



The CEO Macro Briefing Book

Economic strength through a volatile political season

UBS Chief Investment Office GWM
Paul Hsiao
Jason Draho, Ph.D.

October 2024



Table of contents

Section 1	Insights in Brief	2
Section 2	Macroeconomic Outlook	6
Section 3	Operational considerations	17
	Section 3.1 Consumer	19
	Section 3.2 Labor	26
	Section 3.3 Financing	33
	Section 3.4 Real estate	38
Section 4	Policy, geopolitics, politics	43
Section 5	Markets and corporate transactions	51
Section 6	Sector updates	64
Section 7	Appendix	68

Section 1

Insights in Brief

Executive Summary: Economic strength in a volatile political season



Macroeconomic Outlook

- **A good growth backdrop...** Better-than-expected growth data, particularly from hiring and retail sales, has lifted Q3 GDP estimates over 3%, another quarter of above-trend growth. We expect growth will be sustained at a good pace, especially if real incomes continue to grow, while downsides risks appear lower.
- **...complicate the trajectory of rate cuts.** Although we still forecast 50bps of rate cuts in Q4, the bar is not high for the Fed to skip a meeting if the labor market data shows no further weakness, and inflation surprises to the upside. While the pace of rate cuts may slow, we still expect the Fed to cut rates to ~3.5%.



Operating Environment

- **Data revisions bolster assessment of consumers and labor market.** Revised income data indicate that consumers are in better shape than assumed, making the recent robust spending appear sustainable. While the labor market continues to broadly cool, wages remain elevated, driving real income growth.
- **Financing conditions return to historical norms while challenges remain for real estate.** Financial conditions are accommodative compared to historical standards, as borrowing costs decrease and banks loosen credit standards while real estate market continues to face supply and financing challenges.



Markets & Deal Activity

- **Good macro has lifted equities, but that strength and election uncertainty is fueling rate volatility.** Large rotations below the surface (e.g., cyclicals vs. defensives) are likely continue as the macro narrative evolves. Rates will stay choppy until election and Fed uncertainty is resolved, but they're still likely to decline.
- **Despite rate cuts, deal activity falls short of expectations.** Hopes for a sharp revival in deal-making with the start of rate cuts have proven premature. M&A activity remains sluggish, and the lack of exits continues to hinder private equity. IPO activity is modestly improving and should increase once uncertainty subsides.



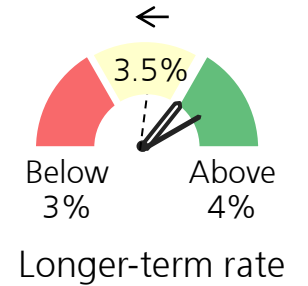
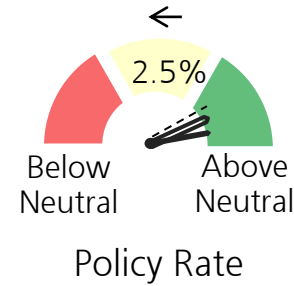
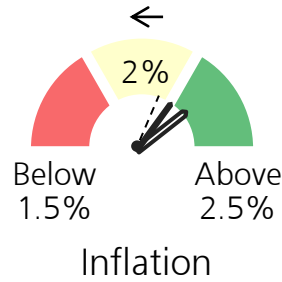
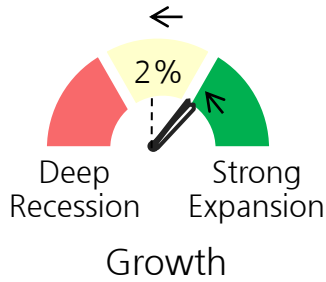
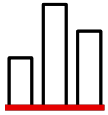
Politics

- **The race has tightened, and UBS CIO puts even odds-on Trump and Harris.** While the odds are evenly split between the two candidates, a Trump victory is likely to be accompanied by a Red Sweep, given the composition of Senate races this year. Conversely, a Harris victory would likely result in a divided government.
- **Best not to mix politics with portfolios.** A UBS InvestorWatch survey found significant anxiety among investors and business owners about the election. History shows that elections serve as a "risk clearing" event for equities, with performance driven more by macro and financial conditions than by election outcomes.

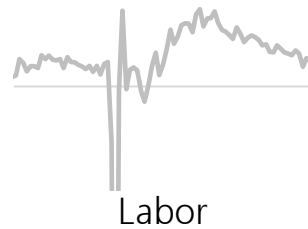
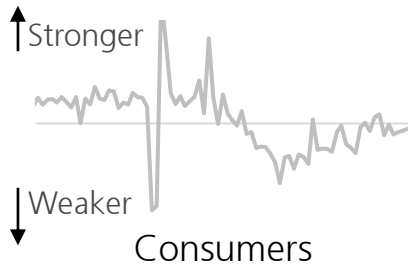
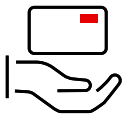
Dashboard Summary: A stronger growth trend supported by rate cuts

Expected Current 6-months prior

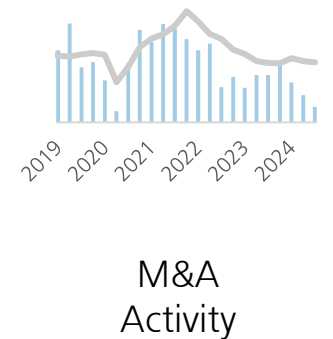
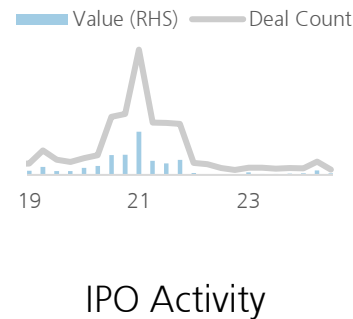
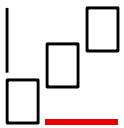
Macroeconomic Conditions



Operating Environment



Markets & Deal Activity



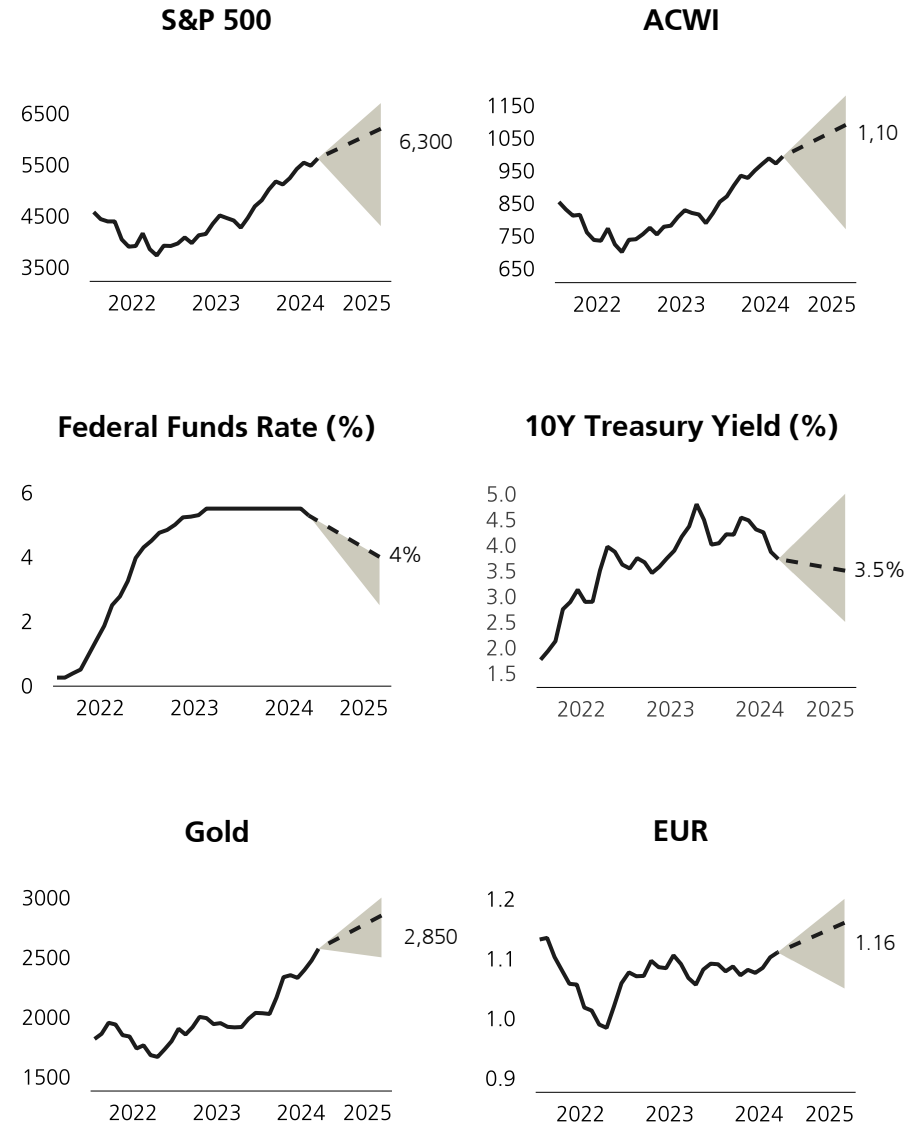
Markets Dashboard: A good macro environment supports risk assets

Performance	Latest	YTD	Q224	Q124	2023
S&P 500	5854	22.7%	3.9%	10.2%	24.2%
Large Cap Growth	3949	30.3%	9.4%	12.6%	28.3%
Large Cap Value	1963	14.3%	-2.7%	7.4%	19.8%
US Small Cap	2234	10.5%	-3.6%	4.8%	15.1%
Int'l Developed Markets	1030	18.6%	2.8%	9.1%	19.5%
<i>S&P 500 Sectors</i>					
Energy	696	8.4%	-3.2%	12.7%	-4.8%
Materials	608	13.4%	-4.9%	8.4%	10.2%
Industrials	1162	21.6%	-3.3%	10.6%	16.0%
Consumer Discretionary	1588	11.8%	0.4%	4.8%	41.0%
Consumer Staples	881	14.7%	0.7%	6.8%	-2.2%
Healthcare	1763	10.9%	-1.4%	8.4%	0.3%
Financials	785	25.4%	-2.4%	12.0%	9.9%
IT	4589	34.5%	13.6%	12.5%	56.4%
Utilities	413	28.8%	3.9%	3.6%	-10.2%
Real Estate	275	9.2%	-2.8%	-1.4%	8.3%
US Gov't					
Munis	2316	1.7%	0.1%	-1.0%	4.1%
TIPS	1344	1.7%	0.0%	-0.4%	6.4%
Agency	350	3.2%	0.8%	-0.1%	3.9%
US IG	122	3.4%	0.6%	-0.3%	5.4%
US IG	3324	3.2%	-0.1%	-0.4%	8.5%
US HY	2672	7.7%	1.1%	1.5%	13.4%
Oil					
Oil	72.2	-1.5%	-2.0%	16.1%	-10.7%
Gold					
Gold	2746	31.8%	4.3%	8.1%	13.1%
USD					
USD	104	2.6%	1.3%	3.1%	-2.1%
EUR					
EUR	1.08	-2.0%	-0.7%	-2.3%	3.1%
JPY					
JPY	151	6.9%	6.3%	7.3%	7.6%
EM FX					
EM FX	1766	1.5%	-0.1%	-0.9%	4.8%

Source: Bloomberg, UBS, as of 22 October 2024



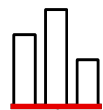
June 2025 UBS CIO Forecasts



Section 2

Macroeconomic Outlook

Macro Key Points: A benign economy, with fewer downside risks



A benign growth environment and a more positive outlook toward year-end. The Atlanta Fed GDP tracker expects another quarter of >3% above-trend growth thanks to the resiliency of the consumer. The data revisions indicate stronger fundamentals than assumed, and with positive real income growth trends, we believe the downside risks for the economy now appear to be lower.



Inflation cooling closer to target. Higher frequency readings of inflation continue to indicate that price growth continues to cool, demonstrating progress in disinflation within the services sector as shelter costs ease. Further moderation in wage growth supports a decline in inflationary pressures and strengthens the case for additional rate cuts.



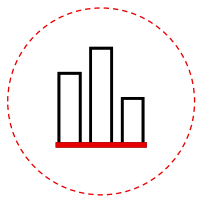
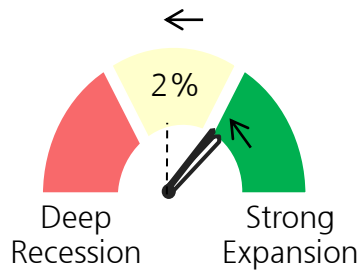
Stronger data complicates the Fed's rate cut plans. After the first rate cut, notable data releases, like the blowout September jobs report, reduced rate cut expectations because the economy is still performing well at these restrictive levels. Even if the Fed follows through with 100bps of cuts in both 2024 and 2025, we believe that the policy will still be "neutral" and not overly accommodative.



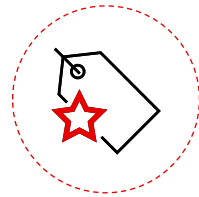
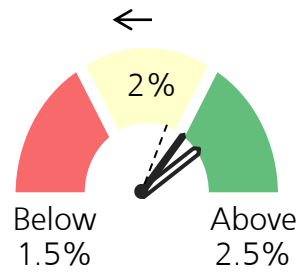
More confidence in a "Roaring '20s" scenario. The economy continued to grow above-trend and may continue this pace with more rate cuts in the pipeline. An acceleration in AI investment and broader adoption of the technology is likely to create a positive supply-side shock, which may increasingly serve as a significant growth driver in the intermediate term.

Macro Dashboard: A stronger growth backdrop toward year-end

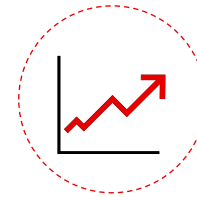
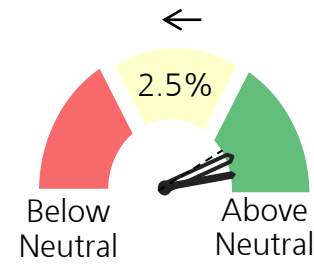
Expected Current 6-months prior



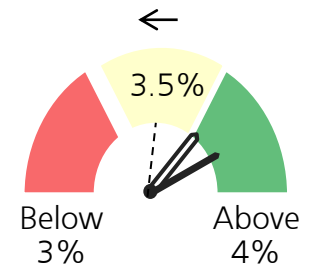
Growth



Inflation



Fed funds rate



10-year yield

- Growth data flow has notably improved compared to the summer growth scares. Q3 likely to be another above-trend quarter before softening through the winter.

- Key inflation gauges show continued progress to Fed's target, supporting the case for further rate cuts.

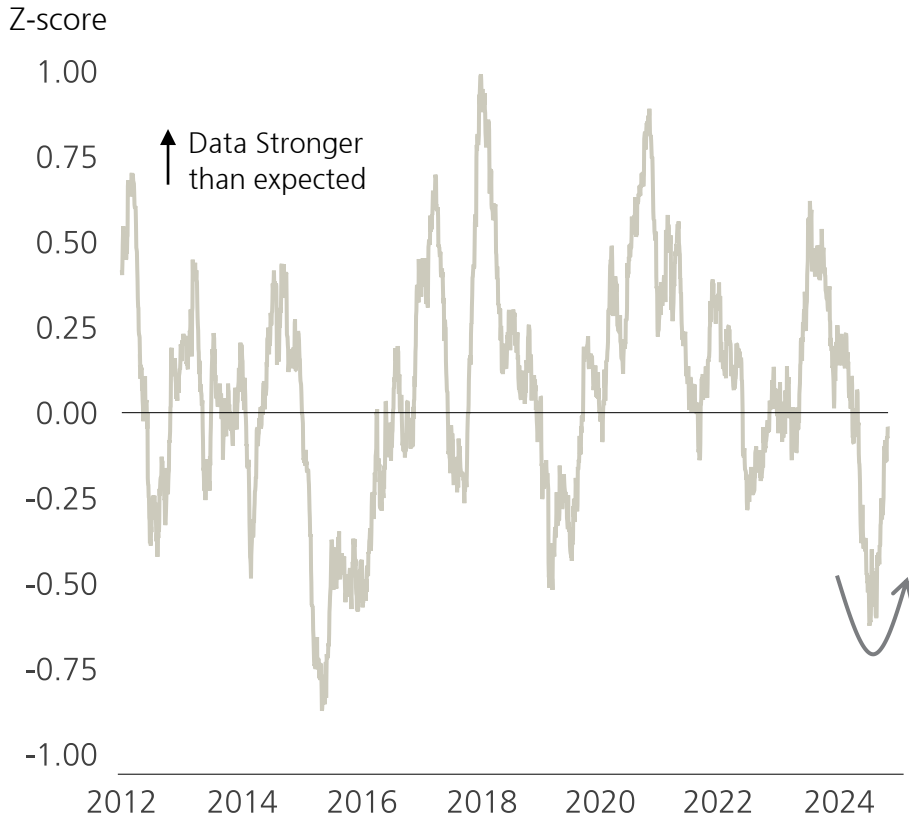
- Fed started its series of rate cuts with a 'jumbo' 50bp in September. Better data flow has reduced expectations of another 50bp through 2024, but the direction of travel is set.

- After spending August and September trending lower, yields returned above 4% in October keeping yields relatively range-bound on better data flow.

Growth: Data flow has significantly improved since summer slowdown

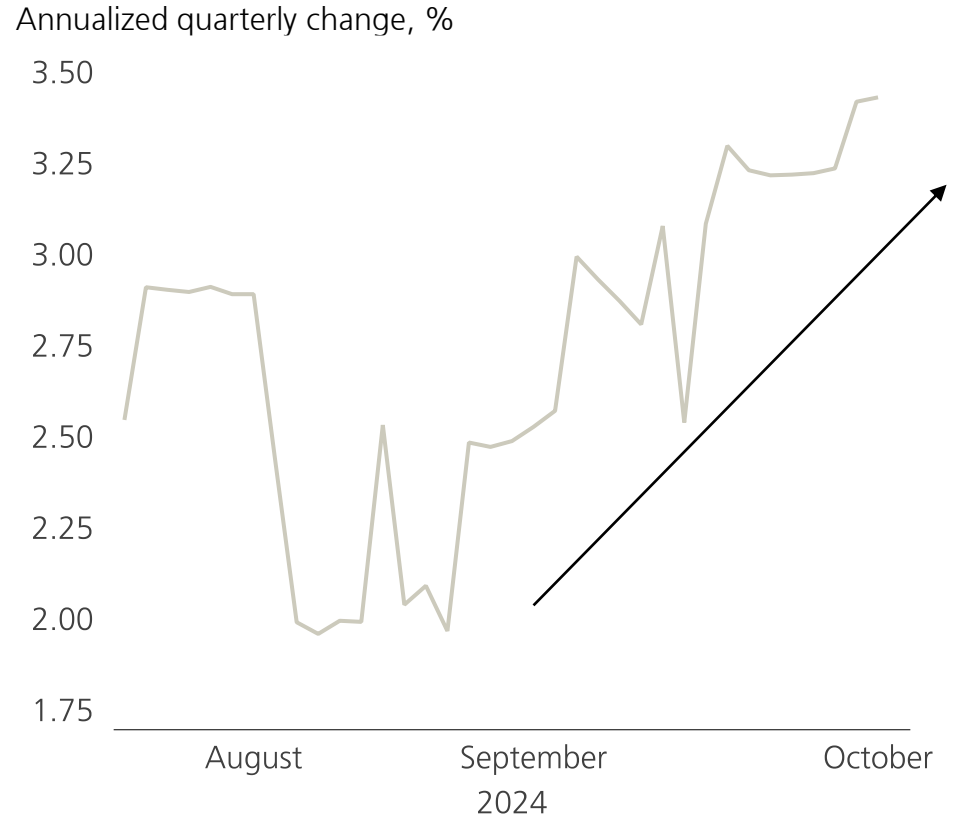
Growth data has been surprising to the upside since the summer and Q3 looks to print another above-trend GDP report.

Bloomberg's ECO surprise index almost back to "neutral"



Source: BEA, Federal Reserve, UBS, as of 24 October 2024

Atlanta Fed GDP Tracker implies a very strong Q3 GDP print



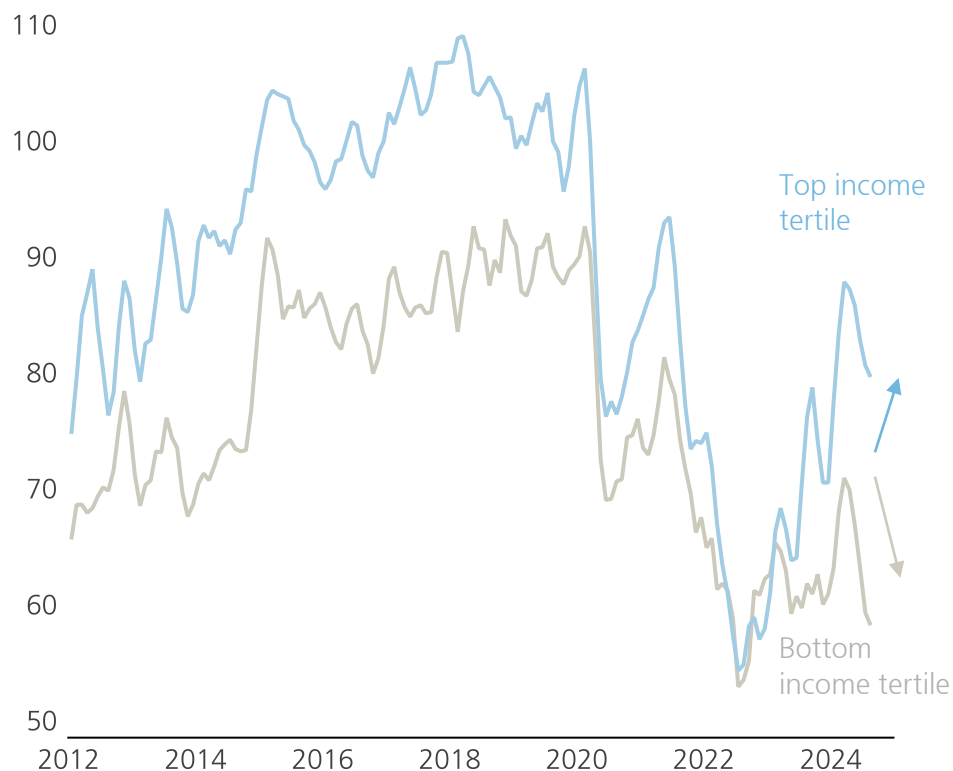
Source: BEA, Federal Reserve Bank of Atlanta, UBS, as of 24 October 2024

Growth: Households and small business sentiment still gloomy

Ahead of the election, household and small business confidence is much lower than what current macro conditions would suggest.

K-shaped consumer sentiment has appeared

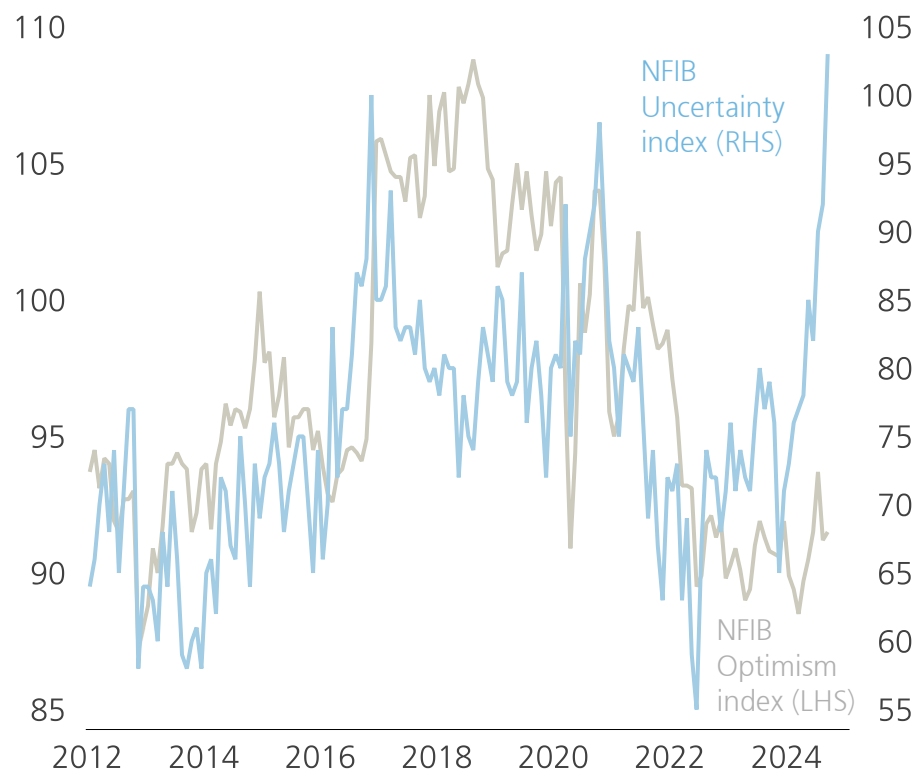
University of Michigan Consumer Sentiment Index



Source: University of Michigan, Macrobond, UBS, as of 24 October 2024

Small business uncertainty at all time high hampers optimism

NFIB Small Business Optimism Index



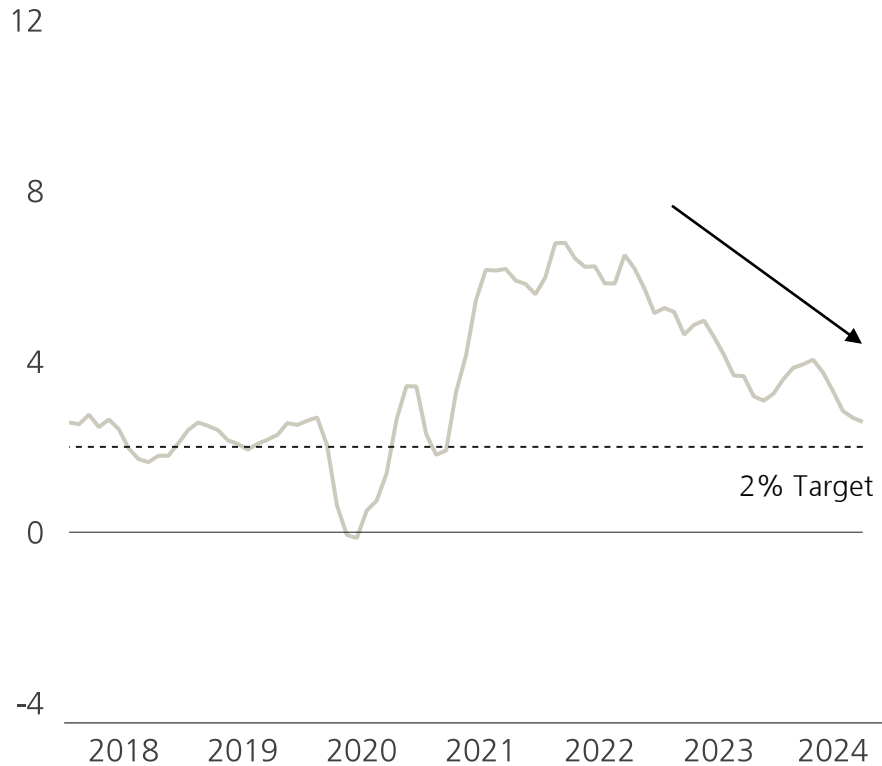
Source: NFIB, Macrobond, UBS, as of 24 October 2024

Inflation: Solid disinflation progress giving Fed green light to cut more

Core inflation is making notable progress toward Fed's target as services inflation continues to cool and goods inflation returns to pre-pandemic trend.

