WELLS FARGO Investment Institute

Investment Strategy

Weekly guidance from our Investment Strategy Committee

Spotlight: U.S. dollar should remain resilient — but not for long......2

- The U.S. Dollar Index in 2023 has held near its strongest level since 2002, but we expect the greenback to depreciate modestly in the second half of 2024.
- Nevertheless, we expect the dollar's near-term downside to be contained. Our belief is that the U.S. dollar will continue to display resilience into the first half of 2024 as U.S. dollar weakness at the beginning of a global economic rebound usually starts with Federal Reserve (Fed) rate cuts.

Equities: Card volume suggests U.S. consumer stable, but losing steam ...4

- After a strong 2021 and 2022, card volume growth has slowed during 2023, implying a moderation in consumer strength.
- Using 2019 as a baseline and considering the impact of accumulated inflation, real consumer spending growth appears to be slowing.

Fixed Income: Municipals continued stellar track record of repayment...5

- Municipal defaults have continued to be infrequent, and we view this as reflective of the resilience of municipal borrowers generally.
- When defaults have occurred, they have generally been in a narrow band of sectors that investors should be aware of.

- While many real estate investment trusts generated a reasonable same-store net operating income increase, growth in funds from operations generally moderated from recent quarters.
- We recommend investors considering REITs focus on data center and industrial REITs given our expectations for positive long-term demand drivers.

Alternatives: Buyout exit values remain in a downward trend7

- The environment for buyout deals remains challenged, as higher interest rates, a lackluster initial public offering market, and a slower fundraising environment continue to limit activity and depress valuations.
- We believe lower valuations are contributing to a shift toward a more buyer-friendly market, which may be an opportunity for disciplined, qualified investors who are able to commit new capital throughout the downturn.

Investment and Insurance Products: > NOT FDIC Insured > NO Bank Guarantee > MAY Lose Value



December 4, 2023

Foreign Exchange Spotlight

Luis AlvaradoTony MianoGlobal Fixed Income StrategistInvestment Strategy Analyst

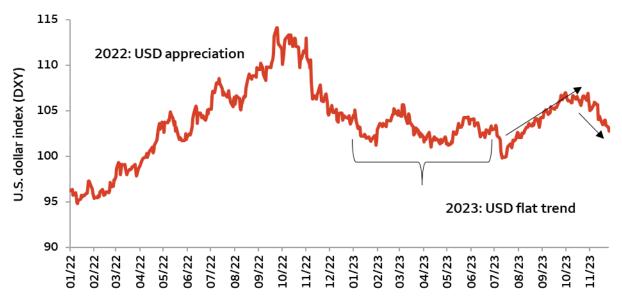
U.S. dollar should remain resilient — but not for long

The U.S. dollar has been strong against major international currencies during the past two years. The U.S. Dollar Index has traded in a broad range in 2023, between roughly 99 and 107 for the year, with a current reading (102.75, as of November 28, 2023) near the calendar year average of 103. This still represents some stabilization of the dollar index after a volatile 2022 when it fell from highs above 114 to around 103 by the year's end, but still managed to appreciate 7.6% for all of 2022.

The higher-for-longer story on U.S. interest rates has served as a backstop for the U.S. dollar, allowing it to remain strong relative to the other major currencies like the euro, yen, and British pound. Our belief is that the U.S. dollar will continue to display this resilience into the first half of 2024 as U.S. dollar weakness usually involves interest rate cuts from the Fed and better ex-U.S. economic growth, which we don't expect until the latter part of 2024.

Drivers of the dollar's trajectory since the Fed started its hiking cycle

The chart shows the changes in the U.S. dollar's value since the start of the Fed's federal funds rate hiking cycle in March of 2022. A clear uptrend in the dollar index for most of 2022 reinforced the idea that investors still placed value on bond yield differentials among countries with similar risk ratings. Further, the heavy influence of the euro on the dollar index (its largest constituent, at 58%) allowed the index to peak in early November 2022 on concerns around an energy crisis in the eurozone, but then the dollar index declined rapidly toward year-end as European sentiment bottomed and winter energy concerns abated.



