third straight year of losses. Over the next two months leading up to the December Fed meeting, markets began pulling rate cut expectations forward, pushing down

Figure 1. Fed fund projections for 2024 in 2023H2



Source: RockCreek, Bloomberg, FRED.



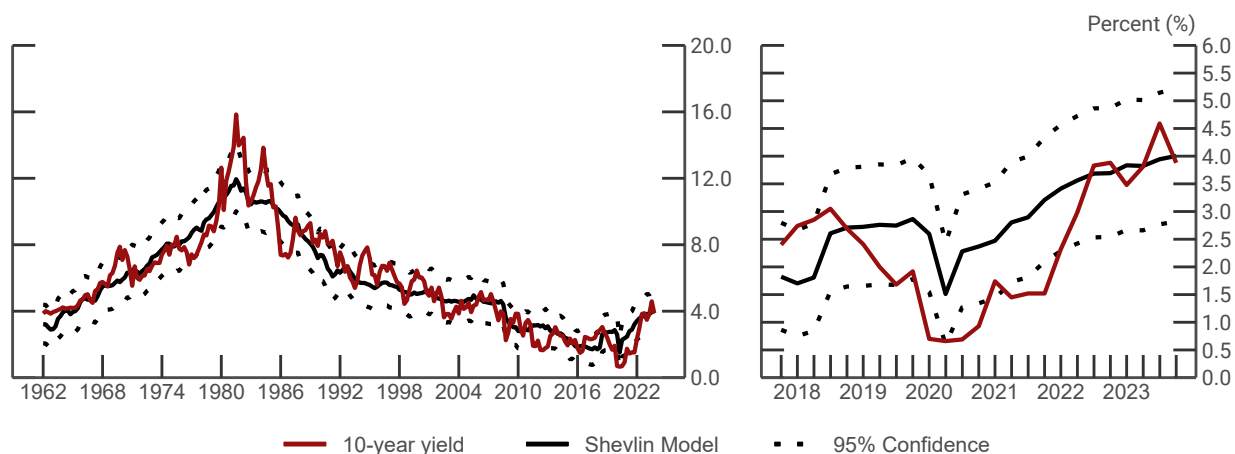
bond yields across the curve. And the FOMC’s quarterly projections – released at the culmination of the December meeting – added fuel to the fire, with the Committee expecting two more cuts in 2024 than they originally forecasted in September. The markets remained well ahead of policymakers. The official projections called for three cuts in the coming year – from 5.50% to 4.75%. Meanwhile, the market’s implied expectations for the 2024 fed funds rate went from about 5.00% in October to 4.50% ahead of the FOMC meeting, and down to 4.00% in the back half of December – signaling six quarter-point cuts priced in for 2024 (figure 1).

It is hard to say that the bond market’s head spinning rally and 120 basis point peak-to-trough rally in long-end rates was completely driven by fundamentals. Many are wondering what is right – should 10-year Treasury yields be closer to 4% or 5%? Were bonds cheap then or are they expensive now?

In a [2019 paper](#), Thomas Shevlin proposes a model for explaining bond yields using economic growth (GDP) and inflation (CPI) rather than forecast surveys that have proven to have little predictive value. Instead of forecasts, Shevlin offers a “heuristic or rule of thumb that gives a simple expression of bond yield ‘value’ in terms of broad, fundamental economic trends.”

The relationship between inflation and growth as drivers of yields is well-grounded in economic theory. Nominal yields are the reflection of real rates and inflation expectations. And real rates

Figure 2. Shevlin Bond Model



Source: RockCreek, FRED, Shevlin (2019).



have been found to relate to the rate of economic growth because, in theory, the “marginal cost of capital for the economy as a whole will equal the natural rate of growth”, which points to GDP growth a deterministic factor in bond value.

