iFlow

MACRO INVESTOR TRENDS

July 2024

Q2-Q3 2024 KEY RISK THEMES

Expectations	Entropy	Emerging Markets	Equities	Electricity	Elections
Economic Forecasts	Disorder in Finance	China, Tech and Tourism	Rotations and Exceptionalism	EV and AI and Green	Markets and Uncertainty
Go to page 3	Go to page 4	Go to page 6	Go to page 8	Go to page 9	Go to page 10

July 2024

TRACKING MARKETS IN 2024 WITH iFLOW

KEY POLICY, POLITICAL AND ECONOMIC RISKS

The second quarter rally in risk assets – from equities to gold to Bitcoin – highlights divergence rather than clear trends. Market trading volumes rose more because of the surprise calls for elections in the UK and France than because of policy divergence from the European Central Bank (ECB) or the Bank of Canada (BOC).

The outlook for 3Q shows the six E's dominating investor calls:

- **Expectations** around the economic data driving policy shifts.
- **Entropy** in finance causing forward guidance to fail.
- **Emerging markets** where China growth stalls have been offset by tech demand and tourism.
- **Equities** reflecting ongoing fears of US exceptionalism, with growth and Fed policy expectations still key.
- **Electricity** reflecting the cost of EV and AI data warehouses begging for green solutions.
- **Election risks** that still lie ahead.

These six E's represent a range of factors that investors consider when making calls, from macroeconomic trends and policy decisions to technological advancements, market structure and political events. The way we've seen markets deal with the list of worries over the summer makes us expect more volatility, not less, across markets.

The mark-to-market on our 2Q calls is mixed, with the five D's (divergence, deglobalization, demographics, decarbonization and digitalization) clearly dominating the discussions. We were right in our call for more central bank **divergence**, with the Swiss National Bank (SNB) easing and the Riksbank to join in as well, with the consensus calls for BOC and continued ECB easing. FX volumes surged, but less because of cross-border flows on rates and more on election risks. We were also right in the call for safe havens to rise, from gold to CHF, as the unwind of carry trades stood out, with MXN and BRL volatility linked to politics and policy in the respective countries. EM outflows slowed in 2Q, but the global growth recovery has stuttered, with the US the only standout surprise. **Deglobalization** is a standing concern for the global economy, and EM investments remain uneven, with India still favored. Over the long term, the power of **demographics** in driving flows was less obvious. Even as we saw a rise in flows for Egypt and Nigeria, the South Africa election and ongoing conflicts in Africa moderated the investment charge. **Decarbonization** lagged, as we expected, but EV tariff feuds and utility demand linked to data warehouses make it clear that "green" issues matter. Meanwhile, voters in most places seem more concerned about immigration, food prices and housing. **Digitalization** dominated, with AI investments a key part of 2Q and continuing to be a significant part of 3Q risks.

EXPECTATIONS: DATA DEPENDENCE DRIVES VOLATILITY

Market consensus: Bumpy landing with more cuts in 2025 from Fed

Our view: Fed cuts twice in 2024, soft landing ahead

Monetary policy expectations for the Fed and most other major central banks are difficult to pin down, in large part because the inflation and growth outlooks in developed markets are similarly ambiguous. For example, the 1Y1M forward OIS swap in the United States, a proxy for short-term rates one year into the future, started the year at around 3.5%, moved up to nearly 4.7% by the end of April, and have subsequently fallen to 4% as of the first week of July. This tracks the moves in inflation, which was stronger than expected in the first quarter and then moderated in the last few months, and growth data, which we argue has been weakening over the last few months. Fed expectations have been revised frequently and have endured multiple regime shifts so far this year.

