Dudack Research Group
A Division of Wellington Shields & Co. LLC Member NYSE, FINRA & SIPC
Gail M. Dudack, CMT ● Chief Investment Strategist ● gail@dudackresearchgroup.com ● 212-320-2045 December 14, 2022

DJIA: 34108.64
SPX: 4019.65
NASDAQ: 11256.81

US Strategy Weekly

Preparing for a Recession

Stocks have seen a year-end rally in each of the last six years and this phenomenon can be explained by a number of seasonal factors such as the end of tax-loss selling, mutual fund window dressing, and stock purchases due to liquidity from year-end and Christmas bonuses, among other things. However, we believe a year-end rally may be less robust than usual since thoughts of 2023 and its various hurdles could weigh on investor sentiment.

Recent market action suggests that investors are very willing to look on the bright side of the street. We prefer to be optimistic ourselves, however, the financial media is persistently focused on news that would suggest peak interest rates are directly ahead. This is viewed as a reason to expect the worst to be over and that a market advance is at hand. In some situations, it might be profitable to look past the economic valley of 2023 and look to invest for the longer term; but this time we think the valley may be deeper and wider than expected. For this reason, we remain prudent and look to keep our portfolio concentrated in necessities, recession resistant companies and sectors and stocks with predictable earnings streams and above average dividend yields.

Lowering Earnings Forecasts

The probability of higher interest rates and the likelihood of a recession in 2023 is high, in our opinion. Though we have been expecting a recession, we have not fully addressed it in our earnings forecasts. Our economic forecast included a weak first half of 2023 followed by an economic rebound, but even that may be too hopeful. This week we are lowering this year's S&P 500 earnings forecast from $202 to $200 to reflect the decline seen in the third quarter earnings results. And since the typical recession results in a 10% decline in corporate earnings, we are lowering our 2023 estimate from $204 to $180.

Looking for an Average Recession

Since WWII, the last twelve recessions have persisted for an average of 10 months, have generated a 2% decline in real GDP, resulted in a loss of an average of 4 million jobs and led to a 10% decline in corporate earnings. Few recessions "match" the average, however, we believe inflation is more embedded in the economy than even the Fed would like to admit. If so, it means interest rates will remain higher for longer than expected. Chairman Jerome Powell was late to address inflation; however, we expect he has studied the last inflationary cycle that began in 1968 and continued until 1982. The error that Federal Reserve Chairman Arthur Burns made in the 1970 decade was to not keep interest rates high enough or long enough to get control over inflation. As a result, there were four recessions between 1970 and 1982, until inflation finally began to recede.

With this in mind, it follows that interest rates will remain higher for longer next year than many expect. If so, the 2023 recession may last for more than two quarters and have a more debilitating impact on corporate earnings. For all these reasons, we are lowering our earnings estimate once again.

The Inflation Problem

November's CPI came in softer than expectations, and while the peak level of inflation may be behind us, the underlying details of November's report are not as favorable as some market commentators seem to believe. Much of the decline in prices is the result of decelerating energy prices (which are still rising 13.1% YOY!); meanwhile, food and beverage prices are rising at a double-digit pace, and housing, transportation, and "other goods and services" inflation are increasing 7% YOY or more. See page 3.

It is very likely that headline inflation peaked at 9% YOY in April 2022, but the Fed's lack of attention in 2021 to stimulus-driven inflation allowed price increases to become embedded in the economy. This is making inflation difficult to combat. As a result, core CPI has been hovering between 6.0% YOY and 6.5% YOY for several months -- the highest in 40 years -- and is far from the 2% target rate indicated by the Fed. See page 4. And inflation is no longer driven solely by the price of energy, nor is it a problem linked primarily to the rise in owners' equivalent rent. The current drivers of the CPI include food and beverage pricing and a wide range of consumer services. See page 5.

It should be noted that prices for services have been on the rise since early 2021. The composite service component of the CPI rose 7.2% YOY in November, rose 7.2% YOY in October, and fell only slightly from the peak rate of 7.4% YOY recorded in September. <u>With inflation now embedded in the largest segment of the economy, the Fed's job has become more difficult than most expect</u>. And as seen in the chart on page 6, the price of WTI crude oil has typically had a direct impact on inflation when it rises but has had less of an impact when prices fall. In our view, the consensus remains too sanguine about the path of inflation over the next 12 months.