While there are numerous other factors and complexities that influence bond yields, especially over short intervals, Shevlin found that this “deliberately simplistic” model using the 10-year compound annual growth rates (“trend”) of real GDP and CPI explained 89% of the level of 10-year Treasury yields during the sample period of 1960-2017 (figure 2). Replicating this model, as of the end of Q4 2023, the indicative “fair value” for the 10-year yield was 3.94% with an upper confidence interval of 5.15% - as yields approached 5% in October, the model signaled that bonds were oversold. While we do not yet have readings for CPI and GDP through Q4, imputing forecast estimates indicates that fair value has ticked up to 4.00%, which is right around current levels.

Although there is currently little to glean from this model as yields have retraced to more reasonable levels in the context of current inflation and growth trends, it is useful to continue to anchor our assumptions about rates in this or similar time-tested valuation models. Such a focus can help shine a light on future opportunities to tactically adjust portfolio duration positioning. Investors in fixed income will be able to generate solid returns this year if they are mindful of opportunistically managing their exposure and diversifying within the fixed income markets.



PUBLIC CREDIT

LEVERAGE FINANCE PERFORMANCE OVERVIEW

Credit markets in Q4 were marked by a decompression in ratings tranches, a reversal in the trend seen for much of the year (table 1). Technical factors, including a lack of new issuance in both Investment Grade (IG) and High Yield (HY) markets and influence from Private Credit allocators, contributed to performance across credit. There continues to be a supply and demand imbalance in bond markets as investors are seeking to lock in higher present rates than they expect will be available in the future. With their historically low coupons and longer duration, high-end IG debt suffered losses for the first 3 quarters of 2023. But in Q4, they sharply rebounded, with the AAA and AA tranches returning 8.4% and 7.3% respectively. The lower ends of the quality stack performed extremely well for the quarter, but the distressed index lagged, returning 6.2% in the quarter. HY and distressed bonds had tailwinds the entire year from a stronger than expected stock market, which provided these companies with better debt ratios and lower rates from issuances in prior years. As a result, the risk of default fell across stressed and distressed credit. In Leveraged Loans (LL), a solid fourth quarter performance wrapped up one of the best years in the history

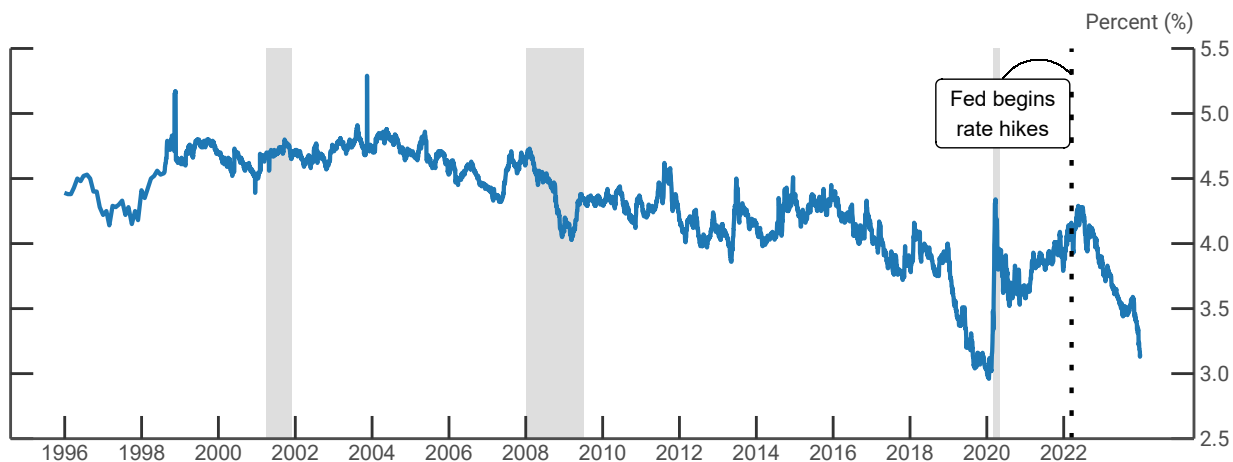
of the asset class. In Q4, the index gained 2.87%, lifting 2023 gains to 13.3%. As rates remain high, leveraged loans continued to see strong coupon payments, which has been the driver of performance given price appreciation only added 0.7%.

