

Quarterly Economic Report

1st Quarter 2023

SVB Asset Management views on economic and market factors affecting global markets and business health



Quarterly Economic Report

Published in Q1 2023 | Data for Q4 2022

- 3 Overview
- 4 Domestic Economy
- **11** Foreign Exchange
- 15 Central Banks and Fiscal Policy
- **19** Corporate Bond Market
- 23 Markets and Performance



Key Takeaways

- The Federal Reserve has aggressively raised the fed funds rate. In 2022, the rate was increased by 425 basis points (bps) in response to high inflation data.
- The labor market remains solid, with the unemployment rate at a 50-year low while inflation remains elevated.
- Although the Q1 and Q2 2022 gross domestic product (GDP) releases were negative, Q3 rebounded to +3.2% while the initial reading for Q4 GDP came in higher than expected at +2.9%.
- Front-end yields remain elevated and inverted relative to longer-term rates. Although the Fed is forecasting keeping rates restrictive for some time, bond yields in 2023 will reflect incoming data, most notably around inflation.

OVERVIEW



Labor markets remain strong.

The labor market has sustained economic growth and remains strong, although the pace of job growth may be moderating.



Further tightening of monetary policy by the Fed is likely.

The Fed remains focused on lowering inflation to its target 2% rate, and ongoing increases to the fed funds rate, albeit less aggressive, are expected in the near term.



Improvements in inflation have affected central banks' expectations.

The US, UK and EUR have lower expectations for rates in 2023 and 2024, while Japan and China are expected to slowly raise rates over time.



The US dollar (USD) bull run takes a pause.

The USD reversed sharply in Q4 as Fed rate hikes became priced in and global economic conditions improved.



Global equity markets experience 2022 losses.

Persistent inflation, rising interest rates, geopolitical events and slowing corporate profits all contributed to global equity shortfalls.



Corporate credit spreads tighten in Q4 2022.

Indications that the pace of Fed policy tightening would slow along with signs of cooling inflation contributed to corporate credit generating positive returns and outperforming US Treasuries in Q4.



Domestic Economy



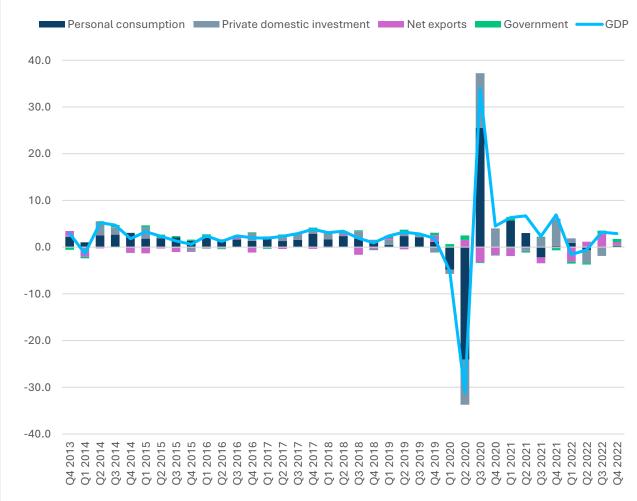
GDP: Normalization Expected

Q4 2022 GDP read 2.9% (quarter-over-quarter [QoQ], annualized rate) — down slightly from 3.2% in Q3 — due to rising interest rates and elevated inflation.

For the full year 2021, GDP growth was 2.1%, with personal consumption and domestic investment heavily contributing.

Growth is expected to slow down in 2023, with market consensus showing expectations for 0.1% for Q1 2023 and -0.6% for Q2 2023.

GDP and Components

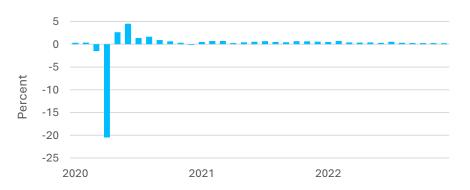




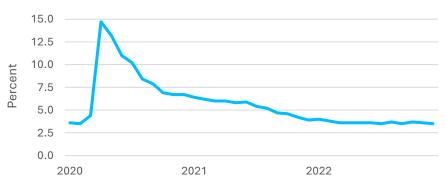
Employment: Hovering Near Pre-pandemic Levels

During the fourth quarter of 2022, the average number of jobs grew by approximately 242,000 per month. The unemployment rate stayed historically low, ending the period at 3.5%, the same rate that it was before the onset of the COVID-19 pandemic in the US in February 2020. There continue to be more jobs available (~10 million) than unemployed Americans (~5 million), as companies continue to report difficulty in hiring despite rising wages.

Non-farm Payrolls



Unemployment Rate



Job Openings and Labor Turnover



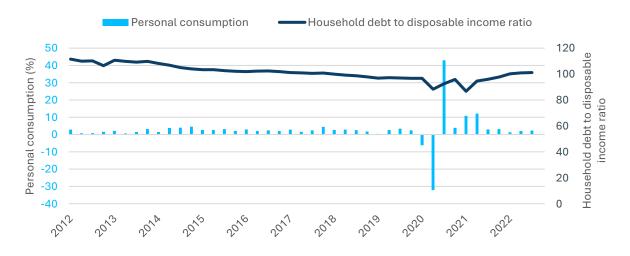
Consumption: Solid Consumer Spending

Consumption for Q4 2022 increased 2.1% from the prior period and increased 4.4% on a year-over-year (YoY) basis. Market expectations are for personal consumption to moderate to 0.8% in Q1 2023.

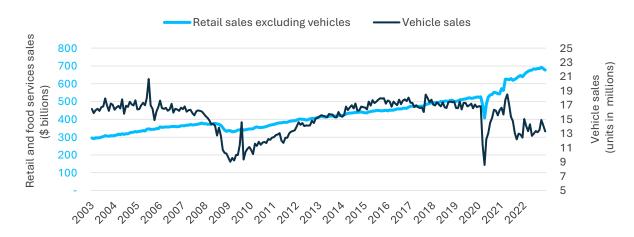
Retail sales excluding vehicles rose 6.1% on a YoY basis at the end of December 2022, down from 18.9% in December 2021.

Higher wages and savings rates should lead to continued consumer spending. The rotation from goods to services should also be in effect.

