

Flash Macro Update

Global Markets | August 2024



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What You Need to Know

How are we thinking about the recent global capital markets volatility?

Given all the recent gyrations in the global capital markets, we wanted to provide an update on our latest thinking, including changes to our rates call. See below for details, but our key conclusions are as follows:

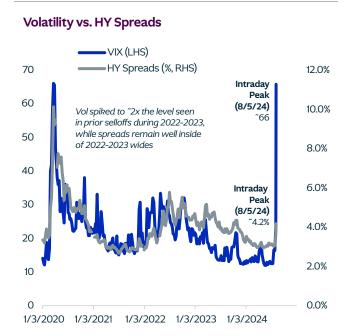
- Growth will slow further, but we are not buyers of the hard landing thesis. In fact, we remain above consensus in our U.S. GDP outlook for 2024 and 2025. Let's review the facts. We just published a 2.8% 2Q24 U.S. GDP print, and our forecast now calls for the Rolling Recession that ensues after the Rolling Recovery as part of our asynchronous global economic cycle thesis (see Mid-Year Outlook for 2024: Opportunity Knocks). Remember that our 2024 2.5% U.S. GDP forecast anticipates just 1.5% growth in both 3Q and 4Q, including discretionary goods spending running near zero growth over multiple quarters. Said differently, our forecasts have always assumed that growth would slow pretty sharply in the second half of 2024. For 2025, we think U.S. GDP growth will be at 2.0%. The other big part of the story we have been highlighting is productivity. Importantly, we have just printed a nice 2.4% productivity growth year-over-year, so that part of the story remains solid (which helps to offset slower headline hiring). Moreover, we do not see the type of slowdown from above-trend levels in cyclical areas of the economy that typically precedes a recession (e.g., Equipment Capex, Business Inventories, and Construction Spending).
- Monday's market action was more about carry trade unwinds than a further weakening of macro fundamentals. Notably, despite an equity selloff, and

a deterioration in market liquidity, credit spreads remained well behaved across geographies. In fact, we can't think of a time that the VIX hit 60 and Credit spreads held so tight (Exhibit 1). Beyond decent fundamentals, it also speaks to the technical bid that we have been highlighting.

- However, confidence will get shaken a bit, followon weakness will now result, and the Fed will get
 pushed into cutting faster. We move to three cuts
 this year from two cuts, while we move to six cuts
 from four next year. However, we now expect no
 cuts in 2026 versus three previously. Our bottom
 line: no change to our forecast for a 3.125% neutral
 rate, but there is now more pressure on Chair Powell
 to get there more quickly, as the steady growth
 in services sectors (e.g., Education/Healthcare)
 that have been powering the labor market is now
 slowing.
- In terms of 10-Year yields, we stick to our targets of 3.75% near-term and 4.0% longer-term. We continue to believe that elevated term premia and hedging costs for foreign buyers will keep the 10-Year from rallying as much this cycle. However, we see yields remaining in the 3.5-4.0% range in the near term as the market deals with uneven/bumpy economic data.
- Big shocks don't typically lead to quick rebounds. In the interim, focus on Credit Spreads, not Equities.
 Credit aligns with financial conditions; Equities are often seen by central bank governors as a more speculative, coincident indicator. As we show, VIX spikes above 50 are positive for medium-term market outcomes, but it takes time.

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Exhibit 1: Volatility Surged, But Credit Spreads Were Comparatively Well Behaved

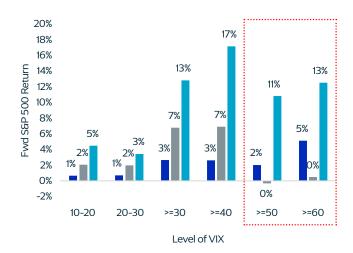


HY spread intraday peak estimated from relative performance of JNK versus 3Y USTs. Data as at August 5, 2024. Source: Bloomberg, KKR Global Macro & Asset Allocation analysis.