Table 1. Credit market performance

	4Q23	2023
Leveraged Loans	+2.87%	+13.32%
Investment Grade Bonds	+7.91%	+8.40%
High Yield Bonds	+7.06%	+13.46%

Source: Bloomberg.



Figure 1. U.S. High Yield Corporate Index Return, 1996 - 2023

Source: RockCreek, Bloomberg.

Heading into the end of the year, spreads in both IG and HY were reaching their cyclical tight, bordering on all-time lows (figure 1). Most ratings spreads are now in the lowest quartile and often in the lowest decile of historical ranges as credit markets often set cyclical tight in hiking pauses. It is hard to see how spreads continue to tighten and if rates have indeed peaked, with new issuance picking up at the end of the year and so far in 2024. Likewise, the share of HY U.S. Corporate Bonds that will be maturing in 0-1 sharply increased in the back end of 2023, rising from GFC lows of 6% and back to a more normal 2010s rate of 8%. With the maturity wall lurching ever closer, companies may feel the pressure to take advantage of these low spreads to issue more debt in 2024. declined but remain much higher than LL (around 5.0x as of mid-year). However, the coverage ratio dynamic will quickly reverse if the Fed increases rate cuts which causes HY new issuance market to reopen and the LL coupon payments to fall. Keeping both fixed and floating instruments in a portfolio gives the flexibility to manage a volatile economic and monetary situation in 2024.

Rising short-term yields in LL have boosted coupons but hurt issuer fundamentals. Loan interest coverage ratios have dropped from 4.4x at the end of 2022 to 3.0x and these ratios look even shakier for the weakest borrowers that have driven recent performance in the loan market. There is still a large maturity wall, and according to LCD, the 2025 to 2026 wall is around \$250 million with about \$100 million and \$175 billion due in 2025 and 2026, respectively. However, riskier credit constitutes a larger portion of the remaining amounts: 51% of the 2025 maturity wall is



from issuers with a B- rating. This can be troublesome for issuers if financing rates remain high. The allocation breakdown between floating and fixed instruments is primarily a discussion around rates. As Q4 showed, any signal of a Fed cut will release the pent-up pressure in the bond market, particularly in duration assets like IG. If the Fed sticks to its word regarding rate cuts and offers three cuts in 2024, the floating rate instruments should provide a more consistent coupon. Both HY and LL are seeing degradation in their underlying borrowers. The HY index coverage ratios have declined but remain much higher than LL (around 5.0x as of mid-year). However, the coverage ratio dynamic will quickly reverse if the Fed increases rate cuts which causes HY new issuance market to reopen and the LL coupon payments to fall. Keeping both fixed and floating instruments in a portfolio gives the flexibility to manage a volatile economic and monetary situation in 2024.

DISTRESS IN CMBS MARKETS

Going forward in 2024, one notable opportunity in credit markets is the dislocation in CMBS spreads. The Fed's interest rate hike has stunted the CRE market this past year. Unlike residential mortgages, CRE loans are non-amortizing and have much shorter terms than residential mortgages. This makes them highly susceptible to rising rates. And combined with the upcoming post-Covid crisis in the office sector, CMBS spreads widened considerably in 2023. Likewise, many CRE loans with coupons of 3% to 5% are coming due over the next few years. With current lending rates at 7.5% or even higher, CMBS new issue volume dropped 65% in 2023.

Investing in commercial real estate presently can feel like catching a falling knife, with sellers and buyers desperate to find a floor in the transaction value. This past year saw property owners unwilling to sell real estate at a lower valuation unless necessary while also refusing to inject more equity to refinance loans. All of this provides an opportunity to begin to play the distressed real estate cycle in CMBS before it materializes in the physical market.