Consumption Overview



Retail Sales

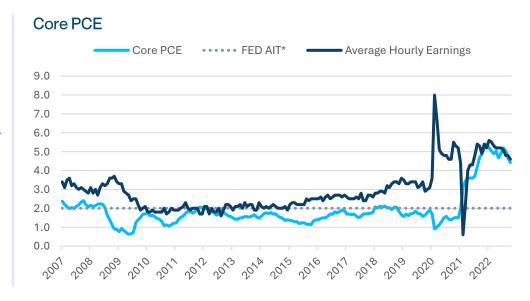




Inflation: Starting to Slow

Inflation has started to cool down with the December 2022 consumer price index (CPI) YoY reaching 6.5%. Core personal consumption expenditures (PCE), the Fed's preferred inflation indicator, rose 4.4% on a YoY basis, down from 5.2% in September 2022.

In addition to market forecasts, the Fed continues to reiterate that it expects inflation to decline over the course of 2023.



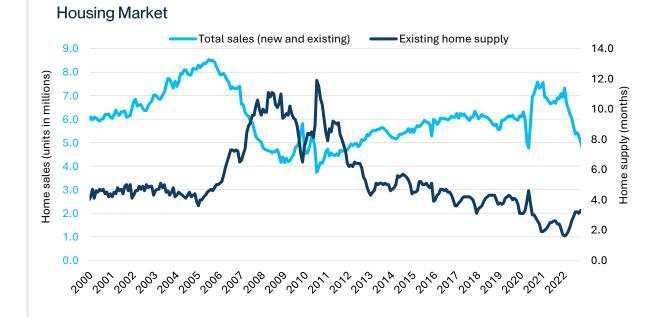
CPI Breakdown (MoM Change)**

									All items	Commodities				Services			
			Food at	Food away		Gasoline		Natural gas	less food	less food and		New	Medical care	less energy		Medical care	Education and
	All items	Food	home	from home	Energy	(all types)	Electricity	(piped)	and energy	energy	Apparel	vehicles	commodities	services	Shelter	services	communication
Dec-22	6.50%	10.40%	11.80%	8.30%	7.30%	-1.50%	14.30%	19.30%	5.70%	2.10%	2.90%	5.90%	3.20%	7.00%	7.50%	4.10%	0.70%
Nov-22	7.10%	10.60%	12.00%	8.50%	13.10%	10.10%	13.70%	15.50%	6.00%	3.70%	3.60%	7.20%	3.10%	6.80%	7.10%	4.40%	0.70%
Oct-22	7.70%	10.90%	12.40%	8.60%	17.60%	17.50%	14.10%	20.00%	6.30%	5.10%	4.10%	8.40%	3.10%	6.70%	6.90%	5.40%	0.00%
Sep-22	8.20%	11.20%	13.00%	8.50%	19.80%	18.20%	15.50%	33.10%	6.60%	6.60%	5.50%	9.40%	3.70%	6.70%	6.60%	6.50%	0.20%
Aug-22	8.30%	11.40%	13.50%	8.00%	23.80%	25.60%	15.80%	33.00%	6.30%	7.10%	5.10%	10.10%	4.10%	6.10%	6.20%	5.60%	0.50%
Jul-22	8.50%	10.90%	13.10%	7.60%	32.90%	44.00%	15.20%	30.50%	5.90%	7.00%	5.10%	10.40%	3.70%	5.50%	5.70%	5.10%	0.50%
Jun-22	9.10%	10.40%	12.20%	7.70%	41.60%	59.90%	13.70%	38.40%	5.90%	7.20%	5.20%	11.40%	3.20%	5.50%	5.60%	4.80%	0.80%
May-22	8.60%	10.10%	11.90%	7.40%	34.60%	48.70%	12.00%	30.20%	6.00%	8.50%	5.00%	12.60%	2.40%	5.20%	5.50%	4.00%	0.80%
Apr-22	8.30%	9.40%	10.80%	7.20%	30.30%	43.60%	11.00%	22.70%	6.20%	9.70%	5.40%	13.20%	2.10%	4.90%	5.10%	3.50%	1.00%
Mar-22	8.50%	8.80%	10.00%	6.90%	32.00%	48.00%	11.10%	21.60%	6.50%	11.70%	6.80%	12.50%	2.70%	4.70%	5.00%	2.90%	1.50%
Feb-22	7.90%	7.90%	8.60%	6.80%	25.60%	38.00%	9.00%	23.80%	6.40%	12.30%	6.60%	12.40%	2.50%	4.40%	4.70%	2.40%	1.60%
Jan-22	7.50%	7.00%	7.40%	6.40%	27.00%	40.00%	10.70%	23.90%	6.00%	11.70%	5.30%	12.20%	1.40%	4.10%	4.40%	2.70%	1.60%
Dec-21	7.00%	6.30%	6.50%	6.00%	29.30%	49.60%	6.30%	24.10%	5.50%	10.70%	5.80%	11.80%	0.40%	3.70%	4.10%	2.50%	1.60%
Nov-21	6.80%	6.10%	6.40%	5.80%	33.30%	58.10%	6.50%	25.10%	4.90%	9.40%	5.00%	11.10%	0.20%	3.40%	3.80%	2.10%	1.70%
Oct-21	6.20%	5.30%	5.40%	5.30%	30.00%	49.60%	6.50%	28.10%	4.60%	8.40%	4.30%	9.80%	-0.40%	3.20%	3.50%	1.70%	1.80%
Sep-21	5.40%	4.60%	4.50%	4.70%	24.80%	42.10%	5.20%	20.60%	4.00%	7.30%	3.40%	8.70%	-1.60%	2.90%	3.20%	0.90%	1.70%
Aug-21	5.30%	3.70%	3.00%	4.70%	25.00%	42.70%	5.20%	21.10%	4.00%	7.70%	4.20%	7.60%	-2.50%	2.70%	2.80%	1.00%	1.20%
Jul-21	5.40%	3.40%	2.60%	4.60%	23.80%	41.80%	4.00%	19.00%	4.30%	8.50%	4.20%	6.40%	-2.10%	2.90%	2.80%	0.80%	1.10%
Jun-21	5.40%	2.40%	0.90%	4.20%	24.50%	45.10%	3.80%	15.60%	4.50%	8.70%	4.90%	5.30%	-2.20%	3.10%	2.60%	1.00%	2.10%
May-21	5.00%	2.20%	0.70%	4.00%	28.50%	56.20%	4.20%	13.50%	3.80%	6.50%	5.60%	3.30%	-1.90%	2.90%	2.20%	1.50%	1.90%
Apr-21	4.20%	2.40%	1.20%	3.80%	25.10%	49.60%	3.60%	12.10%	3.00%	4.40%	1.90%	2.00%	-1.70%	2.50%	2.10%	2.20%	1.70%

