BANK OF AMERICA

CHIEF INVESTMENT OFFICE

Equity Spotlight

An Update on Valuations

February 2023

All data, projections and opinions are as of the date of this report and subject to change.

SUMMARY

- The valuation backdrop for certain areas of the market across regions, style and size has shifted, possibly presenting an improved entry point for long-term investors. Still, the full picture of the investment landscape should be considered, and uncertainty surrounding the effect of tighter financial conditions keeps us in a more defensive mode.
- As we move through the first half of the year, we continue to look for opportunities to potentially add to Equities in areas such as Small-caps, non-U.S. Developed Markets and Emerging Market (EM) as well as to further emphasize more Value-oriented places, given lower starting-point equity valuations and our view that we expect the 12- to 18-month return outlook to be solid.

Investors face a very different market environment compared to the start of 2022. Concerns over accelerating inflation and higher interest rates led to major rerating in equity markets last year. One year later, inflation measures remain elevated but appear to have peaked and now follow a downward trajectory; and while short-term interest rates sit at their highest levels in over 15 years, the Federal Reserve's (Fed) tightening cycle looks to be closer to the end than the beginning following 450 basis points of rate hikes. Despite these shifting factors, the foundation for the fundamental backdrop remains fragile. The effect of higher rates and tighter financial conditions on the earnings outlook has yet to be fully seen, and the magnitude of a possible economic downturn is still uncertain. As these dynamics play out, equity valuations could be vulnerable to another move lower in the near term.

Some investors may find lower valuations in certain areas as an attractive entry point. The usefulness of valuations, however, generally depends on time horizon. The strongest relationship between S&P 500 price-to-earnings (P/E) ratios and subsequent market returns has historically been about a 10-year holding period, where P/E accounted for roughly 80% of the variability in annualized returns.[1] Still, long-term investors should consider the full picture of the investment landscape instead of relying solely on valuations as they make investment decisions.

[1] BofA Global Research. Data as of November 2022.

CIO ASSET CLASS VIEWS

Asset Class	CIO View				
	Underweight		Neutral	Overweight	
Equities			●		
U.S. Large-Cap				●	
U.S. Mid-Cap				●	
U.S. Small-Cap			●		
International Developed		●			
Emerging Markets			●		

Source: Chief Investment Office as of February 7, 2023. CIO asset class views are relative to the CIO Strategic Asset Allocation (SAA) of a multi-asset portfolio.

CIO EQUITY SECTOR VIEWS

Sector	CIO View				
	Underweight		Neutral	Overweight	
Healthcare					●
Energy				●	
Financials				●	
Utilities				●	
Consumer Staples			●		
Industrials			●		
Real Estate			●		
Information Technology			●		
Materials		●			
Consumer Discretionary	●				
Communication Services	●				

Source: Chief Investment Office as of February 7, 2023. All sector and asset allocation recommendations must be considered in the context of an individual investor's goals, time horizon, liquidity needs and risk tolerance. Not all recommendations will be in the best interest of all investors.

Regions

U.S. equity valuations fell sharply last year amid rising bond yields. The S&P 500's forward P/E ratio cratered 21% to 16.8x by the end of 2022 but still hovered above its 15-year historical average of 15.9x. Valuations have rebounded some since the start of this year, with the forward multiple trading at around 18.3x, as markets have priced in the potential for a Fed pause in the coming months, but further multiple compression is possible, especially if earnings deterioration accelerates.[2]