EMERGING MARKET DEBT

Emerging market debt ended the year on a high note with its largest quarterly gain since 2020. Heading into 2024, we maintain a constructive outlook on EM debt amid a backdrop of ongoing monetary cycle easing. After a difficult post-Covid period where rising rates and global instability



put downward pressure on EM debt, particularly China, Q4 offered an inflection point for EM debt. The Bloomberg EM Aggregate Index's 8.1% in the fourth quarter generated most of the 9% the index returned for the year. Further, EM fixed income markets historically tend to generate equity-like returns during the period between the end of central bank rate hikes and the completion of rate cuts. This trend is expected to continue as major global central banks have concluded their rate hike cycles, with inflation remaining better than expected and labor markets loosening.

There are two potential tail risks to watch for EM debt in 2024. A hard landing will see potential for significant spread widening and EM FX depreciation. However, the asset class should be insulated against a large drawdown given the carry profile in EM debt combined with expected lower U.S. Treasury yields. If global inflation inflects higher, prompting developed markets central banks to restart rate hikes and EM central banks to end rate cuts early, it is expected that U.S. Treasury yields will rise to new cycle highs and EM credit spreads will widen. In this scenario, credit defaults would spike as EM countries face challenges accessing capital markets, resulting in losses.

The run up in the final quarter of 2023 was primarily driven by the expectation of lower inflation rates in developed economies. A reversal of this trend will impair EM bonds. And several EMs have lingering issues in their credit markets, particularly China. Developed markets lowering interest rates will provide tailwinds to EM, but the fundamentals in dragging economies in the post-Covid world will hamper the asset class going forward.