One of the reasons for these uneven expectations, of course, is because the post-COVID data and economic modeling landscapes have been much more uncertain. Data tell us how things are – and how things are evolving; modeling relies on data as an input and requires underlying structural assumptions about the inflation process and economic growth. Economic data have been harder to gather post-pandemic and have been subject to significant revisions – a problem many statistics agencies and central banks are facing globally. For example, the average two-month data revision for nonfarm payroll growth between 2022 and 2023 is 43,000 jobs, more than double the 20,000 in 2018 and 2019. The chart below shows the average data miss (relative to consensus expectations) for six important data releases, comparing the 30 months through December 2019 to the previous 30 months through this past May. In every case, the divergence between expectations and releases is higher now than it had been. This creates volatility in expectations and makes assuming a policy and/or economic outlook treacherous.

This tees up a potentially volatile summer, with what we believe is an economy at an inflection point and uncertainty as to when interest rate cuts will begin – even though we believe September is likely. Whatever the questions about data and forecast modeling, it's clear to us the economy is slowing, and we believe inflation will do so as well. But how fast and how deep the slowdown will be is difficult for economists and market participants to gauge, with market reactions to bigger data misses remaining outsized. As stated above, this is a recipe for volatility.

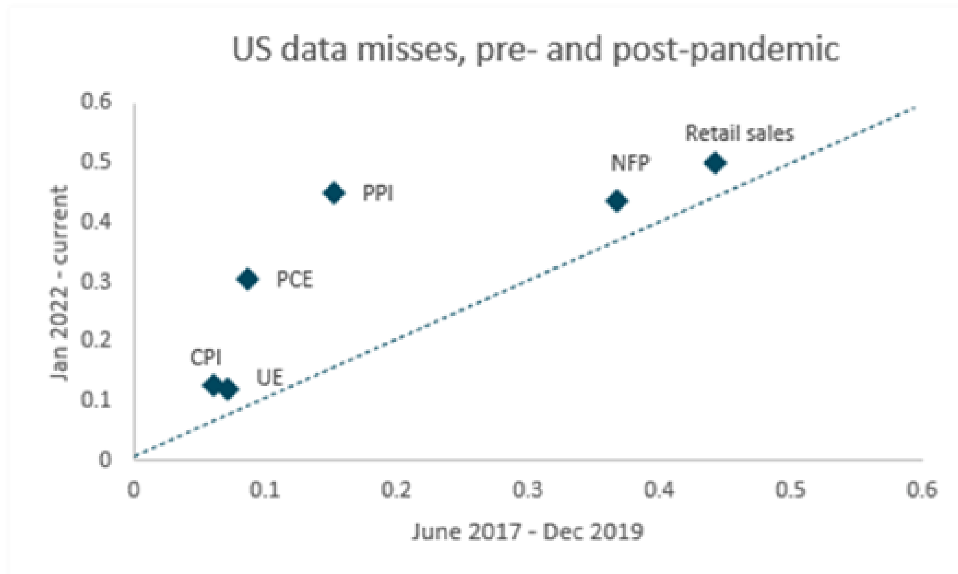

EXHIBIT #1: FORECASTING MODELS ARE NOT WORKING

SOURCE: BNY iFLOW

> "Fed expectations have been revised frequently and have endured multiple regime shifts so far this year."

ENTROPY: HIGHER VOLATILITY

Market consensus: Summer calm with low volatility

Our view: August/September position shifts linked to policy

We expect the rate cuts from FOMC and other central banks to help spur some cross-border flows in equities and bonds, but hedged with FX.

Much of modern financial theory is inspired by advances in physics. Just as in thermodynamics entropy is simply redistributed, financial entropy can never be fully eliminated: quantitative easing or outright financial repression from monetary policy only serves to redistribute volatility. For example, emerging markets often find the transition from closed to open capital accounts extremely difficult. Integration into the global financial system offers new investment channels for domestic savers, and the subsequent introduction of two-way volatility for the exchange rate tends to lead swiftly to financial stability fears.

Developed markets have learned similar lessons. Even before the sharp round of interest rate hikes in recent years, the costs of quantitative easing and forward guidance were becoming clear. In 2014, then-Bank of Canada Governor Stephen Poloz broke decisively with his predecessor Mark Carney – the originator of forward guidance in modern monetary policy – and warned that it was eroding the market's role in price discovery. He warned that upon normalization, "you really want…the market to have healthy two-way volatility to it."

