



Marco Pirondini
Senior Managing Director
Head of Equities US
Portfolio Manager

Executive Summary

- While peak inflation may be behind us, prior periods in which inflation has been over 5% have ended in recessions.
- S&P 500 earnings have always declined in recessions. Consensus 2023 earnings estimates are above those of 2022, however, suggesting investors have not yet discounted a potential recession.
- During previous earnings declines, high quality factors have outperformed low quality ones. As a result, we believe investors may benefit in 2023 with a quality orientation in their equity portfolios. Quality factors include return on equity, return on assets, net income margin and asset turnover. (See page 6 for definitions.)

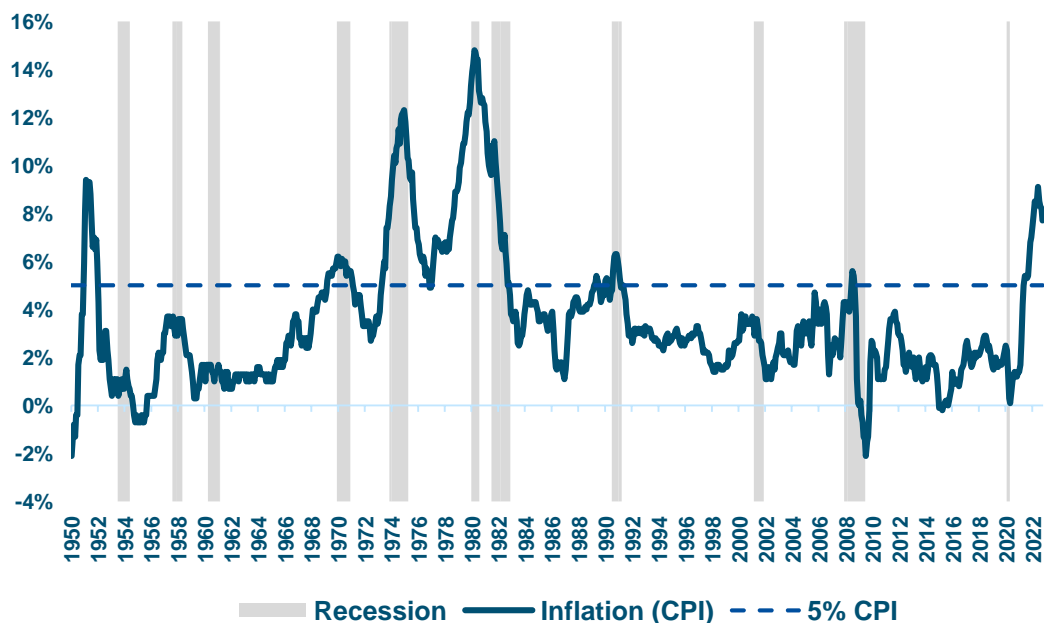
A Recession Appears Likely

Inflation, as measured by the Consumer Price Index (CPI), has declined each month since peaking in June at 9.1%, leading some to predict a soft landing for the US economy. Since 1950, however, a US recession has accompanied every period in which the CPI has risen more than 5%. The reason is that historically, the Fed has tipped the economy into a recession by aggressively raising interest rates to combat inflation. With CPI currently above 7%, and the Fed moving aggressively to curtail it, a recession in 2023 appears likely.



Alec Murray
Senior Vice President
Head of Equity Client
Portfolio Managers

Exhibit 1: Recessions have always accompanied periods in which CPI exceeded 5%
US Consumer Price Index (CPI) and recessions (1950 – 2022)



Source: Bloomberg and Amundi US. Last data point October 31, 2022. Data is based on past performance, which is no guarantee of future results.

Quality factors, which include return on equity, return on assets, net income margin and asset turnover, consistently outperformed in past earnings-driven bear markets.

Earnings Have Always Declined in Recessions

Corporate profitability has historically suffered during recessions. Since 1928, the average earnings declines in recessions has been just over 30%, but the range has been wide depending on the depth of the recession. During the 1980 recession, earnings declined by only 4.6%[□] because energy earnings rose along with oil prices. At the time, energy stocks represented 28%[□] of the S&P 500 Index, so the increase in energy earnings largely offset declines in other sectors. Today, however, the energy sector is only 5.3% of the S&P 500 Index[□]. As a result, higher energy earnings will likely be less helpful in counteracting declines in other sectors than they were in 1980.