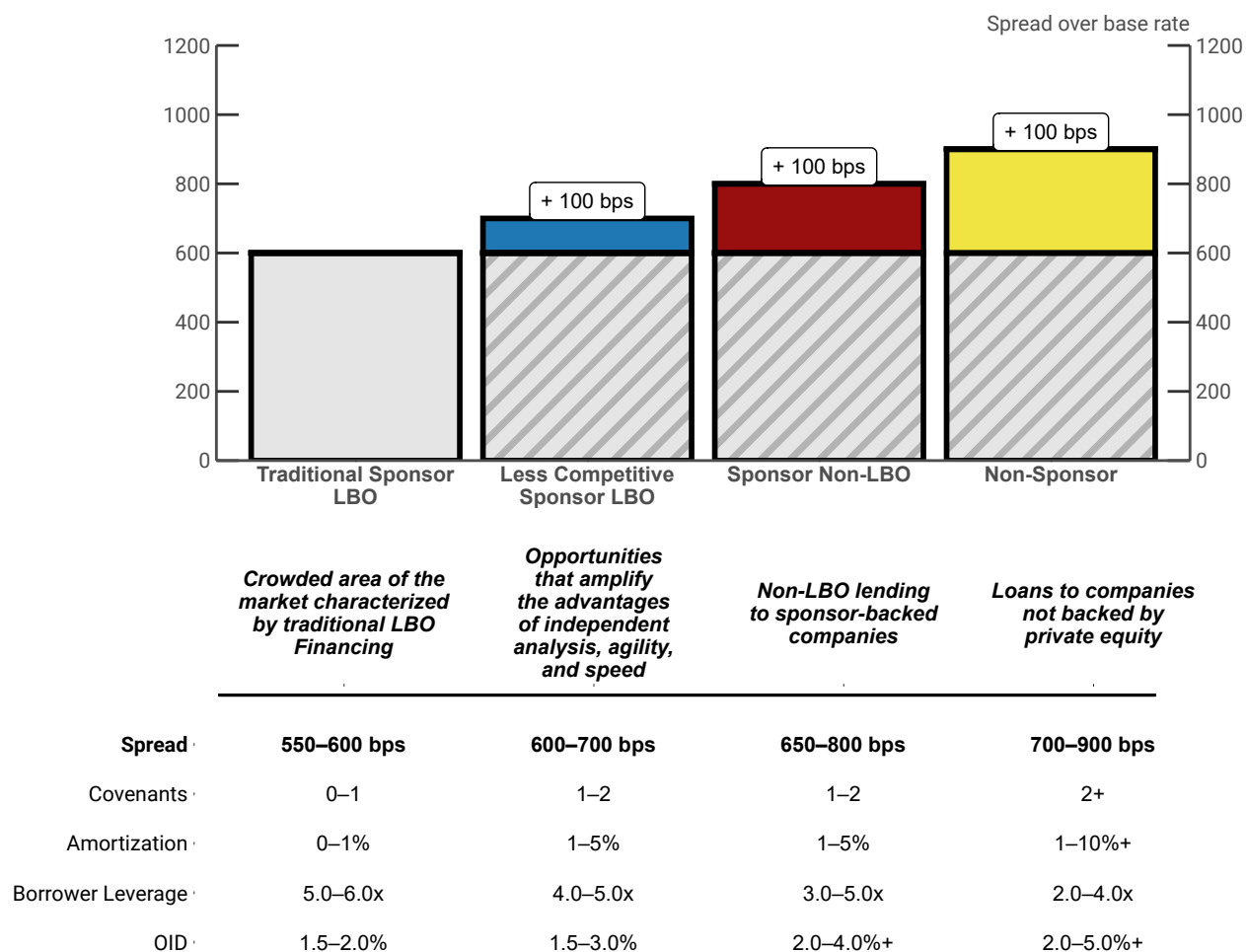
PRIVATE CREDIT

In prior quarters, we have detailed certain opportunities in the asset-based and esoteric private credit markets. Although we continue to be cognizant of certain risks present in the corporate direct lending market, some segments continue to appear more attractive than others in the current macroeconomic environment.

The corporate direct lending market can be subdivided based upon a myriad of factors that define the lending approach and the borrower. For simplicity, we will consider only three of the most distinguishing factors: seniority of the loan (senior versus subordinate/mezzanine), market capitalization of the borrower (upper middle market, core middle market, and lower middle market), and involvement of a private equity owner (sponsor-backed versus non-sponsored). It should come as no surprise that most of the capital raised by corporate direct lending strategies has been raised by large multi-billion-dollar funds that by necessity are focused on financing core and upper middle markets, typically lending to corporates owned by private equity sponsors that need inexpensive and covenant light loans to finance their LBO activity. This segment of the market is where deal volumes and deal sizes have been most supportive of corporate direct lending fund formation. Investors have gravitated toward these larger funds in the belief that larger is safer, i.e., larger borrowers with more enterprise value. This is not necessarily the case, however, as this segment of the market has become increasingly competitive compared to the lower middle market (LMM), which is financed by smaller funds and presents a more attractive alternative.

The LMM segment includes smaller companies with EBITDAs of less than \$25 million, revenues of less than \$100 million, and enterprise values of less than \$100 million. The LMM universe



Figure 1. The Corporate Direct Lending Market

Source: RockCreek, Silver Point Capital.

in the U.S. is highly fragmented and includes approximately 200,000 companies. Unlike core and upper middle market companies that are either publicly owned or owned by private equity sponsors, LMM companies are typically founder-owned with a lack of institutional relationships and capital market access. Generally, their credit needs have been met through long-term banking relationships. It is not surprising that few corporate lending funds focus on this market, where the deal sizes are small and labor-intensive to source, underwrite, and manage.

Many large, direct lending firms believe that companies managed by sophisticated private equity firms with large EBITDA pose lower credit risks to lenders. This is not necessarily true,



as debt levels traditionally are a more reliable predictor of default than size. On average, smaller companies in the LMM have lower debt-to-EBITDA ratios than their larger counterparts. At the same time, smaller borrowers have consistently paid a higher credit spread than larger companies, reflecting a persistent misperception by the market. The risks often cited in relation to the LMM include less access to debt financing and less sophistication (relative to a savvy PE sponsor). Importantly, many of these risks can be mitigated by a value-add, institutional lender poised to provide guidance on capital markets and operational expertise, as needed.

The current market dynamics for direct lending to LMM companies are highly favorable due to lack of debt capital from traditional sources (figure 1). Most debt financing for LMM companies has come from community and regional banks. This source of financing has dissipated since the Global Financial Crisis, because of the number of banks in the U.S. declined by a staggering 40% over the period. The decline in the number of banks was triggered by heightened regulatory pressures on depository institutions, and more recently, by the collapse of Silicon Valley Bank and the subsequent tightening of lending standards.