Core CPI essentially back to Fed's target

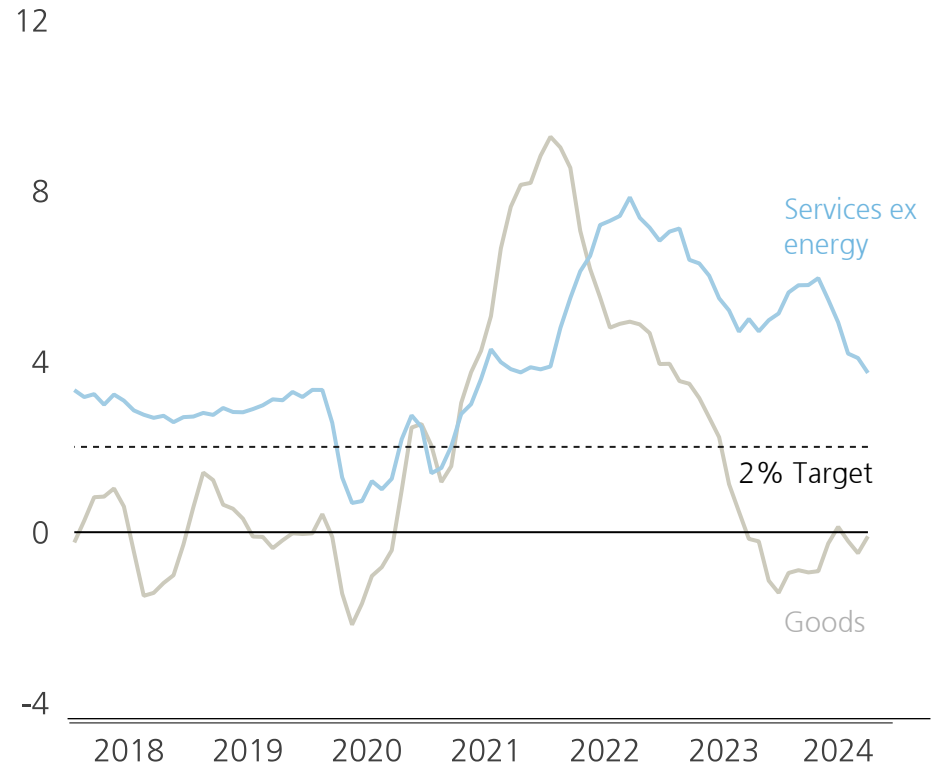
Core CPI inflation, 6M annualized %



Source: BLS, Federal Reserve, UBS, as of 15 October 2024

Services inflation lowest in years as goods are deflationary

Core CPI inflation, 6M annualized %

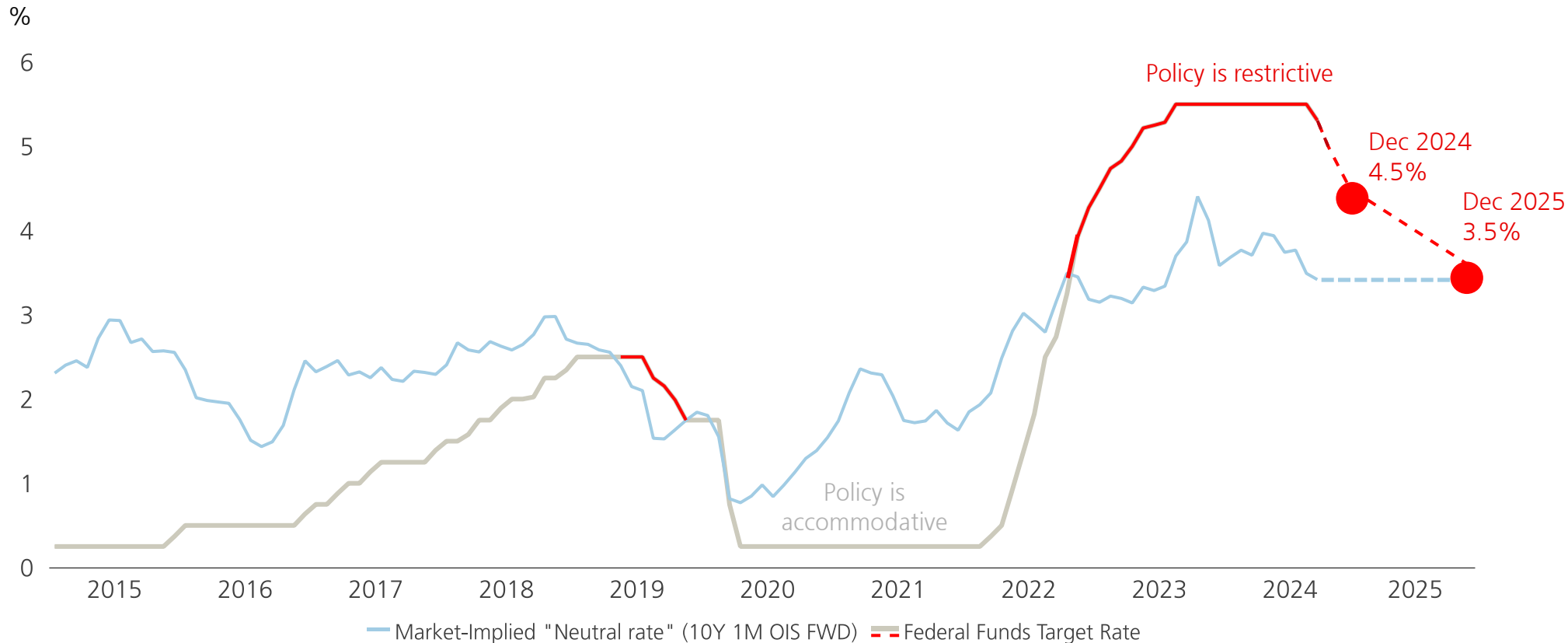


Source: BLS, Federal Reserve, UBS, as of 15 October 2024

Rates: Fed has signaled a clear downward direction for rates

Even with ~150bp of additional cuts through the end of 2025, policy rates are likely to still only be around neutral, giving the Fed more options should a recession appear.

Federal Funds Rate and 10Y 1M Forward with UBS CIO forecast

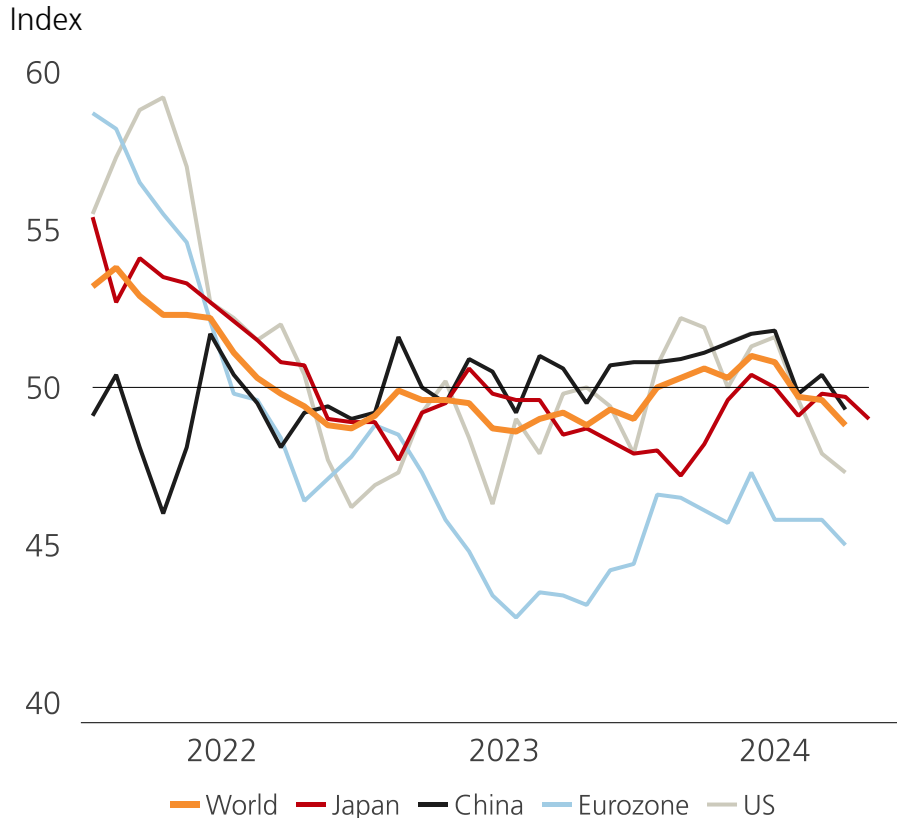


Source: Bloomberg, UBS as of 24 October 2024

Rates: It's a global rate-cutting cycle among central banks

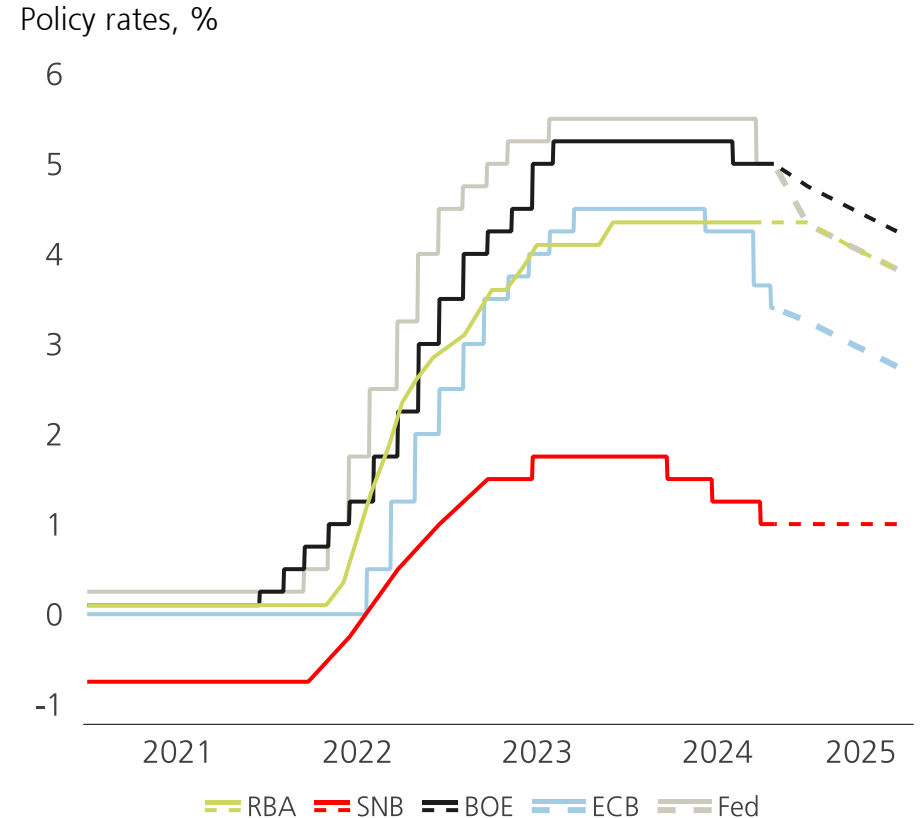
Global manufacturing staying in a slump in Q4 increases the odds of more rate cuts to come from a variety of central banks throughout 2024 and 2025.

Global PMIs show a softer global backdrop



Source: BEA, Macrobond, UBS, as of 24 October 2024

Fed joins many other central bank cutting rates this year and next



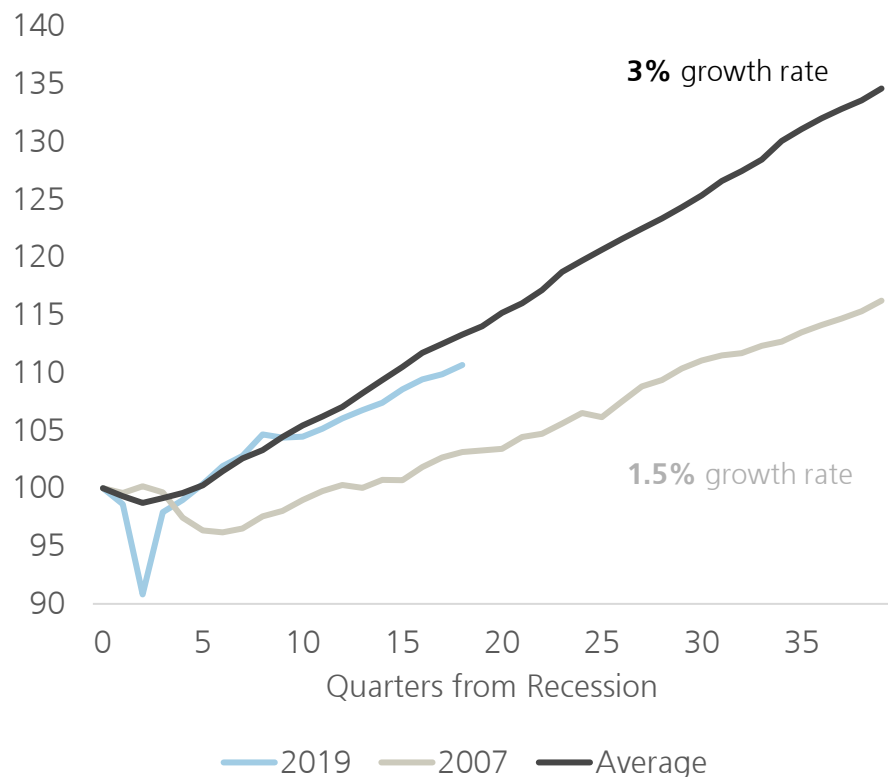
Source: Bloomberg, Macrobond, UBS, as of 24 October 2024

“Roaring ‘20s”: Current recovery looking like the historical average...

Real GDP growth in the current cycle is aligning with the historic average ~3% growth trend. When combined with a slightly higher-than-2% inflation rate, growth may stabilize at a 5% nominal level.

Current growth trend looks much more like average

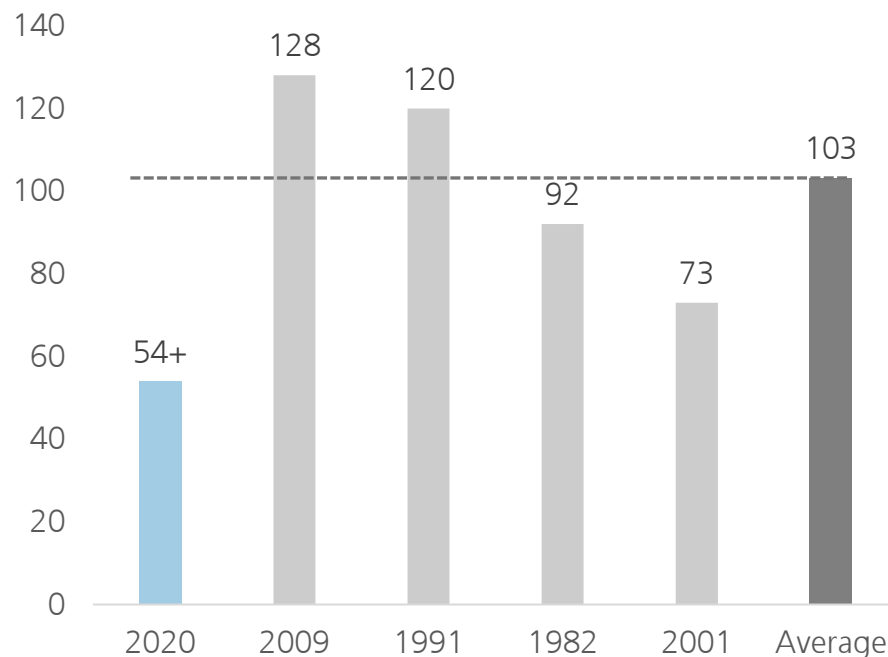
Recession start = 100



Source: BEA, Federal Reserve, UBS, as of 24 October 2024

Current expansion is not particularly old

Expansion length, in months



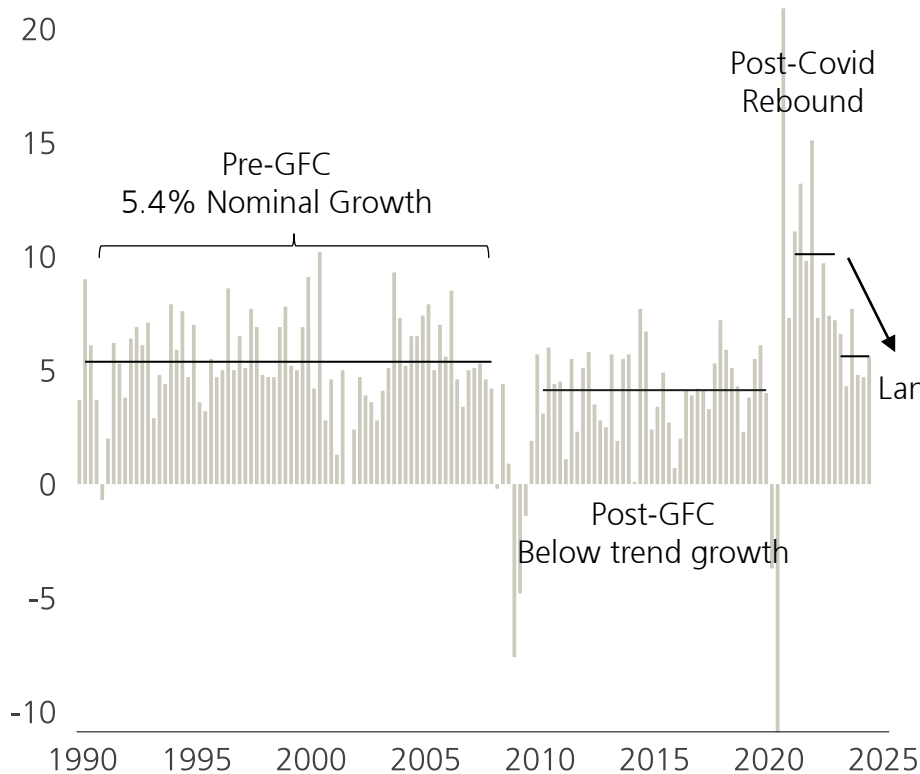
Source: NBER, UBS, as of 24 October 2024

"Roaring '20s": ...which is a 5% landing

It is possible that the US economy has established a new, faster nominal growth trend compared to the post-global financial crisis (GFC) recovery, which could accelerate with a resurgence in investment.

Nominal growth settling at 5% over the last two years....

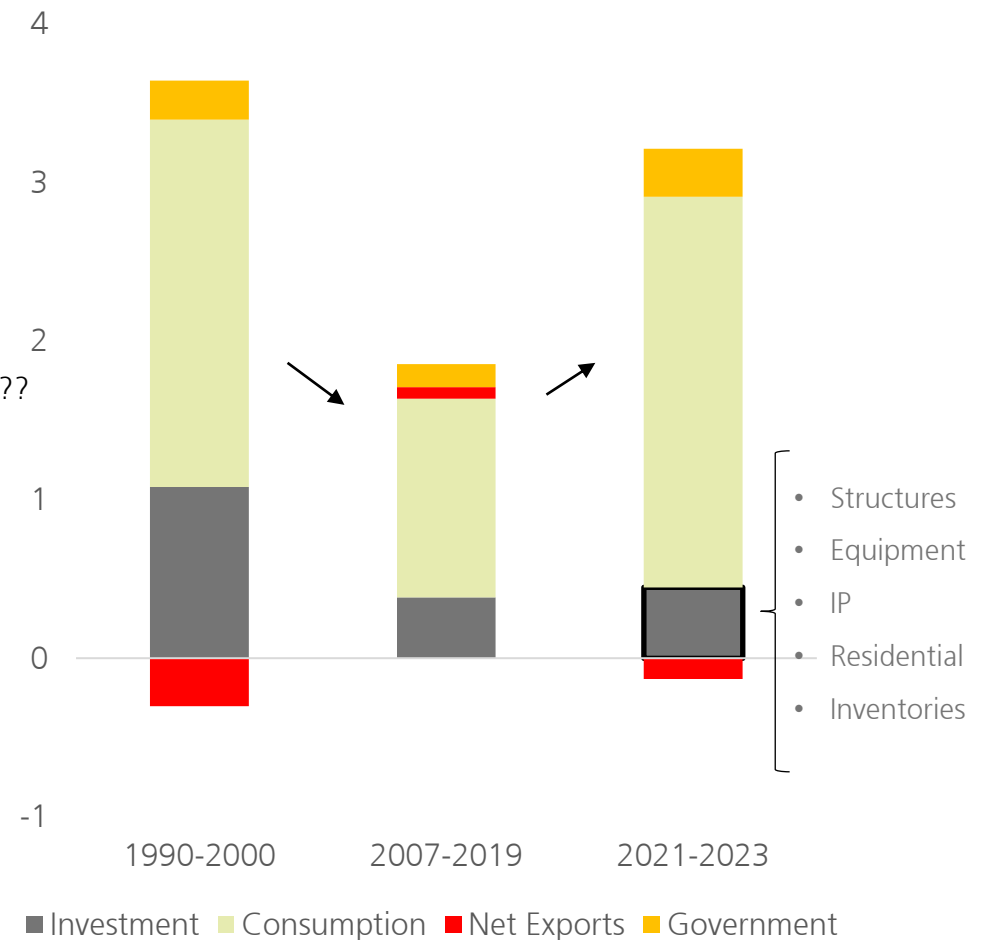
q/q annualized, %



Source: Bloomberg, BEA, UBS, as of 24 October 2024

Investment has scope to improve to sustain 'Roaring '20s'

% contribution to GDP



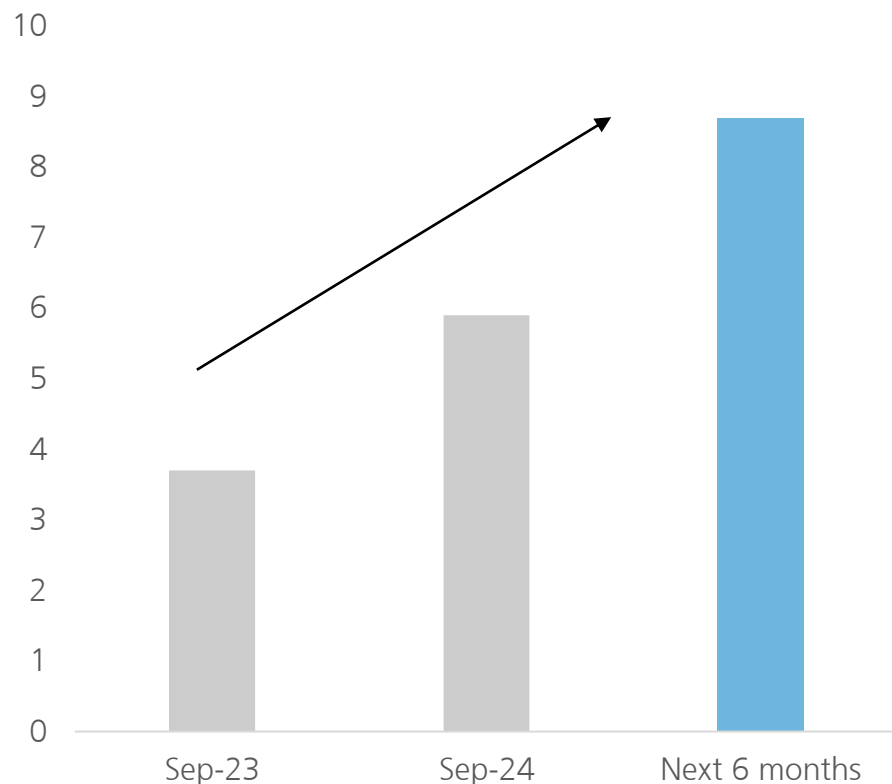
Source: BEA, UBS, as of 17 June 2024

"Roaring '20s": AI adoption is a positive, if uncertain, supply-side shock

AI investment has already made a positive contribution to overall GDP, and broader adoption across various industries could result in a productivity boom.

Firm AI adoption is increasing

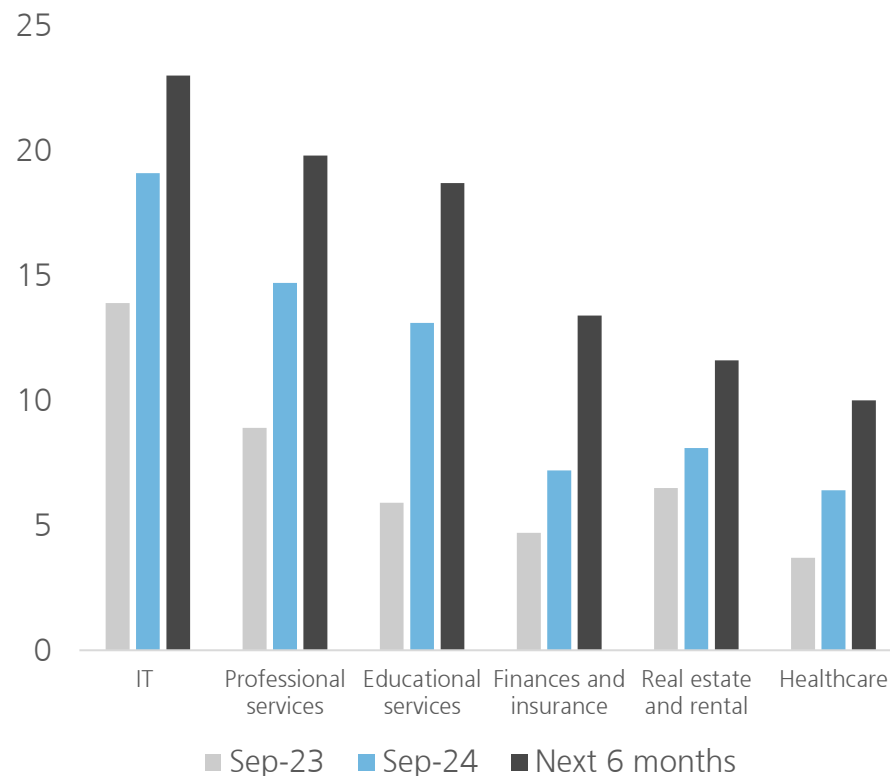
% of firms planning to use AI in the US



Source: UBS as of 24 October 2024

And AI adoption is led by six industries

% of firms planning to use AI in the US

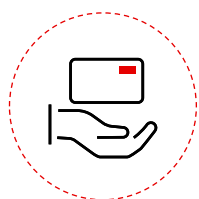
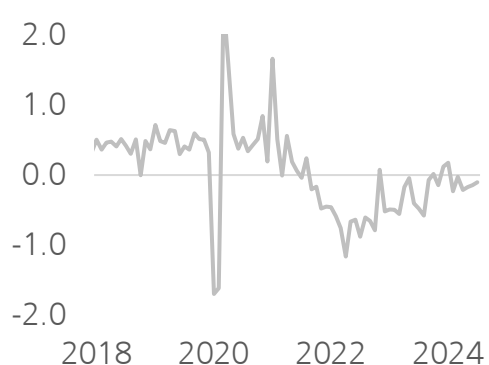


Source: UBS as of 24 October 2024

Section 3

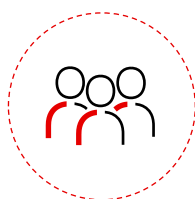
Operational considerations

Operating Environment Dashboard: Broadly normalizing



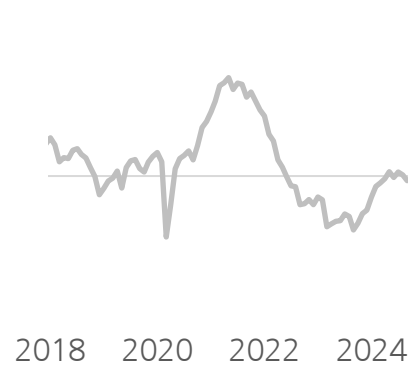
Consumers

- Personal spending is robust despite a modest erosion in household fundamentals; sentiment remains unusually low but may pick up after the election.



Labor

- The labor market has cooled from the very tight levels seen in 2022 and 2023 yet remains historically healthy akin to levels seen in the immediate pre-pandemic environment.



Financing

- Financing conditions have improved thanks to loosening credit standards, strong market performance, and confidence of lower rates ahead.



Real Estate

- The real estate sector is still sluggish and operating below pre-pandemic levels. Residential activity is held up by still-high mortgage rates while commercial sales are broadly still struggling.

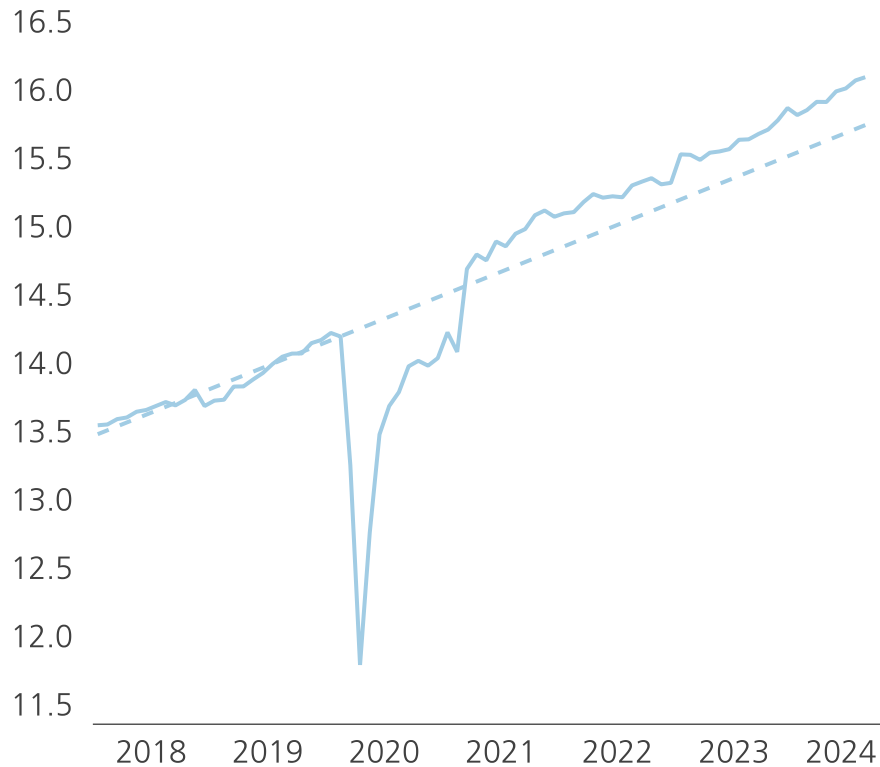
Section 3.1

Consumer

Spending: Consumption keeps its post-pandemic strength

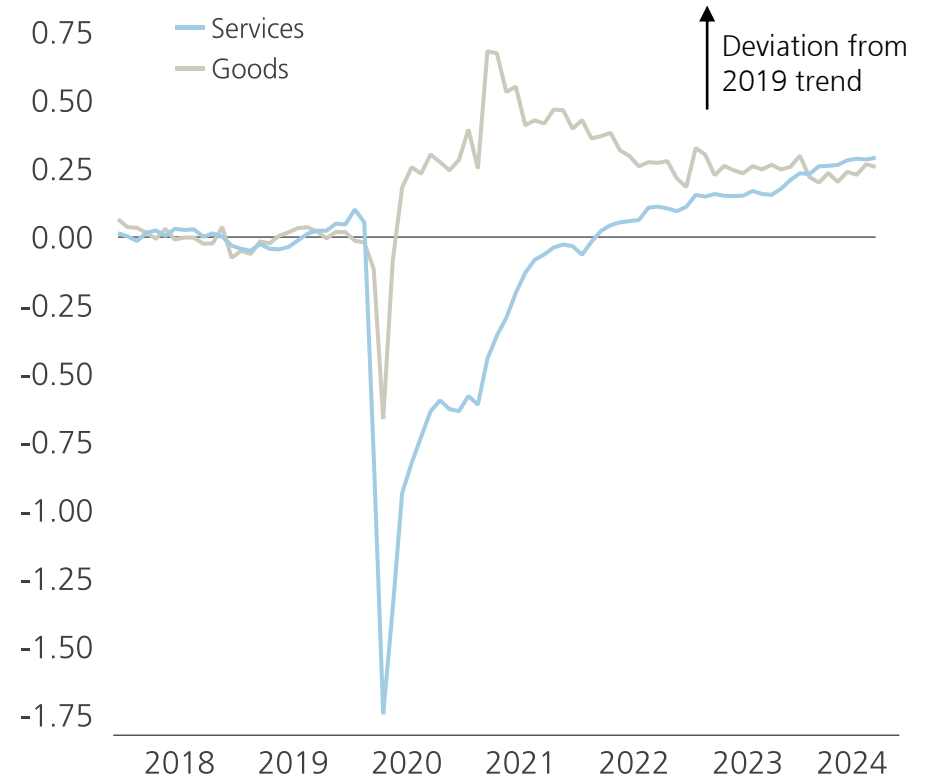
The continued strength of the consumer has helped keep American growth above-trend; after years of lagging, services spending is now running faster than goods spending.