Exhibit 2: During recessions, S&P 500 earnings declines have been between 4% – 91%
S&P 500 earnings declines during prior recessions

Recession Period	Reported Earnings Declines	Recession Period	Reported Earnings Declines
3Q'29-1Q'33	-74.5%	4Q'73-1Q'75	-14.8%
3Q'37-2Q'38	-49.2%	1Q'80-3Q'80	-4.6%
1Q'45-4Q'45	-29.4%	3Q'81-4Q'82	-19.1%
4Q'48-4Q'49	-3.3%	3Q'90-1Q'91	-36.7%
2Q'53-2Q'54	-17.6%	1Q'01-4Q'01	-54.0%
3Q'57-2Q'58	-22.0%	4Q'07-2Q'09	-91.9%
2Q'60-1Q'61	-11.7%	1Q'20-2Q'20	-32.5%
4Q'69-4Q'70	-12.9%	Average	-36.2%

Source: Strategas, September 20, 2022. **Data is based on past performance, which is no guarantee of future results.** See page 6 for more information about indices.

Quality Has Been the Best Defense When Earnings Decline

As shown in Exhibit 3, quality factors, which include return on equity, return on assets, net income margin and asset turnover, consistently outperformed in past earnings-driven bear markets. In fact, during the most recent six periods in which next-twelve-month (NTM) earnings declined, equities of companies in the highest quintile of the S&P 500 Index outperformed those in the lowest quintile **100% of the time**.

[□] Source: Forbes, "1980 Revisited", March 6, 2000.

[□] Source: Standard & Poors, September 2022.

Exhibit 3: Factors that outperformed during earnings-driven bear markets*Profitability measures have been key indicators of quality*

Outperformers	Peak in Next TM EPS	Trough in NTM EPS	ROA	Net Income Margin	ROE	Asset Turnover	These factors outperformed in every period where next-twelve-months earnings per share fell
	Jan-86	May-86	10.0%	7.9%	10.9%	4.7%	
	Sep-89	Apr-91	36.9%	29.9%	19.2%	11.7%	
	Sep-00	Nov-01	0.5%	2.6%	3.6%	5.3%	
	Oct-07	May-09	7.4%	4.4%	6.8%	2.7%	
	Sep-14	Mar-16	4.8%	4.3%	6.6%	7.0%	
	Feb-20	May-20	14.7%	15.0%	9.0%	7.9%	
	Avg		12.4%	10.7%	9.3%	6.6%	100% Hit Rate
	Hit Rate		100.0%	100.0%	100.0%	100.0%	

Source: Piper Sandler, November 4, 2022. Data in green shows the performance of quality factors for the highest quintile of the companies in the S&P Index compared with the lowest quintile. The hit rate is defined as the percentage of positions that generated positive returns over this period. NTM EPS is next-twelve-months earnings per share. An earnings-driven bear market is considered a period in which the market experiences a decline of 20% or more. **Data is based on past performance, which is no guarantee of future results.**

Companies That Lost Money Have Been by Far the Worst Performers

By comparison, equities of companies with the most negative earnings (top quintile) have underperformed the index by more than 15% on average during the periods shown. Long-term volatility, sales variance, and beta[□] were also factors that consistently underperformed.

Exhibit 4: Factors that underperformed during earnings-driven bear markets*Factors that underperformed during periods of declines in earnings per share*

Underperformers	Peak in NTM EPS	Trough in NTM EPS	Beta	Sales Variance	Long Term Volatility	Negative Earnings	These factors underperformed in every period where next-twelve-months earnings per share fell
	Jan-86	May-86	-5.0%	-1.7%	-3.8%	-10.3%	
	Sep-89	Apr-91	-2.7%	-8.7%	-16.7%	-17.2%	
	Sep-00	Nov-01	-19.5%	-15.8%	-24.7%	-10.0%	
	Oct-07	May-09	-4.1%	-19.5%	-10.8%	-16.6%	
	Sep-14	Mar-16	-19.6%	-20.1%	-20.1%	-27.9%	
	Feb-20	May-20	-5.4%	-1.1%	-4.7%	-11.3%	
	Avg		-9.4%	-11.1%	-13.5%	-15.6%	0% Hit Rate
	Hit Rate		0.0%	0.0%	0.0%	0.0%	