Poloz argued that during policy normalization, it wasn't the job of central banks to micromanage markets. Doing so would only serve to redistribute – or even amplify – volatility during crucial policy inflection points. Although policy (both monetary and fiscal) and operational errors contributed to the moves, gyrations in UK gilt markets and the US banking sectors in 2022 and 2023, respectively, were good examples of sudden volatility redistribution during policy normalization.

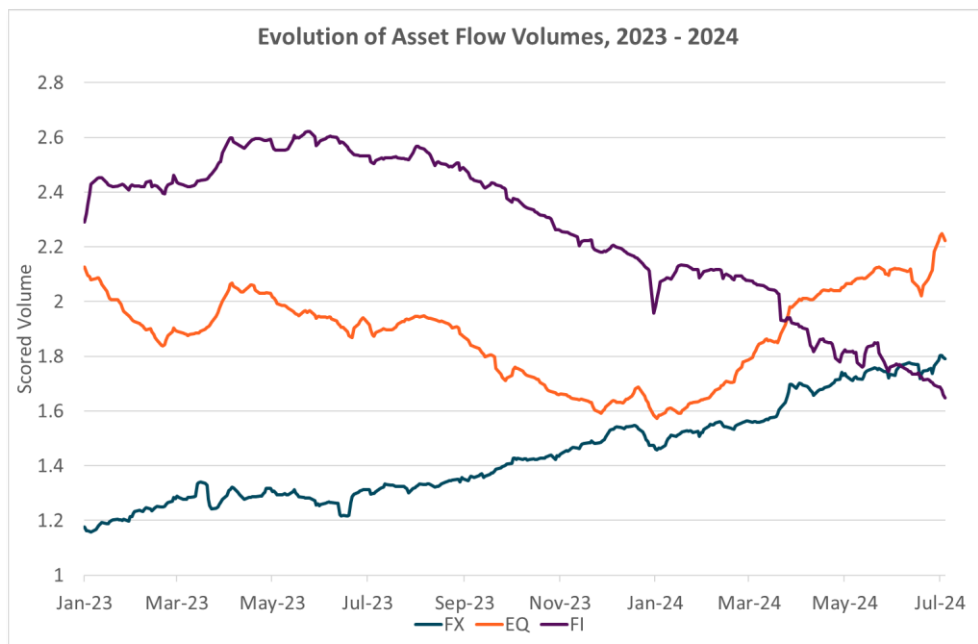

EXHIBIT #2: BONDS AND FX TO SEE VOLUME AND VOLATILITY

SOURCE: BNY iFLOW

ENTROPY: HIGHER VOLATILITY (CONT'D)

Market consensus: Summer calm with low volatility

Our view: August/September position shifts linked to policy

Now that the Fed is on the cusp of easing and dollar valuations look set to peak, markets are perhaps looking forward to a reversal of the process and more manageable volatility transfers. Yet, just like in thermodynamics, total entropy cannot fall as the "heat" can stray beyond financial markets, such as the socioeconomic costs associated with low growth. Electoral results in recent months indicate such discontent, and a backlash against the financial system is possible. In many ways the sociopolitical backlash against the 2008 global financial crisis is continuing.

Furthermore, within the financial system, transfers of volatility are occurring within asset classes. Falling global rates will surely reduce uncertainty in bond markets – barring policy shocks after elections – but valuation misalignments in other markets are coming through. If we use the change in two-way volume scores as a benchmark for volatility (in iFlow, volume scores are measured as multiples of standard deviation of asset volume), volatility is currently shifting from fixed income markets to equities and foreign exchange. Valuations in strategies, such as being long US tech or global semiconductors and FX carry trades, are looking stretched, and the need to hedge these exposures will likely push up volumes commensurately.