Moreover, 32% of small business owners indicated that inflation was their single biggest problem. The small business optimism index rose 0.6 points in November to 91.9, but this is the 11th month below the 49-year average of 98. Of the 10 components, 6 increased and 4 decreased in November. The percentage of owners that plan to raise prices was more than 50% earlier in the year but now sits at 35%. Owners who think it is a good time to expand improved one point to six in November, but this is well below the long-term average of 13. See page 7.

2023: The Year of Earnings Adjustment

In 2022, investors began to take inflation seriously and focused on tightening monetary policy. As a result, there has been a steady decline in price earnings multiples this year. But the adjustments are not over. In our view, the challenge in 2023 will be the reality of a recession and the negative impact it will have on earnings.

As noted, we are lowering our S&P 500 2022 earnings estimate slightly to $200 and taking our 2023 estimate down $180 to reflect a 10% decline. However, even without a recession in 2023, S&P 500 earnings have been extremely high relative to the trend in nominal GDP. Earnings growth and nominal GDP tend to be highly correlated and the relative outperformance of S&P earnings versus economic activity in 2021 and 2022 is an unsustainable trend. A period of earnings outperformance has usually been followed by a decline in earnings. See page 8.

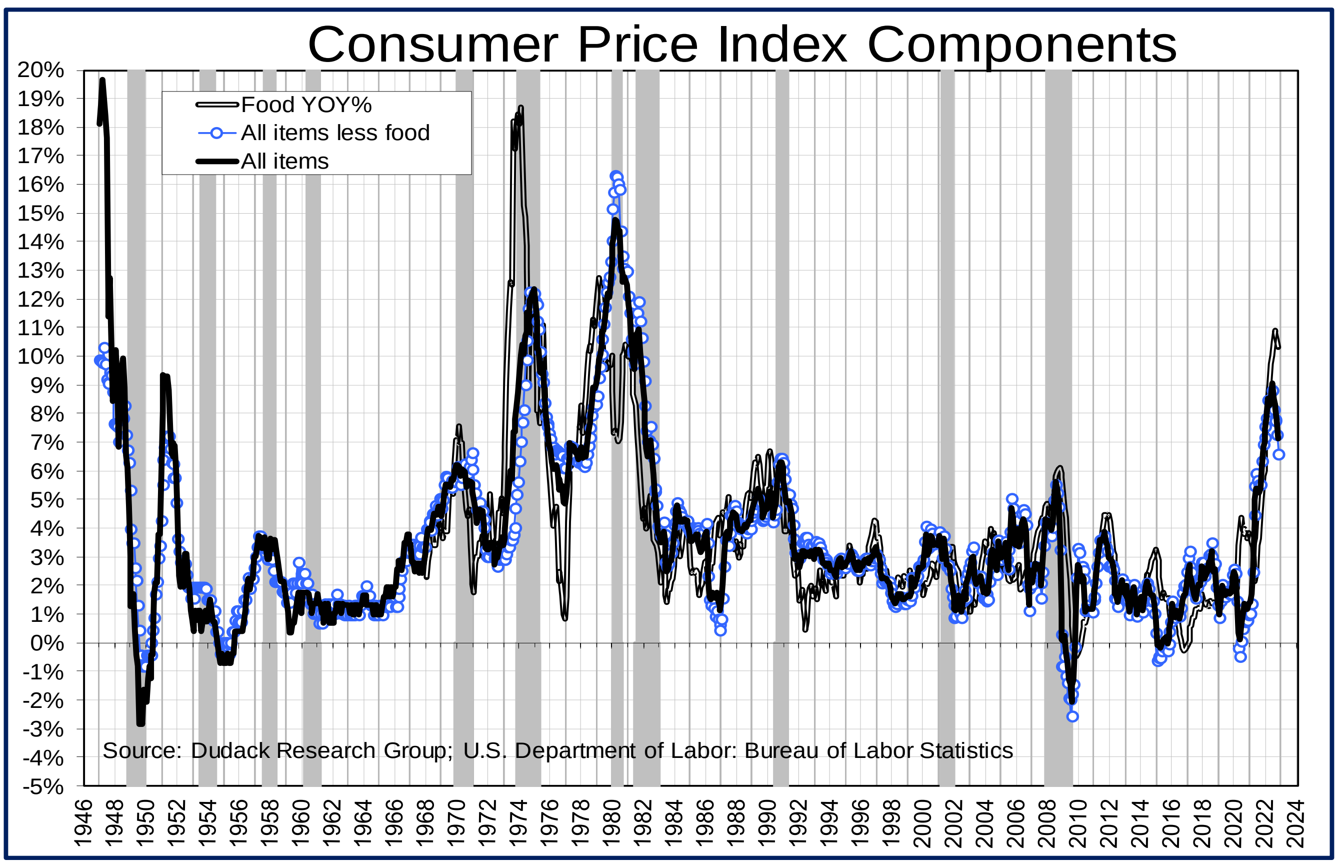
The recent earnings outperformance in this cycle is easily explained by the historic level of stimulus pumped into the economy both during and after the Covid shutdown. In short, corporate earnings were artificially elevated. As stimulus fades, earnings are apt to underperform, even without a recession in 2023. However, we expect the Fed will remain on track to raise short-term rates to 5% or higher next year and this makes a recession a high probability in the next twelve months. As we have often noted, inflation in excess of 4% has characteristically resulted in a recession. Double-digit inflation has historically been followed by multi-year rolling recessions.