2022's dollar strength gives way to 2023's flattened trading range

Sources: Bloomberg, Wells Fargo Investment Institute, latest data as of November 28, 2023. The U.S. Dollar Index (DXY) is a weighted average dollar exchange rate index against 6 major currencies, base year 1973, calculated by ICE Futures U.S. An index is unmanaged and not available for investment. **Past performance is no guarantee of future results**.

The almost flat dollar index trend for calendar year 2023 has been made up mostly of three waves.

- In the first wave, which occurred in the first half of 2023, a flat trend was largely influenced by cross currents. The U.S. regional banking crisis unfolded, so we had a new Fed bank liquidity facility (dollar supply increases, so the dollar's value slipped), but we also had the U.S. Treasury announcing big borrowing plans, which sent yields higher (demand by the Treasury pushes the dollar's value higher). We also had the eurozone slip into recession, and the Bank of Japan's policy changes led to a weaker yen.
- The second wave began to unfold in July of 2023, as the Fed remained committed to keeping interest rates elevated for longer while investors began to speculate that the European Central Bank (ECB) would remain on a pause as sentiment on the European economy began to deteriorate. This caused the dollar index to rally and peak through October.
- The third wave, which started after the Fed's meeting in November, was followed by relative weakness in the dollar index, as the Fed hinted at a pause in the hiking cycle, citing declining inflation trends. However, the markets' growing expectation that the Fed is done hiking and that it may even cut interest rates several times in 2024 is further fueling the downturn.

Our outlook and potential implications for markets

In our view, the U.S. dollar should remain strong relative to the other major developed currencies during the first half of 2024. A pivot from the Fed toward interest rate cuts and a stronger recovery in the eurozone appear to be the key factors likely to push the dollar's value lower toward the end of next year. Also, a global recovery may begin to encourage international investing that, in turn, should benefit other currencies.

We expect a 2024 year-end range of \$1.08 – \$1.12 per euro, which is consistent with a dollar index ranging between 99 and 103. We expect only mild yen appreciation, and we believe that a U.K. recession will keep the pound weaker against the dollar next year.

The potential for dollar strength through the first half of 2024 also reinforces our preference for U.S. Large Cap Equities over Developed Market ex-U.S. Equities. Also, we prefer U.S. Taxable Investment Grade bonds over Developed Market ex-U.S. bonds and also dollar-denominated Emerging Market (EM) bonds over local-currency EM bonds.

Equities

Robert Hammel

Equity Sector Analyst — Payments, Payroll, and IT Services

Card volume suggests U.S. consumer stable, but losing steam

More than \$10 trillion in U.S. credit and debit card volume was reported by the payment networks during the 12month period ended September 30, 2023, and we believe this provides excellent insight into recent strength of the U.S. consumer, including consumer spending on goods and services. However, recent data shows moderating consumer strength, especially considering the impact of accumulated inflation.

U.S. card volume was at nearly \$2.6 trillion during the third quarter of 2023, representing a 5.8% increase versus the prior year. Year to date (as of September 30, 2023), U.S. card volume is 7.1% higher than the comparable period a year prior. This comes on top of a 25% increase during 2021 and a 13% gain during 2022.

On a nominal basis, the 51% increase in U.S. card volume from the third quarter of 2019 to the third quarter of 2023 implies a compound annual growth rate (CAGR) of 10.8%, impressive in the context of historical nominal growth of 8% – 10%. However, the period from September 2019 to September 2023 saw significant inflation, with a 20% increase in the Consumer Price Index (CPI) or a 4.6% CAGR — this implies a CAGR of 6.2% for real U.S. card volume, a modest slowdown from the second and first quarters of 2023 (6.5% and 7.2% CAGR, respectively).

Further, preliminary data from the payment networks suggests further modest slowing during October relative to the third quarter. The theme of modest slowing during October was also echoed by payments companies serving small and mid-sized businesses in discretionary categories, including restaurants and retail.