Real personal spending runs faster than the pre-pandemic trend



Source: BEA, UBS, as of 24 October 2024

Spending on services now exceeds above-trend goods spending
2017 US tril.\$,



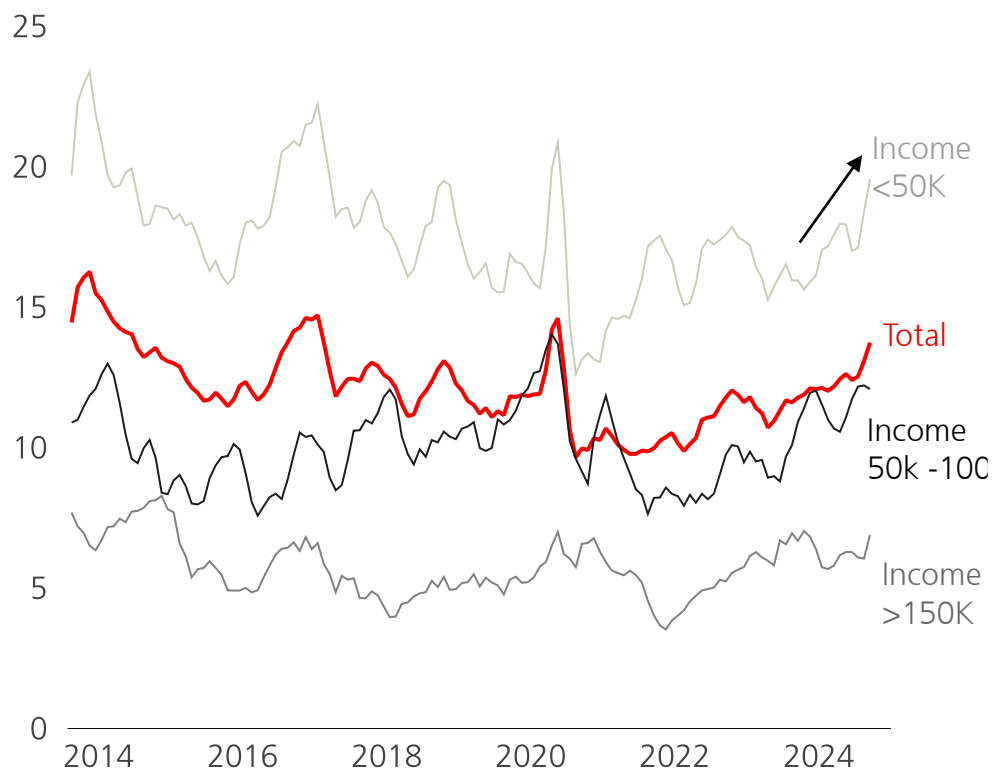
Source: BEA, UBS, as of 24 October 2024

Sentiment: "K-shaped" household sector taking hold

Lower income households may benefit the most from lower rates and continued real-income gains; higher income spending is increasingly powering retail spending.

Credit card stress rising, especially for lower income HHs

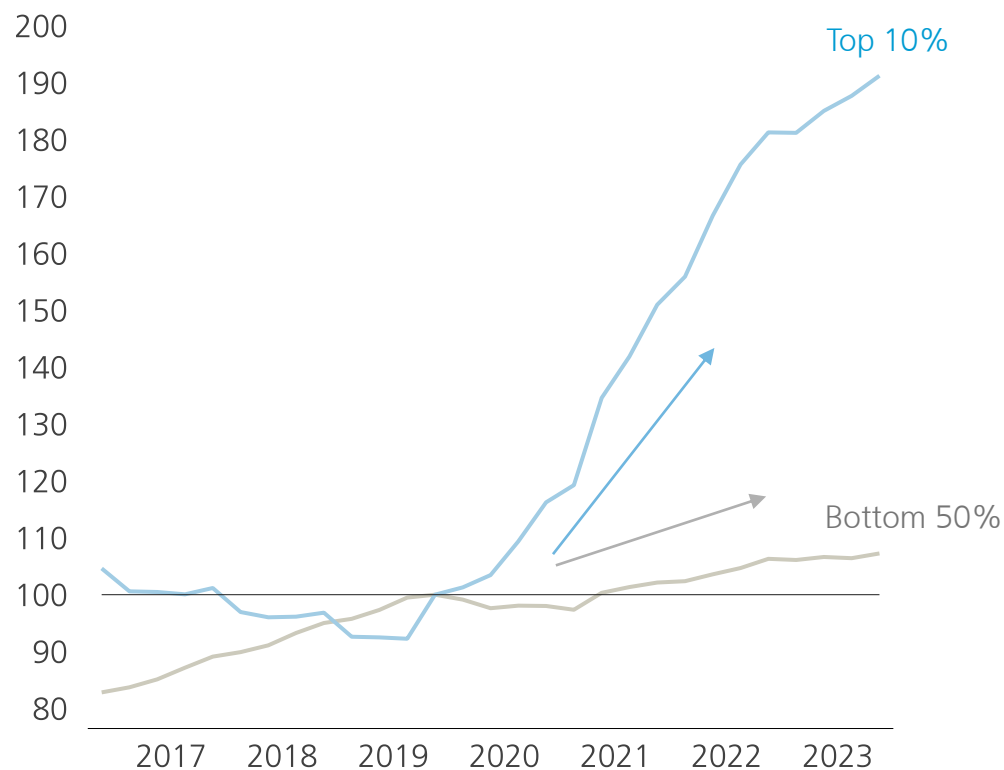
Credit Card delinquency rate, %



Source: University of Michigan, UBS, as of 24 October 2024

Credit availability, spending proxy, looks increasingly K-shaped

Rebased 12/31/2019 = 100



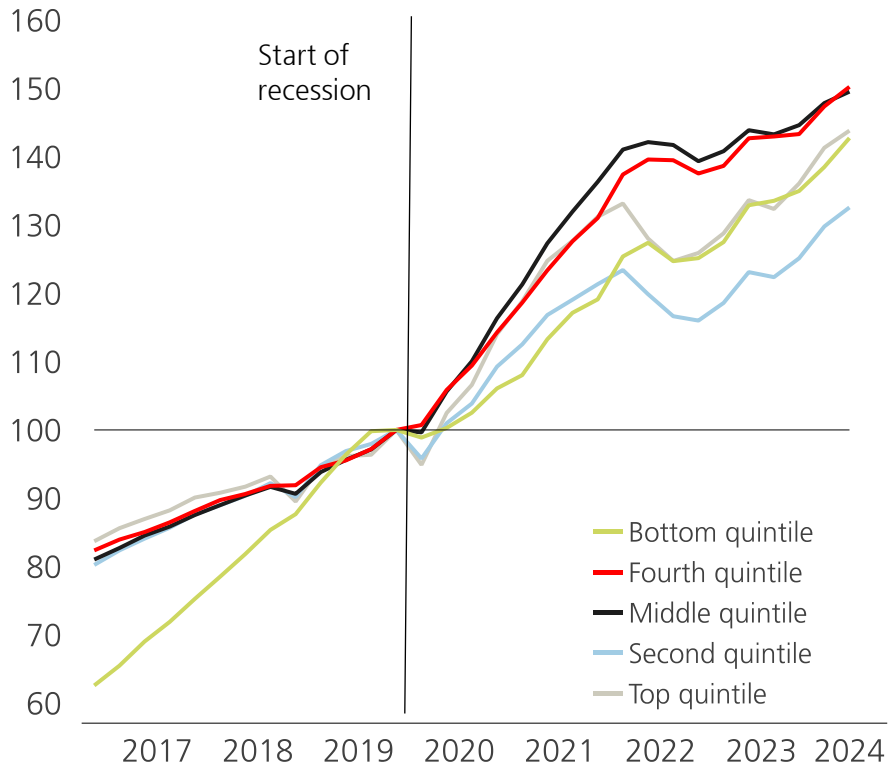
Source: Federal Reserve, UBS, as of 24 October 2024

Income: Consumer spending powered by stronger balance sheets

Both household balance sheets and real income trends are much stronger than their pre-pandemic trends, underpinning consumer strength.

The median American's net worth up ~50% since 2019

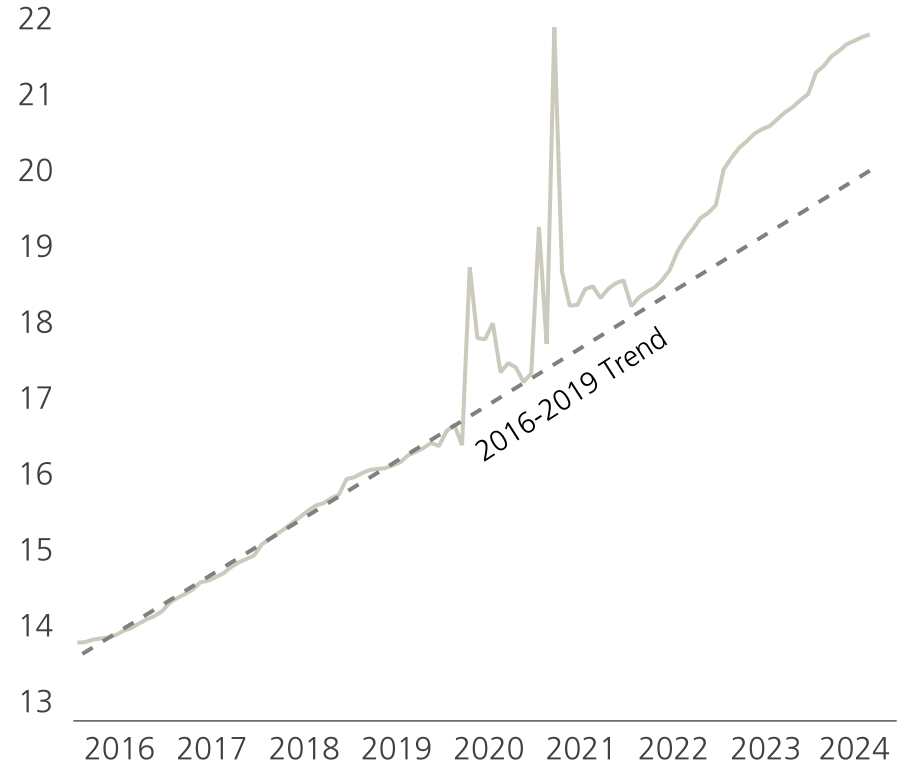
Net worth by quintile, 12/31/2019=100



Source: Federal Reserve Bank, UBS, as of 22 October 2024

Rising income driving robust personal spending

Real disposable income in USD, \$ tril.



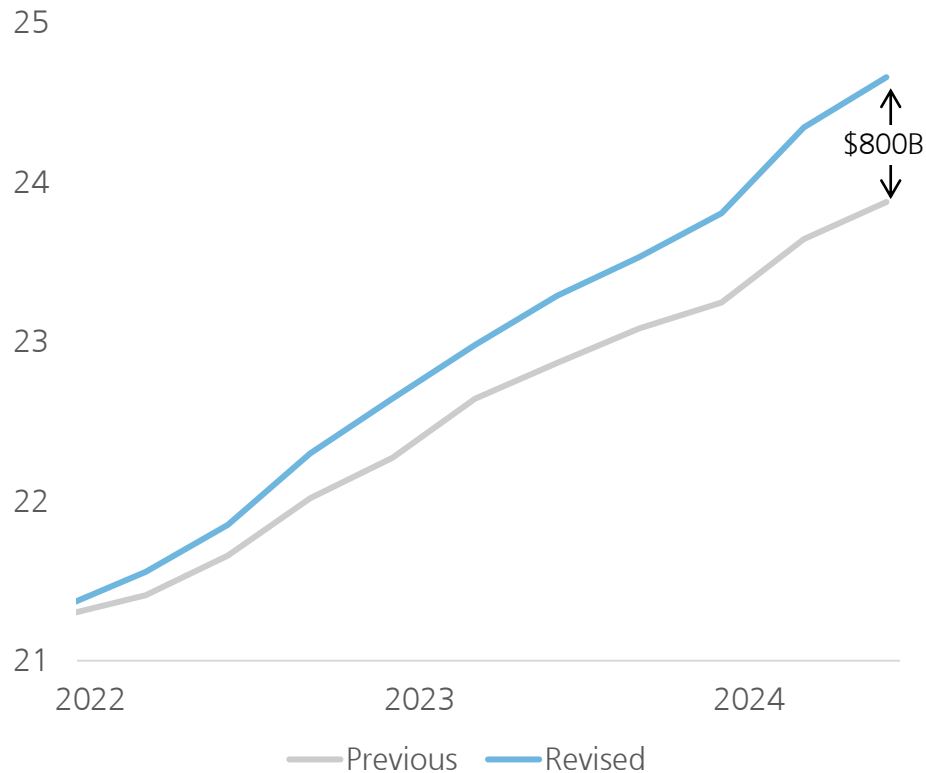
Source: BEA, UBS, as of 24 October 2024

Income: Revisions show healthier consumer than previously thought

An updated look at income numbers explains why spending has held up so well as consumers earned nearly \$1 trillion more and saved a much larger portion of it than previously thought.

Prior reports underestimated nearly \$1T of household income

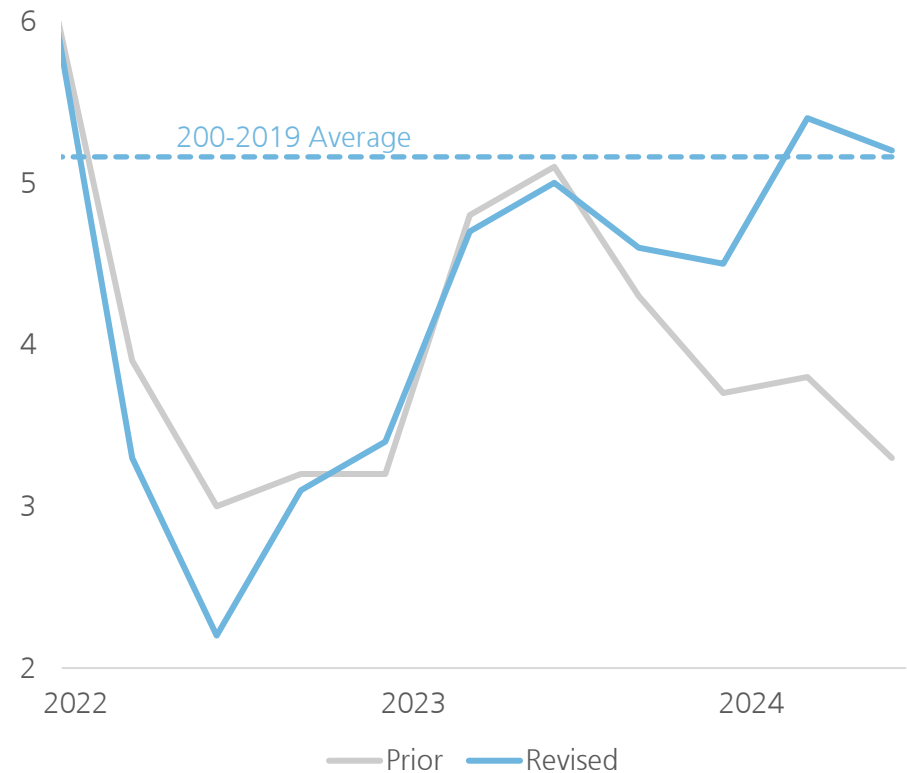
Personal income, ann. US \$ tril.



Source: BEA, UBS, as of 24 October 2024

Revised savings rate trending in line with historical norms

Savings as share of Disposable income, %



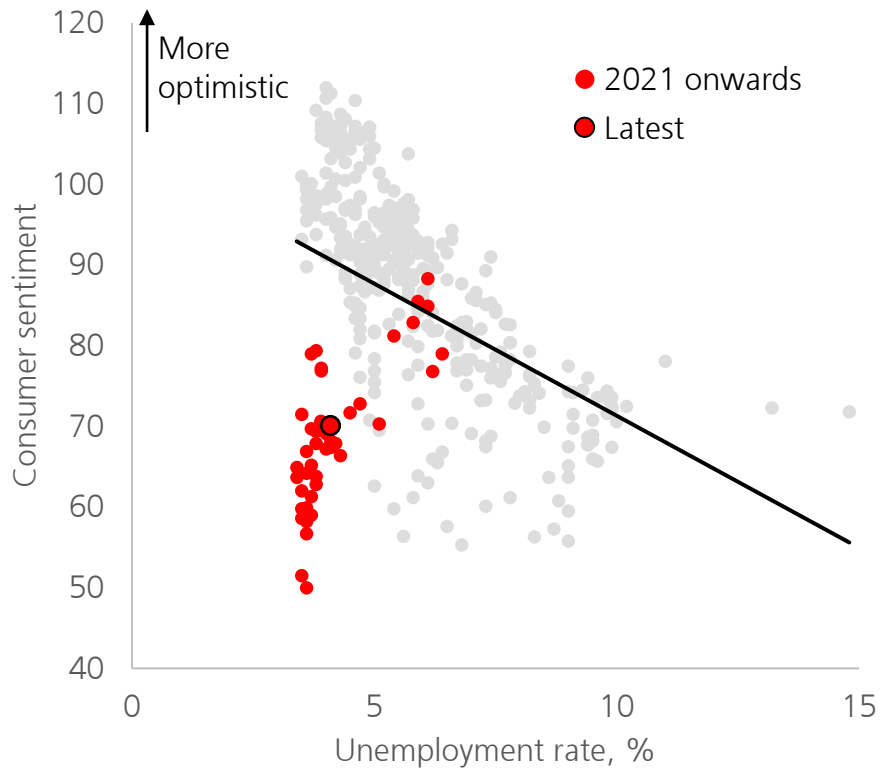
Source: BEA, UBS, as of 24 October 2024

Consumer: Sentiment still unusually weak but improving

Affordability anxiety affecting consumer sentiment will take some time to unwind, depending on the pace of disinflation and path of the Fed's rate cuts.

Consumer sentiment should be higher with this labor market

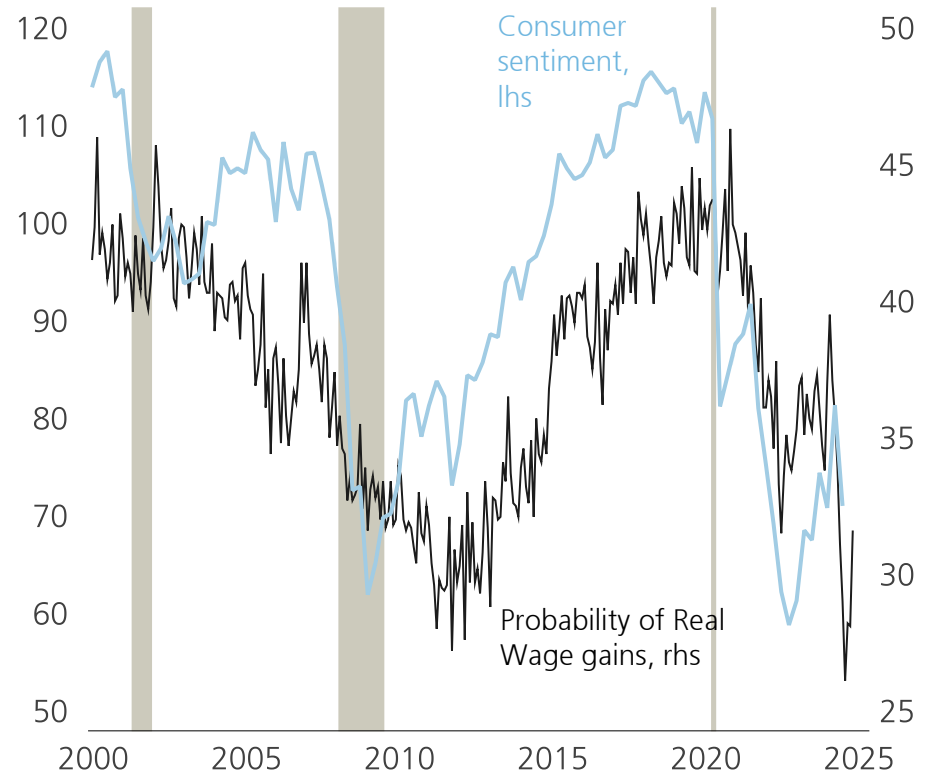
Consumer sentiment index and unemployment rate



Source: University of Michigan, UBS, as of 24 October 2024

But affordability concerns are top of mind for households

University of Michigan Consumer Sentiment index



Source: University of Michigan, UBS, as of 24 October 2024

Section 3.2

Labor

Labor Key Points: Cooling but still strong



Labor	-2Y	Today
Payrolls	Green	Yellow
ADP Payroll	Yellow	Yellow
Openings	Green	Green
Average Hourly Earnings	Green	Green
Fed Wage Tracker	Green	Green
ECI (y/y, %)	Green	Green
Unemployment	Green	Green
Prime Age Participation	Green	Green
Initial Jobless Claims	Green	Green
NFIB: Hard to Fill Job	Red	Red
NFIB Hiring Intentions	Green	Yellow
Job Security Sentiment	Yellow	Red
ISM Employment	Red	Red

- **The labor market continues to cool.** The extreme tightness following the pandemic has eased, and labor market conditions are now slightly softer than pre-pandemic levels.
- **A blowout September jobs report counters the narrative of a rapidly cooling labor market.** September's jobs report managed to exceed even the most optimistic of forecasters, coming in contrast to a broad set of cooler labor market data. Expect more skepticism on continued rate cuts if hiring stays at this hotter pace.
- **Wage growth is easing, and demand for part time is rising.** Employers are less willing to pay up to attract workers from other firms and are looking to part-time workers to fill vacancies.
- **Ignore the Sahm Rule for now; layoffs are still limited.** The recent rise in the unemployment rate has triggered the Sahm Rule, historically a predictor of recession. Yet layoffs and jobless claims remain historically low and not indicative of significant labor market stress for the time being.

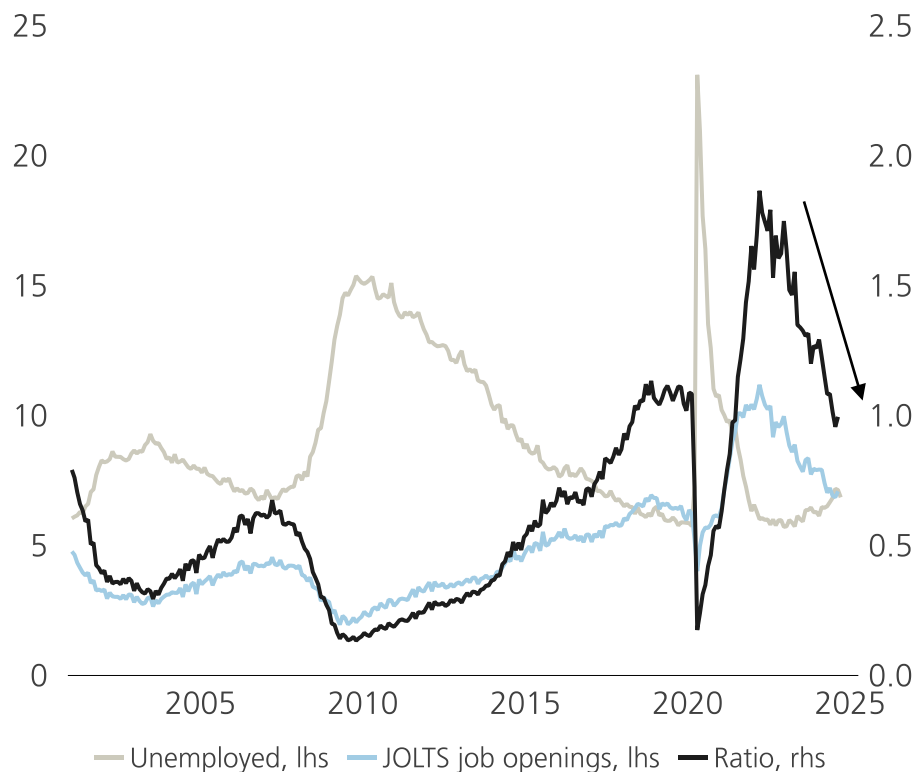
Note: "Payrolls" is represented by 1-month change of non-farm payrolls; "Openings" is represented by share of job openings relative to employment; ECI refers to the yearly change in the employment cost index; "Unemployment" is represented by the unemployment rate; "Prime Age Participation" is represented level of prime age (25-55) labor force participation
 Source: Bloomberg, BLS, Federal Reserve, UBS, as of 24 October 2024

Labor Demand: Cooling from white-hot levels

The job openings to unemployed ratio has return to pre-pandemic levels, while blowout September jobs report counters a broader slowing hiring trend.