Central banks are hoping that their current guidance on rates can help economies and the financial system "land" in an orderly manner. However, just like in physics, financial entropy is difficult to measure directly, and systems can be far more disorderly than previously anticipated. The longer the process extends, the greater the risks of errors or accidents. To paraphrase Poloz, it is imperative for policymakers to end micromanagement and let markets maximize price discovery as soon as possible.

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EMERGING MARKETS: TECH, TOURISM AND CHINA WEAKNESS

Market consensus: China continues to underperform

Our view: AI and tech boom to continue

- The balancing act for EM is between equity inflows in APAC and commodity demand elsewhere.
- Uncertainty about the pace and number of US rate cuts and the stability of global growth will keep EM flows dispersed.

Sentiment in Asia through Q2 showed a clear dichotomy: the stalling Chinese economic recovery contrasted strongly with the supercharged tech-related recovery in South Korea and Taiwan and the revival of tourism in Southeast Asia. South Korean and Taiwanese PMI manufacturing are back in expansion after a long period of contraction since H2 2022. Export growth benefited not only the tech sector in South Korea and Taiwan, with gains of 51% y/y and 9% y/y, respectively, but the rest of the region as well: the data show that the latest semiconductor exports grew by 22% y/y in Singapore and 31% y/y in the Philippines. We expect this trend to continue in H2 2024. Indeed, the World Semiconductor Trade Statistics (WSTS) revised its 2024 forecast for global semiconductor sales growth higher to 16% y/y ($611bn), with the Asia Pacific region accounting for more than half of sales revenue at $340bn – a growth rate of 17.5% y/y. Global semiconductor sales are projected to increase further to $687bn (12.5% y/y), or $383bn (12.3% y/y) for APAC in 2025.

Affinity for the microchip theme is clear, with accelerated inflows into Korean and Taiwanese equities. As shown in the chart below, the strong buying trend in Korean equities was motivated by attractive valuations as well as a series of policy initiatives by the Korean government, including FX liberalization and the Corporate Value-up Program. Official data show foreign holdings of Korean equities rose from 26.4% of total market capitalization in 2022 to 27.4% in 2023 and 29.1% as of May 2024. Taiwan equities experienced profit-taking in Q2, but flows remain net positive for the year. The Taiex is up over 30% year-to-date and is en route to its second-best year since 2000, after a 78% gain in 2009 – a rally bolstered by the low base from the 2008 financial crisis.