Source: Piper Sandler, November 4, 2022. Data in orange for beta, sales variance, and long-term volatility shows the factor performance of highest-quintile stocks relative to the lowest quintile stocks in the S&P 500 Index. Data for negative earnings shows the performance of the highest quintile (most negative-earning stocks) relative to all stocks in the index. The hit rate is defined as the percentage of positions that generated positive returns over this period. NTM EPS is next-

[□] Beta is a measure of the contribution of a security or asset class to the risk of the broader market. A beta greater than 1 suggests that the stock is more volatile than the broader market, and a beta less than 1 indicates a stock with lower volatility. See page 6 for definitions.

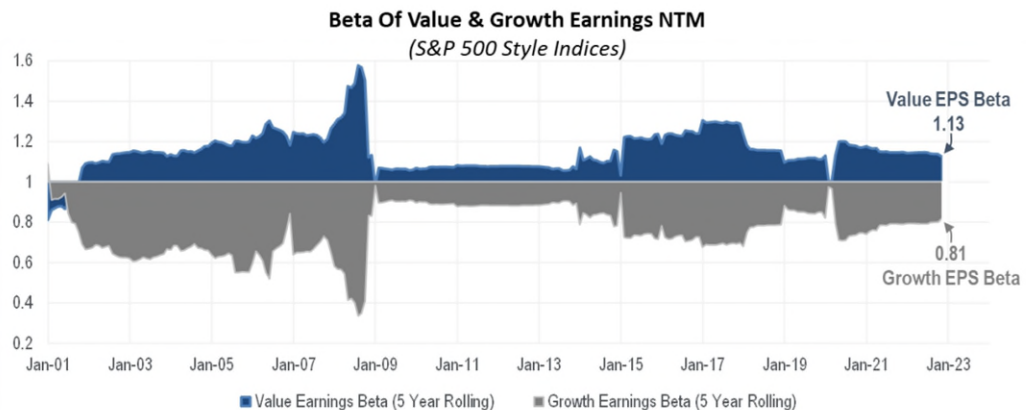
twelve-months earnings per share. An earnings-driven bear market is considered a period in which the market experiences a decline of 20% or more. **Data is based on past performance, which is no guarantee of future results.**

Balancing Value Exposure with Reasonably Priced Growth Stocks May Be the Best Path Forward in 2023

The environment in 2022 has been positive for value and poor for growth. Value indices traditionally have much higher exposure than growth indices to energy and financial stocks, which often do well when inflation and interest rates are rising. Growth stocks, meanwhile, tend to be long-duration assets whose valuations are especially sensitive to changes in interest rates, which have spiked this year. Year-to-date through November 30[□], the Russell 1000 Value Index outperformed the Russell 1000 Growth Index by 19%.

In 2023, we believe value may continue to do well if inflation and interest rates remain elevated. However, value's cyclical orientation also makes it vulnerable to a recession. As shown below, the value earnings-per-share (EPS) beta is over 1, meaning value earnings are more volatile than S&P 500 EPS. The growth EPS beta, meanwhile, is below 1, indicating the growth EPS are less volatile than S&P 500 EPS. While value stocks continue to trade at a wider than average price-to-earnings (P/E) multiple discount to growth stocks, the "E" for value stocks is less certain than for growth in a weakening economic environment. Moreover, growth is likely to benefit from valuation support as the Fed tames inflation and interest rates (and the cost of capital) decline. For these reasons, we believe balancing value exposure with reasonably priced growth may be the best path forward next year in US equities.

Exhibit 5: Beta of next-twelve-months (NTM) value & growth earnings



Source: Piper Sandler, November 15, 2022. Indices are the S&P 500 Growth Index and the S&P 500 Value Index. **Data is based on past performance, which is no guarantee of future results.** Indices are unmanaged and their returns assume reinvestment of dividends and do not reflect any fees or expenses. It is not possible to invest directly in an index. See page 6 for further information about indices shown.

Areas of the market we believe may struggle are distressed value, which is particularly sensitive to economic conditions, and growth stocks with high valuation premiums. While the latter group of stocks has declined sharply this year, they are unlikely to perform well in 2023 unless inflation and interest rates fall to the exceptionally low levels of the last growth cycle.