<u>In sum, 2022 was a year of multiple compression and 2023 is apt to be the year of earnings deterioration</u>. We remain cautious.

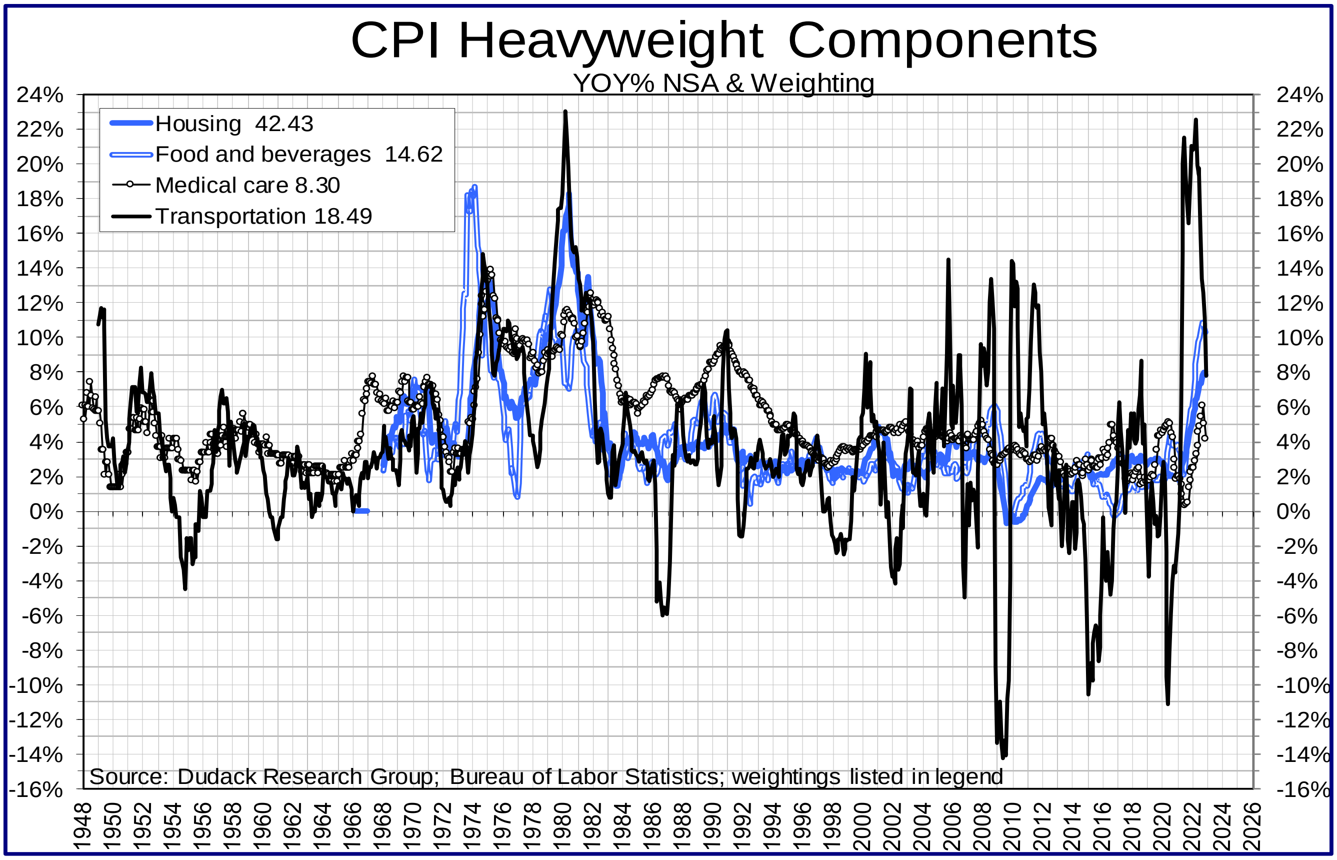
November's CPI came in softer than expectations, and while peak inflation may be behind us, the underlying details of November's report may not be as favorable as some investors believe. Much of the decline in prices is the result of decelerating energy prices (which are still up 13.1% YOY!) but food and beverage prices are rising at a double-digit pace, and housing, transportation, and "other goods and services" inflation are rising 7% YOY or more.