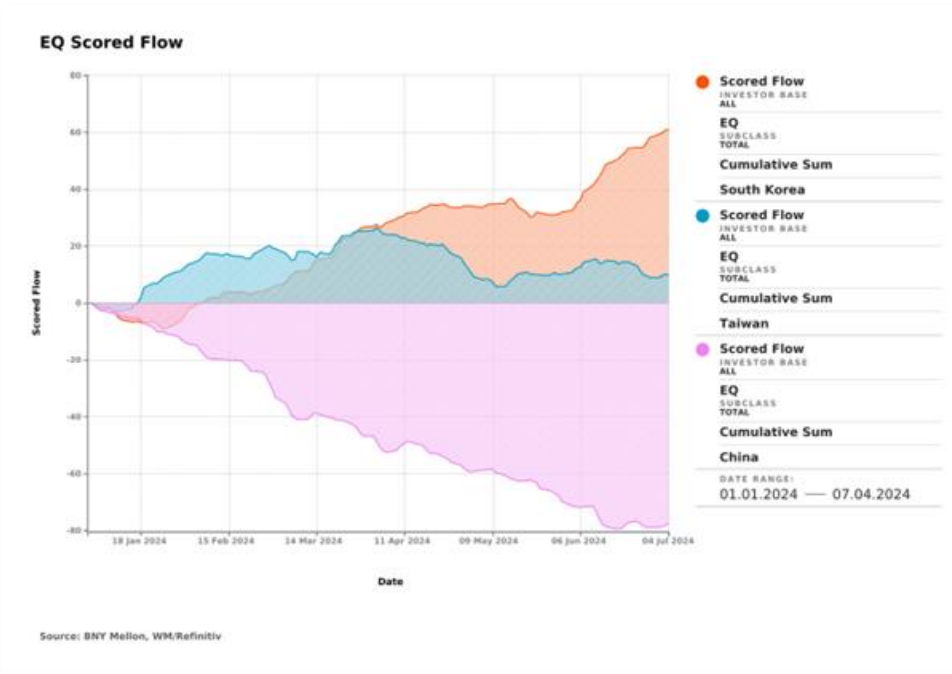

EXHIBIT #3: EM EQUITIES IN APAC KEY

SOURCE: BNY iFLOW, GLOBAL FACTORS

EMERGING MARKETS: TECH, TOURISM AND CHINA WEAKNESS (CONT'D)

Market consensus: China continues to underperform

Our view: AI and tech boom to continue

Flows in the rest of APAC equities were not as positive, with outflows in Chinese equities leading to cumulative outflows from the region. iFlow data show investor sentiment toward China was one-sided, with persistent outflows materializing even when the Shanghai Composite staged a strong market rally at the beginning of Q2. The divergence in asset prices between individual APAC economies is likely to continue in the near-term until there is credible stabilization in China – but markets had very low expectations that the recent plenum would produce meaningful change.

In foreign exchange, APAC currencies on an aggregate basis remain the most underheld compared with G10, LatAm and EMEA. Persistently low yields, the weak China macro environment and ongoing yield support for the US dollar will likely see continued demand for hedging and therefore keep APAC FX strongly underheld. On an individual basis, the most striking development over the past quarter is that KRW-scored holdings moved back to neutral levels relative to a substantial reduction of long positioning in IDR. Increasing deficit concerns may have affected the rupiah, but the direction of travel for the two currencies is symptomatic of a general carry retreat in currency markets from very elevated holdings. For example, Latin American currencies have struggled, but like the KRW, CHF and SEK have seen a material reduction in underheld positions.

Heading into H2, we expect that divergent paths in economic recoveries, central bank policy bias and government fiscal consolidation will continue to drive FX differentiation across APAC currencies and broader asset allocation preferences.

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EQUITIES: US EXCEPTIONALISM?

Market consensus: S&P 500 up another 5%; 6,000 expected by 4Q

Our view: Rotation risk of 10% correction

- 2Q earnings with 3Q outlooks key along with the US election
- iFlow shows investors long G10, biggest holdings in EM led by India, Mexico

The performance of global equity markets has been one of the surprises in 2024. The consensus expectation appears to be another 5% rally across most major bourses. 2Q earnings reports are expected to remain strong at over 8%, even as the economy stalls, with GDP for 2Q now expected to be between 1.5%-2.0%, with no bounce back in 3Q. The link between equities and bonds has been a noisy correlation story in 2Q, and that seems likely to continue as investors look for new drivers beyond just FOMC rate cuts to spur growth. How the rest of the world diverges in policy and performance matters more now than at the start of the year. The US election risk premium may show up more clearly in equities in 3Q after the surprise electoral outcomes in France and the UK. There are also risks for US equities from the ongoing search for diversification away from US exceptionalism, particularly in the AI boom/tech sector concentration.

Our iFlow data has been more constrained. The selling of China shares has been notable and left investors net short, and the recent stalling of the recovery shown in the national GDP and PMI figures added to further selling pressures. The focus for 3Q will be on China stimulus and policy, with how tech pushes balance out the consumer against languishing property sector concerns. Even so, China weakness has not mattered to APAC, with Japan the clear winner, along with Italy and India, in equity holdings and enjoying ongoing flow support. What may be a larger risk for 3Q comes from Germany, with weaker economic data at odds with the ongoing positive flows and long positioning. US equity iFlow data show ongoing selling out of longs but with notable shifts between sectors suggesting that rotational plays in 2Q were more important, with IT, utilities and real estate the major focus.