[□] Source: Bloomberg, November 15, 2022

Exhibit 6: The NASDAQ outperformed during exceptionally low inflation, low interest rate environments*NASDAQ excess return*

	Nasdaq	S&P 500	Nasdaq Excess Return	
2009	43.9%	23.5%	20.4%	<p>US CPI Averaged 1.55%</p> <p>Rates were in a downtrend</p> <p>The Fed had Zero Interest Rate Policy from 2008-2015</p>
2010	16.9%	12.8%	4.1%	
2011	-1.8%	0.0%	-1.8%	
2012	15.9%	13.4%	2.5%	
2013	38.3%	29.6%	8.7%	
2014	13.4%	11.4%	2.0%	
2015	5.7%	-0.7%	6.5%	
2016	7.5%	9.5%	-2.0%	
2017	28.2%	19.4%	8.8%	
2018	-3.9%	-6.2%	2.4%	
2019	35.2%	28.9%	6.3%	
2020	43.6%	16.3%	27.4%	
2021	21.4%	26.9%	-5.5%	
2022	-28.4%	-17.0%	-11.5%	

Source: Piper Sandler, November 15, 2022. See page 6 for more information about indices shown.

Summary

The risk of a recession in 2023 appears high. Although S&P 500 earnings have always declined in recessions, 2023 earnings estimates are above those of 2022, suggesting investors have not yet discounted a potential recession. To prepare their portfolios, investors may wish to balance exposure to quality value stocks with reasonably priced, high-quality growth stocks.

Definitions

Indices are unmanaged and, unlike fund returns, do not reflect any fees or expenses. It is not possible to invest in an index.

Asset Turnover – A measure that analyzes how well a company uses its assets to drive sales.

Beta - a measure of the contribution of an individual security or asset class to the risk of the broader market. A beta greater than 1 suggests that the stock is more volatile than the broader market, and a beta less than 1 indicates a stock with lower volatility.

Consumer Price Index - Measures the overall change in consumer prices based on a representative basket of goods and services over time

Earnings per Share (EPS) - A company's net profit divided by the number of common shares it has outstanding

Hit Rate – The percentage of positions that have generated positive returns over a given period

Long Term Volatility – A definition of how much a security's price fluctuates over time.

NASDAQ – National Association for Securities Dealers Automated Quotations. An online global marketplace for buying and trading securities.

Negative Earnings – Company losses, caused by companies spending more than they earn.

Net Income Margin – The after-tax income of a business expressed as a percentage of revenues.

Next Twelve Months (NTM) – Any financial measure forecasted for the immediate next twelve months from the current date.

Quality Factors – Measure that potentially indicate the health of a company, such as return on equity, return on assets and net income margin

Return on Assets (ROA) – Measures the profitability of a business in relation to its total assets.

Return on Equity (ROE) – Measure of financial performance calculated by dividing net income by shareholders' equity.

Sales Variance - The difference between actual sales and budgeted sales

S&P 500 Index – A commonly used measure of the broad US stock market.

Important Information

This document is solely for informational purposes. This document does not constitute an offer to sell, a solicitation of an offer to buy, or a recommendation of any security or any other product or service. Any securities, products, or services referenced may not be registered for sale with the relevant authority in your jurisdiction and may not be regulated or supervised by any governmental or similar authority in your jurisdiction. Furthermore, nothing in this website is intended to provide tax, legal, or investment advice and nothing in this document should be construed as a recommendation to buy, sell, or hold any investment or security or to engage in any investment strategy or transaction. There is no guarantee that any targeted performance or forecast will be achieved. Unless otherwise stated, all information contained in this document is from Amundi Asset Management S.A.S. and is as of December 1, 2022. Diversification does not guarantee a profit or protect against a loss. The views expressed regarding market and economic trends are those of the author and not necessarily Amundi Asset Management S.A.S. and are subject to change at any time based on market and other conditions, and there can be no assurance that countries, markets or sectors will perform as expected. These views should not be relied upon as investment advice, a security recommendation, or as an indication of trading for any Amundi product. This material does not constitute an offer or solicitation to buy or sell any security, fund units or services. Investment involves risks, including market, political, liquidity and currency risks. Past performance is not a guarantee or indicative of future results.

Date of first use: December 1, 2022.

Amundi Asset Management US is the US business of the Amundi Asset Management group of companies.

©2022 Amundi Asset Management US, Inc.
RO 2612757