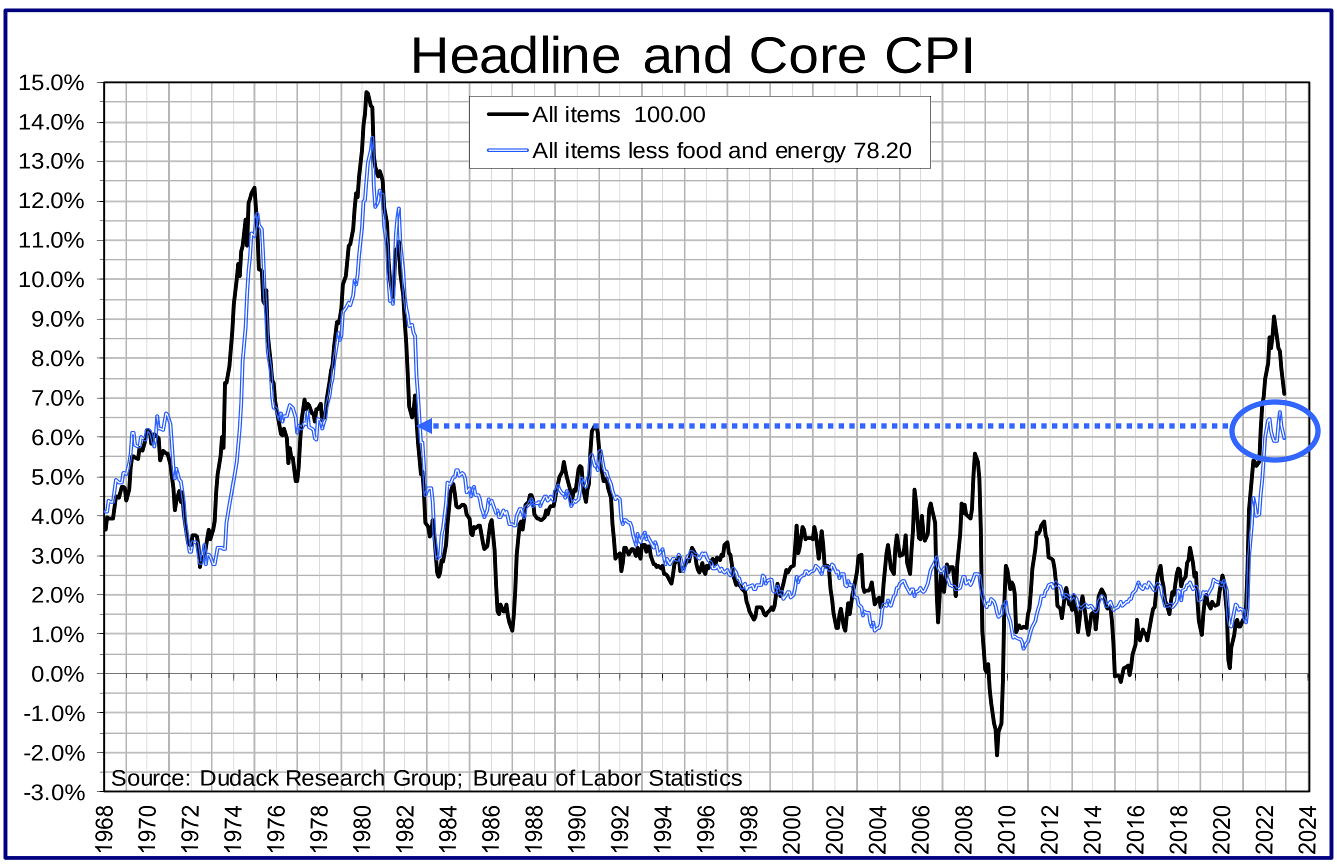
CPI Components Heavy Weights - Not Seasonally Adjusted Data	Component Weight*	Fuel Weight	Price Chg YOY%	Price Chg MOM%
Housing	**42.4%**	**4.9%**	**7.8%**	**0.3%**
Owners' equivalent rent of residences	**24.0%**		*7.1%*	0.7%
Fuels and utilities	**4.9%**		**13.1%**	**-1.0%**
Transportation	**18.5%**	**3.1%**	**7.8%**	**-1.2%**
Food and beverages	**14.6%**		**10.3%**	**0.0%**
Food at home	**8.5%**		*12.0%*	0.0%
Food away from home	**5.2%**		*8.5%*	0.5%
Alcoholic beverages	**0.9%**		*5.5%*	0.6%
Medical care	**8.3%**		**4.2%**	**-0.6%**
Education and communication	**6.0%**		**0.7%**	**0.6%**
Recreation	**5.0%**		**4.7%**	**0.4%**
Apparel	**2.5%**		**3.6%**	**-2.1%**
Other goods and services	**2.7%**		**7.0%**	**0.7%**
Special groups:				
Energy	8.1%		13.1%	-2.5%
All items less food and energy	78.2%		6.0%	0.1%
All items	**100.0%**		**7.11%**	**-0.1%**