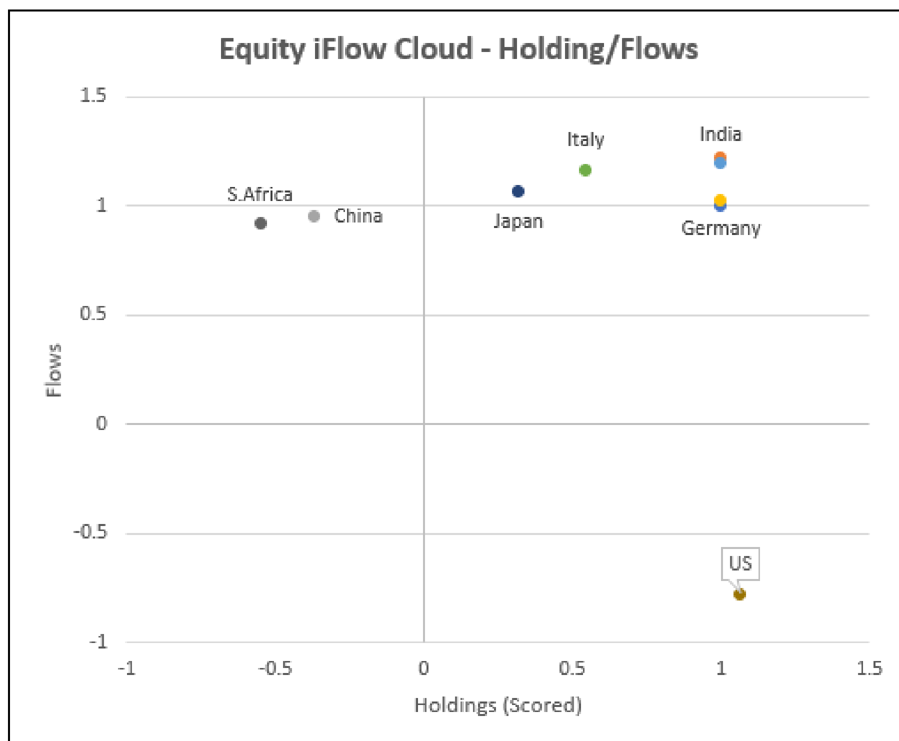

EXHIBIT #4: ODDS FOR S&P 500 CORRECTION LINKED TO EPS AND ELECTION

SOURCE: BNY iFLOW

"How the rest of the world diverges in policy and performance matters more now than at the start of the year. The US election risk premium may show up more clearly in equities in 3Q."

ELECTRICITY: AI, EV AND GREEN

Market consensus: Electricity demand key for growth

Our view: Other energy technology needed to fill demand

The focus on energy demand in 2024 hasn't gone away. The cost of green started the year with high expectations for energy prices, while the reality has been more modest as oil prices are up 15%, but natural gas has dropped nearly 7% in the US and is up under 3% in the EU/UK. Talk of a commodity super-cycle is based on the lack of investment in carbon energy, while the rise in copper and other green energy metals dominates. The problem with renewables providing sufficient electricity to meet growing demand from data warehouses continues to be the focus for many investors. Utilities have seen ongoing demand and buying, with the logic of energy being a diversification play against IT concentration risks.

There are other problems in the electricity world for the rest of 2024 beyond this focus. Globally, the dependence on lithium batteries to provide storage for renewables has reached its limit. Meanwhile, the new challenges are hydrogen cell technology and the use of ammonia together with carbon energy to fuel utilities. The shift to using ammonia in coal-fired plants as a means for reaching 2030 carbon goals stands out for how energy demand and delivery might change rapidly in the months ahead. The APAC focus on ammonia and hydrogen, particularly in Japan, stands out and could be important in driving oil and coal prices, along with US ammonia exports. US generation of green hydrogen will be one area to watch.