Exhibit 2: VIX Moves Above 50 Typically Take Months, Not Days, to Recover

S&P Forward Returns at Different VIX Levels

■ S&P 1M Fwd Returns ■ S&P 3M Fwd Returns ■ S&P 6M Fwd Returns



Data as at August 5, 2024. Source: Bloomberg.

Section I: What happened?

We saw an aggressive technical unwind of the carry trade by hedge funds and others who borrowed in yen, Swiss francs, and China renminbi. To put this into context, Monday was the worst Japan equity performance since the 1987 crash. Consistent with this view, we note that the VIX above 60 is the highest since the pandemic.

Prime brokers across the Street are signaling that, while leverage has come down, it still could fall further. This viewpoint is also true in the currency markets, as many global macro players were borrowing yen to fund investment in both Japanese banks and the Magnificent Seven, we believe.

As the yen rallied on Sunday night and equity prices fell, margin loans and collateral needed to be posted, and as a result, it created further downward pressure on borrowed asset classes.

Section II: Economic update

As we have been highlighting for some time, the U.S. is experiencing rolling sector recessions and recoveries, adding up to what we think amounts to a 'turbulent, soft landing'. In 2022, the key headwind to growth was in residential construction. In 2023, it was an inventory correction related to supply chain re-openings. In 2024, prior to this most recent bout of market turbulence, the new wrinkle was a slowing of consumer discretionary spending. Importantly, however, each of these sector cycles has been offset by strength elsewhere. In 2024, we think the offsets are persistently expansionary fiscal policy, Al-related investments, and less drag from inventory normalization.

Macro sore spots:

 Lower income consumers, who feel more of the brunt from rent inflation, and who are pressured more directly by rate increases, given the higher share of variable-rate liabilities on their balance sheets, including credit cards. Also, lower income consumers spend a greater share of their wallets on essentials, which have experienced greater inflation than discretionary items have.

- Construction spending. Both housing and nonresidential construction starts have rolled over. Rate hikes are clearly exerting pressure.
- Foreign exports. Growth in most non-U.S. developed markets plus China remains notably subdued.

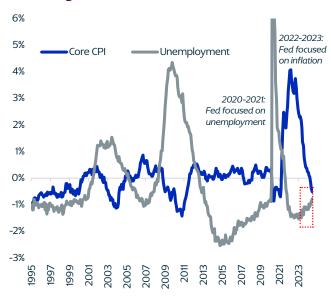
Macro bright spots:

- Productivity. Labor productivity has grown above a 2% rate over the past year, which is a notable acceleration from the 1% productivity trend we saw in 2010-19. This is not just about AI, but also about delayed benefits from the surge in digital and automation-related investments during the pandemic.
- Higher income consumers. Aggregate consumer net worth is at record levels. Importantly, upper tier consumers are also more insulated from rate increases, as their liabilities skew to fixed rate mortgages.
- Non-residential investment in tech and other industrial equipment. The AI boom in data centers, software investment, and electric demand is real. Keep in mind that the Magnificent 7 accounts for over 20% of U.S. tech capex and R&D, and they are growing spending at a 15-20% annual rate. Despite equity market volatility, these companies' balance sheets are much stronger than those of previous tech/telecom champions during the Dot-Com boom.
- **Government spending.** Defense and state and local outlays remain notably robust.

What does this all mean? We remain above-consensus in our U.S. GDP outlook for 2024 and 2025, despite having what we think are fairly guarded assumptions about the near-term outlook. We assume +2.5% GDP in 2024 and +2.0% in 2025, vs. consensus of 2.3% and 1.7% respectively. Importantly, our forecasts already embed material slowing in 2H24, including a stalling out in discretionary goods spending.

Exhibit 3: The Fed's Dual Mandate Has Shifted Decidedly Toward Labor (Not Inflation)

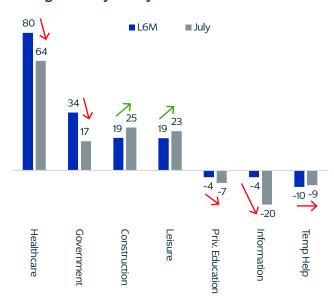
Inflation and Unemployment: % Above (Below) L5Y Average



Data as at July 31, 2024. Source: Bloomberg, KKR Global Macro & Asset Allocation analysis.