Job Openings / Unemployed ratio back to pre-pandemic range

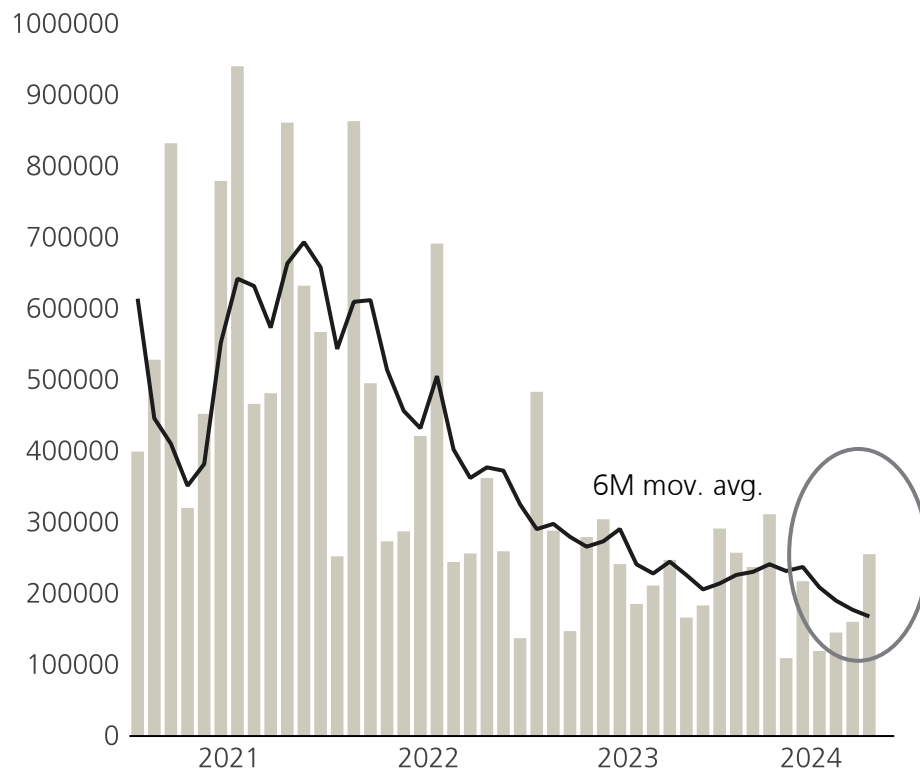
in millions and ratio



Source: BLS, Macrobond, as of 22 October 2024

Too soon to call blowout Sept jobs report a trend change

Non-farm payrolls, 1M change



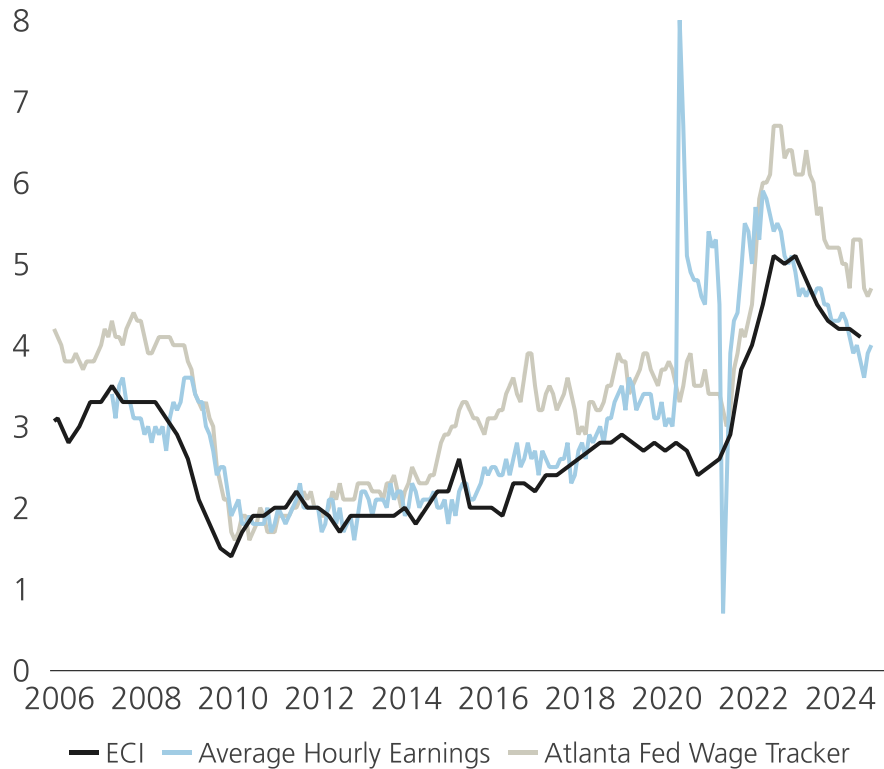
Source: BLS, Macrobond, as of 22 October 2024

Wages: Slowing wage growth paves way for rate cuts

Continued wage cooling helps increase the odds of sustained rate cuts from the Fed; current levels of wage growth runs faster than inflation, supporting household spending.

Various wage indicators show slower but still-strong growth

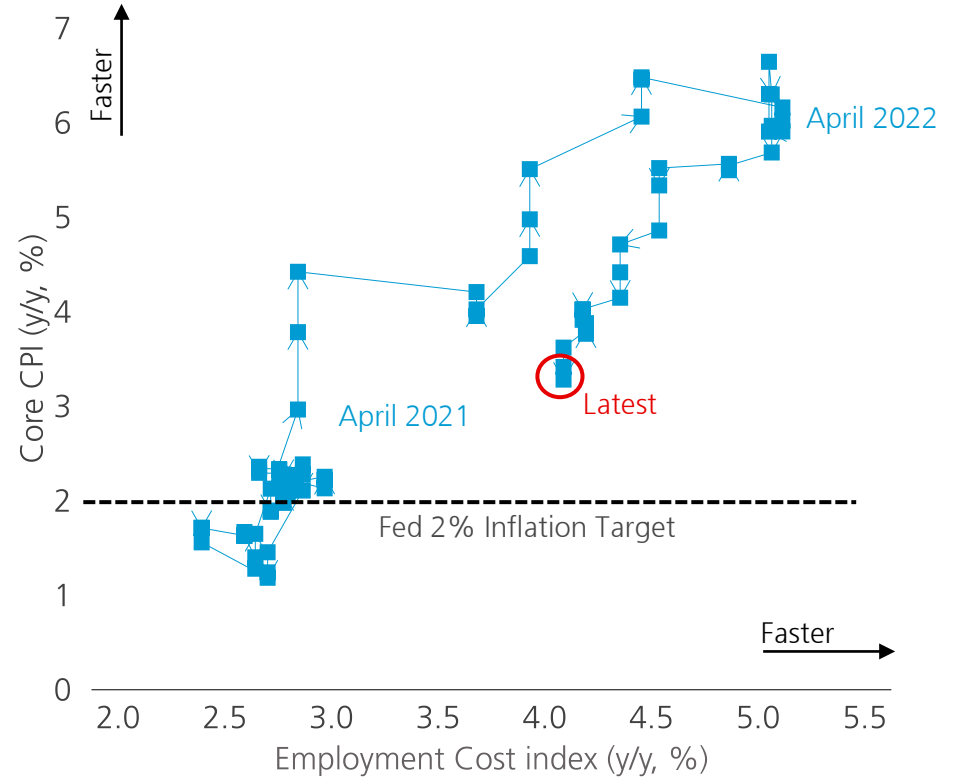
year/year, %



Source: Federal Reserve Bank of Atlanta, BLS, BEA, UBS as of 24 October 2024

Slower wage growth consistent with further disinflation

year/year, % 2017-Present

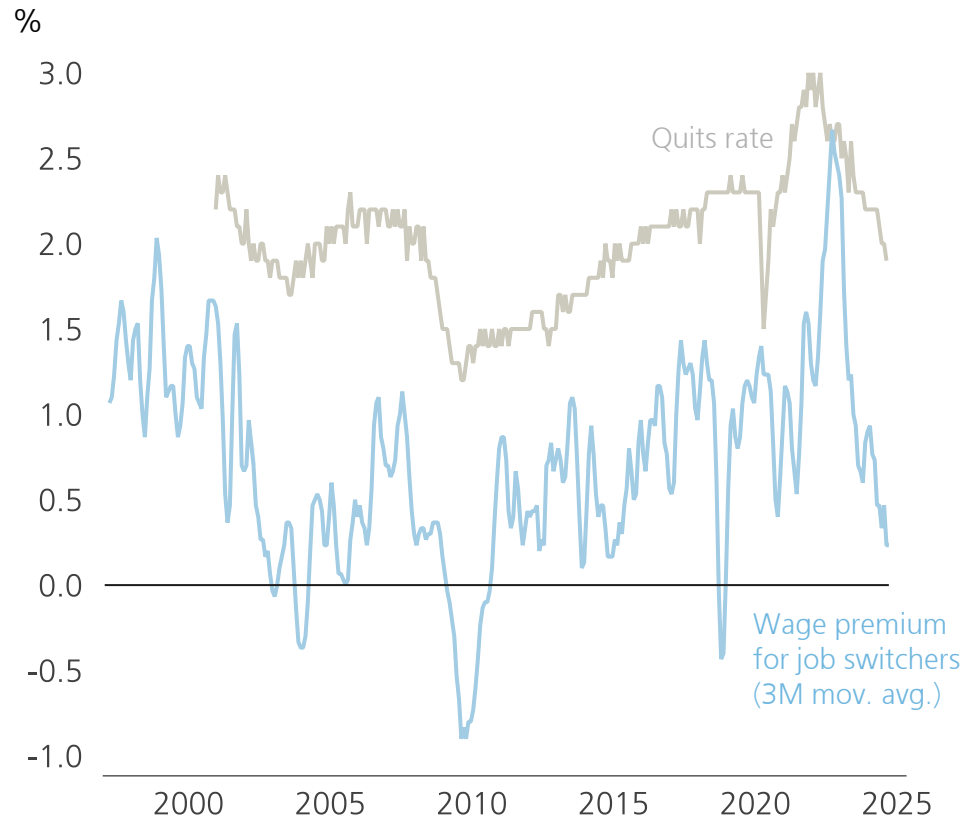


Source: BLS, UBS as of 24 October 2024

Labor Supply: Fewer people quitting, part-time demand still strong

While layoffs haven't surged, firms are less likely to pay a premium for people currently in the work force while firms are increasingly looking to hire part-time workers.

Wage premium for switching jobs is declining



Source: BLS, UBS, as of 24 October 2024

Part-time wage growth still running hot compared to history



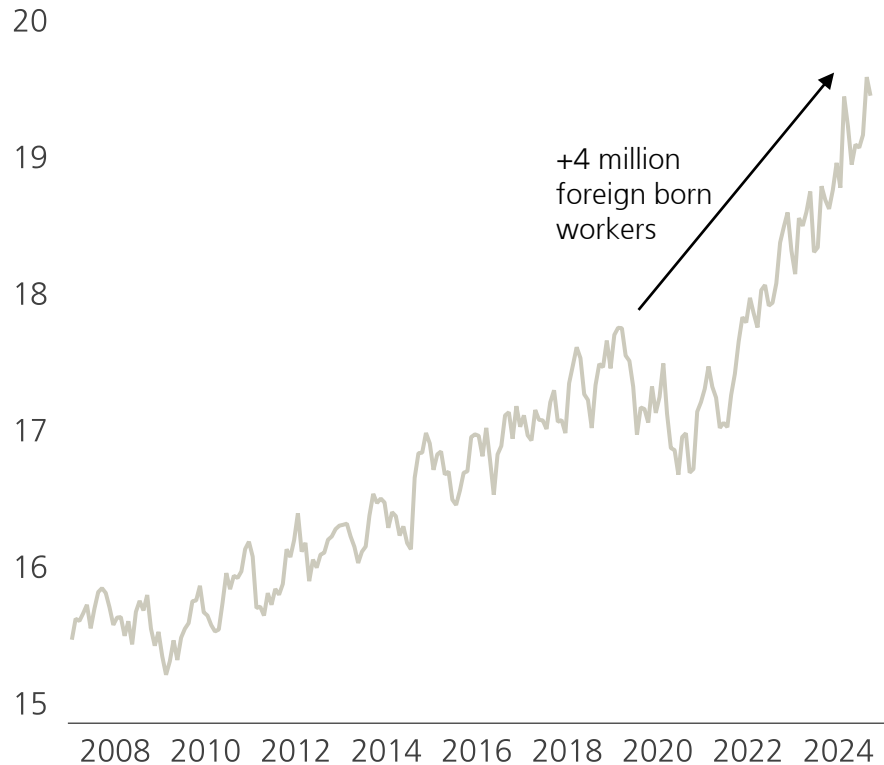
Source: Federal Reserve Bank of Atlanta, UBS, as of 24 October 2024

Labor Supply: Immigrants bolster sluggish labor force growth

There are 4 million more foreign born workers in the US labor force compared to pre-pandemic levels, helping reverse a decades long-decline in overall labor force growth.

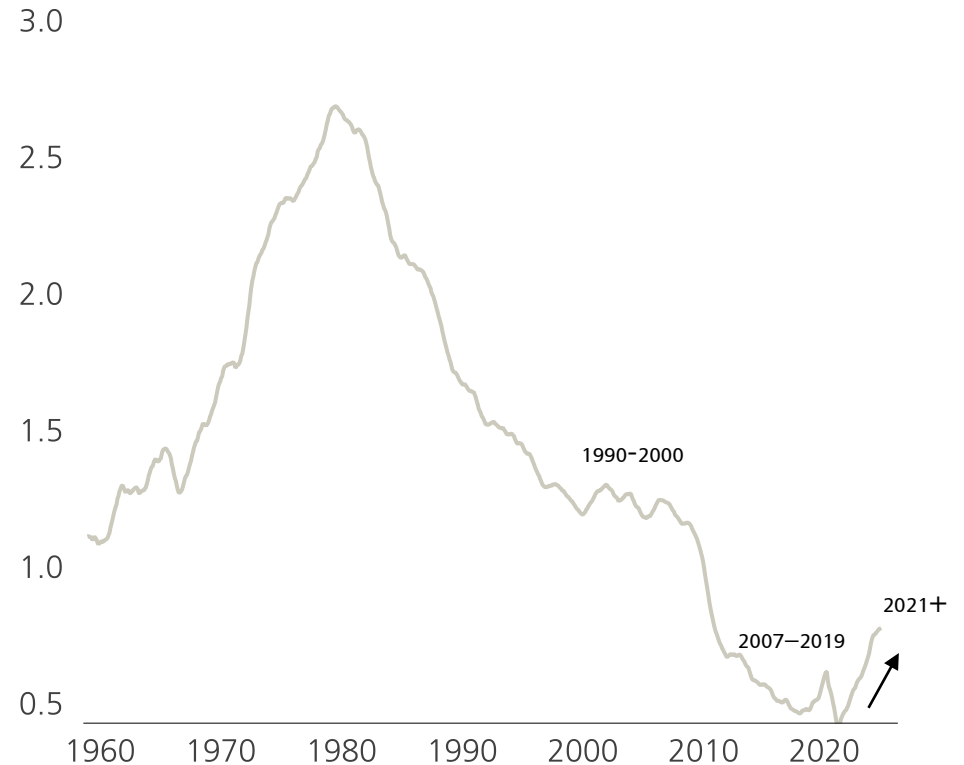
Foreign-born workers make up a record of the labor force

% of Labor Force



Downward labor force growth reversing trend thanks to immigration

y/y, 10Y mov. Avg., %



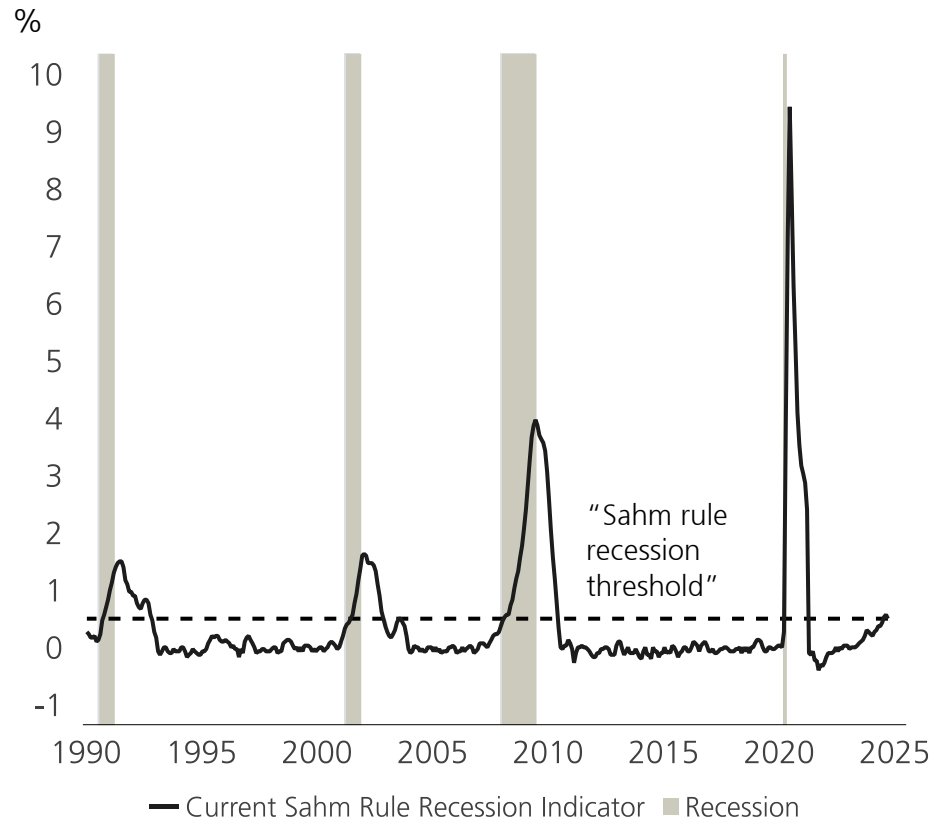
Source: BLS, UBS, as of 17 October 2024

Source: CBO, UBS, as of 17 October 2024

Unemployment: Despite Sahm Rule trigger, layoffs still very low

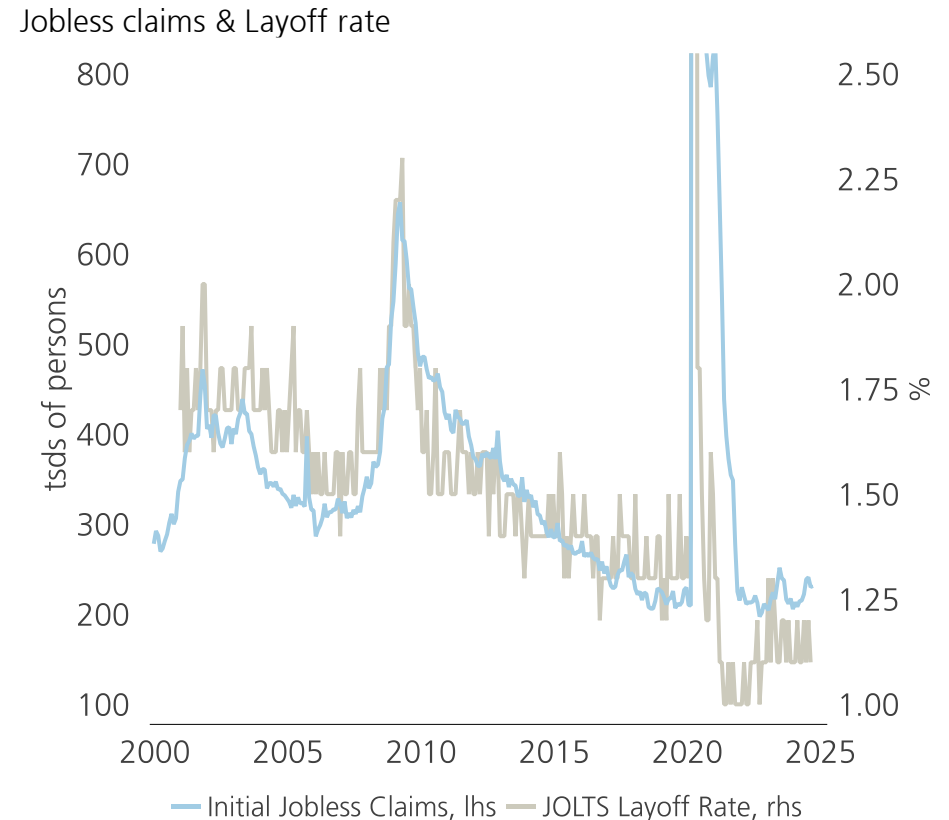
Even with a quick uptick in the unemployment rate, layoffs and jobless claims are still in benign levels, which should alleviate near-term recession fears.

Rise in unemployment rate has triggered the Sahm Rule



Source: Federal Reserve of St. Louis, UBS, as of 24 October 2024

Layoffs still at very low levels



Note: Axes have been truncated
Source: BLS, UBS, as of 24 October 2024

Section 3.3

Financing

Financing Key Points: Easier conditions as Fed begins cutting rates



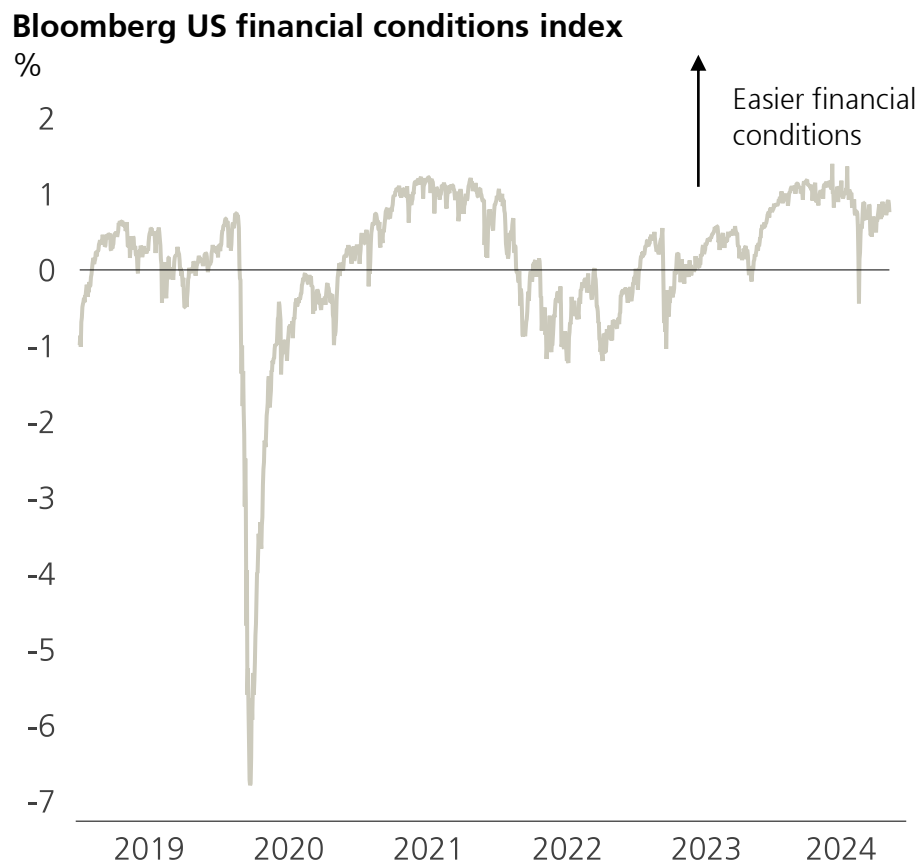
Financing	-2Y	Today
Bloomberg FCI	Red	Green
M2 Money Growth	Red	Red
SLOOS - Large	Red	Orange
SLOOS - Small	Red	Orange
NFIB - Credit Conditions	Yellow	Red
NFIB - Interest Rate	Red	Red
CP Spread	Green	Green
IG Spread	Red	Green
HY Spread	Yellow	Green

- **Financial conditions improve with higher rate cut odds.** A broadening equity rally and cheaper borrowing costs support easier financial conditions. Credit conditions, as represented by the Federal Reserve loan officer survey, continue to loosen, easing stress particularly borne by smaller firms that lack the same access to capital markets that larger firms have.
- **Corporate bond issuance accelerates as yields fall.** Both investment grade and high yield issuance continue to trend higher while spreads remain at historically tight levels.

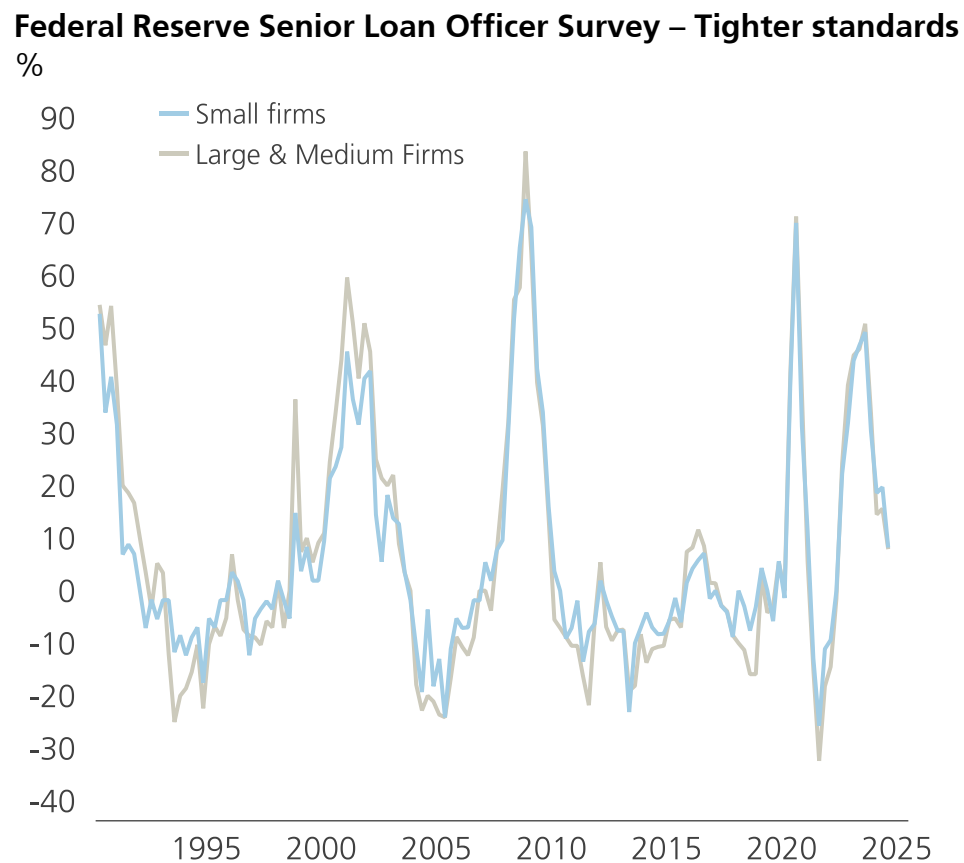
Note: Financial conditions refers to the Bloomberg Financial Conditions index; "SLOOS" refers to the Federal Reserve Senior Loan Officer Survey; IG issuance are measured on a quarterly moving average of monthly issuance data; Availability of Borrowing Costs refers to "Interest Rate on short-term loans" component in the NFIB survey
 Source: Bloomberg, NFIB, SIFMA, Federal Reserve, UBS, as of 24 October 2024

Financial Conditions: A looser environment thanks to the Fed's cuts

Financial conditions in easier territory thanks to the start of the Fed's rate cut cycle with a 50bp cut in September coinciding with loosening lending standard for firms.



Source: Federal Reserve, Macrobond, UBS, as of 24 October 2024



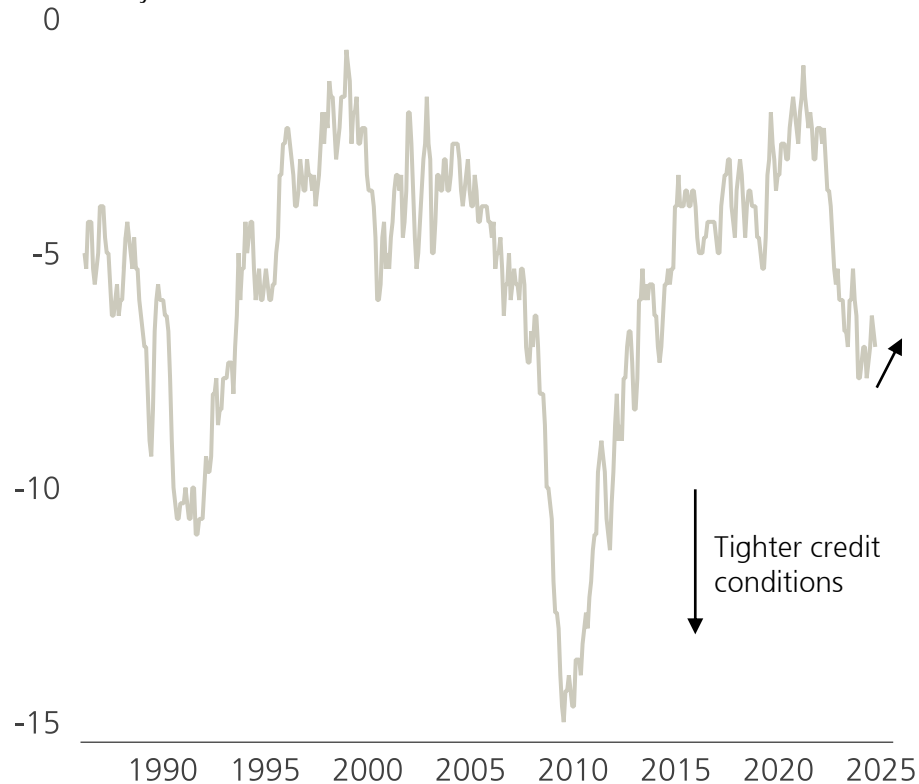
Source: Federal Reserve, Macrobond, UBS, as of 24 October 2024

Financial Conditions: Tight conditions for small businesses improving

Small businesses that complain of very tight credit conditions and high cost of borrowing have reasons to be marginally more optimistic, as lower policy rates ease borrowing costs.