EV tariffs and the battery life of the cars was a focus for markets in H1 2024. The US election is unlikely to change this, and the risk of a German election and general European discontent over green targets adds to the US/EU shift away from EV solutions as Chinese cars face larger trade barriers. This may lead Japanese and South Korean auto companies to return to using hydrogen cell technology. Unlike lithium batteries, which deteriorate over time and eventually need to be replaced, hydrogen fuel cells have a much longer lifespan. As long as hydrogen is available, fuel cells will continue to react with oxygen and generate electricity.

"AI warehouse demand will double demand for electricity in the US by 2026 from current levels."

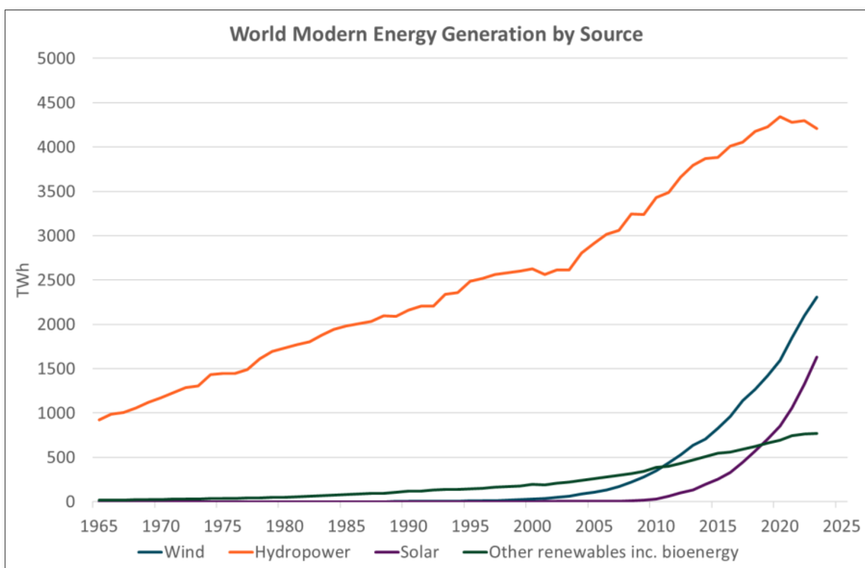

EXHIBIT #5: NEW RENEWABLE ENERGY SOURCES WILL DOUBLE IN NEXT 5 YEARS

SOURCE: BNY AND IEA

ELECTIONS: US RISKS NOT FULLY PRICED

Market consensus: "Trump trade" means higher rates

Our view: Tighter election result risk means higher volatility

- Control of Congress unclear

The US election risk now stands out as a market event. The early debate on June 27th between President Biden and former President Trump led to a shift in the polls and sparked a discussion among Democrats about whether to replace Biden. The markets have priced in a "Trump trade," with higher inflation, and higher bond yields reflect a risk premium. The edge for Trump has risen following the tragic shooting events in Pennsylvania. However, the generic polling for Congress hasn't improved, and neither the Democrats nor the Republicans have a clear margin. Aside from the debate, views on the economic outlook and policy improved, albeit from a very low base. The current slowing of the labor market and slowing consumer spending may be as important to the summer election cycle as any change in the presidential race. Logically, fears about fiscal policy should be linked more closely with whether control of Congress changes rather than the outcome of the presidential election.

Our iFlow data continue to show investors are more concerned about the economy than risk premiums for bonds. The bias to own duration that started in late October continues. Furthermore, purchases of US bonds by foreigners were notable in June and they continue in July. In our view, the data suggest political risks to the US have yet to be priced into the USD or bonds or equity holdings. This seems likely to change as the summer progresses and the races for president and Congress become clearer.