Exhibit 4: Particularly Now that Services Employment -Which Has Powered Job Growth - Is Slowing

Average Monthly NFP by Sector



Data as at July 31, 2024. Source: Bloomberg.

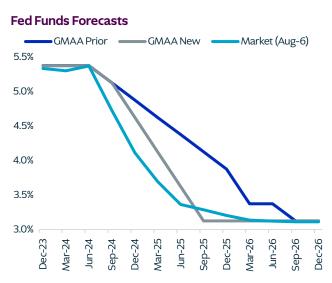
Consensus embeds that the economy stalls out more broadly in coming quarters across consumption, investment, government spending, and inventory

levels. Said differently, consensus expectations already reflect a fair amount of slowing, and may not need to reset a lot lower to reflect softer recent data.

Importantly, the most cyclical areas of the U.S. economy are already running at subdued levels, and "you can only get so hurt falling out of a first story window." Historically, recessions are caused by bubbles in construction spending and inventory investment. Today, those areas are running at below-trend levels, as construction started falling when interest rates spiked in 2022, and inventories started correcting as supply chains normalized in 2023.

All that said, what has become more clear in recent days is that Fed rates are too high, which means we are on the cusp of a cutting cycle that we think will take fed funds to the low-3% range over the next four quarters from 5.375% currently. Specifically, we are focused on the following considerations:

Exhibit 5: We Are On the Cusp of a Cutting Cycle That We Think Will Take Fed Funds to the Low-3% Range Over the Next Four Quarters



Data as at August 6, 2024. Source: Bloomberg, KKR Global Macro & Asset Allocation analysis.

- Now that inflation is back below 3%, the Fed is free to focus on both aspects of its dual mandate: not just 2% inflation, but also full employment.
- We already knew that the most rate sensitive parts
 of the economy are under pressure i.e., the lower
 income consumer and construction 'sore spots'
 mentioned above.
- The new 'wrinkle' in the story is that the July payroll data showed a distinct slowdown in the steady growth services sectors that have been powering the job market. Last year, healthcare, education, leisure/hospitality, and government jobs accounted for almost 80% of total job growth. What these areas have in common is that they are stable-growth services sectors that have been hiring back workers who were lost during the pandemic. In recent months, the growth rates in these core services sectors have been running at about half the rate we were seeing a year ago.

Finally, while U.S. inflation has moderated, we want to underscore that we continue to expect it to center at a 'higher resting rate' in coming years. Key factors underpinning our thinking include demographically driven labor scarcity, heightened geopolitics, fragmenting supply chains, and an at-times messy energy transition. As we detail further below, we still expect the 'new normal' is 2.5% core inflation, vs. 1.5% pre-pandemic. i.e., elevated inflation, but not elevated enough to keep the Fed from easing as growth slows over coming quarters.

As we have been highlighting for some time, the U.S. is experiencing rolling sector recessions and recoveries, adding up to what we think amounts to a 'turbulent, soft landing'.

Section III: What does all this mean for our rate call?

For the past two months, we have been highlighting that slower job growth and inflation were leading the Fed to shift its focus from the 'inflation' side of its dual mandate to the 'full employment' side. Said differently, our call was that the Fed would find it necessary to cut rates quickly from restrictive to neutral territory in order to protect growth, even before it had fully achieved its two-percent inflation mandate.

Flash forward to today, and this view has played out even more forcefully than we had anticipated. A slowing employment recovery in the services categories that have driven job growth this cycle – including healthcare, leisure/hospitality, and government – has convinced the Fed and markets that the balance of risks now demands a faster start to the easing cycle. As a result, we expect the Fed to cut rates three times this year and six times next year starting in September, ultimately achieving a 3.125% 'neutral' rate by 4Q25. Our prior expectation was for the Fed to follow a more cautious every-othermeeting pace and achieve their terminal rate only in 4Q26.