Credit Availability for Small Businesses marginally better

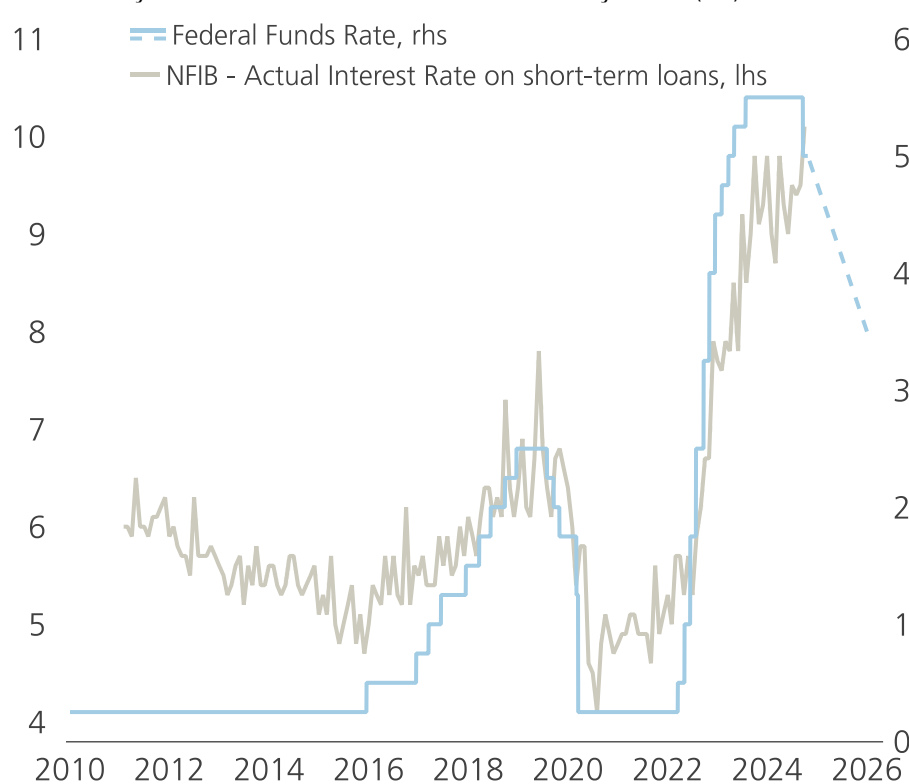
NFIB survey: Credit Conditions index



Source: NFIB, Macrobond, UBS as of 24 October 2024

Actual interest rates paid tied to pace of Fed's rate cuts

NFIB survey: Actual Interest Rate Paid & Policy Rate (%)

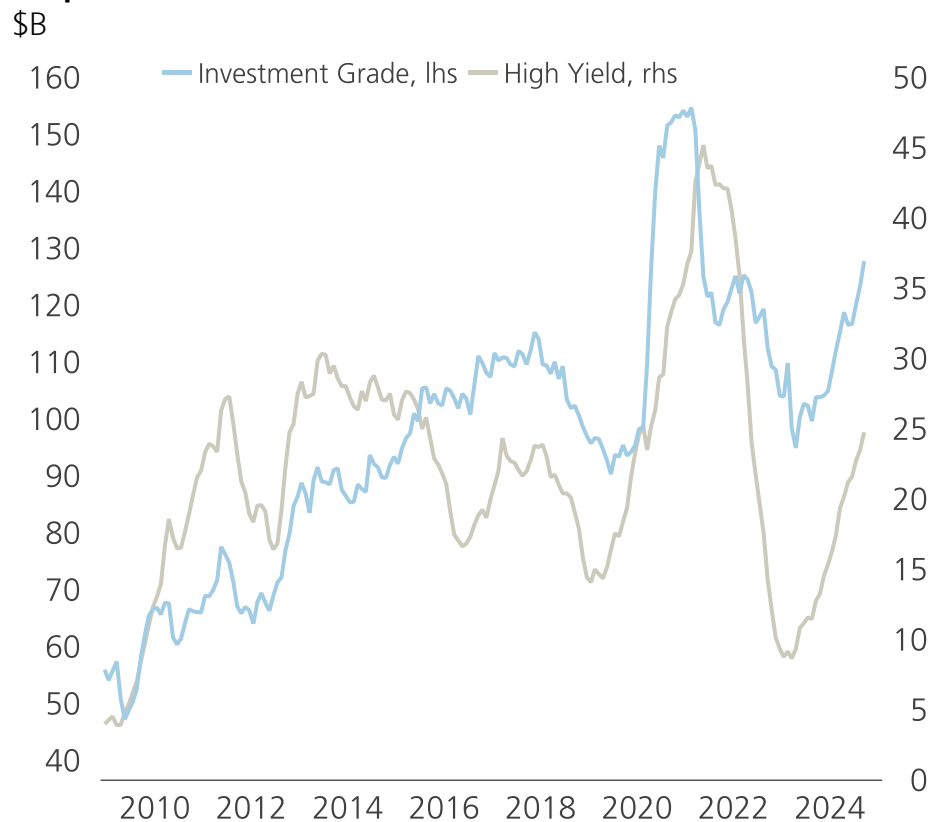


Source: NFIB, Macrobond, UBS as of 15 October 2024

Financial Conditions: Issuance accelerates as spreads remain tight

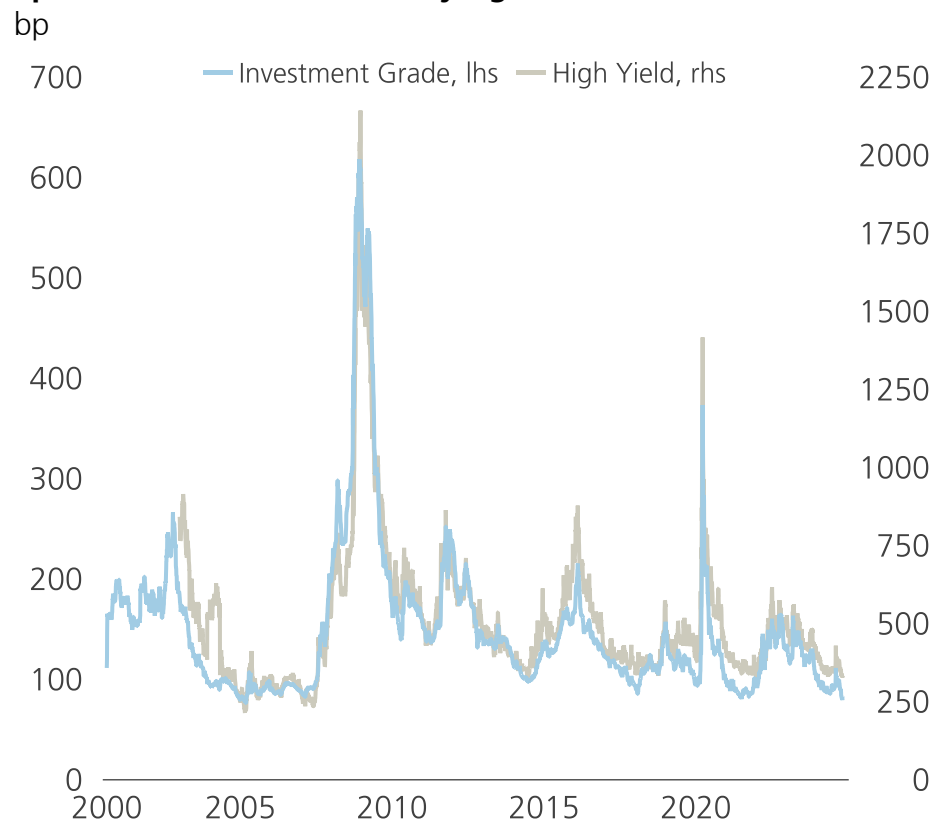
Strong demand for high yield and investment grade issuance as borrowing costs cheapen drive the accelerate of issuance and continued tightness for spreads.

Corporate bond issuance accelerates amid Fed rate cuts



Source: Bloomberg, Macrobond, UBS as of 15 July 2024

Spreads remain at historically tight levels



Source: Bloomberg, Macrobond, UBS as of 15 July 2024

Section 3.4

Real estate

Real Estate Key Points: Cooling but still very strong



Real Estate	-2Y	Today
Residential - Sales	Red	Orange
Residential - Prices	Red	Red
Residential - Home Starts	Green	Green
Residential - Vacancy	Red	Red
Hotels	Green	Orange
Industrial	Green	Orange
Offices	Red	Red
Retail	Green	Red
NAHB Sentiment	Red	Red

- **Unaffordability still high despite lower rates.** Low inventory and declining home starts keeping prices high while majority of homebuyers say that a 5.5% is the upper limit they would pay on a mortgage rate for a new home.
- **Commercial real estate delinquencies and properties sold remain low.** Earlier concerns of CRE contagion and meltdown were overblown and risks likely will subside with easier financing conditions. Overall CRE transactions still low, with industrials being the sole bright spot.

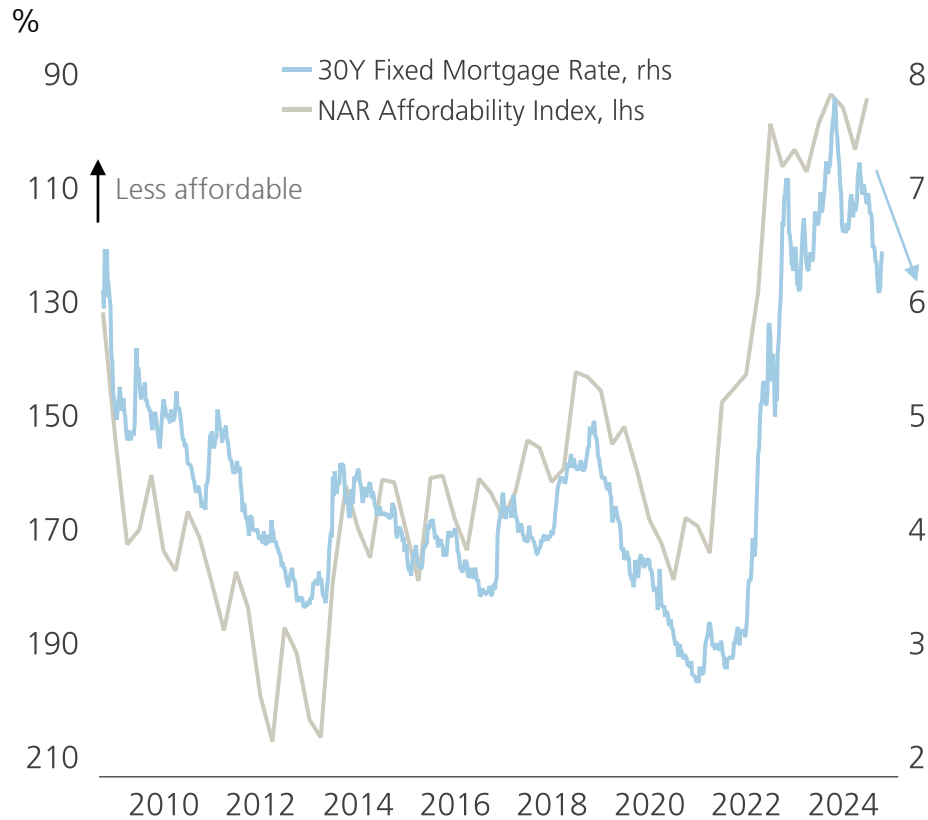
Note: Residential prices refers to the yearly change in S&P Home price index; "Hotels", "Industrial", "Offices", and "Retail" refer to the numbers of properties sold nationally compiled by Real Capital Analytics.

Source: Bloomberg, NAHB, Real Capital Analytics, Federal Reserve, UBS, as of 24 October 2024

Residential: Rate cuts easing mortgage rates but affordably still low

Lower policy rates from the Fed combined with continued guidance has helped mortgage rates decline from the near 8% recent peak; yet most still say rates need to fall below 5.5% to buy a new home.

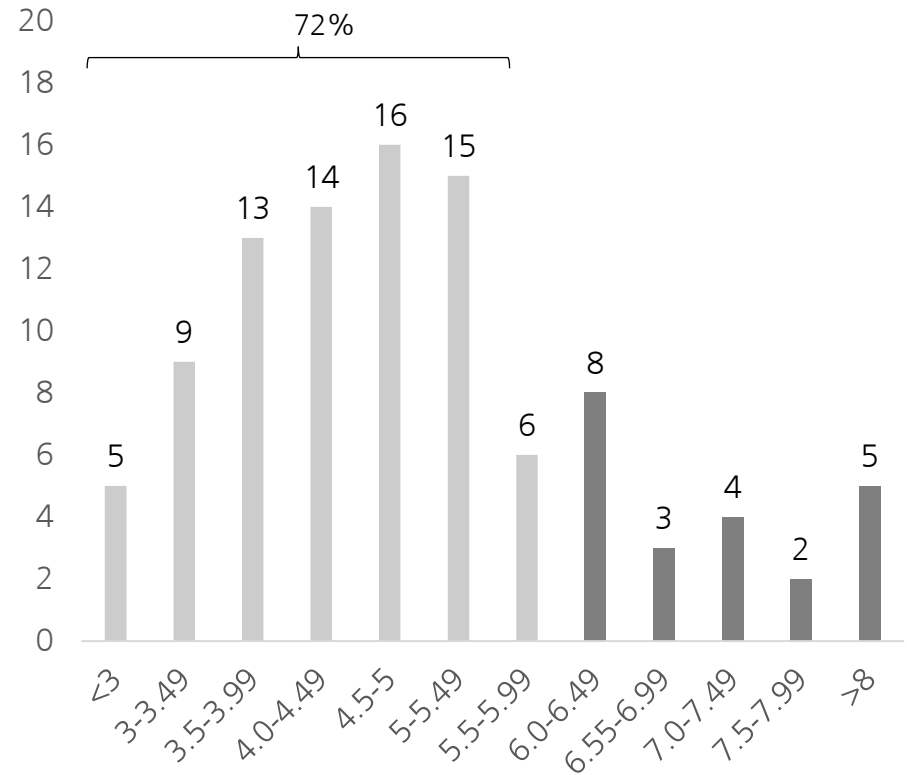
Real estate historically unaffordable despite lower rates



Source: Federal Reserve, UBS, as of 24 October 2024

Most homeowners 5.5% is upper limit for their mortgage rate

Share of homeowners with various mortgage rates



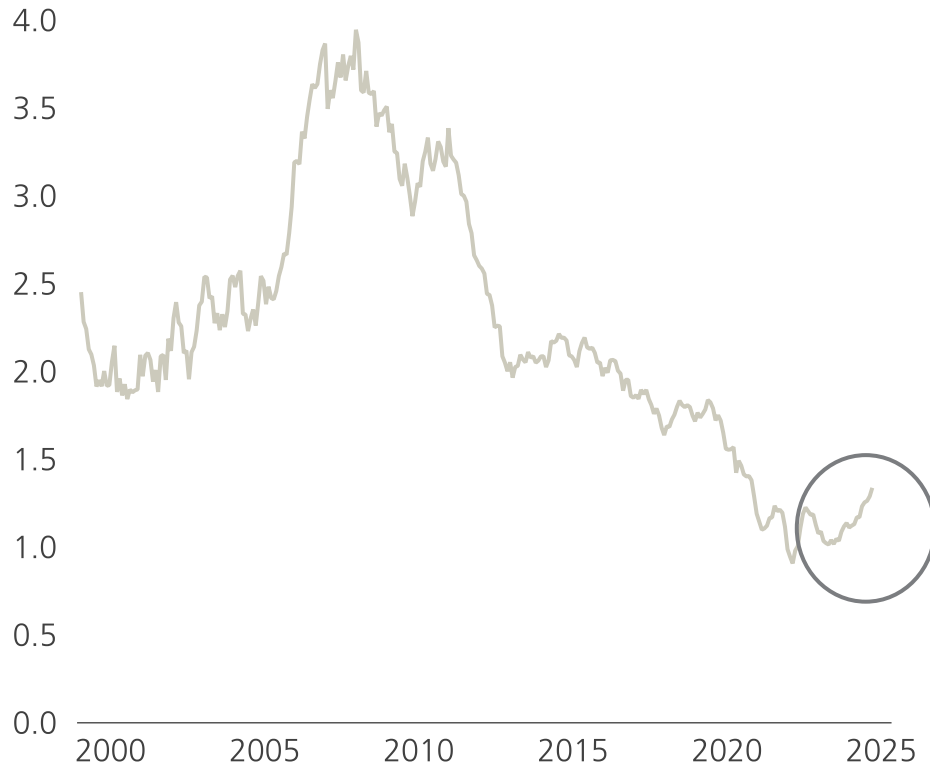
Source: New Home Trends Institute, UBS, as of 24 October 2024

Residential: Rate cuts should ease historic unaffordability issue

Housing inventory has modestly risen from historically low levels and the slide in housing starts imply tight levels of supply are here to stay.

Housing inventory trends marginally higher from record lows

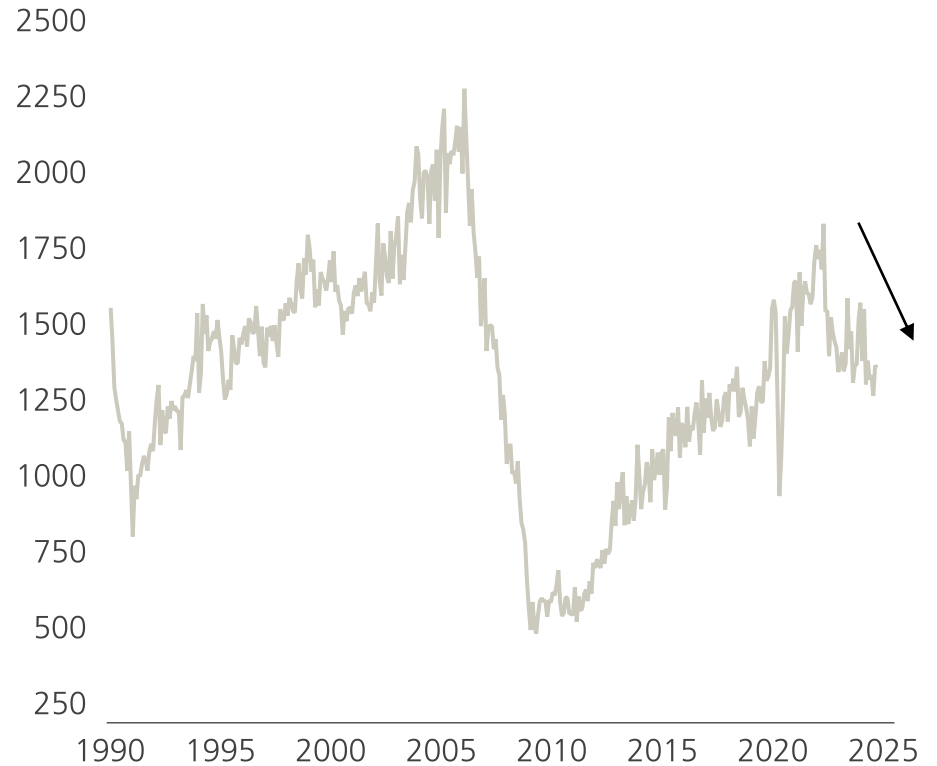
in millions



Source: NAR, Bloomberg, UBS, as of 24 October 2024

Sluggish housing starts suggest tight inventory levels to stay

in tds

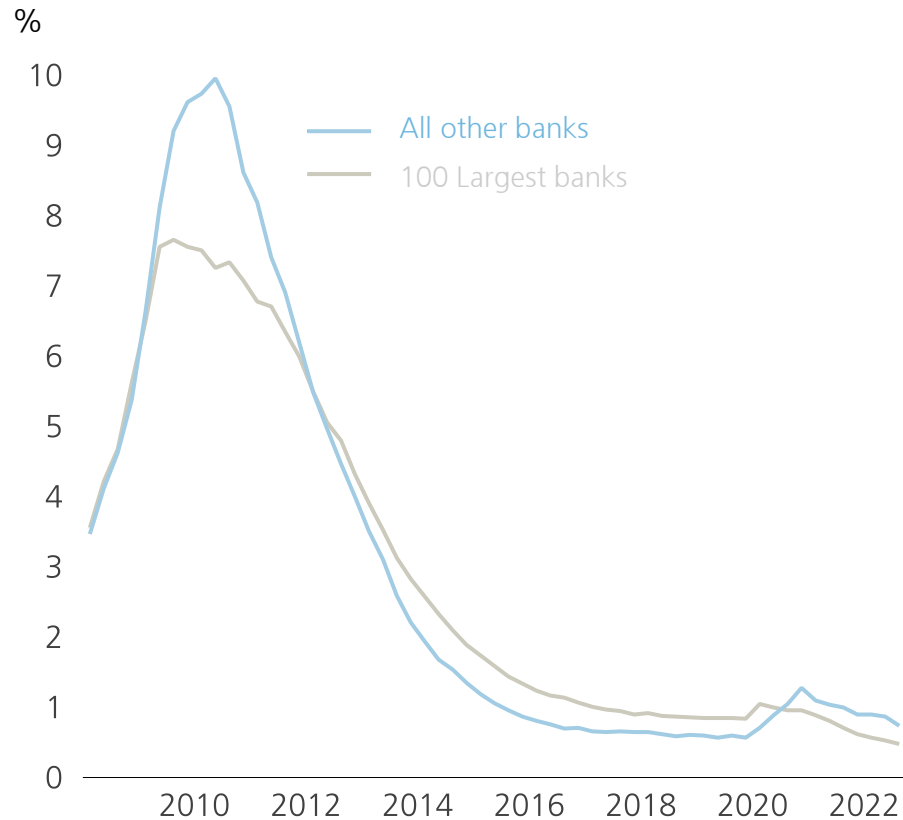


Source: Federal Reserve, UBS, as of 24 October 2024

Commercial Real Estate: Headwinds continue

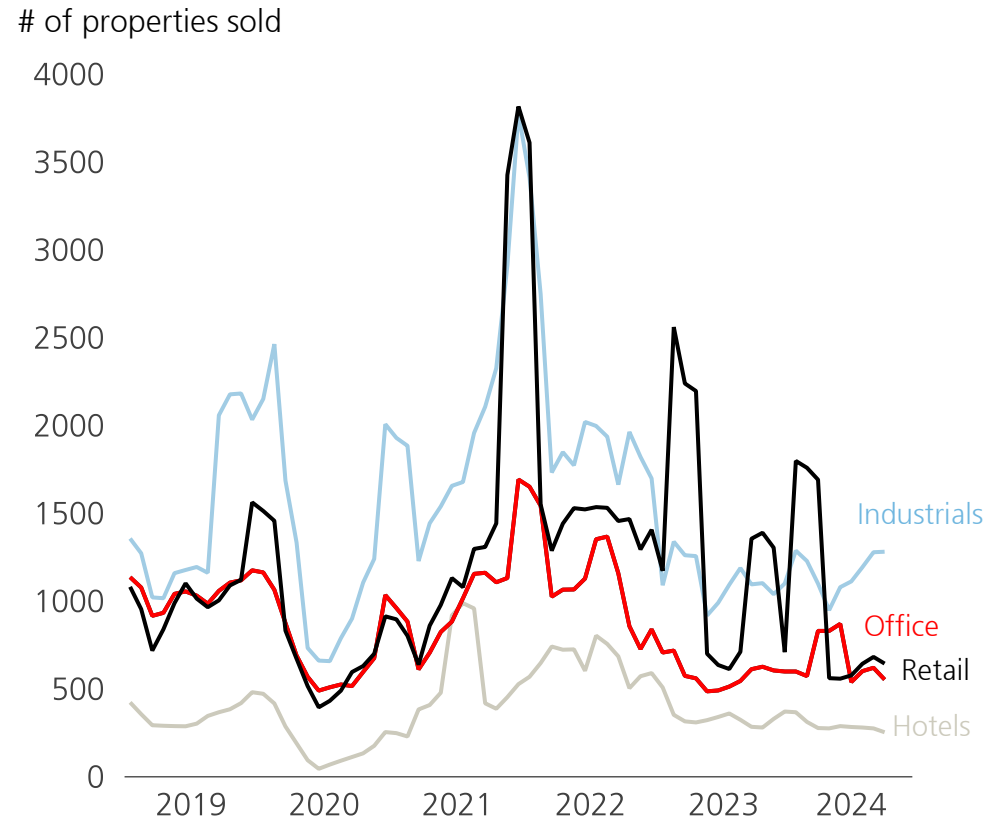
Contagion fears still are overblown as delinquency rates on CRE-related loans at very low levels; sales remain sluggish, but continued rate cuts and AI-demand may be a tailwind for CRE in 2025.

Delinquency Rate for Commercial Real Estate



Source: Federal Reserve, Macrobond, UBS as of 24 October 2024

Modest industrial real estate recovery a bright spot in CRE



Source: Bloomberg, Macrobond, UBS as of 24 October 2024

Section 4

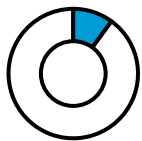
Policy, geopolitics, politics

US election: An unusual, historic, and close race reaches a conclusion

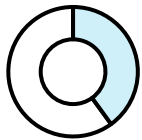
Neck and neck race in the days leading to the election with CIO's election odds now evenly split between a Harris or Trump outcome.

Four plausible scenarios, but two are most likely

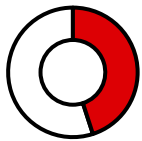
UBS CIO US election scenario probabilities



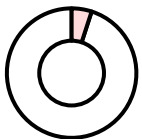
Blue sweep (5%)



Harris with split Congress (45%)



Red sweep (35%)

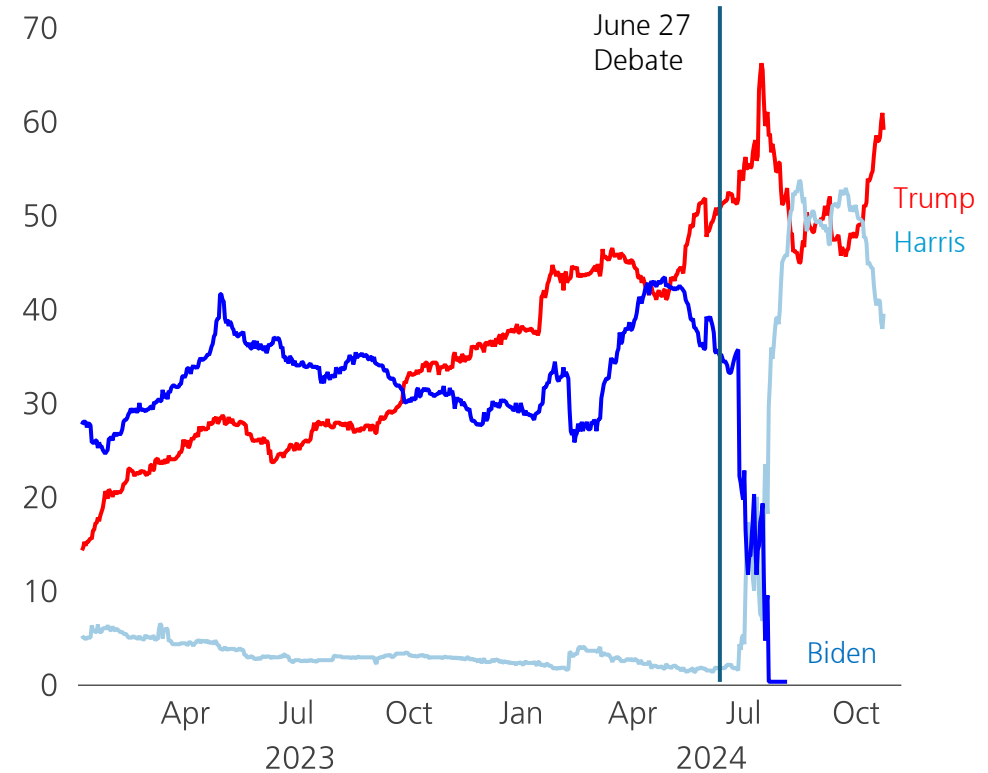


Trump with split Congress (15%)

Source: UBS, as of 23 October 2024

Probability of a Trump Presidency rise ahead of election

%

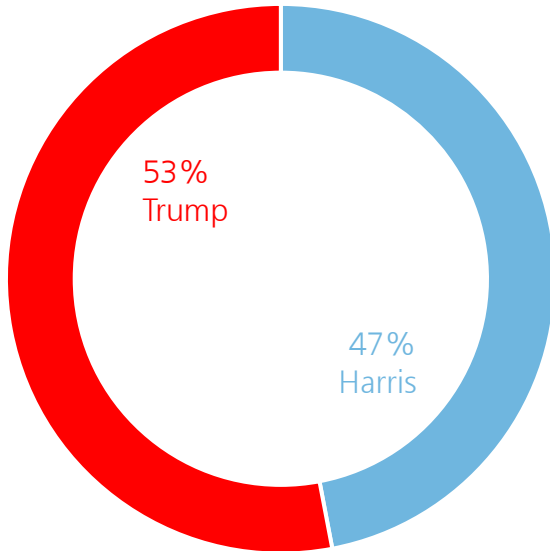


Source: PredictIt, UBS, as of 22 October 2024

US election: UBS business-owner clients survey results

Business owners say the economy is the most important issue, but now are much more optimistic compared to four years ago.

Trump holds an edge with business owners
% respondents



Source: UBS, as of 17 September 2024

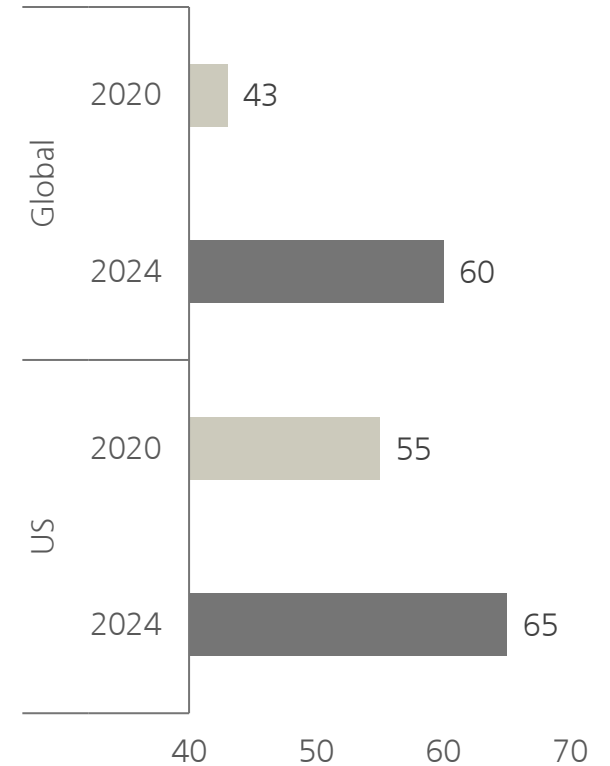
Most important issue: the economy
% respondents



83% of clients say the **economy** is the most important issue

Source: UBS, as of 17 September 2024

Client economic outlook has brightened
% "Highly Optimistic" over next 12 months



Source: UBS, as of 17 September 2024

US election: Markets influenced more by macro, not politics

Risk assets more swayed by economic and financial factors rather than political; the conclusion of an election can be seen as a 'risk clearing' event supporting 2H equity performance during election years.