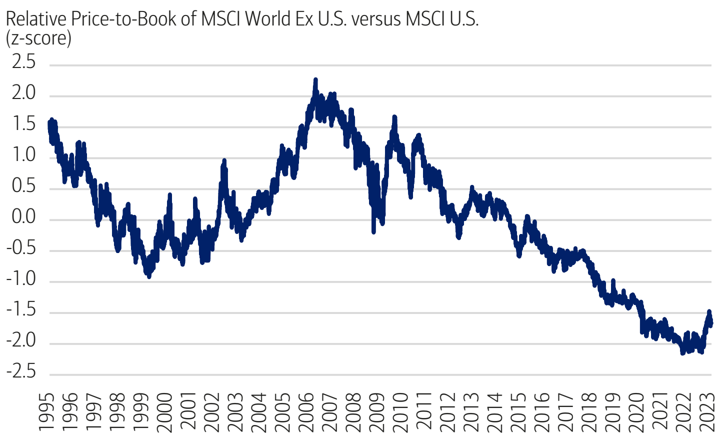
While U.S. Equities have improved from an absolute valuation basis, relative valuations appear to favor non-U.S. Equities. The relative price-to-book ratio for non-U.S. versus U.S. Equities has stretched two standard deviations from its historical trend (Exhibit 1a), suggesting non-U.S. Equities are trading at a steep discount. International Developed market valuations have fallen below their historical averages, and EMs multiples trade slightly above theirs but not in extended territory (Exhibit 1b). Although the valuation backdrop for non-U.S. has improved, for now we maintain a preference for the U.S. versus the rest of the world given near-term risks from the conflict in Ukraine and elevated inflation in Europe, a weakening Japanese economy amid slowing export growth, and escalating geopolitical tensions between China and the U.S. Non-U.S. Equities remain on our watch list for possible upgrade given our view that as interest rate differentials narrow, the dollar peaks, and China's reopening accelerates, new tailwinds may emerge. Some strategic exposure to non-U.S. Equities may be prudent for long-term investors.

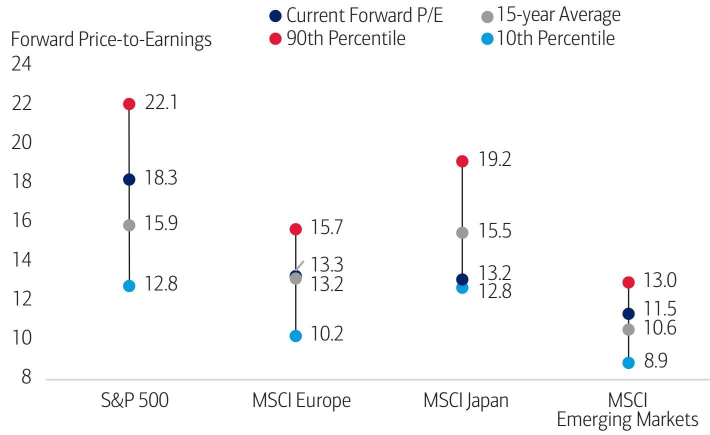
DID YOU KNOW?

- The Nasdaq Composite Index returned about 11% in January—its best start to the year since 2001.[†]
- Macro sentiment among BofA Fund Manager Survey Investors is now the least bearish since the start of the Russia/Ukraine war, with a net 35% expecting a weaker economy in the next 12 months.[††]
- For Q4 2022, 68% of companies in the S&P 500 Index have reported a positive earnings-per-share surprise and 65% have reported a positive revenue surprise.[†††]

[†] Bloomberg. January 31, 2023.
[††] BofA Global Research Fund Manager Survey. February 14, 2023.
[†††] FactSet Earnings Insight. February 17, 2023.

Exhibit 1a & 1b: Some Strategic Exposure to Non-U.S. Equities May Be Warranted Given Relative Valuations.





Source: Bloomberg. Data as of February 20, 2023. **Please refer to index definitions at the end of this report. Past performance is no guarantee of future results.**

Style

The case for long-run Value outperformance is building after more than a decade of trailing Growth stocks. The low interest rate environment that followed the 2008/2009 Great Financial Crisis helped power the Russell 1000 Growth to outperform its Value counterpart by 535% by the end of 2021 and before the start of the Fed's latest tightening cycle.[3] The shift in market conditions last year, however, supported a strong reemergence for Value, which helped the index outpace Growth by 22%, its best relative calendar year outperformance since 2000.[4] Valuations only add another layer to this narrative. Value trades at a relative discount to Growth, a level close to that seen during the dot-com bubble, which preceded several years of strong Value relative outperformance (Exhibit 2a). Given the mix of higher rates, weakening fundamentals and