Despite the lack of available credit, the demand for debt financing in the LMM remains robust with attractive pricing. We have seen the prevailing market dynamics allow LMM lenders to consistently originate loans with cash coupons as high as S+800 bps to S+1,000 bps – and even higher in some instances – a substantial premium to the pricing of the traditional sponsor LBO market where debt financing can be reliably obtained at S+550 bps to S+600 bps. Although these rates appear to be unsustainable with the potential of introducing the risk of default, we believe this to be misguided. Ultimately, the sustainability of any interest expense is going to be based upon borrower leverage levels and the duration of the debt outstanding. As discussed previously, LMM companies tend to be less levered than their larger counterparts (figure 1). Specifically, it would not be uncommon to lend to a LMM non-sponsor-owned business with 2.0x to 4.0x pro forma debt-to-EBITDA, whereas a traditional sponsor LBO financing might be completed at 5.0x to 6.0x pro forma debt-to-EBITDA. At the same time, the uses of proceeds tend to be more transitory in nature with the LMM, often to facilitate growth or some transition. Finally, loan structures in the LMM are often more favorable with multiple covenants and contractual amortization features, which serve to protect the lender.



PRIVATE EQUITY & VENTURE CAPITAL

Private equity and venture capital investors cheered the conclusion of 2023, a year when founders were forced to reset expectations amidst struggles to find new sources of capital, investors marked down portfolio company valuations, and limited partners held their purse strings even more tightly. According to the most recent [PitchBook-NVCA Venture Monitor](#), 2023 saw the lowest amount of capital raised by the global venture capital industry since 2015, with U.S. venture fundraising down 60% from the prior year. Despite the overall market slowdown, the fourth quarter of 2023 was chock-full of headlines that caused private equity investors to scramble.

This past year saw Artificial intelligence (AI) dominate the venture market, with more than a third of the \$171 billion invested in 2023 going into AI companies. However, the biggest story during Q4 was not so much about deal volume but rather the ousting and ultimate reinstatement of Sam Altman as CEO of OpenAI. In mid-November, the majority independent board of directors at the non-profit OpenAI, LLC – which controls OpenAI Global LLC, a capped for-profit entity – suddenly and publicly ousted Altman. While the board did not offer much of an explanation – except that Altman had not been “consistently candid in his communications with the board” – reports since the initial ousting suggests that Altman and the board had clashed on a number of fronts, including AI safety. Over the course of four tense days, CTO Mia Murati was appointed interim CEO, Sam Altman and other key members of the OpenAI team were hired at Microsoft, and former Twitch CEO Emmett Shear was announced as the CEO of OpenAI. The saga reached a tentative resolution on November 21 when an agreement was reached in principle to reinstate Sam Altman as CEO, restructure the company’s board, and conduct a review of the events leading to the division. While OpenAI’s for-profit arm has continued its unprecedented acceleration – the company topped \$1.6 billion in annualized revenue in 2023 and is in talks to raise additional capital



at \$100 billion valuation – the OpenAI chronicle highlighted the importance of aligned corporate governance within the AI space, as highlighted by Harvard Law Professor Roberto Tallarita in a recent Harvard Business Review article.

In a notably slow exit environment, venture capital managers held out hope for Adobe's acquisition of venture-backed Figma, a \$20 billion acquisition first announced in September 2022. Nearly 15 months later in December 2023, Figma and Adobe reached a mutual decision to end the pending acquisition as the two companies no longer saw a path toward regulatory approval. This bellwether decision will likely further dampen venture-backed M&A activity. As part of the termination, Adobe will pay a \$1 billion fee to Figma. Additionally, Figma is expected to finish the calendar year with \$600 million of annual recurring revenue, which would represent 40% growth year over year. Nevertheless, the proposed acquisition would have been a significant liquidity event for early Figma investors, and given the change in the market environment, Figma is unlikely to reach the \$20 billion valuation for at least a few years.