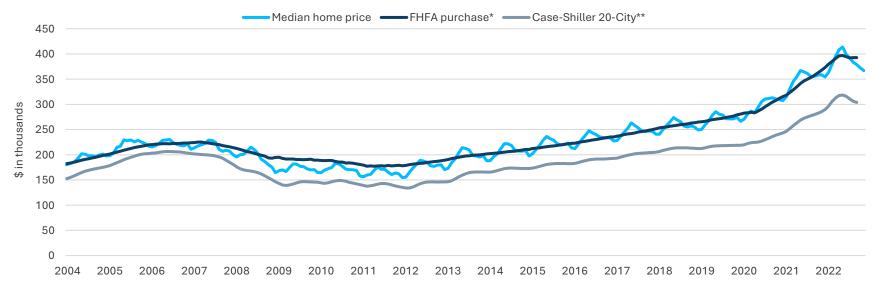


Housing: Sales Are Slumping

Home sales have slowed significantly, while inventory has slightly increased. For 2023, the market will be focused on the impact that multiyear highs in mortgage rates could have on home sales.



Home Prices

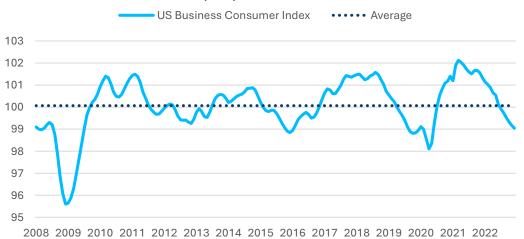




Business Outlook: Moderating

Business sentiment has declined over the past several quarters and dropped to below average in Q4 2022. Economic activity continued steadily throughout the fourth quarter. Institute for Supply Management (ISM) data remained in solid territory, and companies continue to be impacted by supply-chain issues and geopolitical events.

Business Confidence Index (BCI)



Business Sentiment

	Dallas Fed Manufacturing Survey	Philly Fed Manufacturing Survey	New York Fed's Empire Manufacturing Survey	Kansas City Fed Manufacturing Survey	Richmond Fed Manufacturing Survey
Dec-22	-19.4	-7.1	-9.1	-2.0	-10.0
Nov-22	-14.4	-15.5	4.5	-2.0	-9.0
Oct-22	-18.8	-13.7	-11.2	-4.0	1.0
Sep-22	-17.2	-9.9	-1.5	1.0	0.0
Aug-22	-12.9	6.2	-31.3	3.0	-8.0
Jul-22	-22.6	-12.3	11.1	13.0	0.0
Jun-22	-17.7	-2.8	-1.2	11.0	-9.0
May-22	-7.3	3.5	-11.6	21.0	-9.0
Apr-22	1.1	13.1	24.6	22.0	7.0
Mar-22	8.7	23.2	-11.8	32.0	11.0
Feb-22	14.0	12.7	3.1	25.0	3.0
Jan-22	2.0	20.8	-0.7	23.0	6.0
Dec-21	7.8	15.5	31.9	27.0	14.0
Nov-21	11.5	41.4	30.9	25.0	14.0
Oct-21	14.4	25.3	19.8	31.0	12.0
Sep-21	4.6	32.9	34.3	23.0	-1.0
Aug-21	9.0	19.7	18.3	27.0	14.0
Jul-21	27.3	27.3	43.0	27.0	24.0
Jun-21	31.1	31.4	17.4	28.0	27.0
May-21	35.7	32.7	24.3	28.0	21.0
Apr-21	38.1	45.6	26.3	30.0	17.0
Mar-21	28.9	51.8	17.4	26.0	17.0
Feb-21	17.2	23.1	12.1	24.0	14.0
Jan-21	7.0	26.5	3.5	17.0	14.0

ISM Manufacturing	ISM Non-
PMI SA	Manufacturing
50.0	54.5
49.0	55.5
48.4	49.2
50.9	56.7
52.8	56.9
52.8	56.7
53.1	56.0
56.1	56.4
55.9	57.5
57.0	58.4
58.4	57.2
57.6	60.4
58.6	61.7
60.8	67.6
60.4	66.6
60.7	62.1
59.6	61.7
60.0	64.0
61.1	61.2
61.9	63.9
61.0	63.0
64.7	62.3
60.8	55.3
58.7	58.7





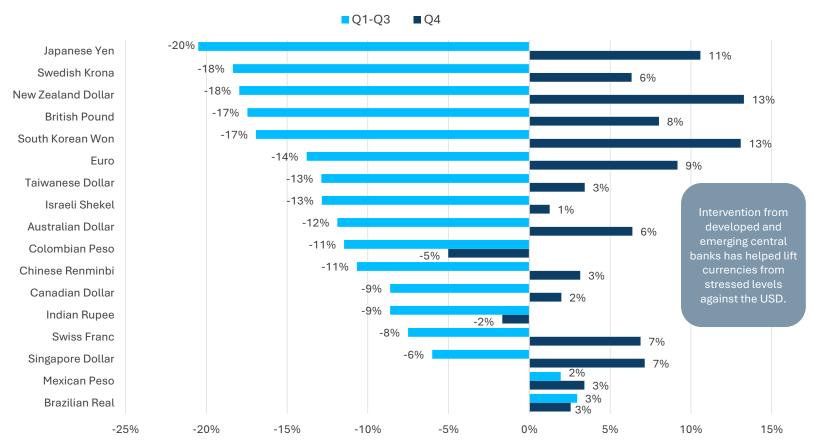
Foreign Exchange



With Terminal Fed Funds in Sight, USD Bull Run Takes a Pause

The USD was strong through the first three quarters of 2022, but reversed sharply in Q4 as Fed rate hikes became priced in and equity markets recovered. Looking ahead, however, it is premature to call an end to the USD bull run. Two-way risk in currencies will persist as long as inflation uncertainty remains, and the ultimate impact on economic growth is still not known. The USD has the tendency to do well in times of financial distress due to its flight-to-quality status.

2022 Currency Movements vs. USD





USD Has Outperformed During Past Recessions, and Underperformed in Periods After

Central banks have engineered demand slowdowns to manage down price pressures. Economic contraction has arrived, but recessions are probable as tightening has gone for longer than many expected. Central banks were late to get started and had to play catch-up and they have operated under pressure not to be labeled complacent on inflation. Central banks continue to measure progress by tracking backward-looking metrics, and assumed the responsibility of undoing the excesses of the previous decade's loose policies.