Source: Dudack Research Group; BLS; *Oct. 2022 weightings; Italics=sub-component; blue>headline

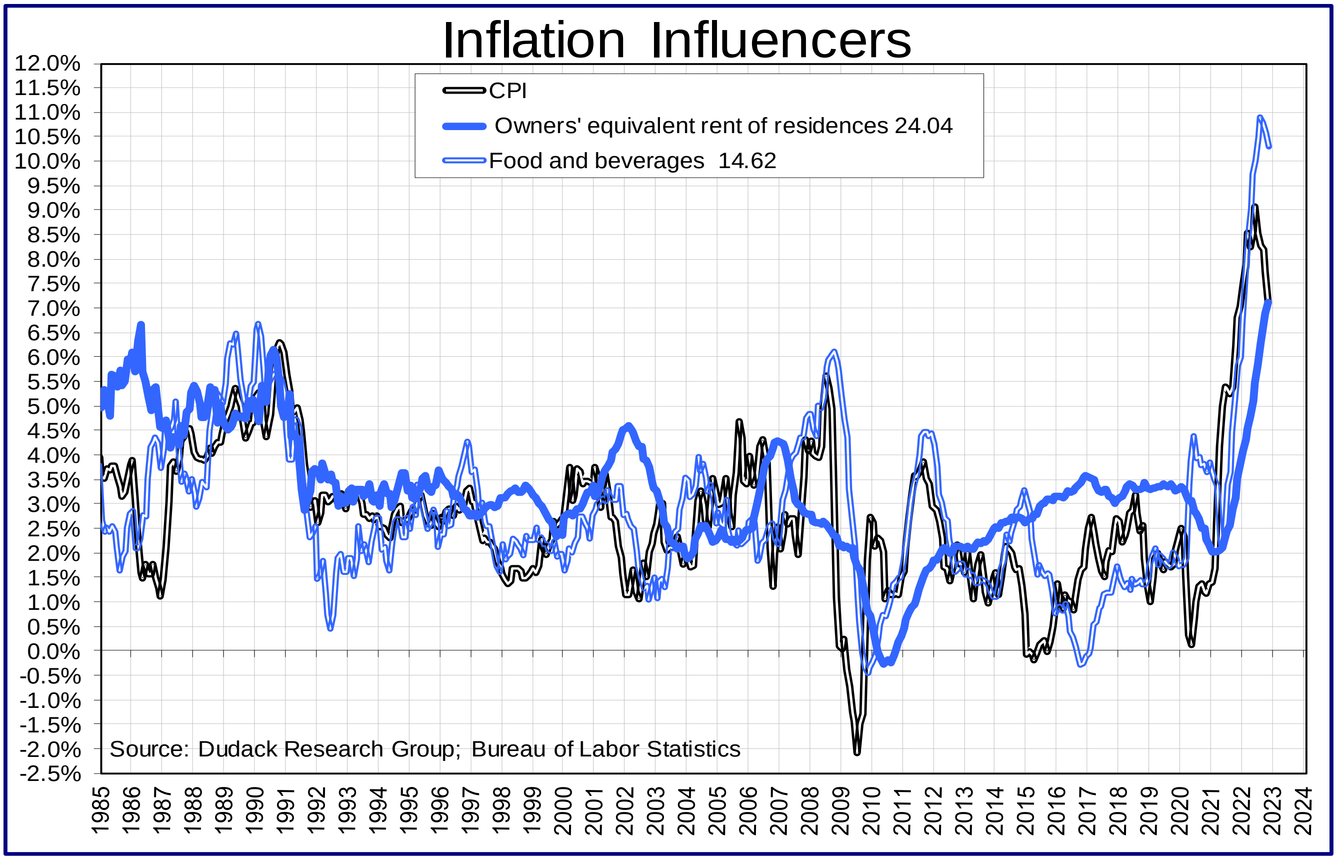


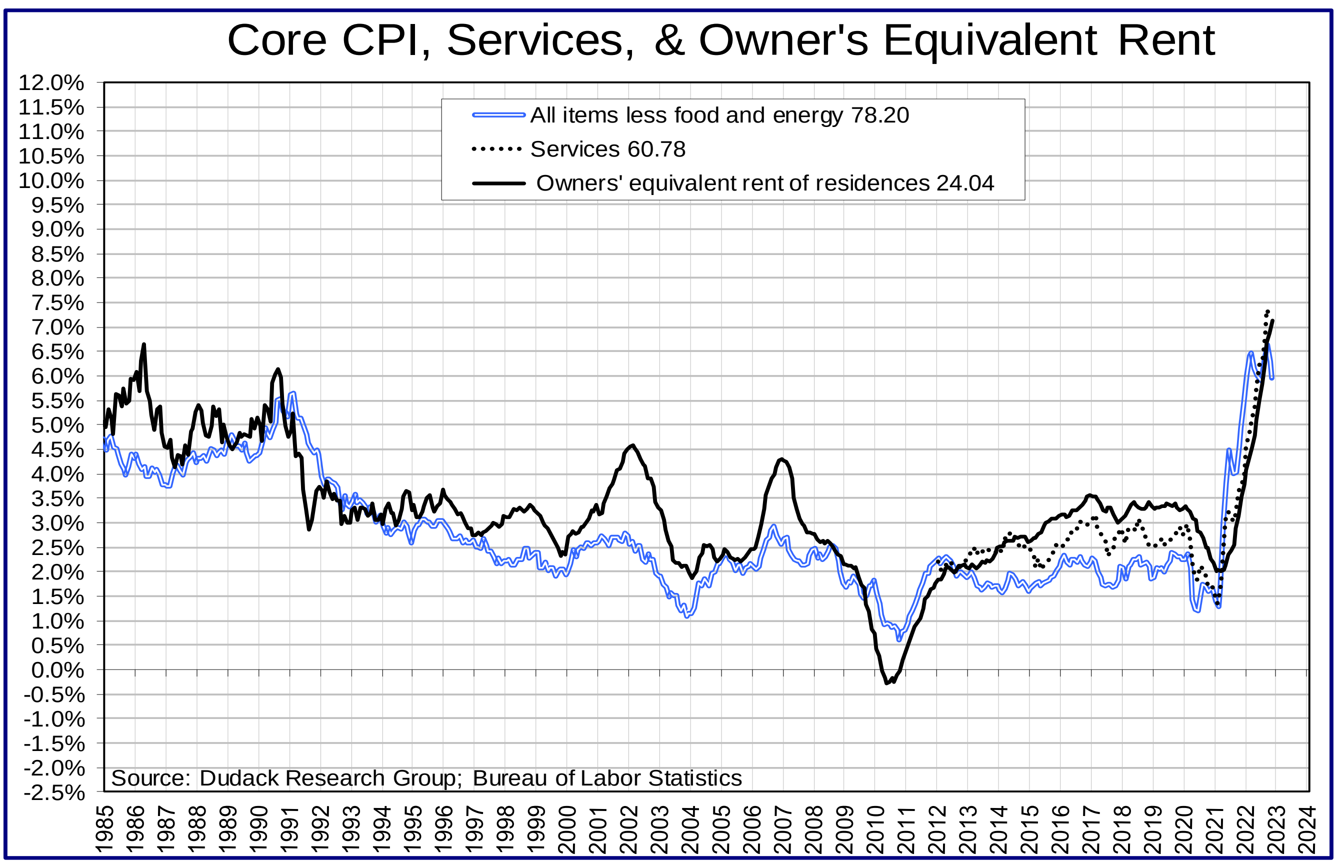
It is very likely that headline inflation peaked at 9% YOY in April, but the Fed's lack of attention to stimulus-driven inflation in 2021 allowed inflation to become embedded in the economy and now it is difficult to combat. As a result, core CPI continues to hover between 6.0% YOY and 6.5% YOY, the highest in 40 years, and is far from the 2% target rate indicated by the Fed.