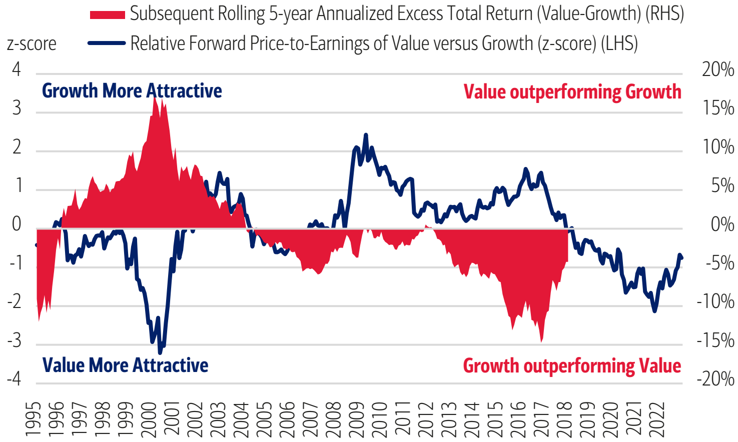
PORTFOLIO CONSIDERATIONS

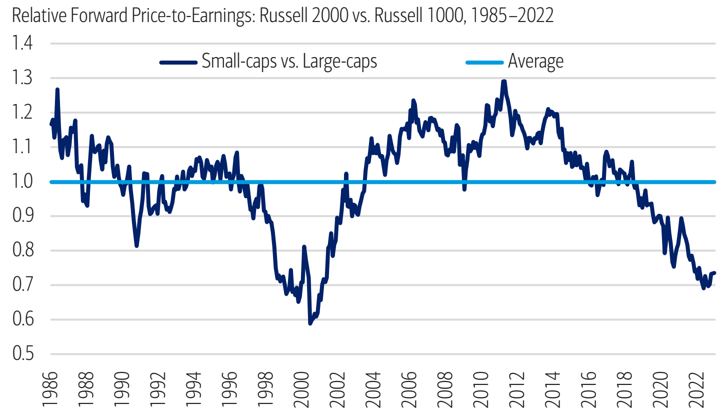
From a positioning perspective, we remain neutral Equities due to our base case of a grind-it-out environment in 2023. We continue to see opportunities in total return sectors, dividend payers, high quality overall and expect potentially better opportunities in Small-caps and non-U.S. Equities later in the year.

[2] Bloomberg. Data as of February 20, 2023.
[3] Bloomberg. Data refers to the period from March 9, 2009 to December 31, 2021.
[4] Bloomberg. Data as of February 21, 2023.

attractive valuations today, the setup for Value outperformance to endure has improved. Therefore, as the reset period progresses, we continue to emphasize more Value-oriented areas of the market, especially more defensive sectors like Healthcare and Financials, which trade at more attractive valuations compared to more elevated Growth-oriented sectors like Technology. Growth should still be part of strategic portfolios given secular forces like automation and artificial intelligence, in our view.

Exhibit 2a & 2b: The Tide May Be Turning For Value and Small-caps.





(Left) Source: Bloomberg. Data as of February 21, 2023. (Right) Source: BofA Global Research. Data as of December 30, 2022. **Please refer to index definitions at the end of this report. Past performance is no guarantee of future results.**

Size

From a size perspective, Small-caps suffered worse than Large-caps last year, as concerns over the economic downturn weighed greater on smaller companies given their closer tie to the domestic economy. The pressure on Small-caps in recent years has pushed valuations to near historic lows. Small-caps are now extremely cheap relative to Large-caps, trading at levels otherwise seen only during the dot-com bubble (Exhibit 2b). The Russell 2000 led the Russell 1000 by roughly 60% in the seven-year period following the bottom in relative valuations in 2000, suggesting current valuations could be setting the smaller size segment up to see an extended period of outperformance.[5] Downside risks in the near term persist, however, as Small-caps tend to underperform heading into a recession and tend to see a bigger hit to earnings than Large-caps. Russell 2000 earnings have fallen on average roughly 50% during recessions, far deeper than the average 20% decline in S&P 500 earnings.[6] Thus, we remain neutral Small-caps with a bias to Large-caps but believe investors should prepare to consider building out exposure as the market bottoming process comes closer to an end.