The USD has been positively correlated to risk aversion in and around recessions going back 30 years. It has traded lower heading into the recession, likely on optimism that the recession will be brief — up during the recession on flight-to-quality inflows; and then down heading out of the recession associated with a relief rally in risk assets.

USD Performance Around Past Recessions

Recession start	Length (months)	12m before	6m before	During recession	6m after	12m after
7/31/1990	8	-10.6%	-5.8%	5.5%	-2.3%	-2.6%
3/31/2001	8	11.3%	3.6%	-1.1%	-3.7%	-8.4%
12/31/2007	18	-8.3%	-6.4%	4.5%	-2.8%	7.3%
2/29/2020	2	2.1%	-0.8%	0.9%	-5.0%	-7.8%
Average	9.0	-1.4%	-2.3%	2.5%	-3.5%	-2.9%

Analysis uses DXY Index to compute USD returns. Recession periods selected per the definition outlined by the National Bureau of Economic Research (NBER).



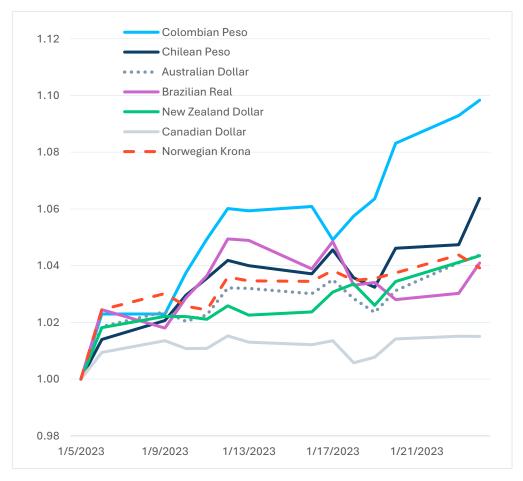
China Reopening is a Boost to the Currencies of Commodityproducing Countries

The end to China's zero-COVID policy and the reopening of its economy will result in a boost to global demand for goods, services, raw materials and commodities.

On expectations of this trend to manifest over the coming quarters, the currencies of commodity-producing countries have outperformed so far in 2023.

Most notably, the pesos of Colombia (key exports crude oil, coal, coffee) and Chile (key export copper) are leading the way, up roughly 10% and 6% respectively.

Currency Performance vs. USD



All exchange rates vs. USD are normalized at 1.0 as of 1/05/2023.



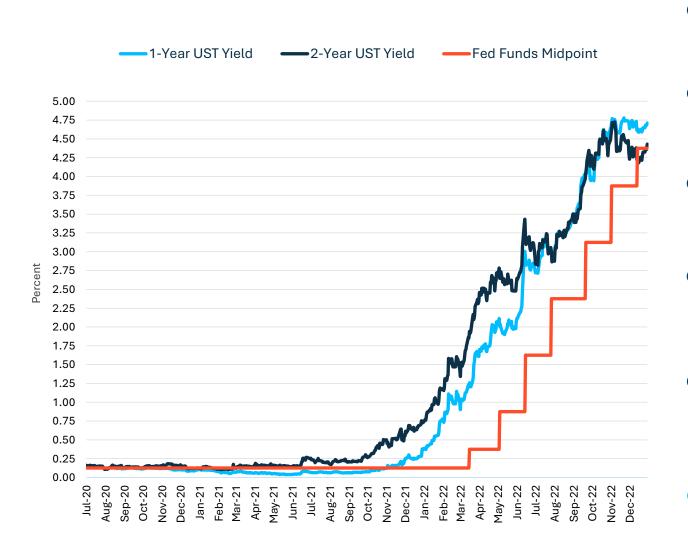


Central Banks and Fiscal Policy



Short-end Interest Rates

The Fed slowed the pace of rate hikes as it allows the impact of 400 bps of higher yields to flow through the economy.



Q3 2020: The Fed announced it would aim to achieve inflation moderately above 2% "for some time." Fed projections showed rates remaining near zero through 2023.

Q2 2021: The stronger recovery triggered the Fed to revise growth and inflation expectations. The dot plot was updated to reflect two potential rate hikes in 2023.

Q1 2022: The Fed turned hawkish in an effort to slow persistently elevated inflation. Seven or more rate hikes — along with balance sheet reductions — pushed interest rates to multiyear highs.

Q2 2022: Inflation and deteriorating consumer confidence forced the Fed to hike 50 and 75 bps in May and June. The Fed warned that the likelihood of a soft landing would be challenging as growth slowed.

Q3 2022: The Fed remains very hawkish with three consecutive 75 bps rate hikes in Q3 2022. Inflation stays elevated, and all Fed speak is unified in the message to raise rates until there is evidence inflation is heading toward the 2% target.

Q4 2022: The Fed reduced the pace of rate hikes from 75 bps to 50 bps in December, as inflation has shown signs of abating and the market expects a fairly stable fed funds rate in 2023.

Economic Forecasts

Recession predictions, slower global growth and persistent inflation push central banks to remain hawkish in their monetary policy.











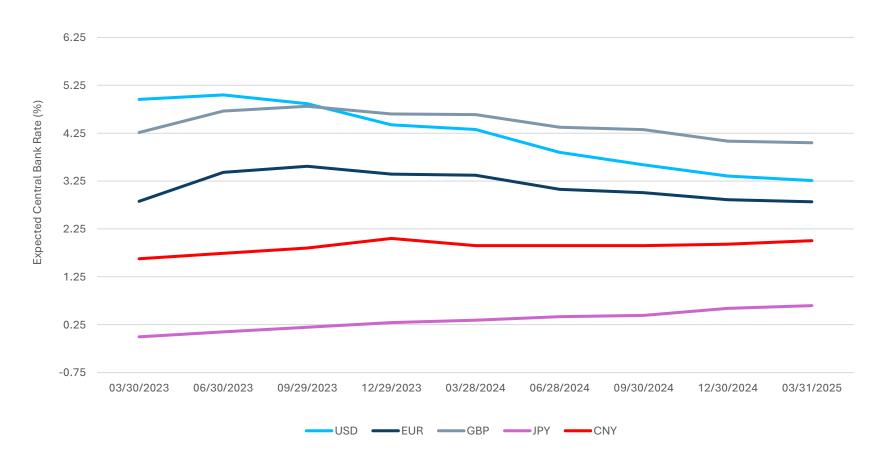
Economic Projections	2022	2023	2024
United States			
Change in real GDP	0.5%	0.5%	1.6%
Core PCE	4.8%	3.5%	2.5%
Unemployment rate	3.7%	4.6%	4.6%
United Kingdom			
Change in real GDP	0.2%	(1.9%)	(0.1%)
CPI	10.9%	5.2%	1.4%
Unemployment rate	3.7%	4.9%	5.9%
Eurozone			
Change in real GDP	3.4%	0.5%	1.9%
CPI	8.4%	6.3%	3.4%
Unemployment rate	6.7%	6.9%	6.8%
Japan			
Change in real GDP	2.0%	1.7%	1.1%
CPI	3.0%	1.7%	1.9%
Unemployment rate	NA	NA	NA
China			
Change in real GDP	3.0%	5.0%	5.0%
CPI	2.1%	2.3%	2.2%
Unemployment rate	4.1%	4.1%	4.1%