	2015 to 2019 (Full year)	Q1 2019 to Q1 2023	Q2 2019 to Q2 2023	Q3 2019 to Q3 2023
Total card volume (percent change)	40%	55%	52%	51%
Consumer Price Index (percent change)	9%	19%	19%	20%
Total card volume (CAGR)	8.8%	11.6%	11.0%	10.8%
Consumer Price Index (CAGR)	2.1%	4.4%	4.5%	4.6%
Real growth	6.7%	7.2%	6.5%	6.2%

U.S. total card volume growth is slowing on both a nominal and real basis

Sources: Wells Fargo Investment Institute, company reports, U.S. Bureau of Labor Statistics. Data for total card volume is as of September 30, 2023, and is based on Visa, Mastercard, American Express, and Discover company reports. Consumer Price Index data is as of November 14, 2023, and refers to U.S. city average, all items; reading is from the last month in the reported period. Q = quarter. CAGR = compound annual growth rate.

Fixed Income

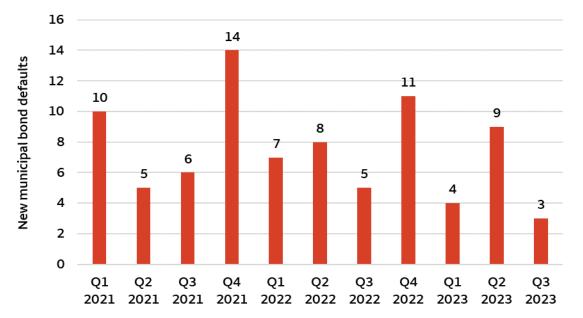
Sara Kisner Municipal Analyst

Municipals continued stellar track record of repayment

Calendar year 2023 is on pace for the lowest number of new defaults since Moody's Investors Service (Moody's) started tracking defaults across the entire universe of municipal bonds in 2021 (see chart). Although recent years have been fraught with impacts from the COVID-19 pandemic, rising interest rates, and market volatility, municipal bonds have lived up to their reputation of being extremely low defaulters. In fact, according to data from Municipal Market Analytics, just 0.41% of outstanding municipal par is currently in default as of November 15, 2023.

While rare, negative credit events such as payment defaults, covenant violations, and debt service reserve draws do happen in the municipal market. History has shown that most of these events occur in a narrow band of municipal sectors. As described in Moody's October 2023 Municipal Sector Profile report, 23 of the 47 defaults since the beginning of 2022 occurred in the senior living sector. Special purpose districts and project finance issuers accounted for 16 new defaults during that period.

Senior living providers were hit exceedingly hard during and after the pandemic. Demand for services was impacted as prospective residents delayed moving in while labor and other expenses rose considerably. Risk in special purpose district bonds peaks when debt service payments are reliant on significant tax-base growth from a very limited pool of payers. Investors looking to avoid outsized risk in their municipal bond portfolio should avoid these sectors and look to add positions in well-rated general obligation bonds and essential service bonds due to their excellent repayment history.



New municipal bond defaults remain low

Source: Moody's Investors Service. Data as of September 30, 2023. The Moody's data focuses on the entire universe of US municipal debt tracked by the Electronic Municipal Market Access (EMMA) system.

Real Assets

John Sheehan

Equity Sector Analyst — Real Estate

REIT third-quarter earnings growth moderates

Data provided by the National Association of Real Estate Investment Trusts (Nareit) shows that in the third quarter of 2023, the real estate investment trust (REIT) industry generated growth in funds from operations (FFO) per share of 0.8% over third-quarter 2022 results. These results followed second-quarter 2023 FFO-per-share growth of 5.4%. Additionally, REITs reported 4.6% growth in net operating income (NOI) from their same-store portfolios relative to third-quarter 2022. Most REIT investors view same-store performance as a good indicator of internal growth.

We view the same-store NOI growth generated by the REIT industry during third-quarter 2023 as relatively attractive despite slight moderation from recent quarters. It is worth noting that we believe REITs faced challenging comparisons with third-quarter 2022 — data from Nareit indicated REITs generated 13.4% growth in FFO per share in third-quarter 2022 (likely reflecting an economic recovery as business operating restrictions mandated by the pandemic were lifted) and a 6.8% increase in same-store NOI. We believe a challenging comparison quarter, higher interest costs, and slowing rent growth contributed to the lower FFO-per-share growth reported this quarter.