[5] Bloomberg. Data from June 30, 2000 to June 29, 2007.

[6] BofA Global Research. Data as of November 2022.

Data as of 2/21/2023 for full table					Valuations**									Consensus Earnings Estimates***					
	Performance				P/E (FWD)			P/B			P/S			2022E		2023E		2024E	
Index	1 Month	3 Months	6 Months	1 Year	As of 2/21/2023	20 year Average	Percentile (%)*	As of 2/21/2023	20 year Average	Percentile (%)	As of 2/21/2023	20 year Average	Percentile (%)	Value	% Year-over-Year	Value	% Year-over-Year	Value	% Year-over-Year
S&P 500 Index	0.8%	1.6%	-4.6%	-6.6%	18.0	15.7	85	3.9	2.9	90	2.3	1.7	87	220	5	224	2	249	11
NASDAQ 100 Index	3.9%	4.6%	-8.5%	-13.1%	22.9	19.2	81	6.0	4.8	82	3.8	3.2	86	467	-6	503	8	596	18
Russell 1000 Total Return (TR)	0.9%	2.0%	-4.4%	-6.9%	18.2	16.1	84	3.8	2.9	90	2.2	1.7	85	227	4	235	3	263	12
Russell 1000 Growth TR	2.4%	3.1%	-8.1%	-12.0%	22.9	18.7	87	9.2	5.8	87	3.4	2.4	86	59	-1	66	10	76	15
Russell 1000 Value TR	-0.5%	1.0%	-0.6%	-1.6%	15.1	14.1	69	2.4	1.9	91	1.6	1.3	79	64	8	64	0	71	10
Russell 2000 TR	1.2%	3.0%	-2.8%	-4.7%	22.5	21.7	59	2.1	2.1	50	1.2	1.1	66	200	7	219	10	274	25
Russell 2000 Growth TR	1.2%	3.7%	-3.3%	-6.5%	27.5	32.5	54	4.1	3.7	73	1.5	1.6	49	220	70	247	12	326	32
Russell 2000 Value TR	1.2%	2.3%	-2.4%	-3.1%	19.0	17.2	74	1.4	1.5	41	1.0	0.9	68	441	-7	477	8	579	21
MSCI Daily TR Net World Ex USA USD	0.7%	9.9%	8.9%	-3.1%	13.3	13.7	36	1.8	1.7	67	1.5	1.5	94	161	8	163	1	172	5
MSCI Europe	1.5%	12.4%	13.9%	0.0%	12.5	13.2	36	1.9	1.8	70	1.4	1.1	94	146	9	147	0	157	7
MSCI Japan****	0.4%	7.0%	3.0%	-8.7%	11.3	15.8	3	1.3	1.4	39	1.0	0.8	83	89	16	93	4	100	7
MSCI Daily TR Net EM USD	-3.0%	8.4%	1.2%	-15.2%	11.5	10.8	72	1.5	1.7	46	1.2	1.1	66	82	-10	79	-4	92	16

*Percentile refers to the percentile rank of the current P/E (FWD). **Monitors commonly used valuation ratios (P/E (FWD) = Forward Price/Earnings, P/B = Price/Book, P/S = Price/Sales). Source: Bloomberg. ***Yearly Earnings Per Share (EPS) estimates for indices referenced. A= Actual. E = Estimate. Source: Factset. **** MSCI Japan earnings expressed in Yen. For illustrative purposes only. Securities indexes assume reinvestment of all distributions and interest payments. **Indexes are unmanaged and do not take into account fees or expenses. It is not possible to invest directly in an index.** Indexes are all based in U.S. dollars, unless indicated otherwise. Performance during periods of exceptional market conditions should not be expected to be repeated in a normal market environment. Performance results are extremely short term and do not provide an adequate basis for evaluating performance potential over varying market conditions or economic cycles. **Past performance is no guarantee of future results. See Index Definitions at the end of this report.**

The table below provides a rough indication of where the S&P 500 Index's central tendency could be, given various scenarios for EPS in 2023 and price-to-earnings (P/E) ratio multiples. These scenarios are not official price targets and are not meant to signal levels where portfolio actions may always be needed. However, during times of market volatility, it's useful to keep this basic framework in mind when considering whether to incrementally add to or trim risk from portfolios while staying invested in one's strategic asset allocation framework.