Global Central Bank Expectations

Improvements in inflation have pushed central bank rate expectations lower in 2023 and 2024 for the US, UK and EUR, while Japan and China are expected to slowly raise rates over time.

Global Central Bank Rate Expectations







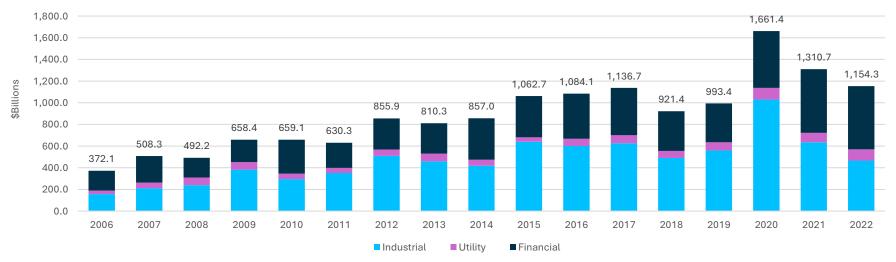
Corporate Bond Market



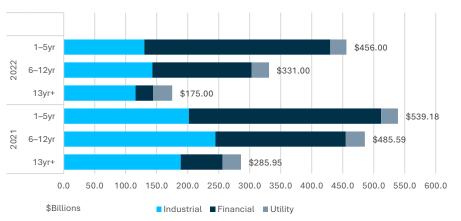
2022 Corporate New-issue Update

New issue of corporate bonds was slightly lower in 2022 than the prior two years, which is expected due to increased funding costs. Duration decreased noticeably YoY.

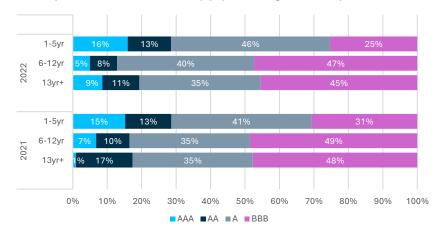
US Investment grade (IG) Corporate New-Issue Volume



IG Corporate New-issue Supply (Sector/Maturity)



IG Corporate New-issue Supply (Rating/Maturity)



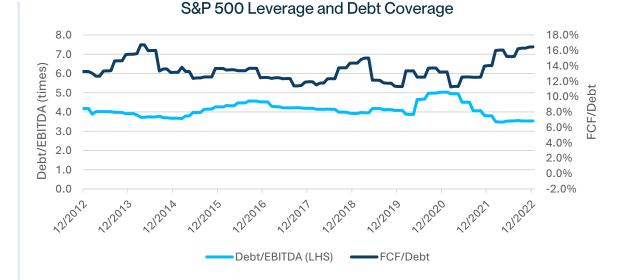


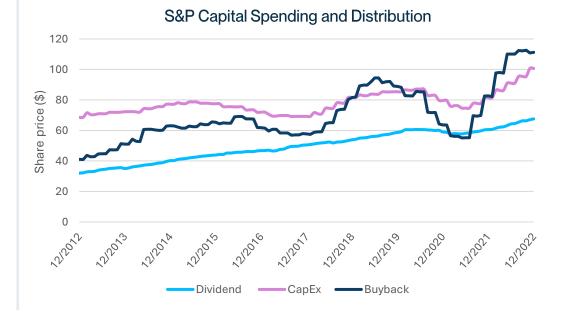
Corporates: Credit Metrics Starting to Normalize

While credit metrics remained favorable in 2022 due to a stable debt balance and strong corporate earnings, leverage and debt coverage have started to normalize from 2021 levels.

Shareholder buybacks tapered in early 2022 as companies shifted from cash distribution to cash preservation amidst the economic slowdown.

Meanwhile, dividends and capital expenditures remain elevated.

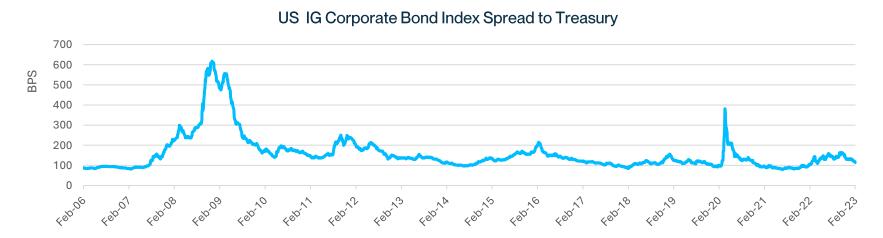




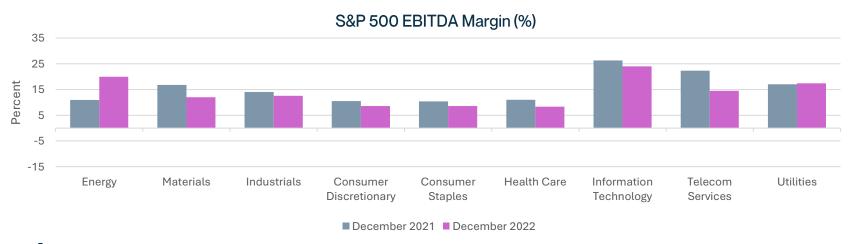


Corporates: Spread and Sector Performance

The risk premium between US Treasuries and corporate bonds has tightened from the elevated levels in late 2022.



Operating profitability, as measured by EBITDA margin, declined YoY for most sectors, with the exception of the Energy sector, which benefited from rising energy prices.