Equity returns are similar regardless of winning party

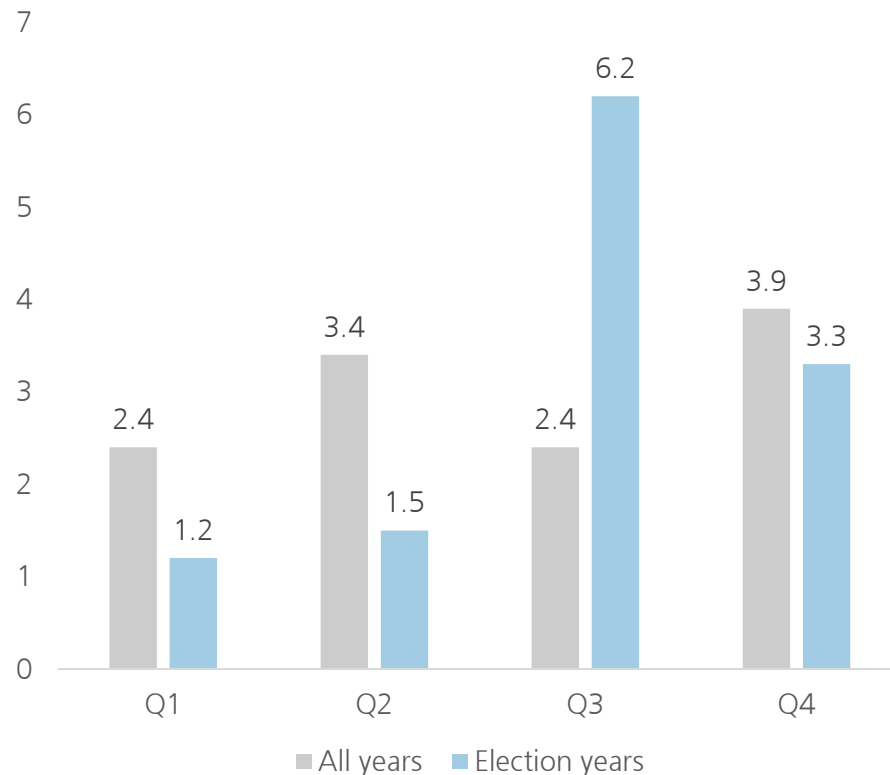
S&P 500 performance, %

Presidential election years	Performance with Republican elected	Performance with Democrat elected
1928–2020	15.3%	12.3%
1948–2020	12.4%	13.9%
1960–2020	12.4%	15.1%

Source: Bloomberg, UBS, as of 9 October 2024

Equities tend to outperform in H2 during election years

Average quarterly S&P 500 performance, %



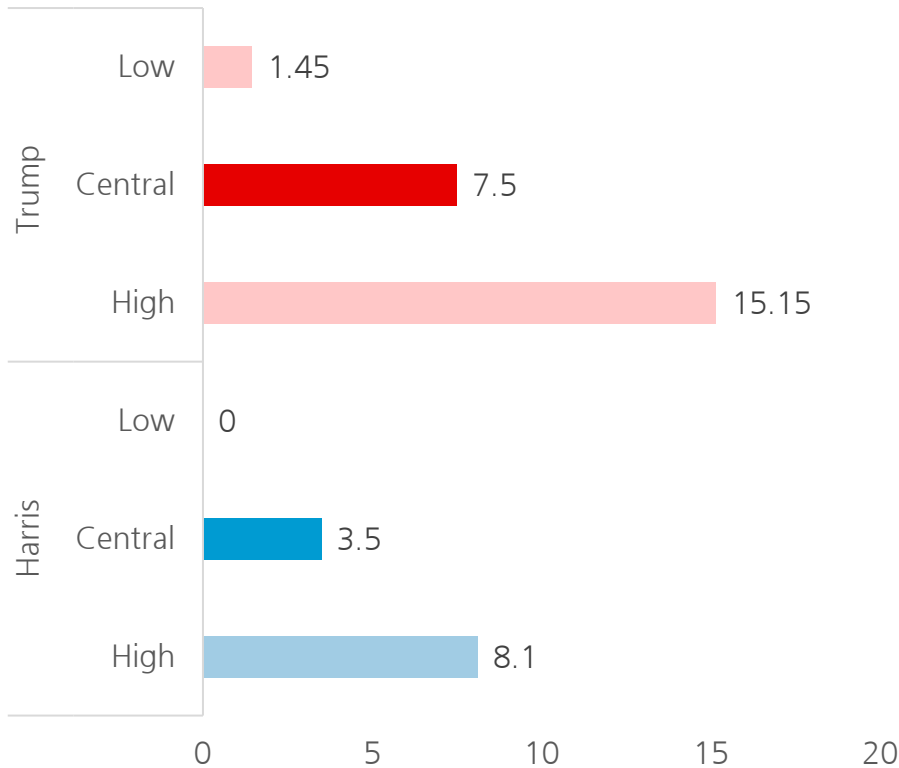
Note: Stock market data from S&P 500 starting from 1/1970
Source: Bloomberg, UBS, as of 9 October 2024

US election: Both candidates offer deficit-widening economic plans

The deficit is 6% of GDP in 2023 despite near record-low unemployment, implying public finances are structurally imbalanced, and the CBO forecasts it to remain above 6% for the foreseeable future.

Both candidates' plans, if passed, likely to widen the deficit

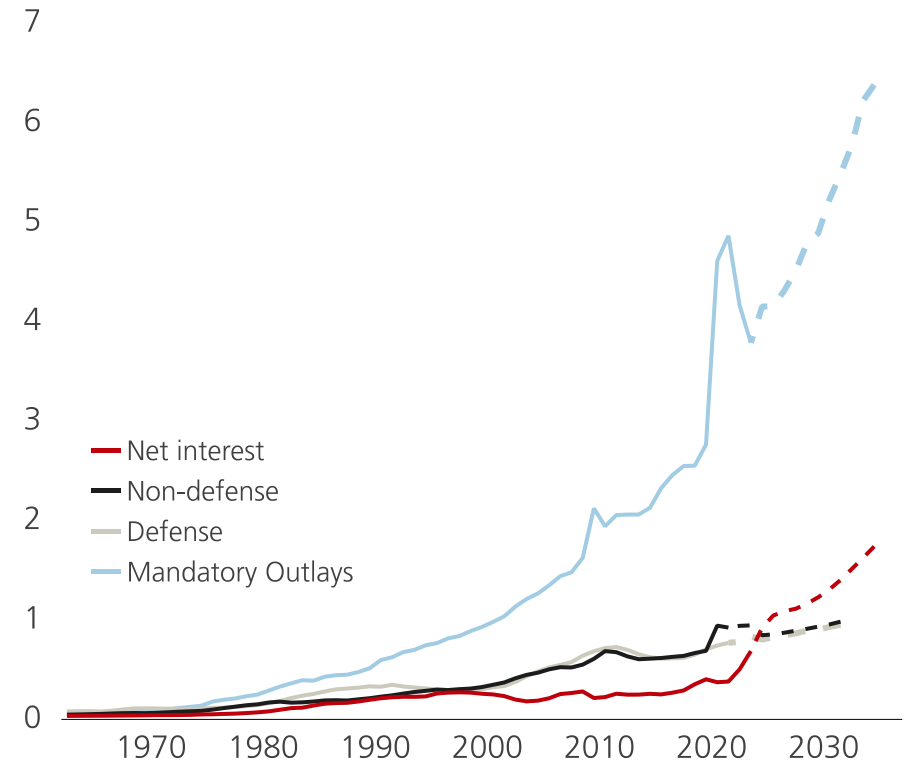
CBO projections for additional deficit spending 2026-2035, \$T



Source: CFRB, UBS, as of 8 October 2024

Hard-to-reform mandatory spending pushing deficits higher

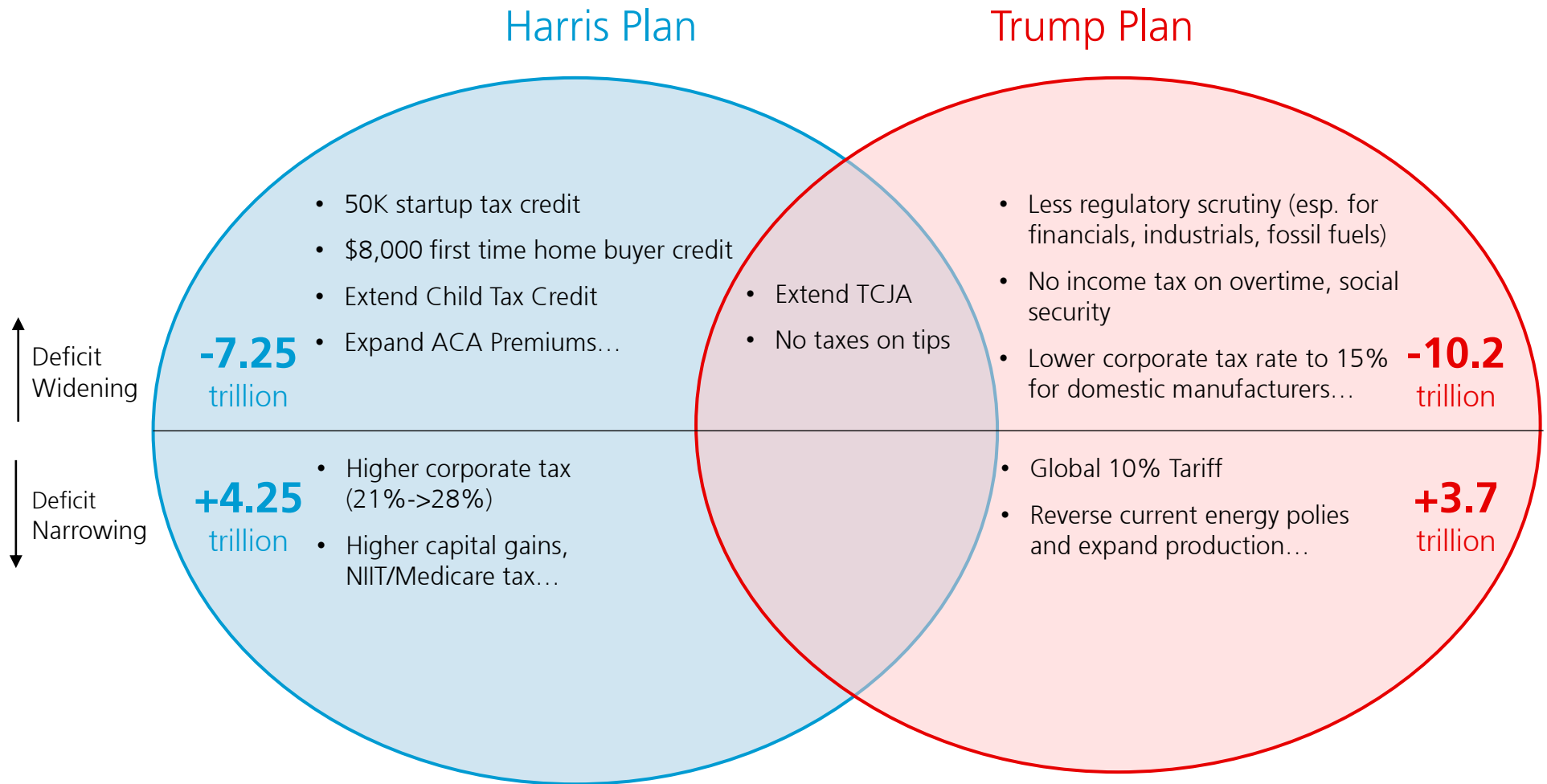
CBO projections, \$T



Source: CBO, UBS, as of 8 October 2024

US election: Both candidates are proposing deficit-widening policies

Business owners can cheer on various parts of each candidate's plans but also keep in mind the high degree of uncertainty when it comes to passing legislation.



Note: Estimates from CRFB's base case analysis, net impact from prior page may look different due to net interest effect
Source: UBS, CRFB as of 9 October 2024

US election: 2016-style 'Trump Trade' has not materialized

The likelihood of a 2016-style election shock is unlikely since Trump and Harris are relatively known quantities to investors; "Trump trade" still a micro story.

Higher odds of Trump win help certain names/sectors

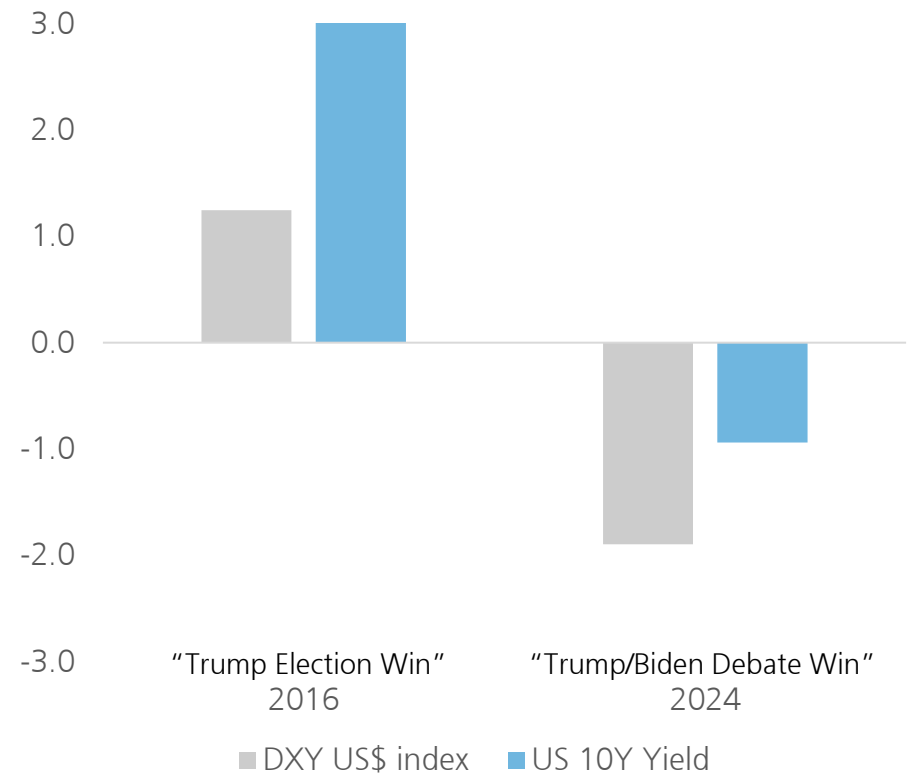
Rebased 12/31/2019=100



Note: UBS Trump Financials is a basket of stocks levered to a policy platform that benefits from deregulation, increase in capital markets activity, and Basel 3 softening.
Source: Bloomberg, Macrobond, UBS as of 15 October 2024

Harris and Trump both known to investors, limiting "surprise"

1M Z-Score



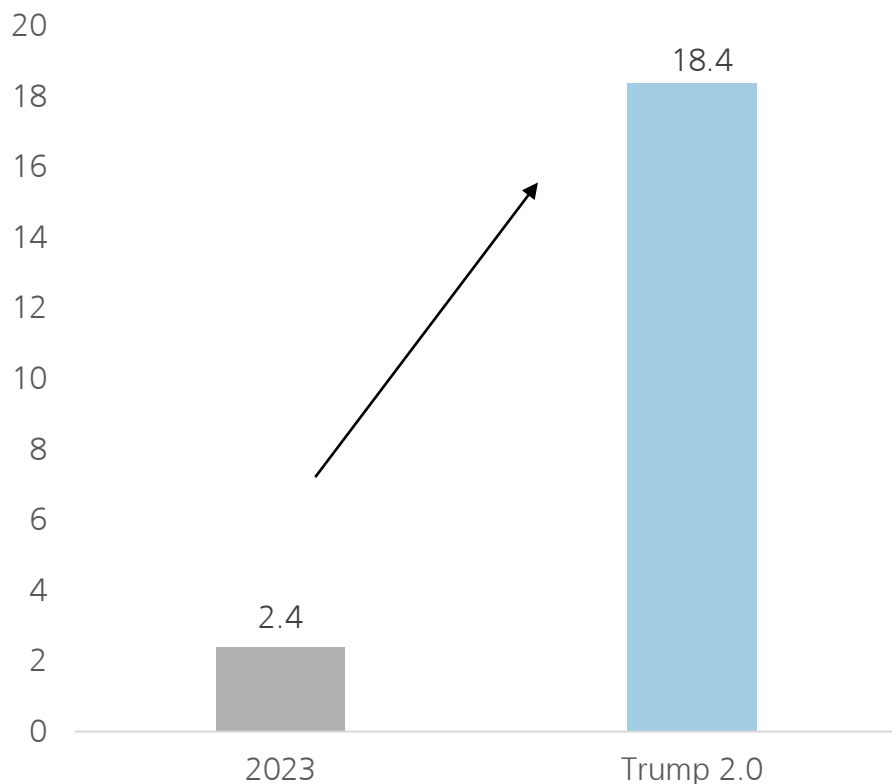
Note: 2016 measured from 10/28/2016 to 11/18/2016 while 2024 measured from 6/28/2024 to 7/19/2024
Source: Bloomberg, UBS, as of 15 October 2024

US election: Adverse effects from higher tariffs not spread equally

The 2018 Trump tariffs have already upended decades of globalization; more aggressive tariffs in a second Trump term will be a negative growth and inflation shock, affecting poorest Americans the most.

A Trump 2.0 term ay bring a sharp increase of tariff rate

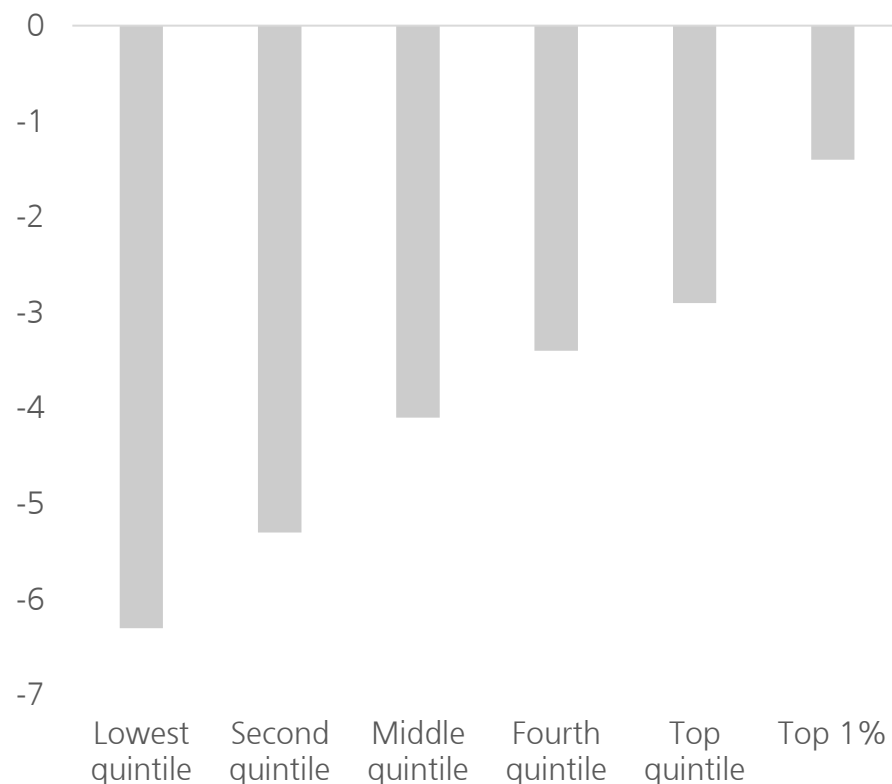
Average Tariff Paid, %



Note: Trump 2.0 Tariff rate assumes a 60% tariff on China, 10% For the rest of the world.
Source: U.S. International Trade Commission, UBS, as of 24 October 2024

Trump 2.0 tariff proposals affect poorest Americans the most

% change in after tax income



Note: The tariff estimates examine a 20 percent tariff for most goods, except for a 60 percent tariff on imports from China. The net effect bars show the combined net effect of the loss from proposed tariffs and the gain from TCJA extensions. Tariff calculations are done using data from the Consumer Expenditure Survey on consumption patterns, following the method detailed in Clausing and Lovely (2024). TCJA extension estimates are from the Tax Policy Center; these do not include many business provision extensions that have been proposed. That inclusion would exacerbate the regressivity of TCJA extensions.

Source: Kimberly A. Clausing and Mary E. Lovely's Policy Brief, Why Trump's tariff proposals would harm working Americans., PIIE, UBS, as of 24 October 2024

Section 5

Markets and corporate transactions

Markets Activity Key Points: “Goldilocks” for markets and activity?



Markets rallying as investors embrace a soft landing, if not Goldilocks economic conditions. Year to date, markets have beat expectations despite higher geopolitical uncertainty thanks to a benign macroeconomic backdrop, more certainty around rate cuts, and continued earnings growth. Valuations are high in absolute terms. but reasonable considering underlying fundamentals.



Vol has been rising into the election, especially for rates, but is likely to subside afterwards. History suggests volatility picks up as election day nears and falls thereafter, especially if matched with stronger signals of Fed rate cuts. The surprising economic strength and a “red sweep” election outcome has lifted rate volatility because of the uncertainty over the number of rate cuts and inflationary policies.



M&A and PE still modest but should benefit from rate cut and election clarity. Dealmaking remains modest with activity decelerating to pre-pandemic levels. Lack of exit opportunities is exacerbating the PE market imbalance: dealmaking is roughly around 2018 levels, but “dry powder” is 1.5x as large, and average holding periods have extended to more than six years compared to a three- to five-year longer-term average.



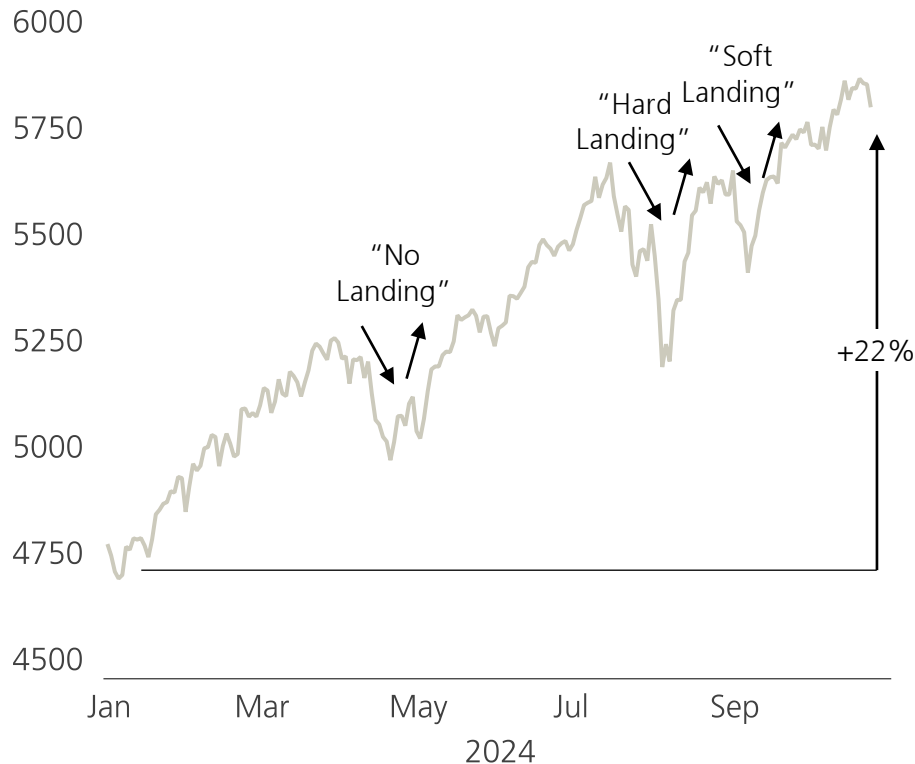
IPO activity and VC funding recovering from very low base. Things are still stagnant in the IPO flywheel. VC fundraising is at low levels, but valuations are holding for both early and late-stage start-ups. Companies have been able to extend runways of prior funding and using new financing structures to extend their lifespan. IPO and VC markets are improving but have yet to fully open and are likely to improve later than M&A / PE.

Equities: A strong equity rally masks sizable internal rotations

The S&P 500 is pricing a good economic outcome with significant rate cuts; beneath the surface, there's been significant rotations, such as between cyclicals and defensives, with the former outperforming again.

Equities steadily grind higher despite shifting market narratives

S&P 500 index



Source: Bloomberg, UBS, as of 24 October 2024

Cyclicals recently outperformed on better data and Fed cut hopes

MSCI Cyclicals – Defensive Return spread



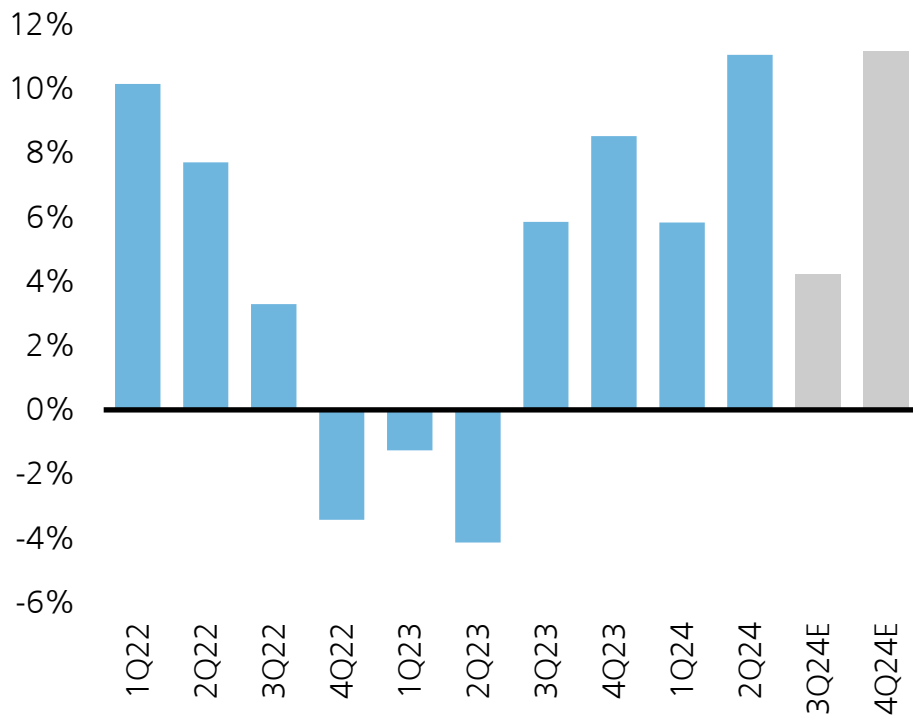
Source: Bloomberg, UBS, as of 22 October 2024

Equities: Earnings growth should be supportive for US equities

Earnings continued its strong trend through 2024, helping equities reach new highs. UBS CIO forecasts 11% and 8% EPS growth in 2024 and 2025, while bottoms-up consensus for 2025 is \$280.

Earnings growth should be healthy the rest of this year...