S&P 500 SCENARIOS BASED ON FORWARD P/E AND 2023 EPS

Forward P/E (Next 12 months)

2023 EPS	Forward P/E (Next 12 months)				
	15.0x	**16.0x**	**17.0x**	**18.0x**	**19.0x**
$240	3,600	3,840	4,080	4,320	4,560
$230	3,450	3,680	3,910	4,140	4,370
$220	3,300	3,520	3,740	3,960	4,180
$210	3,150	3,360	3,570	3,780	3,990
$200	3,000	3,200	3,400	3,600	3,800
$190	2,850	3,040	3,230	3,420	3,610
$180	2,700	2,880	3,060	3,240	3,420

For illustrative purposes only. Forecasts are subject to change. Source: Chief Investment Office as of February 7, 2023.

Asset Class Proxies and Index Definitions

Securities indexes assume reinvestment of all distributions and interest payments. Indexes are unmanaged and do not take into account fees or expenses. It is not possible to invest directly in an index.

Equities/S&P 500 Index widely regarded as the best single gauge of the U.S. equities market, includes a representative sample of 500 leading companies in leading industries of the U.S. economy.

Russell 1000 Total Return (TR) Index consists of the largest 1000 companies in the Russell 3000 Index. This index represents the universe of large capitalization stocks from which most active money managers typically select.

Russell 1000 Growth TR Index measures the performance of the large-cap growth segment of the U.S. equity universe. It includes those Russell 1000 companies with higher price-to-book ratios and higher forecasted growth values.

Russell 1000 Value TR Index measures the performance of the large-cap value segment of the U.S. equity universe. It includes those Russell 1000 companies with lower price-to-book ratios and lower expected growth values.

Russell 2000 TR Index measures the performance of the 2,000 smallest companies in the Russell 3000 Index.

Growth/Russell 2000 Growth TR Index measures the performance of the broad growth segment of the U.S. equity universe. It includes those Russell 2000 companies with higher price-to-book ratios and higher forecasted growth values.

Value/Russell 2000 Value TR Index measures the performance of the large-cap value segment of the U.S. equity universe. It includes those Russell 2000 companies with lower price-to-book ratios and lower expected growth values.

MSCI USA Index is designed to measure the performance of the large and mid cap segments of the US market.

MSCI Daily TR Net World Ex USA Index USD captures large and mid cap representation across 22 of 23 Developed Markets (DM) countries – excluding the United States. The index covers approximately 85% of the free float-adjusted market capitalization in each country.

MSCI Europe Index is a free-float weighted equity index measuring the performance of Europe Developed Markets.

MSCI Japan Index is a free-float weighted equity JPY Index.

MSCI Daily TR Net EM Index USD captures large and mid cap representation across 23 Emerging Markets countries and targets coverage of approximately 85% of the free float adjusted market capitalization in each country.

NASDAQ 100 Index is a stock market index that includes almost all stocks listed on the Nasdaq stock exchange.

Important Disclosures

Investing involves risk, including the possible loss of principal. Past performance is no guarantee of future results.

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Asset allocation and diversification do not ensure a profit or protect against loss in declining markets.

Investments have varying degrees of risk. Some of the risks involved with equity securities include the possibility that the value of the stocks may fluctuate in response to events specific to the companies or markets, as well as economic, political or social events in the U.S. or abroad. Small cap and mid cap companies pose special risks, including possible illiquidity and greater price volatility than funds consisting of larger, more established companies. Investments in foreign securities (including ADRs) involve special risks, including foreign currency risk and the possibility of substantial volatility due to adverse political, economic or other developments. These risks are magnified for investments made in emerging markets. International investing involves special risks, including foreign taxation, currency risks, risks associated with possible differences in financial standards and other risks associated with future political and economic developments. Investments in a certain industry or sector may pose additional risk due to lack of diversification and sector concentration.