Markets and Performance



Market Sector Performance

It was a difficult year for equity and fixed income markets as sticky inflation, aggressive Fed rate hikes, the Russia/Ukraine war, and volatile economic data kept markets on edge, weighing on investors' sentiment throughout 2022. Meanwhile, crude oil outperformed for the second consecutive year after demand rebounded from 2020.

2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Biotech	IPO Index	Biotech	Biotech	Crude Oil	Biotech	US Treasury	Tech	IPO Index	Crude Oil	Crude Oil
32.91%	54.33%	43.24%	13.09%	45.03%	43.85%	0.86%	45.97%	109.60%	55.01%	6.71%
IPO Index	Biotech	Tech	Tech	High Yield	Tech	US Aggregate	Crude Oil	Biotech	Tech	High Yield
17.86%	48.20%	14.23%	3.23%	17.13%	39.65%	0.01%	34.46%	48.10%	28.73%	-11.19%
S&P 500	S&P 500	S&P 500	S&P 500	Tech	IPO Index	High Yield	IPO Index	Tech	S&P 500	US Treasury
16.00%	32.39%	13.69%	1.38%	12.27%	35.75%	-2.08%	33.87%	42.64%	28.71%	-12.46%
High Yield 15.81%	Tech 23.66%	US IG Corporate 7.46%	US Treasury 0.84%	S&P 500 11.96%	S&P 500 21.83%	US IG Corporate -2.51%	Biotech 32.34%	S&P 500 18.40%	High Yield 5.28%	US Aggregate -13.01%
Tech 14.52%	High Yield 7.44%	IPO Index 7.17%	US Aggregate 0.55%	US IG Corporate 6.11%	Crude Oil 12.47%	S&P 500 -4.38%	S&P 500 31.49%	US IG Corporate 9.89%	US IG Corporate -1.04%	US IG Corporate -15.76%
US IG Corporate 9.82%	Crude Oil 7.19%	US Aggregate 5.97%	US IG Corporate -0.68%	US Aggregate 2.65%	High Yield 7.50%	Tech -6.02%	US IG Corporate 14.54%	US Treasury 8.00%	US Aggregate -1.54%	S&P 500 -18.11%
US Aggregate 4.22%	US IG Corporate -1.53%	US Treasury 5.05%	High Yield -4.47%	US Treasury 1.04%	US IG Corporate 6.42%	Biotech -14.99%	High Yield 14.32%	US Aggregate 7.51%	US Treasury -2.32%	Biotech -25.62%
US Treasury	US Aggregate	High Yield	IPO Index	IPO Index	US Aggregate	IPO Index	US Aggregate	High Yield	IPO Index	Tech
1.99%	-2.02%	2.45%	-7.98%	-0.51%	3.54%	-17.53%	8.72%	7.11%	-9.89%	-30.29%
Crude Oil	US Treasury	Crude Oil	Crude Oil	Biotech	US Treasury	Crude Oil	US Treasury	Crude Oil	Biotech	IPO Index
-7.09%	-2.75%	-45.87%	-30.47%	-15.61%	2.31%	-24.84%	6.86%	-20.54%	-20.38%	-57.06%

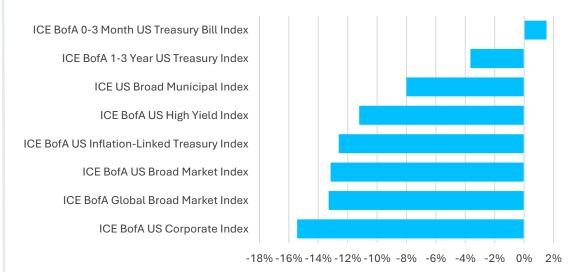
All returns above are on a total return basis. YTD 2022 returns are on an aggregate basis up to 12/31/2022. US Aggregate refers to Bloomberg Barclays Aggregate Bond Index. US Treasuries refers to the US Treasury allocation of the Bloomberg Barclays Aggregate Bond Index. US IG Corporate refers to the IG Corporate allocation of the Bloomberg Barclays Aggregate Bond Index. High Yield refers to the US Corporate High Yield Bloomberg Index. Crude Oil refers to the Spot West Texas Intermediate Crude Oil — Bloomberg-sourced. S&P 500 refers to the S&P 500 Total Return Index. Tech refers to the S&P Global 1200 Information Technology Index. Biotech refers to the S&P Biotechnology Select Industry Index. IPO Index refers to the Renaissance IPO Index.



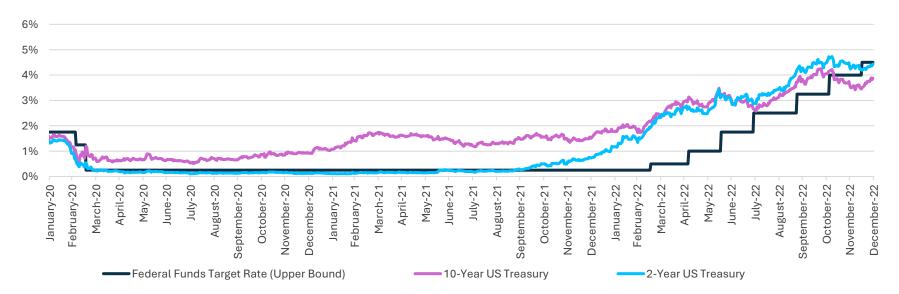
Global Bond Performance

Rising bond yields in 2022 pushed returns negative in global bond markets as central banks underestimated the inflationary pressures caused by historically tight labor markets, rising commodity prices due to the war in Ukraine, and COVID-19 lockdowns in China, disrupting global supply chains.

2022 YTD Bond Performance



Bond Yields

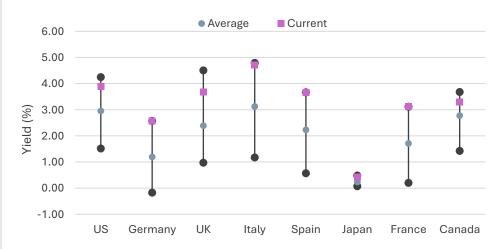




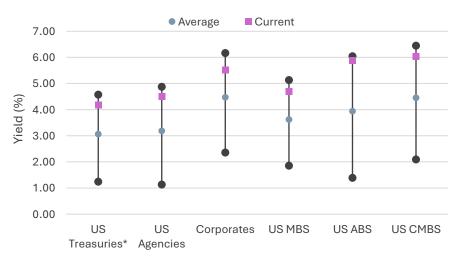
Global and Domestic Yields

Unprecedented monetary policy tightening from the Fed has pushed all-in yields higher in 2022 for both global and domestic bonds to levels not seen since 2008-2009.