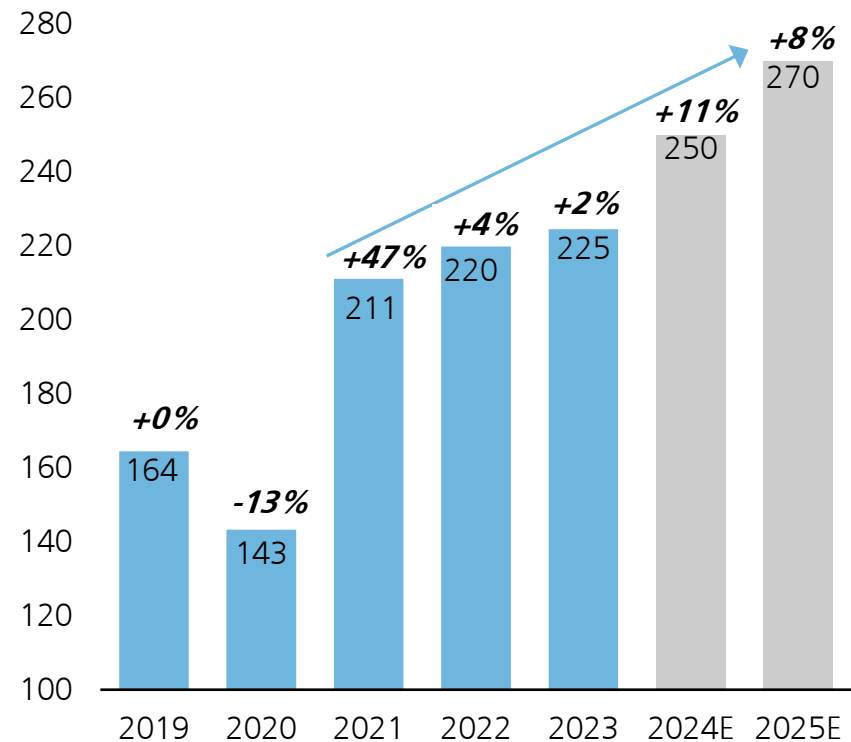
S&P 500 quarterly EPS Y/Y growth, actual and consensus estimates



Source: Bloomberg, FactSet, UBS, as of 24 September 2024

...and in 2025 as S&P 500 EPS likely make new highs

Actual and UBS CIO S&P 500 earnings per share estimates



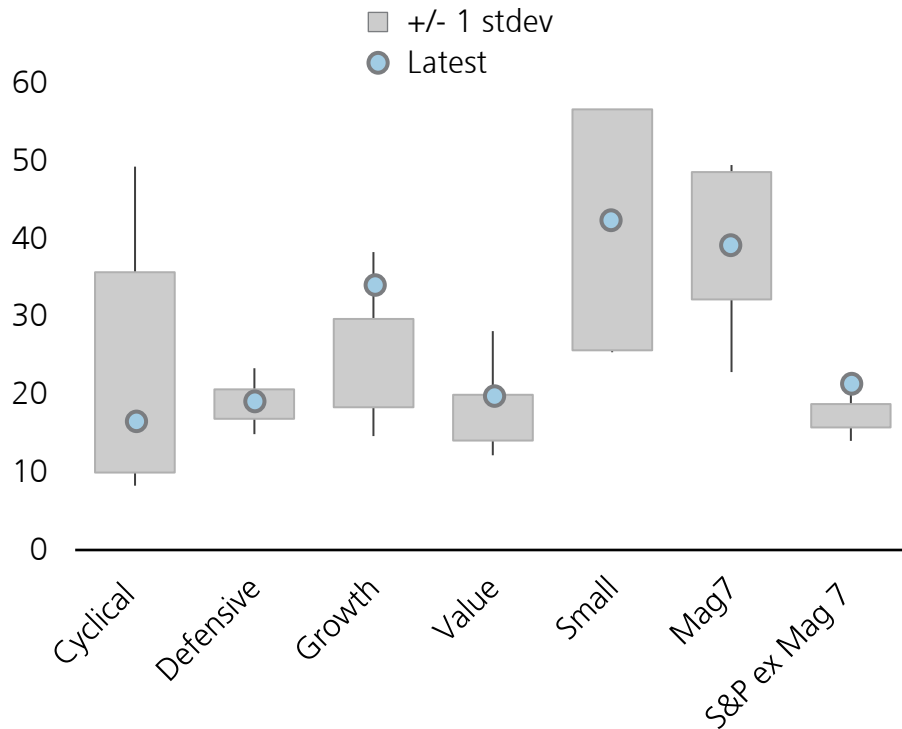
Source: FactSet, UBS, as of 24 September 2024

Valuations: Stocks continue to perform despite high valuations

P/E ratios in equity markets across styles and sectors show valuations in the upper range of historical averages.

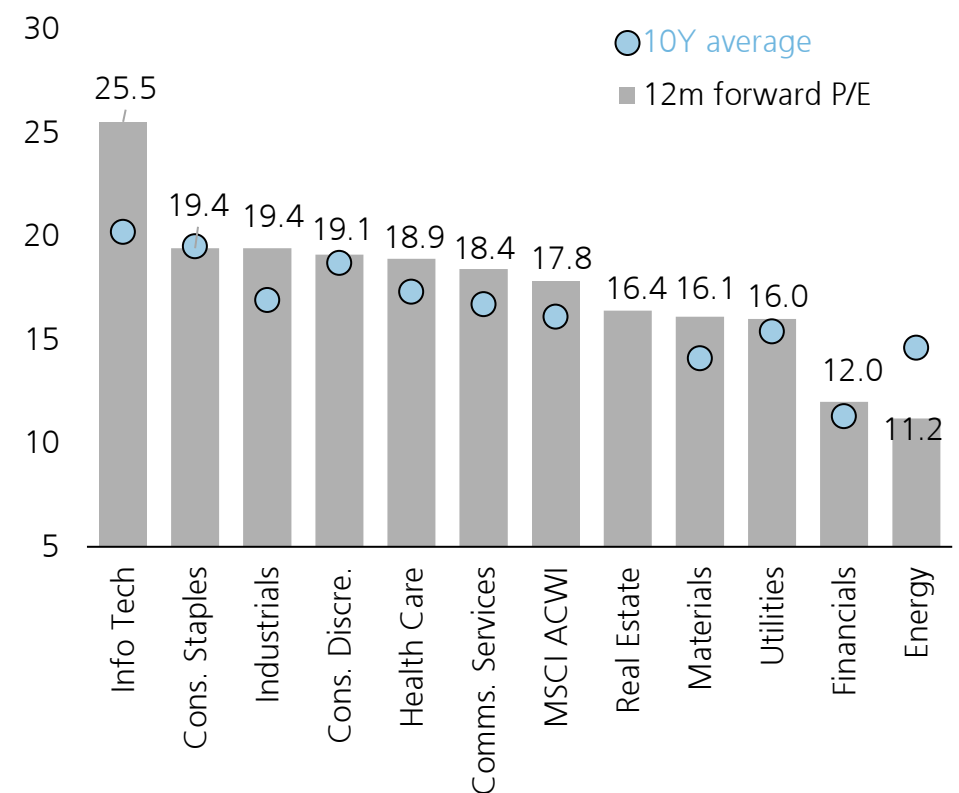
Valuations by style

PE Ratio



Valuations by sector

MSCI USA 12M Forward PE Ratio



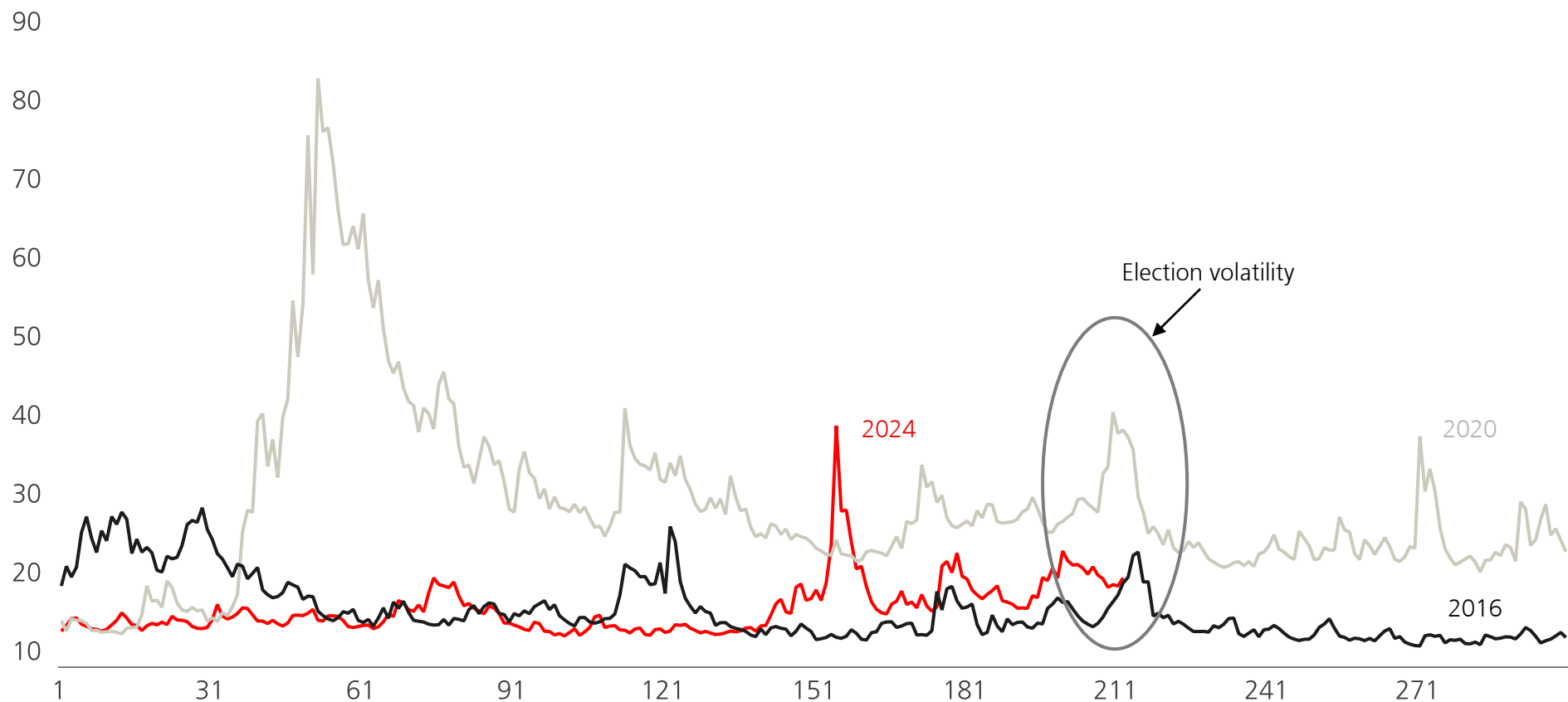
Note: Recessionary periods excluded; Data range from 2012
Source: Bloomberg, UBS, as of 22 October 2024

Source: Bloomberg, UBS, as of 22 October 2024

Volatility: History suggests lower equity volatility after elections

Volatility was low in the first half of 2024, supporting the new highs made by equity markets; history suggests elections are a “risk clearing” event that may push volatility lower toward year-end.

VIX Index



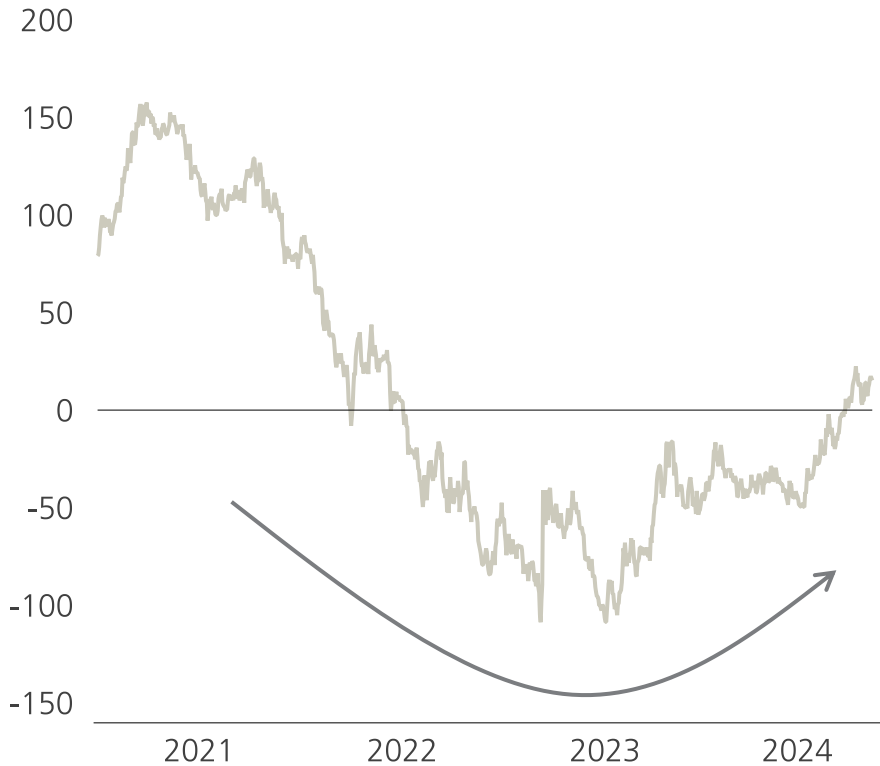
Source: FactSet, UBS, as of 22 October 2024

Rates: Fed rate cuts and better macro have steepened the curve...

The yield curve inversion has ended because 2Y yields fell on lower rate cut odds, while 10Y yields have increased in response to recent improvements in growth outlook and rising inflation risk.

The yield curve is positively sloped again

2s10s Treasury curve, in bp



Source: Bloomberg, Macrobond, UBS as of 23 October 2024

2Y yields fell sharply in Q3 while 10Y yields stage sharp recovery

%



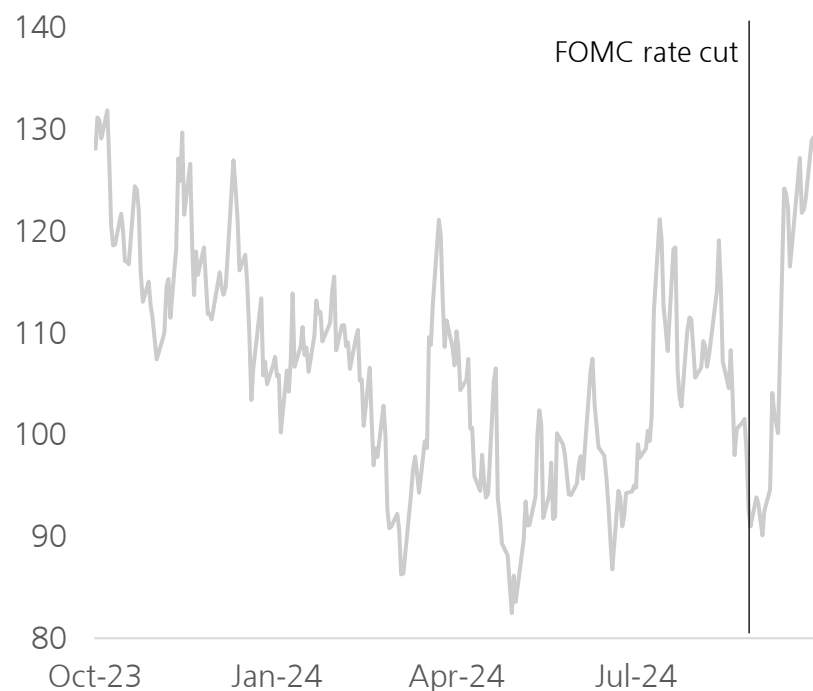
Source: Bloomberg, Macrobond, UBS as of 23 October 2024

Rates: ...and they've driven higher rate volatility and policy uncertainty

Better-than-expected growth and potential policy changes after the election have led to a higher 10Y Treasury yield, higher rate volatility, and a higher terminal fed funds rate.

Interest rate volatility has surged since the Sep. rate cut

MOVE Index



Source: Bloomberg, UBS as of 23 October 2024

Market pricing for the more rate cuts continues to oscillate

December 2025 fed funds rate futures, in %



Source: Bloomberg, UBS as of 23 October 2024

M&A: Volumes down despite improving conditions

Despite easing financial conditions and bullish financial markets, M&A volumes haven't convincingly picked up, reflecting lingering hesitation amongst corporate executives and sponsors.

M&A Heatmap	Dec-18	#####	Jun-19	Sep-19	Dec-19	Mar-20	Jun-20	Sep-20	Dec-20	Mar-21	Jun-21	Sep-21	Dec-21	Mar-22	Jun-22	Sep-22	Dec-22	Mar-23	Jun-23	Sep-23	Dec-23	Mar-24	Jun-24	Sep-24	
M&A Volume	368	457	627	349	381	265	72	375	587	510	624	593	529	456	499	223	288	219	301	301	363	254	172	97	
FCI	-1.0	0.3	0.3	-0.1	0.3	-5.3	-0.9	-0.4	0.3	0.9	1.2	0.7	0.9	-0.2	-1.2	-1.1	-0.1	-0.3	0.3	0.2	0.9	1.1	1.0	0.7	
Vistage CEO Confidence	6.4	6.7	6.5	6.2	6.6	7.0	6.5	6.9	6.9	7.1	6.9	6.7	6.5	6.7	5.6	5.9	5.9	6.1	6.6	6.1	6.3	7.0	6.7	6.5	
NFIB Small Business Confidence	104.4	101.8	103.3	101.8	102.7	96.4	100.6	104.0	95.9	98.2	102.5	99.1	98.9	93.2	89.5	92.1	89.8	90.1	91.0	90.8	91.9	88.5	91.5	91.5	
Markets																									
SPX	-6%	7%	8%	2%	29%	-9%	5%	13%	16%	54%	39%	28%	27%	14%	-12%	-17%	-19%	-9%	18%	20%	24%	28%	23%	34%	
NASDAQ	-1%	12%	9%	2%	38%	6%	32%	47%	48%	68%	43%	29%	27%	13%	-21%	-25%	-33%	-11%	32%	34%	54%	38%	30%	36%	
Midcap	-12%	1%	0%	-4%	24%	-24%	-8%	-4%	12%	81%	51%	42%	23%	3%	-16%	-17%	-14%	-7%	16%	14%	14%	21%	12%	25%	
Smallcap	-12%	1%	-5%	-10%	24%	-25%	-8%	-1%	18%	93%	60%	46%	14%	-7%	-26%	-24%	-22%	-13%	11%	7%	15%	18%	8%	25%	
Rates																									
10Y rate	2.68	2.41	2.01	1.66	1.92	0.67	0.66	0.68	0.91	1.74	1.47	1.49	1.51	2.34	3.01	3.83	3.87	3.47	3.84	4.57	3.88	4.20	4.40	3.78	
Federal Funds Rate	2.50	2.50	2.50	2.00	1.75	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.50	1.75	3.25	4.50	5.00	5.25	5.50	5.50	5.50	5.50	5.00	
2s10s Spread	19	14	25	4	34	42	50	55	79	158	122	121	77	0	5	-45	-56	-56	-106	-48	-37	-42	-36	14	
Financing																									
IG Spread	1.5	1.2	1.2	1.2	0.9	2.7	1.5	1.4	1.0	0.9	0.8	0.8	0.9	1.2	1.6	1.6	1.3	1.4	1.2	1.2	1.0	0.9	0.9	0.9	
HY Spread	5.3	3.9	3.8	3.7	3.4	8.8	6.3	5.2	3.6	3.1	2.7	2.9	2.8	3.3	5.7	5.5	4.7	4.6	3.9	3.9	3.2	3.0	3.1	3.0	
SLOS Large	-16	3	-4	-3	5	0	42	71	38	6	-15	-32	-18	-15	-2	24	39	45	46	51	34	15	16	8	
SLOS Mid/Small	-3	4	0	-6	6	-1	40	70	31	11	-13	-26	-11	-9	0	22	32	44	47	49	30	19	20	8	
IG Issuance	-15%	-11%	-17%	-7%	-2%	14%	64%	60%	62%	37%	-18%	-23%	-20%	-17%	-4%	-4%	-15%	-22%	-12%	-8%	1%	17%	14%	23%	
HY Issuance	-39%	-32%	-20%	-3%	61%	60%	75%	81%	52%	81%	52%	27%	15%	-26%	-50%	-66%	-77%	-73%	-49%	-11%	64%	124%	94%	94%	
Volatility																									
MOVE	66.6	58.5	70.4	77.2	58.3	83.9	54.1	39.2	49.0	71.3	57.3	61.1	77.1	106.9	135.5	141.9	121.6	135.9	110.6	113.6	114.6	86.4	98.6	94.6	
VIX	25.4	13.7	15.1	16.2	13.8	53.5	30.4	26.4	22.8	19.4	15.8	23.1	17.2	20.6	28.7	31.6	21.7	18.7	13.6	17.5	12.5	13.0	12.4	16.7	

Note: SLOS Large and SLOS Mid/Small measure the change in tightening standards
Source: Bloomberg, UBS, as of 24 October 2024

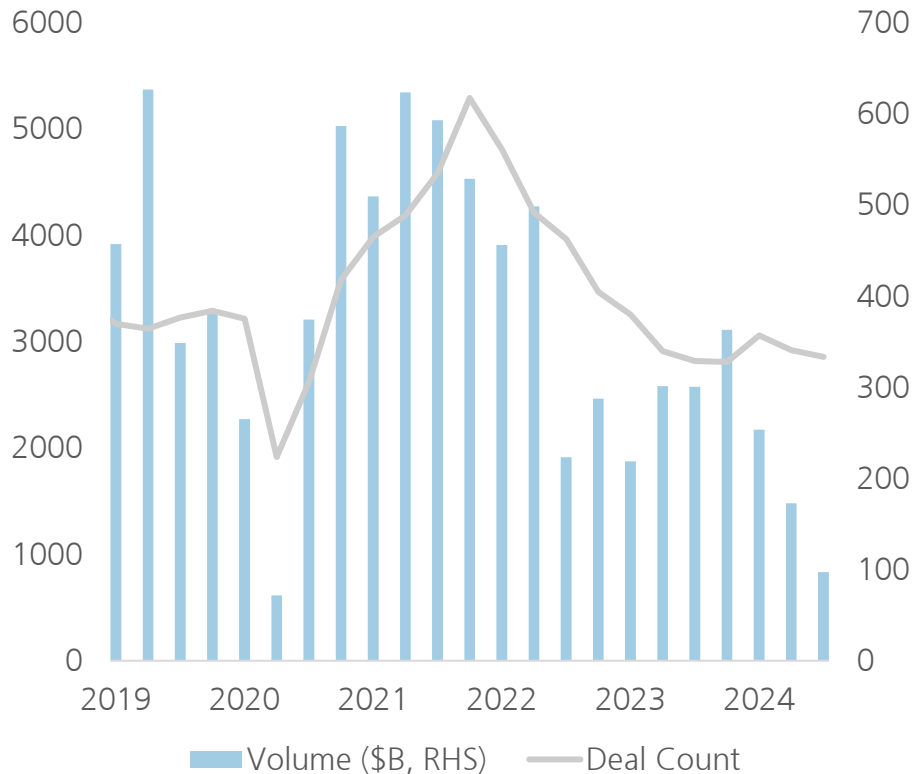


M&A: Deal activity is recovering, but falling short of expectations

Overall activity remains modest in the US with some pockets of bright spots including deals in energy, financial services, and tech. Rate cuts should be a tailwind to support activity, rate volatility a headwind.

US dealmaking still sluggish, no strong rebound yet

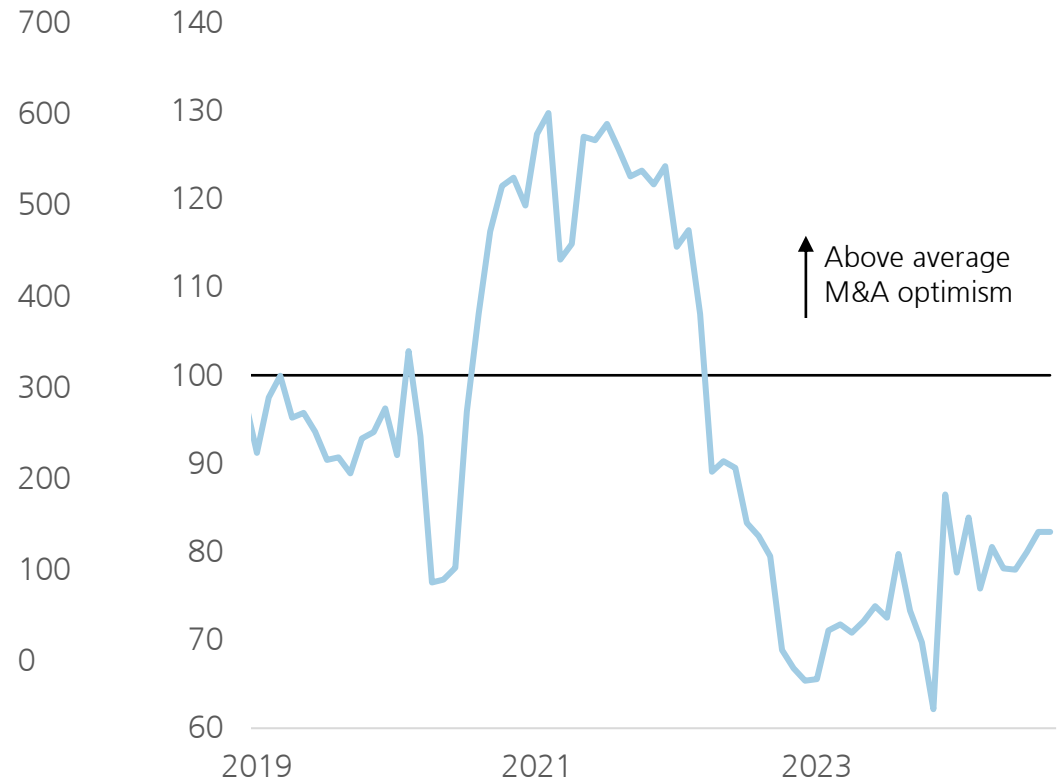
Count and value (\$B)



Source: Bloomberg, UBS, as of 24 October 2024

BCG M&A Sentiment index reveals stable but low sentiment

Index



Note: A sentiment value over 100 indicates that decision makers expect M&A activity during the next approximately six months to surpass the most recent ten-year average. A value under 100 implies they expect below-average activity.

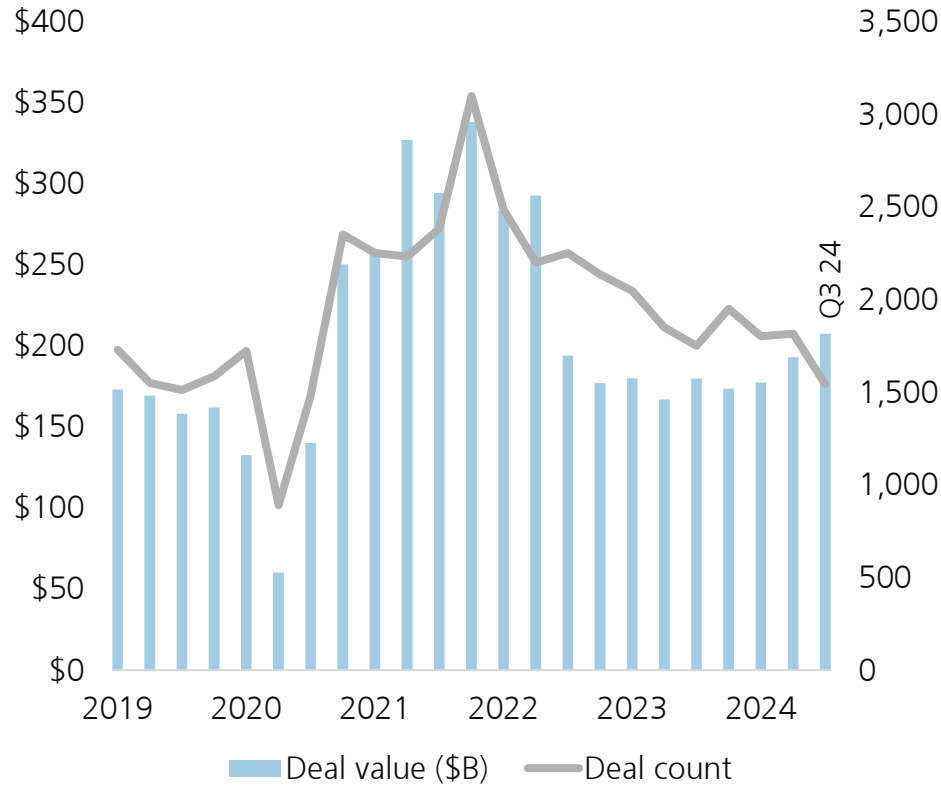
Source: BCG, UBS, as of 24 October 2024

Private Equity: A modest uptick in activity

Volumes have increased while exit/investment ratio has fallen to a record low, underscoring the difficulty in realizing investments and returning capital to LPS.