With that said, our forecasts remain somewhat more hawkish in the near term than market pricing for 4-5 rate cuts between now and December. Key to our thinking is that Monday's selloff ultimately centered on equity volatility (which the Fed is less focused on), rather than credit (which the Fed views as a more direct risk to economic growth). So long as credit spreads remain relatively well contained, we do not think the Fed will need to cut rates by more than 75 basis points this fall. History is a useful guide here as well: consider that when LTCM failed in September 1998 following a period of elevated market volatility, policymakers only eased rates by about 75 basis points. We do not think the current period of volatility requires more easing at the front end of the curve than the LTCM crisis, particularly as the aftermath of SVB in March of 2023 gave policymakers more confidence that balance sheet policy, rather than interest rate policy, can be an effective tool to contain market dysfunction.

Importantly, market volatility does not change our thinking on the long-run level of nominal and real interest rates in the U.S., either. Our long-held view has

been that in the medium term (i.e., 2026 and beyond), U.S. growth would settle around 2.0%, inflation would center in the mid-2.0% range, and fed funds would average in the low 3% range. As a result, real rates would average about 50-100 basis points below the level of real GDP growth. If we are right, then this environment would be comparable to the post-Dot Com, pre-GFC era, when the Fed held real rates about one percent below GDP growth on average despite inflation realizing slightly above target. By contrast, the post-GFC era was characterized by deeply negative real rates as the U.S. navigated a multiyear deleveraging cycle – something we do not anticipate this cycle.

Similarly, we stick to our view that 10-Year Treasury yields will ultimately center on 4.0% in 2025 and beyond, reflecting a low-three percent average short rate and about 75 basis points of term premium, driven by wider fiscal deficits, positive stock-bond correlations, and a structurally lower savings rate. By contrast, in the post-GFC era, we think this term premium was closer to zero. With that said, we do think that the asynchronous economic cycle will lead to periods of soft patches in the data, which will see the 10-Year trade in the 3.5-4.0% range as the market focuses on downside risks to growth. As such, our expectation is that near-term

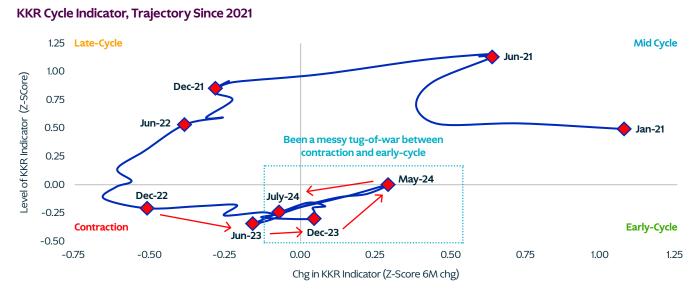
economic uncertainty as the economy slows will see the 10-Year end the year closer to 3.75% before rising back towards our 4.0% long-term target.

Section IV: What does this all mean for investing?

We continue to advocate for Keeping It Simple. This cycle is different, and now is not the time to stretch for risk. As one can see below in our cycle model indicator, we are still experiencing an asynchronous recovery. Given our view that we are in a *Regime Change* for four reasons (more fiscal, heightened geopolitics, a messy energy transition, and sticky wages in the service sector), we think owning more non-correlated assets, especially ones backed by collateral and/or with operational upside makes a lot of sense.

The good news is that one does not need to own shaky capital structures or profitless companies with big terminal values to earn high single digit double digit return investments. Asset-Based Finance, Infrastructure, and Real Estate Debt all appear to be good hard asset investments linked to nominal GDP growth, while Biotechnology, Japan, small cap stocks, and parts of the REIT market are all attractively priced for portfolio managers who are willing to spend time understanding relative valuation.

Exhibit 6: What's Clear to Us Is that Previous Cycles Have Followed a 'Smoother' Trajectory. The Current Cycle Is Straddling Contraction and Early Cycle and Is Leading to Lots of Confusion



Data as at July 31, 2024. Source: Bloomberg, KKR Global Macro & Asset Allocation analysis.