In conjunction with their third-quarter 2023 earnings, the majority of REITs we closely monitor updated their 2023 earnings guidance — in general, most either reiterated or made modest adjustments to their prior 2023 earnings guidance. We recommend investors considering REITs focus on data center and industrial REITs given positive long-term demand drivers.

Favorable sub-sectors	Unfavorable sub-sectors
Data Center REITs	Diversified REITs
Industrial REITs	Lodging/Resort REITs
Infrastructure REITs	Office REITs
Self-Storage REITs	Specialty REITs
	Timber REITs

REIT sub-sector guidance

Source: Wells Fargo Investment Institute; favored sub-sectors by Global Securities Research (GSR) and favored sectors by Global Investment Strategy. As of December 4, 2023.

Alternatives

Mark Steffen, CFA, CAIA

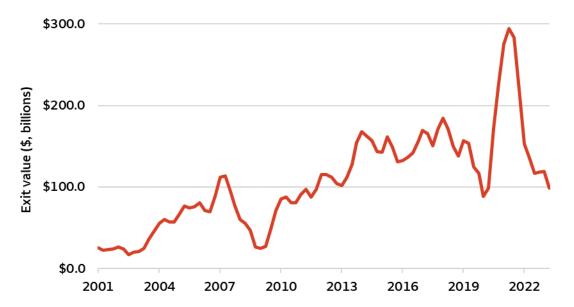
Global Alternative Investment Strategist

Buyout exit values remain in a downward trend

The public equity markets have experienced a resurgence in 2023 with a select few mega cap technology companies accounting for a large portion of the returns. Yet the private markets have yet to exude the same level of optimism.

Private capital funds are often long-term investments. Capital is invested over the first three to five years, and investments are sold in the middle to latter stages of the fund's life, which can extend over 10 years. In the past year, funds that are in the harvest stage — when investments are typically sold — have found it difficult to extract maximum value for their assets. This dynamic is causing many managers to extend holding times in the hope that the conditions improve in the coming quarters.

For Private Equity – Buyout funds, the slowing deal activity and declining valuations have continued to trend downward since early 2022. While the robust deal environment in 2021 may have pulled forward sales as valuations soared to new heights, the combination of higher interest rates, a lackluster initial public offering market, and slower private capital fundraising has continued to limit deal activity. As highlighted in the chart, Buyout exit values declined significantly from the peak in 2021 and remained in a downward trend through third-quarter 2023. While the depressed exit values may negatively impact mature funds that are trying to wind down their portfolios, we believe lower valuations are contributing to a shift toward a more buyer-friendly market, which may benefit disciplined, qualified investors who are able to commit new capital throughout the downturn.



Private Equity — Buyout exit values remain well below 2021 highs

Sources: Pitchbook and Wells Fargo Investment Institute. Data shown from January 1, 2001, to September 30, 2023. Data as of September 30, 2023. Private equity funds primarily focus on purchasing at least a controlling percentage of a company's stock to take over its assets and operations. The "Private Equity — Buyout" universe is defined as all funds listed in the Pitchbook database that are classified in the buyout category. Alternative investments, such as hedge funds, private equity, private debt and private real estate funds are not appropriate for all investors and are only open to "accredited" or "qualified" investors within the meaning of U.S. securities laws. **Past performance is not a guarantee of future results**.

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Current tactical guidance

Cash Alternatives and Fixed Income

м	lost Unfavorable	Unfavorable	Neutral	Favorable	Most Favorable
		U.S. Intermediate Term Taxable Fixed Income	Cash Alternatives Developed Market Ex-	U.S. Taxable Investment Grade Fixed Income	U.S. Long Term Taxable Fixed Income
		High Yield Taxable Fixed Income	U.S. Fixed Income Emerging Market Fixed		U.S. Short Term Taxable Fixed Income
			Emerging Market Fixed Income		rixed meome

Equities

Most Unfavorable	Unfavorable	Neutral	Favorable	Most Favorable
U.S. Small Cap Equities	Emerging Market Equities	U.S. Mid Cap Equities Developed Market Ex- U.S. Equities	U.S. Large Cap Equities	

Real Assets

Most Unfavorable	Unfavorable	Neutral	Favorable	Most Favorable
		Private Real Estate	Commodities	

Alternative Investments*

Most Unfavorable	Unfavorable	Neutral	Favorable	Most Favorable
		Hedge Funds—Event Driven	Hedge Funds—Relative Value	
		Hedge Funds—Equity Hedge	Hedge Funds—Macro	
		Private Equity		
		Private Debt		

Source: Wells Fargo Investment Institute, December 4, 2023.