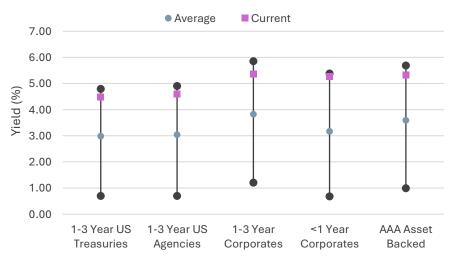
Yields Across the Globe



Broad Fixed Income Yields



Short-duration Yields



*US Treasuries pertain to on-the-run sovereign 10-year securities.



Quarterly Credit and Duration Performance Stratification

Credit spreads tightened across the last three months of 2022 on improved risk sentiment. Indications that the pace of Fed policy tightening would slow along with signs that elevated inflation was cooling contributed to corporate credit generating positive returns and outperforming US Treasuries in Q4.

Corporate Credit

Duration	0-0.25	0.25-0.5	0.5-1.0	1.0-1.5	1.5-2.0	2.0-2.5	2.5-3.0	3.0-4.0	4.0-5.0	5.0-6.0	6.0-7.0	7.0-8.0	8.0-9.0	9.0-10.0	10.0- 11.0	11.0- 12.0	Over 12.0
AAA	1.16%	1.05%	0.84%	0.82%	0.77%	0.97%	1.15%	1.83%	1.61%	3.21%	0.80%	2.51%	3.42%	3.60%	3.61%	4.17%	3.18%
AA1		0.91%		0.65%	0.70%	0.90%	1.01%	1.09%	1.76%	2.37%	2.45%	3.06%		3.98%	5.02%	3.08%	3.06%
AA2	1.03%	1.10%	0.90%	0.92%	0.77%	1.12%	0.92%	1.53%	1.82%	2.65%	1.84%	2.66%	5.93%	3.68%	4.14%	3.10%	2.67%
AA3	1.06%	1.00%	0.92%	0.81%	0.98%	1.40%	1.45%	1.82%	2.14%	2.69%	3.65%	3.27%	3.69%	5.84%	4.79%	4.59%	4.39%
A1	1.12%	1.04%	0.97%	0.88%	1.07%	1.28%	1.63%	1.87%	2.47%	2.74%	2.95%	3.26%	3.80%	4.34%	4.50%	4.85%	3.67%
A2	1.22%	1.13%	1.11%	1.10%	1.23%	1.70%	1.87%	2.43%	3.14%	3.46%	3.53%	3.90%	4.09%	5.16%	5.38%	5.67%	4.67%
А3	1.16%	1.18%	1.05%	1.09%	1.05%	1.58%	1.94%	2.42%	3.30%	3.54%	3.48%	3.88%	4.42%	5.31%	5.45%	6.65%	5.08%
BBB1	1.28%	0.99%	1.20%	1.09%	1.14%	1.73%	2.13%	2.55%	3.18%	3.44%	3.88%	4.10%	6.00%	5.07%	5.71%	6.80%	5.44%
BBB2	1.20%	1.34%	1.05%	1.21%	1.18%	1.64%	2.25%	2.61%	3.32%	3.94%	4.28%	4.54%	5.30%	7.09%	7.86%	7.61%	5.97%
BBB3	1.29%	1.46%	1.41%	1.48%	1.49%	2.62%	2.48%	3.20%	4.39%	4.84%	5.32%	4.90%	7.56%	7.47%	10.14%	8.06%	5.97%

US Treasuries

Duration	0-0.25	0.25-0.5	0.5-1.0	1.0-1.5	1.5-2.0	2.0-2.5	2.5-3.0	3.0-4.0	4.0-5.0	5.0-6.0	6.0-7.0	7.0-8.0	8.0-9.0	9.0-10.0	10.0- 11.0	11.0- 12.0	Over 12.0
AAA	0.91%	0.89%	0.80%	0.66%	0.60%	0.86%	1.11%	1.31%	1.34%	1.34%	1.16%	1.08%	0.92%		0.27%	0.33%	-0.40%

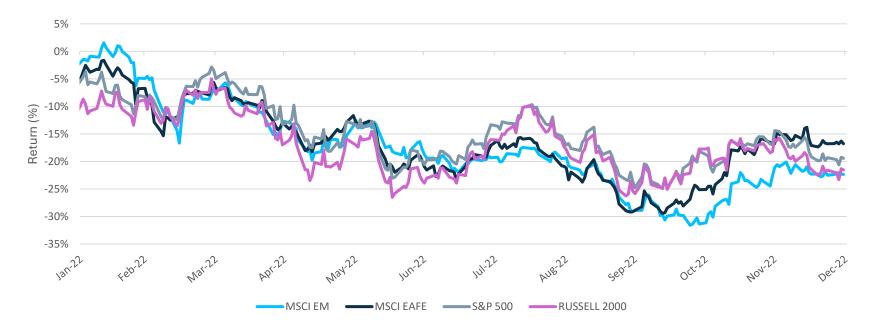
Percentages in table represent total return. Red cells indicate the lowest returns and green indicates the highest returns. Gray boxes indicate there were no securities within the specific duration range for the evaluation period.



Global Equity Performance

Global equity markets were down ~20% at the end of 2022 — the worst performance since 2008. It was a consistent theme for 2022, with high and persistent inflation, rising interest rates, the war in Ukraine and slowing corporate profits all weighing on investors, with signs pointing to a likely recession in 2023.