US dealmaking still sluggish, no strong rebound yet

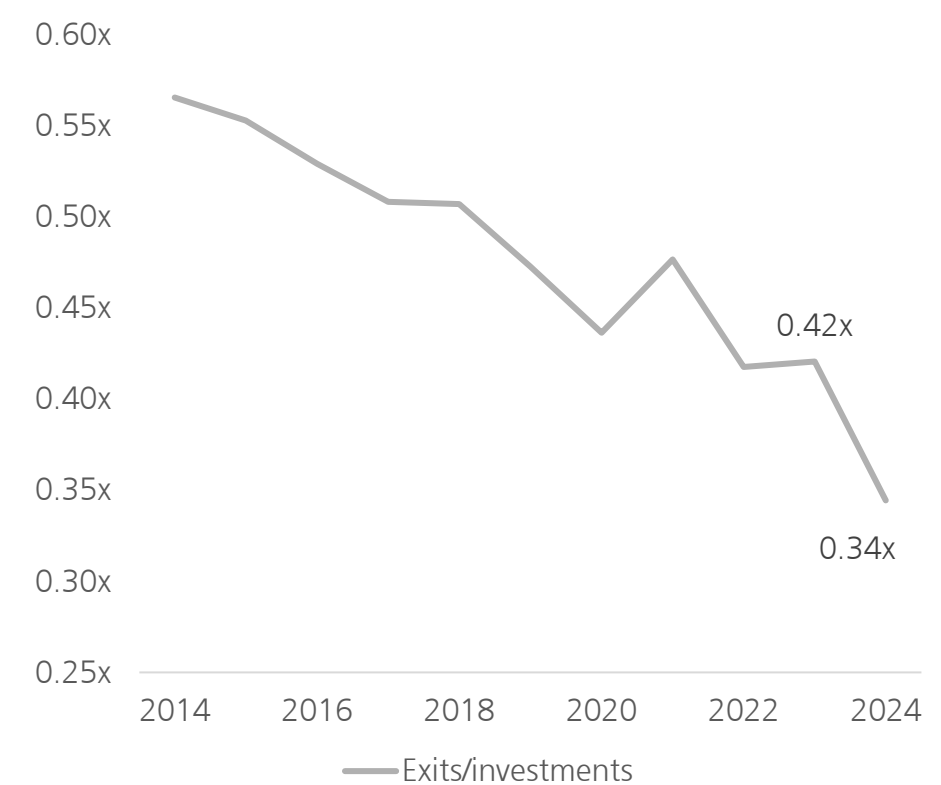
Number and count
\$400



Source: Pitchbook, UBS, as of 24 October 2024

Challenging exit environment lingers, increasing holding times

Exit/Investment Ratio



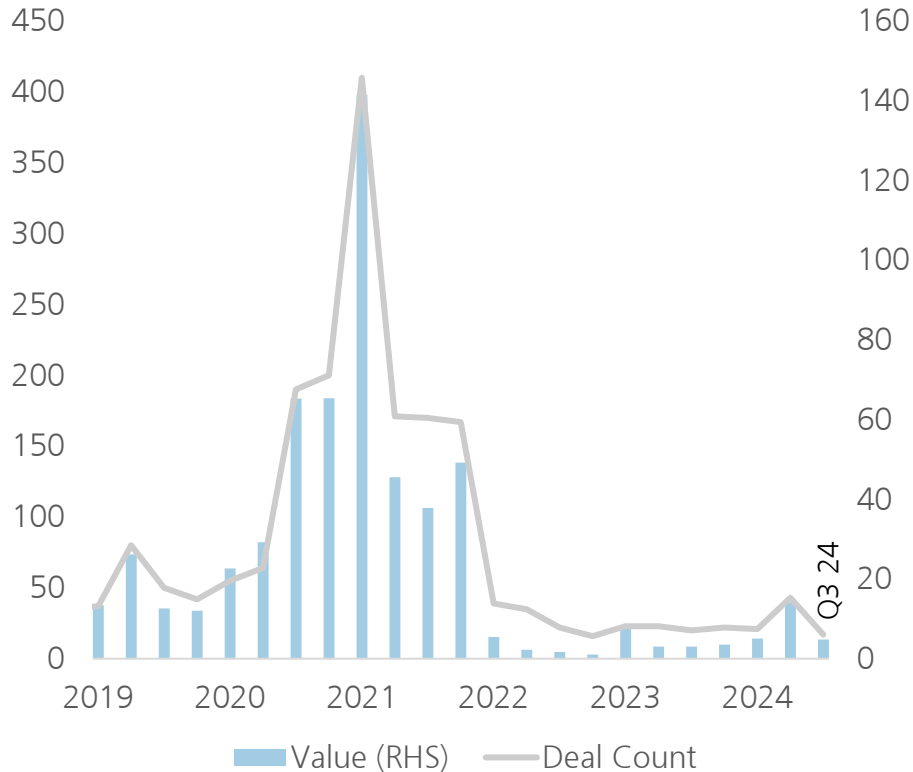
Source: Pitchbook, UBS, as of 24 October 2024

IPOs: An improvement from last year, but still sluggish

Alternative ways to source capital and sluggish recent IPO performance has deterred more companies from going public so far.

IPO market recovering back to pre-pandemic ranges

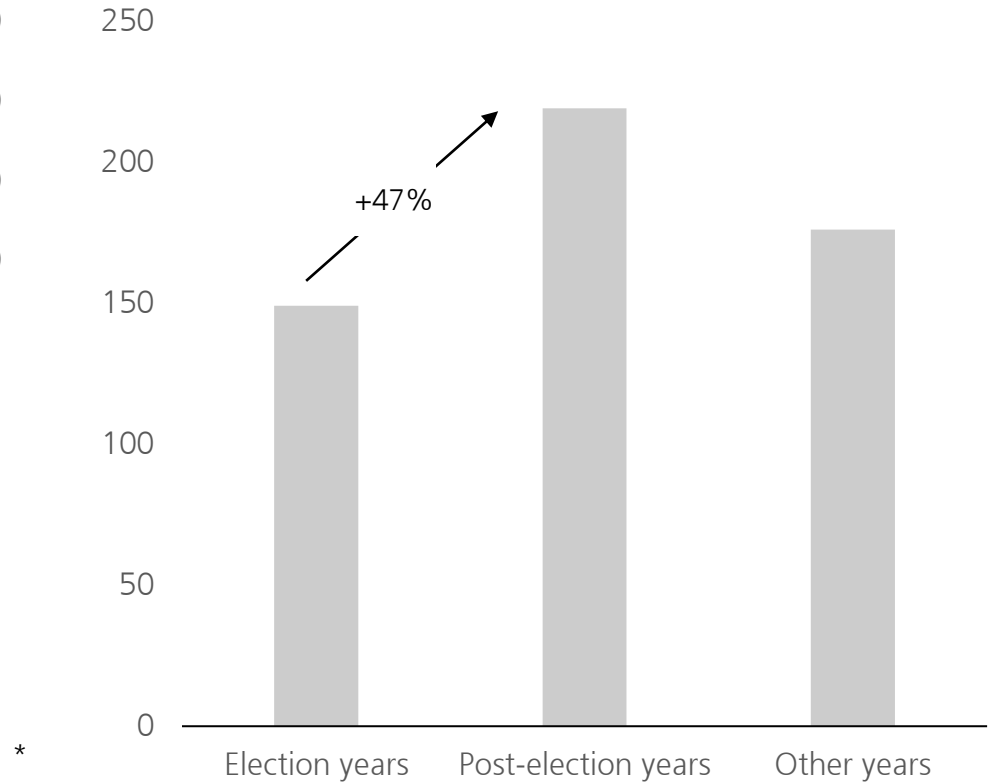
Deal value (\$B) and count



Source: Bloomberg, UBS, as of 24 October 2024

IPO activity muted during election years before a rebound

Average count



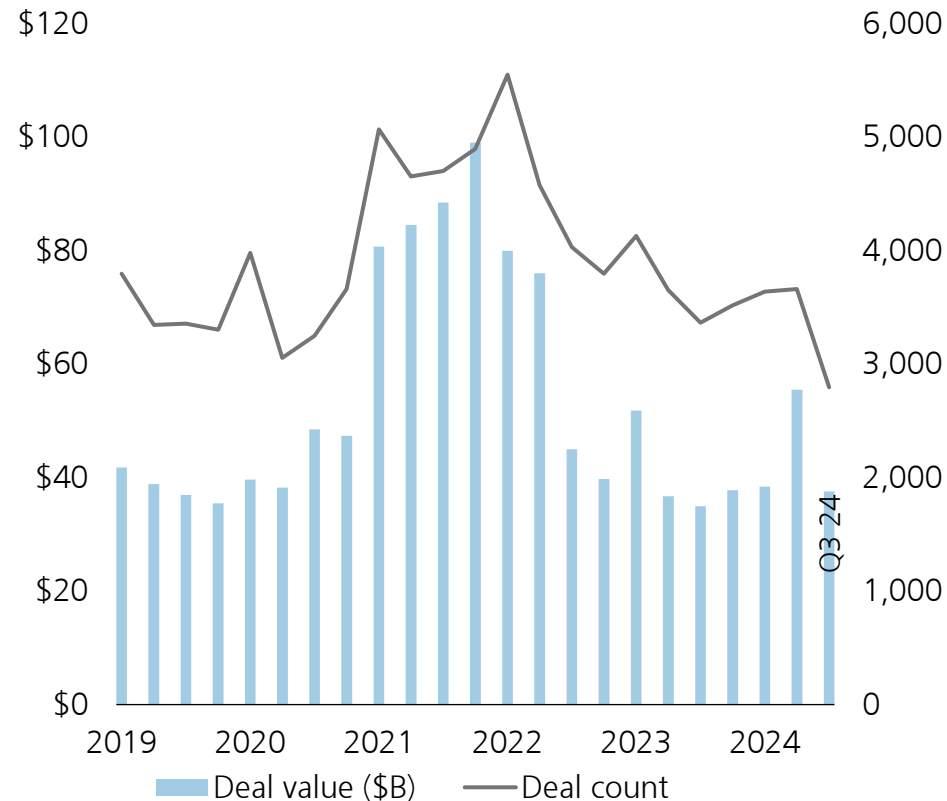
Source: EY, UBS, as of 23 October 2024

Venture Capital: Signs of stabilization, not reacceleration

Venture capital market remains sluggish, buoyed by a few large deals in the AI sector; fundraising remains low amid a lack of exits

Venture capital deal activity remains muted

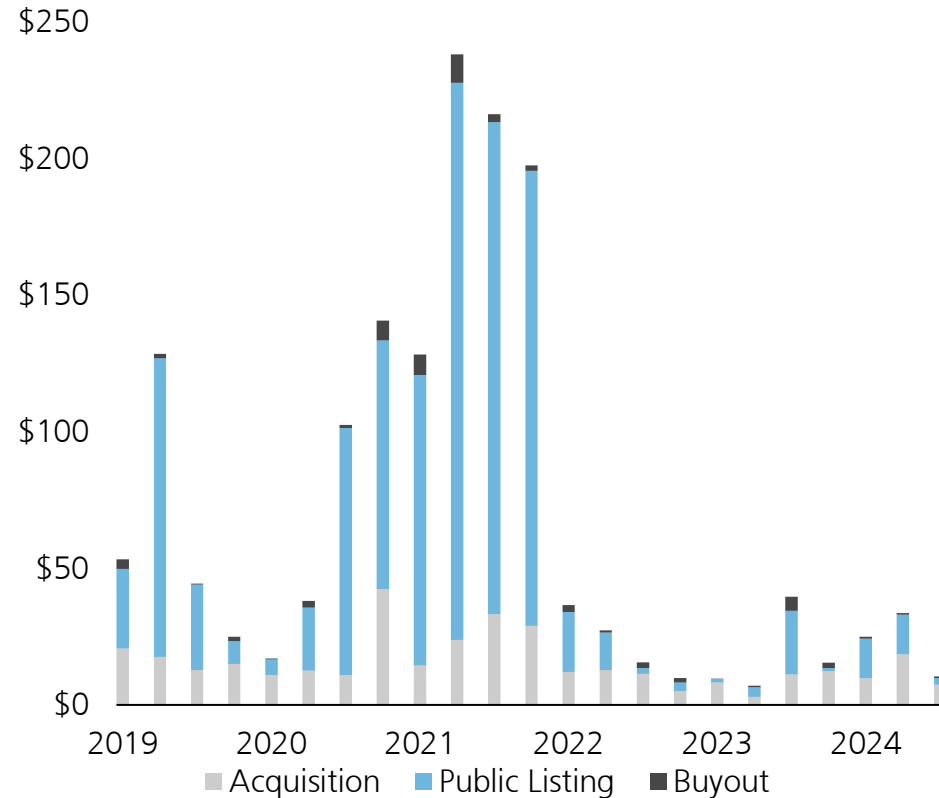
Deal value (\$B) and count



Source: Pitchbook, UBS, as of 24 October 2024

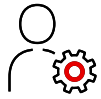
Venture exits by type

\$B



Source: Pitchbook, UBS, as of 24 October 2024

Sector Views: Tech and Industrials in CIO Most Attractive



Tech: Continued outperformance driven by strong earnings and AI optimism. Even as AI optimism has eased on the margins, continued earnings strength has powered the tech sector outperformance. ChatGPT debut in 2022, broader AI adoption has encouraged the tech sector rally while adding \$10 trillion to US equity market capitalization.



Industrials: A favorable medium-term outlook is tempered by near-term uncertainty. Electoral and monetary policy uncertainty are weighing on the near-term outlook for Industrials especially while valuations are expensive relative to history.

Sector Snapshot: Tech

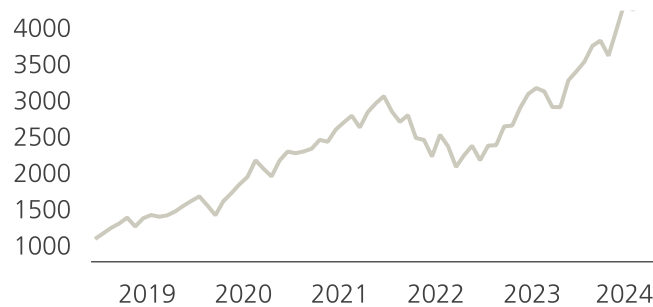
Summary

- Investors will likely continue to gravitate to high-quality companies with good secular growth in the current economic environment.
- AI is attractive in the near-term and will be a key driver of equity market returns for years to come particularly benefitting AI-linked semiconductors and US mega caps.
- Valuations can be a concern since Tech is one of the most expensive sectors globally and expensive relative to its history, but justified with strong earnings.

Market Performance

S&P Subsector performance

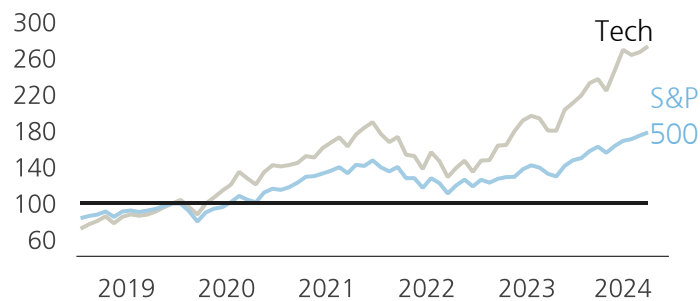
in tsds.



Source: Bloomberg, UBS, as of 24 October 2024

Relative Market Performance

Rebased 12/31/2019 = 100

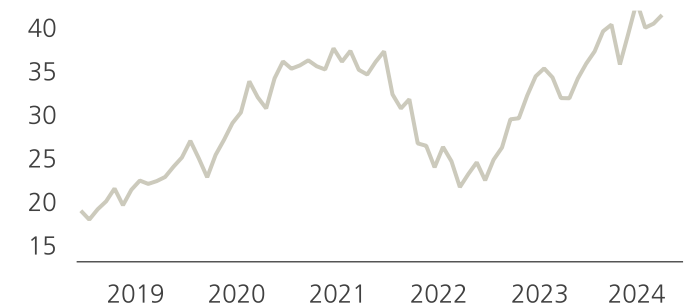


Source: Bloomberg, UBS, as of 24 October 2024

Valuations

P/E Ratio

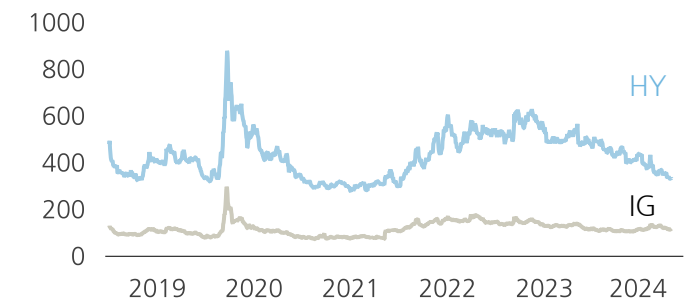
%



Source: Bloomberg, UBS, as of 24 October 2024

Spreads

in bp



Source: Bloomberg, UBS, as of 24 October 2024

Sector Snapshot: Industrials

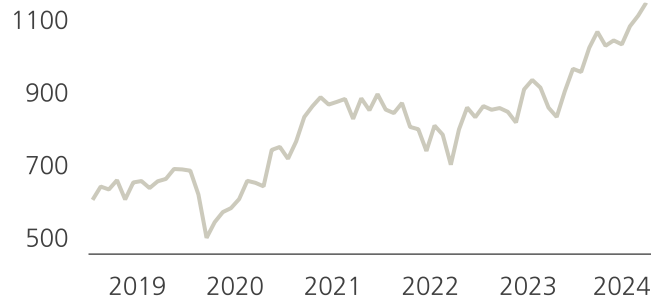
Summary

- A favorable medium-term outlook is tempered by near-term uncertainty.
- ISM manufacturing continues its historic contractionary streak but is expected to gradually improve.
- Despite lagging broader index performance, tailwinds such as implementation of the BIL, IRA, and CHIPS Act, bottoming out in cyclical areas like transportation, and multi-year growth in infrastructure are all supportive for the sector.

Market Performance

S&P Subsector performance

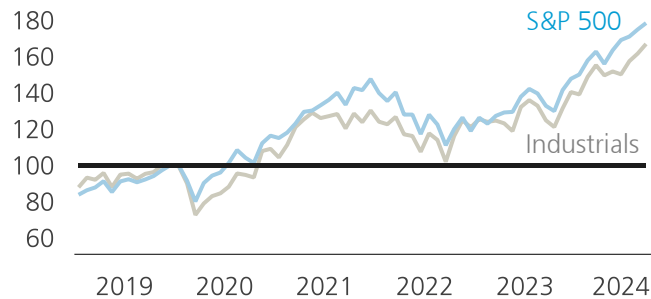
in tsds.



Source: Bloomberg, UBS, as of 24 October 2024

Relative Market Performance

Rebased 12/31/2019 = 100



Source: Bloomberg, UBS, as of 24 October 2024

Valuations

P/E Ratio

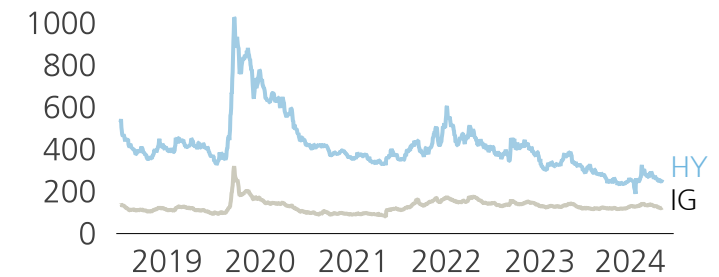
%



Source: Bloomberg, UBS, as of 24 October 2024

Spreads

%



Source: Bloomberg, UBS, as of 24 October 2024

Section 7

Appendix

Risk information

Non-Traditional Assets

Non-traditional asset classes are alternative investments that include hedge funds, private equity, real estate, and managed futures (collectively, alternative investments). Interests of alternative investment funds are sold only to qualified investors, and only by means of offering documents that include information about the risks, performance and expenses of alternative investment funds, and which clients are urged to read carefully before subscribing and retain. An investment in an alternative investment fund is speculative and involves significant risks. Specifically, these investments (1) are not mutual funds and are not subject to the same regulatory requirements as mutual funds; (2) may have performance that is volatile, and investors may lose all or a substantial amount of their investment; (3) may engage in leverage and other speculative investment practices that may increase the risk of investment loss; (4) are long-term, illiquid investments, there is generally no secondary market for the interests of a fund, and none is expected to develop; (5) interests of alternative investment funds typically will be illiquid and subject to restrictions on transfer; (6) may not be required to provide periodic pricing or valuation information to investors; (7) generally involve complex tax strategies and there may be delays in distributing tax information to investors; (8) are subject to high fees, including management fees and other fees and expenses, all of which will reduce profits.

Interests in alternative investment funds are not deposits or obligations of, or guaranteed or endorsed by, any bank or other insured depository institution, and are not federally insured by the Federal Deposit Insurance Corporation, the Federal Reserve Board, or any other governmental agency. Prospective investors should understand these risks and have the financial ability and willingness to accept them for an extended period of time before making an investment in an alternative investment fund and should consider an alternative investment fund as a supplement to an overall investment program.

In addition to the risks that apply to alternative investments generally, the following are additional risks related to an investment in these strategies:

- Hedge Fund Risk: There are risks specifically associated with investing in hedge funds, which may include risks associated with investing in short sales, options, small-cap stocks, “junk bonds,” derivatives, distressed securities, non-U.S. securities and illiquid investments.
- Managed Futures: There are risks specifically associated with investing in managed futures programs. For example, not all managers focus on all strategies at all times, and managed futures strategies may have material directional elements.
- Real Estate: There are risks specifically associated with investing in real estate products and real estate investment trusts. They involve risks associated with debt, adverse changes in general economic or local market conditions, changes in governmental, tax, real estate and zoning laws or regulations, risks associated with capital calls and, for some real estate products, the risks associated with the ability to qualify for favorable treatment under the federal tax laws.
- Private Equity: There are risks specifically associated with investing in private equity. Capital calls can be made on short notice, and the failure to meet capital calls can result in significant adverse consequences including, but not limited to, a total loss of investment.
- Foreign Exchange/Currency Risk: Investors in securities of issuers located outside of the United States should be aware that even for securities denominated in U.S. dollars, changes in the exchange rate between the U.S. dollar and the issuer’s “home” currency can have unexpected effects on the market value and liquidity of those securities. Those securities may also be affected by other risks (such as political, economic or regulatory changes) that may not be readily known to a U.S. investor.

Risk information

UBS Chief Investment Office's ("CIO") investment views are prepared and published by the Global Wealth Management business of UBS Switzerland AG (regulated by FINMA in Switzerland) or its affiliates ("UBS"), part of UBS Group AG ("UBS Group"). UBS Group includes former Credit Suisse AG, its subsidiaries, branches and affiliates. Additional disclaimer relevant to Credit Suisse Wealth Management follows at the end of this section. The investment views have been prepared in accordance with legal requirements designed to promote the **independence of investment research**.

Generic investment research – Risk information:

This publication is **for your information only** and is not intended as an offer, or a solicitation of an offer, to buy or sell any investment or other specific product. The analysis contained herein does not constitute a personal recommendation or take into account the particular investment objectives, investment strategies, financial situation and needs of any specific recipient. It is based on numerous assumptions. Different assumptions could result in materially different results. Certain services and products are subject to legal restrictions and cannot be offered worldwide on an unrestricted basis and/or may not be eligible for sale to all investors. All information and opinions expressed in this document were obtained from sources believed to be reliable and in good faith, but no representation or warranty, express or implied, is made as to its accuracy or completeness (other than disclosures relating to UBS). All information and opinions as well as any forecasts, estimates and market prices indicated are current as of the date of this report, and are subject to change without notice. Opinions expressed herein may differ or be contrary to those expressed by other business areas or divisions of UBS as a result of using different assumptions and/or criteria.

In no circumstances may this document or any of the information (including any forecast, value, index or other calculated amount ("Values")) be used for any of the following purposes (i) valuation or accounting purposes; (ii) to determine the amounts due or payable, the price or the value of any financial instrument or financial contract; or (iii) to measure the performance of any financial instrument including, without limitation, for the purpose of tracking the return or performance of any Value or of defining the asset allocation of portfolio or of computing performance fees. By receiving this document and the information you will be deemed to represent and warrant to UBS that you will not use this document or otherwise rely on any of the information for any of the above purposes. UBS and any of its directors or employees may be entitled at any time to hold long or short positions in investment instruments referred to herein, carry out transactions involving relevant investment instruments in the capacity of principal or agent, or provide any other services or have officers, who serve as directors, either to/for the issuer, the investment instrument itself or to/for any company commercially or financially affiliated to such issuers. At any time, investment decisions (including whether to buy, sell or hold securities) made by UBS and its employees may differ from or be contrary to the opinions expressed in UBS research publications. Some investments may not be readily realizable since the market in the securities is illiquid and therefore valuing the investment and identifying the risk to which you are exposed may be difficult to quantify. UBS relies on information barriers to control the flow of information contained in one or more areas within UBS, into other areas, units, divisions or affiliates of UBS. Futures and options trading is not suitable for every investor as there is a substantial risk of loss, and losses in excess of an initial investment may occur. Past performance of an investment is no guarantee for its future performance. Additional information will be made available upon request. Some investments may be subject to sudden and large falls in value and on realization you may receive back less than you invested or may be required to pay more. Changes in foreign exchange rates may have an adverse effect on the price, value or income of an investment. The analyst(s) responsible for the preparation of this report may interact with trading desk personnel, sales personnel and other constituencies for the purpose of gathering, synthesizing and interpreting market information.

Different areas, groups, and personnel within UBS Group may produce and distribute separate research products **independently of each other**. For example, research publications from **CIO** are produced by UBS Global Wealth Management. **UBS Global Research** is produced by UBS Investment Bank. **Research methodologies and rating systems of each separate research organization may differ**, for example, in terms of investment recommendations, investment horizon, model assumptions, and valuation methods. As a consequence, except for certain economic forecasts (for which UBS CIO and UBS Global Research may collaborate), investment recommendations, ratings, price targets, and valuations provided by each of the separate research organizations may be different, or inconsistent. You should refer to each relevant research product for the details as to their methodologies and rating system. Not all clients may have access to all products from every organization. Each research product is subject to the policies and procedures of the organization that produces it.

The compensation of the analyst(s) who prepared this report is determined exclusively by research management and senior management ([not including investment banking](#)). Analyst compensation is not based on investment banking, sales and trading or principal trading revenues, however, compensation may relate to the revenues of UBS Group as a whole, of which investment banking, sales and trading and principal trading are a part.

Tax treatment depends on the individual circumstances and may be subject to change in the future. UBS does not provide legal or tax advice and makes no representations as to the tax treatment of assets or the investment returns thereon both in general or with reference to specific client's circumstances and needs. We are of necessity unable to take into account the particular investment objectives, financial situation and needs of our individual clients and we would recommend that you take financial and/or tax advice as to the implications (including tax) of investing in any of the products mentioned herein.

Risk information

This material may not be reproduced or copies circulated without prior authority of UBS. Unless otherwise agreed in writing UBS expressly prohibits the distribution and transfer of this material to third parties for any reason. UBS accepts no liability whatsoever for any claims or lawsuits from any third parties arising from the use or distribution of this material. This report is for distribution only under such circumstances as may be permitted by applicable law. For information on the ways in which CIO manages conflicts and maintains independence of its investment views and publication offering, and research and rating methodologies, please visit www.ubs.com/research-methodology. Additional information on the relevant authors of this publication and other CIO publication(s) referenced in this report; and copies of any past reports on this topic; are available upon request from your client advisor.

Important Information About Sustainable Investing Strategies: Sustainable investing strategies aim to consider and incorporate environmental, social and governance (ESG) factors into investment process and portfolio construction. Strategies across geographies approach ESG analysis and incorporate the findings in a variety of ways. Incorporating ESG factors or Sustainable Investing considerations may inhibit UBS's ability to participate in or to advise on certain investment opportunities that otherwise would be consistent with the Client's investment objectives. The returns on a portfolio incorporating ESG factors or Sustainable Investing considerations may be lower or higher than portfolios where ESG factors, exclusions, or other sustainability issues are not considered by UBS, and the investment opportunities available to such portfolios may differ.

External Asset Managers / External Financial Consultants: In case this research or publication is provided to an External Asset Manager or an External Financial Consultant, UBS expressly prohibits that it is redistributed by the External Asset Manager or the External Financial Consultant and is made available to their clients and/or third parties.

USA: Distributed to US persons only by UBS Financial Services Inc. or UBS Securities LLC, subsidiaries of UBS AG. UBS Switzerland AG, UBS Europe SE, UBS Bank, S.A., UBS Brasil Administradora de Valores Mobiliarios Ltda, UBS Asesores Mexico, S.A. de C.V., UBS SuMi TRUST Wealth Management Co., Ltd., UBS Wealth Management Israel Ltd and UBS Menkul Degerler AS are affiliates of UBS AG. **UBS Financial Services Inc. accepts responsibility for the content of a report prepared by a non-US affiliate when it distributes reports to US persons. All transactions by a US person in the securities mentioned in this report should be effected through a US-registered broker dealer affiliated with UBS, and not through a non-US affiliate. The contents of this report have not been and will not be approved by any securities or investment authority in the United States or elsewhere. UBS Financial Services Inc. is not acting as a municipal advisor to any municipal entity or obligated person within the meaning of Section 15B of the Securities Exchange Act (the "Municipal Advisor Rule") and the opinions or views contained herein are not intended to be, and do not constitute, advice within the meaning of the Municipal Advisor Rule.**

For country information, please visit ubs.com/cio-country-disclaimer-gr or ask your client advisor for the full disclaimer.

Additional Disclaimer relevant to Credit Suisse Wealth Management

You receive this document in your capacity as a client of Credit Suisse Wealth Management. Your personal data will be processed in accordance with the Credit Suisse privacy statement accessible at your domicile through the official Credit Suisse website <https://www.credit-suisse.com>. In order to provide you with marketing materials concerning our products and services, UBS Group AG and its subsidiaries may process your basic personal data (i.e. contact details such as name, e-mail address) until you notify us that you no longer wish to receive them. You can optout from receiving these materials at any time by informing your Relationship Manager.

Except as otherwise specified herein and/or depending on the local Credit Suisse entity from which you are receiving this report, this report is distributed by UBS Switzerland AG, authorised and regulated by the Swiss Financial Market Supervisory Authority (FINMA).

Version C/2024. CIO82652744

© UBS 2024. The key symbol and UBS are among the registered and unregistered trademarks of UBS. All rights reserved.