*Alternative investments are not appropriate for all investors. They are speculative and involve a high degree of risk that is appropriate only for those investors who have the financial sophistication and expertise to evaluate the merits and risks of an investment in a fund and for which the fund does not represent a complete investment program. Please see end of report for important definitions and disclosures.

Risk considerations

Each asset class has its own risk and return characteristics. The level of risk associated with a particular investment or asset class generally correlates with the level of return the investment or asset class might achieve. **Stock markets**, especially foreign markets, are volatile. Stock values may fluctuate in response to general economic and market conditions, the prospects of individual companies, and industry sectors. **Foreign investing** has additional risks including those associated with currency fluctuation, political and economic instability, and different accounting standards. These risks are heightened in emerging markets. **Small- and mid-cap stocks** are generally more volatile, subject to greater risks and are less liquid than large company stocks. **Bonds** are subject to market, interest rate, price, credit/default, liquidity, inflation and other risks. Prices tend to be inversely affected by changes in interest rates. **High yield (junk) bonds** have lower credit ratings and are subject to greater risk of default and greater principal risk. The **commodities** markets are considered speculative, carry substantial risks, and have experienced periods of extreme volatility. Investing in a volatile and uncertain commodities market may cause a portfolio to rapidly increase or decrease in value which may result in greater share price volatility. **Real estate** has special risks including the possible illiquidity of underlying properties, credit risk, interest rate fluctuations, fluctuations in currency exchange rates, derivative investment risk and the effect of political and economic conditions. The use of currency transactions to seek to achieve gains in the portfolio could result in significant losses to the portfolio which exceeds the amount invested in the currency instruments. In addition, exchange rate movement between the U.S. dollar and foreign currencies may cause the value of the fund's investments to decline.

Alternative investments, such as hedge funds, private equity/private debt and private real estate funds, are speculative and involve a high degree of risk that is appropriate only for those investors who have the financial sophistication and expertise to evaluate the merits and risks of an investment in a fund and for which the fund does not represent a complete investment program. They entail significant risks that can include losses due to leveraging or other speculative investment practices, lack of liquidity, volatility of returns, restrictions on transferring interests in a fund, potential lack of diversification, absence and/or delay of information regarding valuations and pricing, complex tax structures and delays in tax reporting, less regulation and higher fees than mutual funds. Hedge fund, private equity, private debt and private real estate fund investing involves other material risks including capital loss and the loss of the entire amount invested. A fund's offering documents should be carefully reviewed prior to investing.

Hedge fund strategies, such as Equity Hedge, Event Driven, Macro and Relative Value, may expose investors to the risks associated with the use of short selling, leverage, derivatives and arbitrage methodologies. Short sales involve leverage and theoretically unlimited loss potential since the market price of securities sold short may continuously increase. The use of leverage in a portfolio varies by strategy. Leverage can significantly increase return potential but create greater risk of loss. Derivatives generally have implied leverage which can magnify volatility and may entail other risks such as market, interest rate, credit, counterparty and management risks. Arbitrage strategies expose a fund to the risk that the anticipated arbitrage opportunities will not develop as anticipated, resulting in potentially reduced returns or losses to the fund.

Definitions

An index is unmanaged and not available for direct investment.

Consumer Price Index (CPI) produces monthly data on changes in the prices paid by urban consumers for a representative basket of goods and services.

U.S. Dollar Index (DXY) measures the value of the U.S. dollar relative to majority of its most significant trading partners. This index is similar to other trade-weighted indexes, which also use the exchange rates from the same major currencies.

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