With many private equity investors on the sidelines in 2023, one area that saw a lot of activity was software take-privates. Public markets were much quicker to adjust to the tepid growth environment, with the median company in the BVP Cloud Index re-rating from 20x ARR in 2021 to 5x ARR by late 2022, remaining in the 6x to 7x range for much of 2023. Investors quickly moved, acquiring companies such as Qualtrics (\$12.5B), Cvent (\$4.6B), KnowBe4 (\$4.6B), Alteryx (\$4.4B), EngageSmart (\$4.0B), and Duck Creek Technologies (\$2.6B). The sector has historically achieved revenue growth rates of 30% to 35%, but growth rates are down 30% to 40% as IT spend is evaluated across enterprises and small- and medium-sized businesses, and we expect investors with a proven track record of improving operational performance to outperform in the current environment.

Despite a tepid fundraising environment and calamitous events like the SVB crisis, we are cautiously optimistic that 2024 will be a more productive year for private market investors than 2023. Many anticipate the IPO window re-opening providing much needed liquidity, with Pitchbook estimating 75 startups waiting to go public. Additionally, we expect more strategic activity and an increase in buyout activity, as rates stabilize with the potential for rate cuts.



REAL ESTATE

The commercial real estate landscape witnessed a significant shift in the final quarter of 2023, with the industrial vacancy rate exceeding the 5% threshold for the first time since the third quarter of 2020. This [shift can be attributed to a combination](#) of subdued demand and an uptick in speculative construction completions. The industrial vacancy rate rose by 60 basis points to stand at 5.2% in Q4. However, the market continues to be robust from a demand perspective. Although the rate has finally crossed the 5% mark, this is still 120bps beneath the 15-year long-term average of 6.4%.

In the face of rising vacancies, industrial real estate continues to hold investment potential, buoyed by ongoing secular trends that continue to fuel tenant demand for warehouses near their customers. Nevertheless, overbuilt markets, such as Atlanta, Indianapolis, and Dallas, are grappling with elevated vacancy levels that may require more time to recover at this stage of the cycle. Consequently, our focus remains on markets where tenant demand outstrips supply, paving the way for favorable rent growth dynamics and absorption of vacant spaces.

The for-sale housing market, too, has encountered challenges. Although headline home sale figures have dropped, the decline can primarily be traced back to existing supply as current homeowners are reluctant to forfeit their sub-5% interest rates for the higher financing costs of a new property. New build home sales volumes have remained consistent, driven by sustained demand and fewer financing considerations compared to existing properties. Hard costs for materials like wood, steel, and concrete have stabilized, though labor costs remain high. To make up for the costs and higher interest rates for buyers, builders have innovated with rate buydowns to offer a lower headline financing cost. While this effectively reduces the land value and impacts the

homebuilders' margin, there is some respite as margins revert to historical norms. Consequently, values are only expected to dip slightly from lower sales volumes due to robust demand and absence of a national oversupply problem. However, certain submarkets may face volatility due to localized oversupply.

Given the escalated ownership costs due to financing and negligible price drops, rental multifamily continues to present an appealing investment opportunity. With interest rates substantially exceeding historical averages, and the likelihood of a sustained high-interest-rate environment, the cost disparity between owning and renting indicates continued demand for multifamily properties.

Data centers continue to be a focus area for investors, with a surge in data consumption and growth driving the need for digital infrastructure. High tenant demand has prompted substantial capital raising for deployment in this space. However, the scarcity of capable operators and prime land sites has led to most publicly traded data center REITs being acquired by investment funds for entry into the sector or deployment into secondary and tertiary markets where land, power, and water are more accessible. While this strategy works if data growth keeps demand ahead of supply, any reversal could cause significant volatility as tenants reassess their needs. As such, we are concentrating solely on primary markets with build-to-suit facilities for hyperscale tenants, providing more protection in a downturn. Other strategies that continue to remain a focus for our portfolios in the current climate include cash flow-oriented strategies such as storage, net lease, and affordable housing where income is the primary return driver.



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