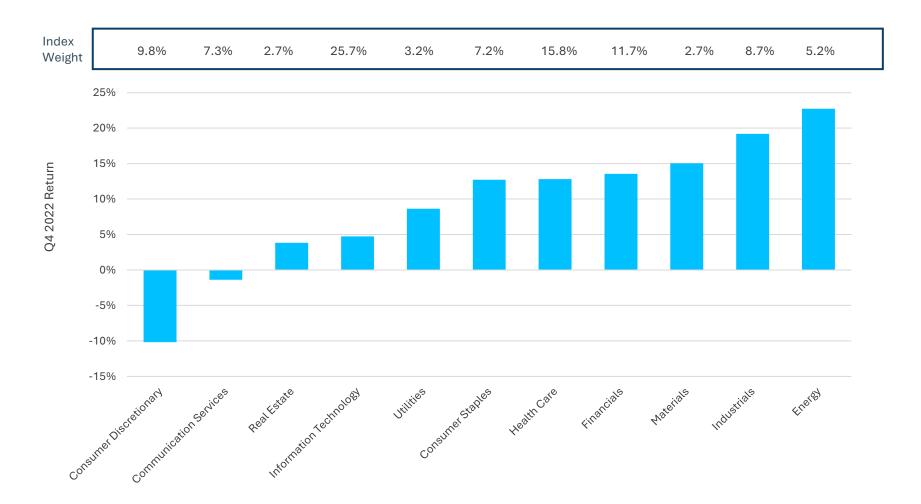
Price Return								
	2022							
MSCI EM	-22.4%							
MSCI EAFE	-16.8%							
S&P 500	-19.4%							
Russell 2000	-21.6%							





US Equity Sector Performance

US equities generated positive returns in Q4, as investors balanced ongoing caution from the Fed that the pace of rate hikes would slow with signs that inflation may be cooling. On top of that, especially strong corporate earnings in certain sectors in Q4 served as an additional factor.





Our Team and Report Authors

Patricia Kao

Head of SVB Asset Management

Portfolio Manager rashar@svb.com

Rohan Ashar

Tim Lee. CFA Senior Credit Analyst tlee@svb.com

Luwei Xiong **Investment Analyst**

Travis Dugan, CFA

Managing Director Head of Portfolio Management tdugan@svb.com

Nicholas Cisneros **Credit Analyst** ncisneros@svb.com

Kyle Lojek Fixed Income Trader klojek@svb.com

Special Contributor Ivan Asensio, Ph.D. Head of FX Risk Advisory iasensio@svb.com

Jason Graveley

Senior Manager Fixed Income Trading Michael Duranceau **Credit Analyst** mduranceau@svb.com Jeff Probst, CFA Portfolio Manager iprobst@svb.com

Darrell Leong, CFA

Managing Director Head of Investment Research dleong@svb.com

Christi Fletcher Senior Portfolio Manager chfletcher@svb.com

Jon Schwartz Senior Portfolio Manager jschwartz@svb.com

Hiroshi Ikemoto Senior Fixed Income Trader hikemoto@svb.com

Jose Sevilla Senior Portfolio Manager jsevilla@svb.com

Steve Johnson, CFA, CTP Portfolio Manager stjohnson@svb.com

Eric Souza Senior Portfolio Manager esouza@svb.com

Disclosure

This material, including without limitation to the statistical information herein, is provided for informational purposes only. The material is based in part on information from third-party sources that we believe to be reliable but which has not been independently verified by us, and, as such, we do not represent the information is accurate or complete. The information should not be viewed as tax, accounting, investment, legal or other advice, nor is it to be relied on in making an investment or other decision. You should obtain relevant and specific professional advice before making any investment decision. Nothing relating to the material should be construed as a solicitation, offer or recommendation to acquire or dispose of any investment, or to engage in any other transaction.

Foreign exchange transactions can be highly risky, and losses may occur in short periods of time if there is an adverse movement of exchange rates. Exchange rates can be highly volatile and are impacted by numerous economic, political and social factors as well as supply and demand and governmental intervention, control and adjustments. Investments in financial instruments carry significant risk, including the possible loss of the principal amount invested. Before entering any foreign exchange transaction, you should obtain advice from your own tax, financial, legal, accounting, and other advisors and only make investment decisions on the basis of your own objectives, experience and resources. Opinions expressed are our opinions as of the date of this content only. The material is based upon information that we consider reliable, but we do not represent that it is accurate or complete, and it should not be relied upon as such.

SVB Private provides a full range of banking, brokerage, and investment management services through Silicon Valley Bank and SVB Investment Services, Inc. (formerly SVB Wealth Advisory). Silicon Valley Bank provides deposit and lending services and products. SVB Investment Services, Inc. (member FINRA and SIPC; SEC-registered investment advisor) offers brokerage and investment management products and services, and is a wholly owned, non-bank subsidiary of Silicon Valley Bank. Silicon Valley Bank is the California bank subsidiary of SVB Financial Group (Nasdag: SIVB) and a member of the Federal Reserve System and FDIC. Bank loans are subject to credit and collateral approval. Financing available and varies by state. Restrictions may apply. Terms and conditions subject to change. NMLSR ID 442029.

Neither SVB Investment Services, Inc., Silicon Valley Bank nor its affiliates provide tax, legal or insurance advice. We can work with your thirdparty advisors on these topics.

SVB Wealth LLC, an SEC-registered investment advisor, offers wealth management services and is a wholly owned subsidiary of Silicon Valley Bank.

IRS Circular 230 Disclosure: SVB Investment Services, Inc. and its affiliates do not provide tax advice. Accordingly, any discussion of US tax matters contained herein (including any attachments) is not intended or written to be used, and cannot be used, in connection with the promotion, marketing or recommendation by anyone unaffiliated with SVB Private Bank of any of the matters addressed herein or for the purpose of avoiding US tax-related penalties.



Disclosure (continued)

Views expressed are as of the date of this report and subject to change. This material, including without limitation the statistical information herein, is provided for informational purposes only. The material is based in part upon information from third-party sources that we believe to be reliable, but which has not been independently verified by us and, as such, we do not represent that the information is accurate or complete. This information should not be viewed as tax, investment, legal or other advice, nor is it to be relied on in making an investment or other decision. You should obtain relevant and specific professional advice before making any investment decision. Nothing relating to the material should be construed as a solicitation, offer or recommendation to acquire or dispose of any investment or to engage in any other transaction.

None of this material, nor its content, nor any copy of it, may be altered in any way, copied, transmitted or distributed to any other party, without the prior express written permission of SVB Asset Management. SVB Asset Management is an investment adviser registered with the US Securities and Exchange Commission (SEC). Registration with the SEC does not in any way constitute an endorsement by the SEC of an investment adviser's skill or expertise. Moreover, registration does not imply that a registered adviser has achieved a certain level of skill, competency, sophistication, expertise or training in providing advisory services to its clients. SVB Asset Management is a non-bank affiliate of Silicon Valley Bank. For institutional purposes only.

Investment products and services offered by SVB Asset Management:

Are not insured by the FDIC or any other federal government agency	Are not deposits of or guaranteed by a bank	May lose value
--	---	----------------

© 2023 SVB Financial Group. All rights reserved. SVB, SVB FINANCIAL GROUP, SILICON VALLEY BANK and the chevron device are trademarks of SVB Financial Group (Nasdag: SIVB), used under license.