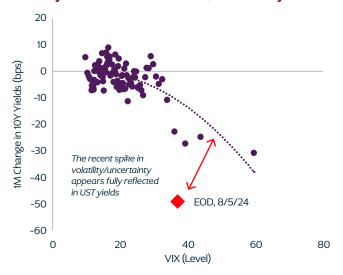
Exhibit 7: We Continue to Envision a Growth and Real Rate Environment Similar to the Post-Dot Com / Pre-GFC Era

Real Rates and GDP, % ■ Fed Funds **■** GDP 6.40% Real Fed Funds ■ Real Fed Funds vs. Real GDP 3.80% 3.40% 3.40% 3.19% 2.60% 2.00% 1.80% 1.40% 1.15% 0.70% -0.40% -0.90% -0.85% -1.10% -2.70% 4Q99-4Q07 4Q07-4Q19 GMAA 25-30e 4Q82-4Q99

Data as at August 5, 2024. Source: U.S Bureau of Economic Analysis, Federal Reserve Board, Haver Analytics, KKR Global Macro & Asset Allocation analysis.

Exhibit 8: Financial Volatility Is Elevated, But This Feels Appropriately Reflected by the Recent 10-Year Rally

Volatility vs Move in 10-Year Yields, Bucketed by %ile



Data as at August 5, 2024. Source: Bloomberg, KKR Global Macro $\ensuremath{\mathrm{G}}$ Asset Allocation analysis.

From a bigger picture perspective, we think that there are several important investment implications that warrant investor attention.

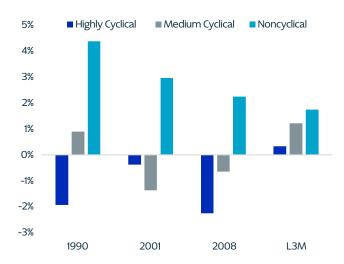
- We are not expecting a return to normalcy. This shock is an important one, and it will take some time for investors to re-assume a risk on posture. Therein lies the opportunity for patient capital. Look for more corporate carve-outs, public to private transactions, and more restructurings in the coming months.
- Focus on more non-correlated assets. While bonds have rallied of late, we still see a changing relationship between stocks and bonds. As a result, we continue to look for more non-traditional assets to add to a portfolio, including Gold, Structured Credit, Insurance as an Asset Class, Infrastructure, Short Duration Liquid Credit, and Asset-Based Finance.

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- 3. With the Fed being asked to do more sooner, we think that our desire to own collateral-based cash flows goes up. The reality is that there is still a lot of liquidity in the cycle, and real rates, while higher than the nirvana period that followed COVID, are likely to still be low relative to prior decades (*Exhibit 8*), we believe (and this is occurring when productivity is boosting growth too).
- 4. A cutting cycle should help spur capital markets activity, and over time, revive sentiment in the more rate-sensitive areas of the economy and markets. In the interim, we really like what we are seeing in many areas of the convertibles market, especially from good companies that just need flexible capital to weather the current growth slowdown.
- 5. We would use weakness in Japan to accumulate positions. Japan does not face a valuation ceiling and government reform is gaining momentum. Our colleague Changchun Hua's work suggests that a technical recession already happened in late 2023 and early 2024. Looking ahead, growth momentum has bottomed out and is projected to pick up over the next 4-8 quarters driven by rising real income, robust inbound tourism, and increased capital expenditure, despite some weakness in housing construction.
- 6. We stick to our call about rolling recoveries and rolling recession and that this cycle is an asynchronous one. If we are right, then many parts of Liquid Credit, especially with managers that can toggle across High Yield, Bank Loans, and Structured Credit, should perform well in this new period of heightened volatility.

Exhibit 9: This Is Very Different than the Lead-Up to a 'Typical' Recession

L3M Annualized Job Growth 3M Prior to Recession by Industry Type, %



Data as at July 31, 2024. Highly cyclical includes construction, manufacturing, and tech/publishing. Medium cyclical includes wholesale trade, transportation, and other. Noncyclical includes finance, education/healthcare, leisure/hospitality, and government. Source: Bloomberg, KKR Global Macro & Asset Allocation analysis.

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