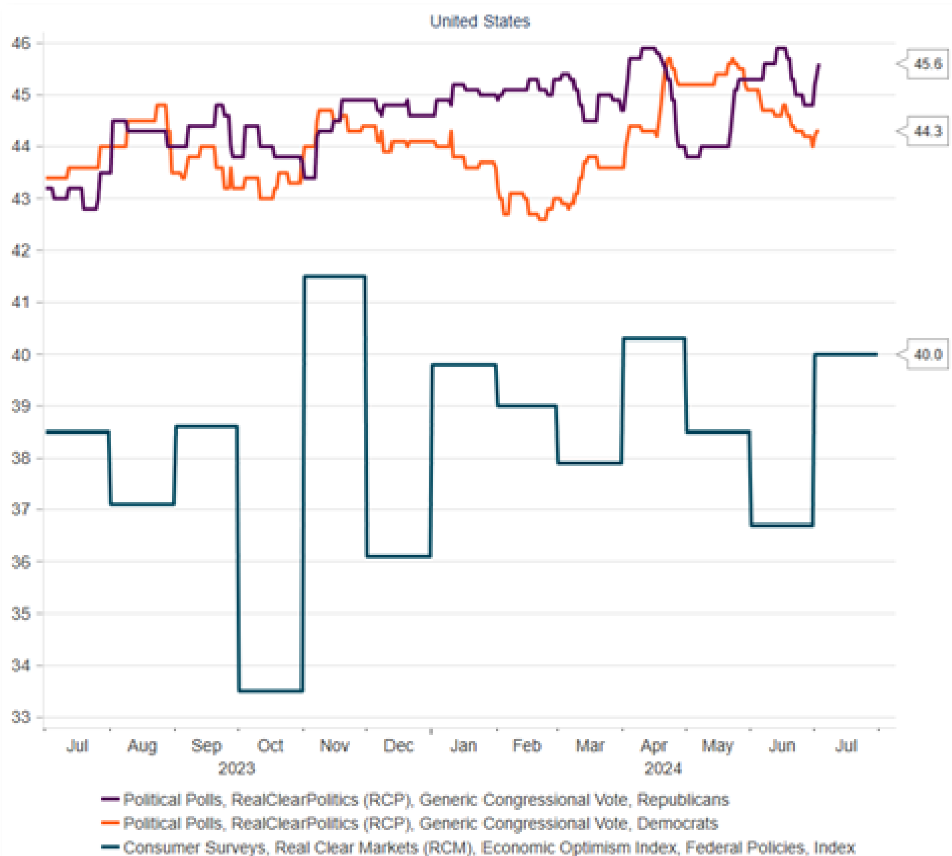

EXHIBIT #6: ECONOMIC VIEWS ARE LINKED TO THE ELECTION NOW

SOURCE: BNY RCP, MACROBOND

"Our iFlow data continue to show investors are more concerned about the economy than risk premiums for bonds."

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CONCLUSIONS

- **In equities**, we expect a larger rotation trade, with the risk of a 10% S&P 500 correction,
- **In bonds,** look for more steepening, with the 2/10Y curve up 25bps,
- **In FX,** we anticipate more downside movement of USD, with USD/JPY dropping to 140.

Market strategy outlook: We show that the market will likely experience more volatility due to a range of factors, including economic data expectations, financial entropy, electricity costs, election risks, emerging market trends and equities. These factors are collectively referred to as the six E's and they dominate investor discussions.

Monetary policy and economic data: Monetary policy expectations are difficult to forecast due to ambiguous inflation and growth outlooks in developed markets. The post-COVID data and economic modeling landscapes have been uncertain, leading to volatility in market expectations. We anticipate a potentially volatile summer, with the economy at an inflection point and questions about when interest rate cuts will begin.

Emerging markets and tech exports: We conclude that the sentiment in Asia reveals a dichotomy, with the stalling Chinese economic recovery contrasting with the tech-related recovery in South Korea and Taiwan and the revival in tourism in Southeast Asia. We note the impact of global semiconductor sales growth on the region and expect the trend to continue in the second half of 2024. Finally, the implications for energy use and demand are significant and suggest the need for more than just renewable plans to keep environmental targets intact.

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