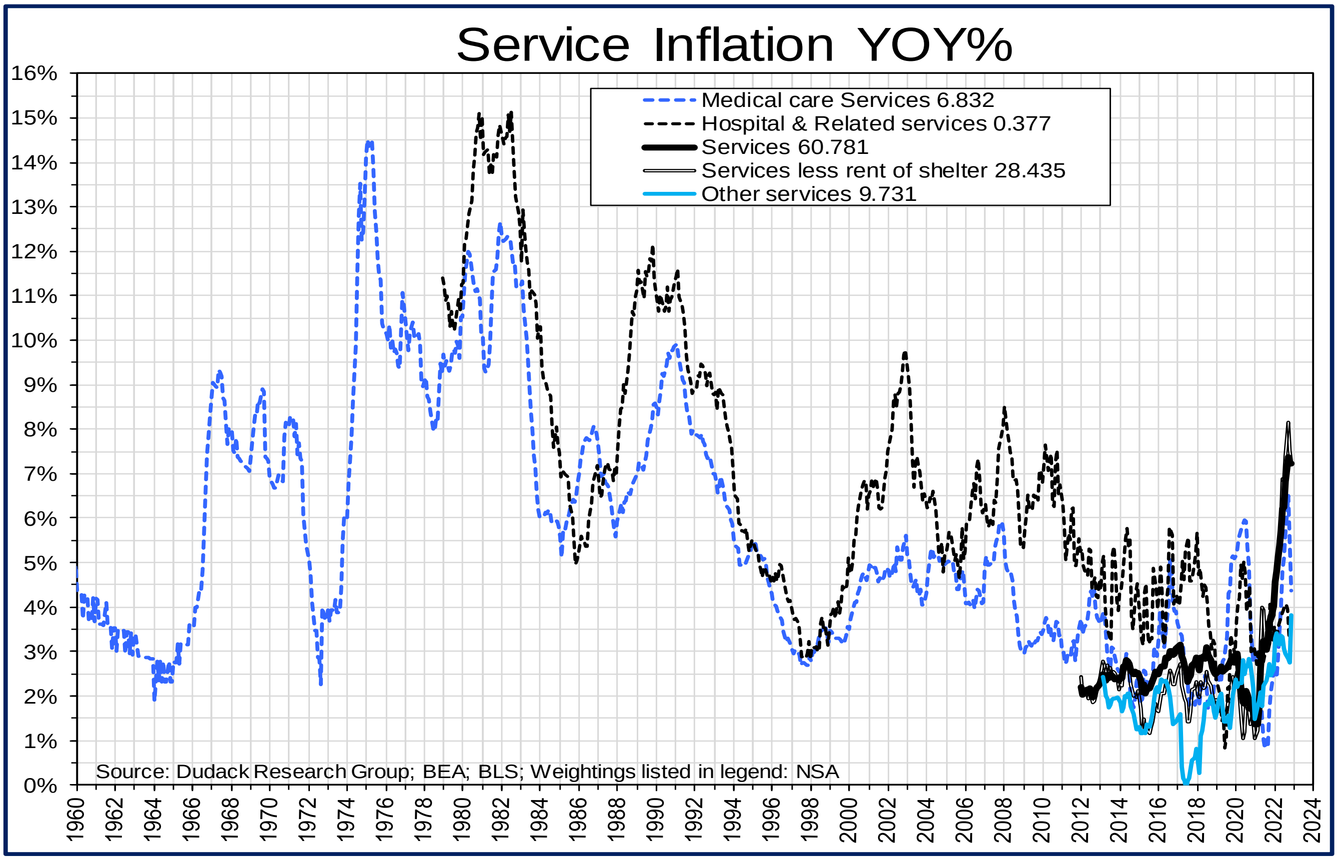


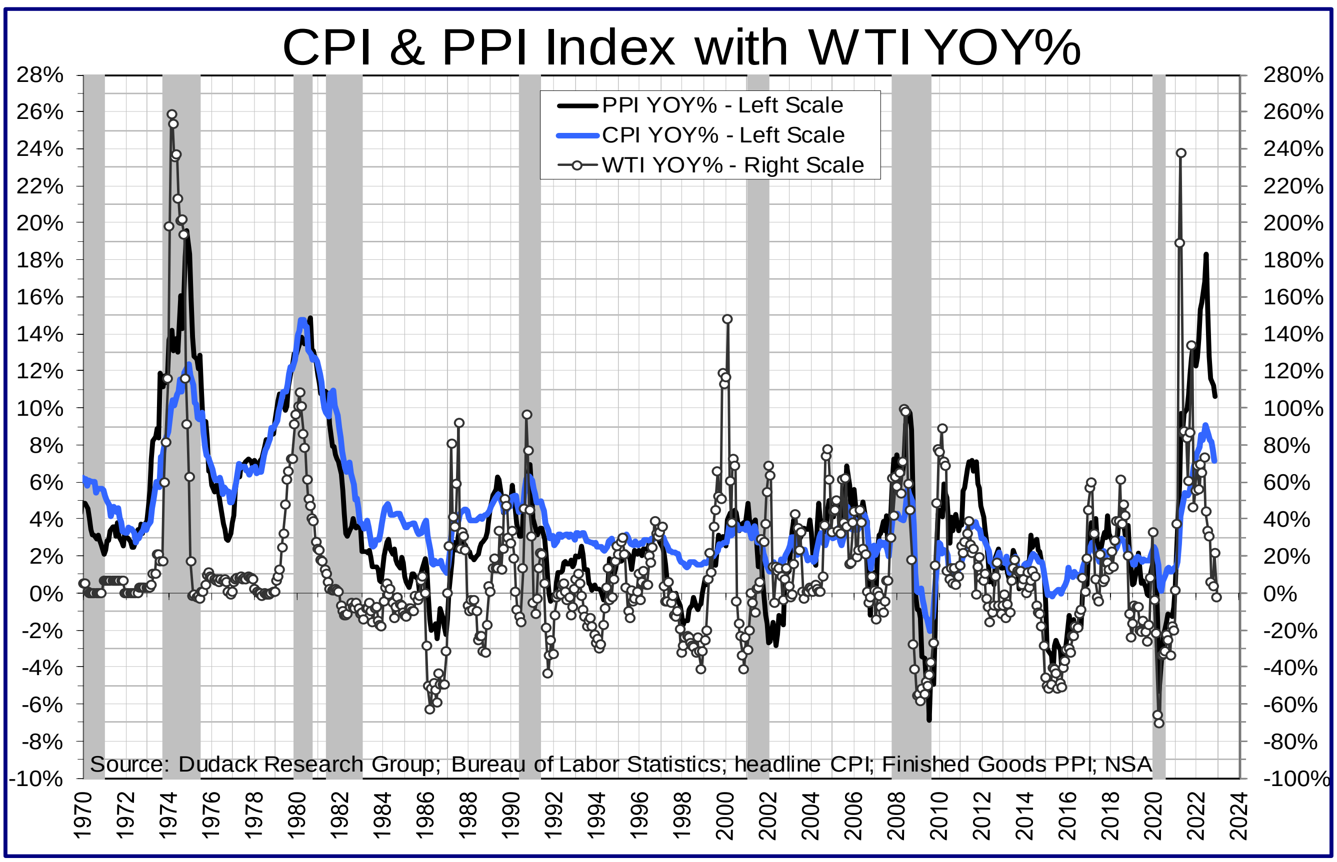
Inflation is no longer driven solely by the price of energy, nor is it a problem linked primarily to the rise in owners' equivalent rent. The current drivers include food and beverage pricing and a wide range of services.



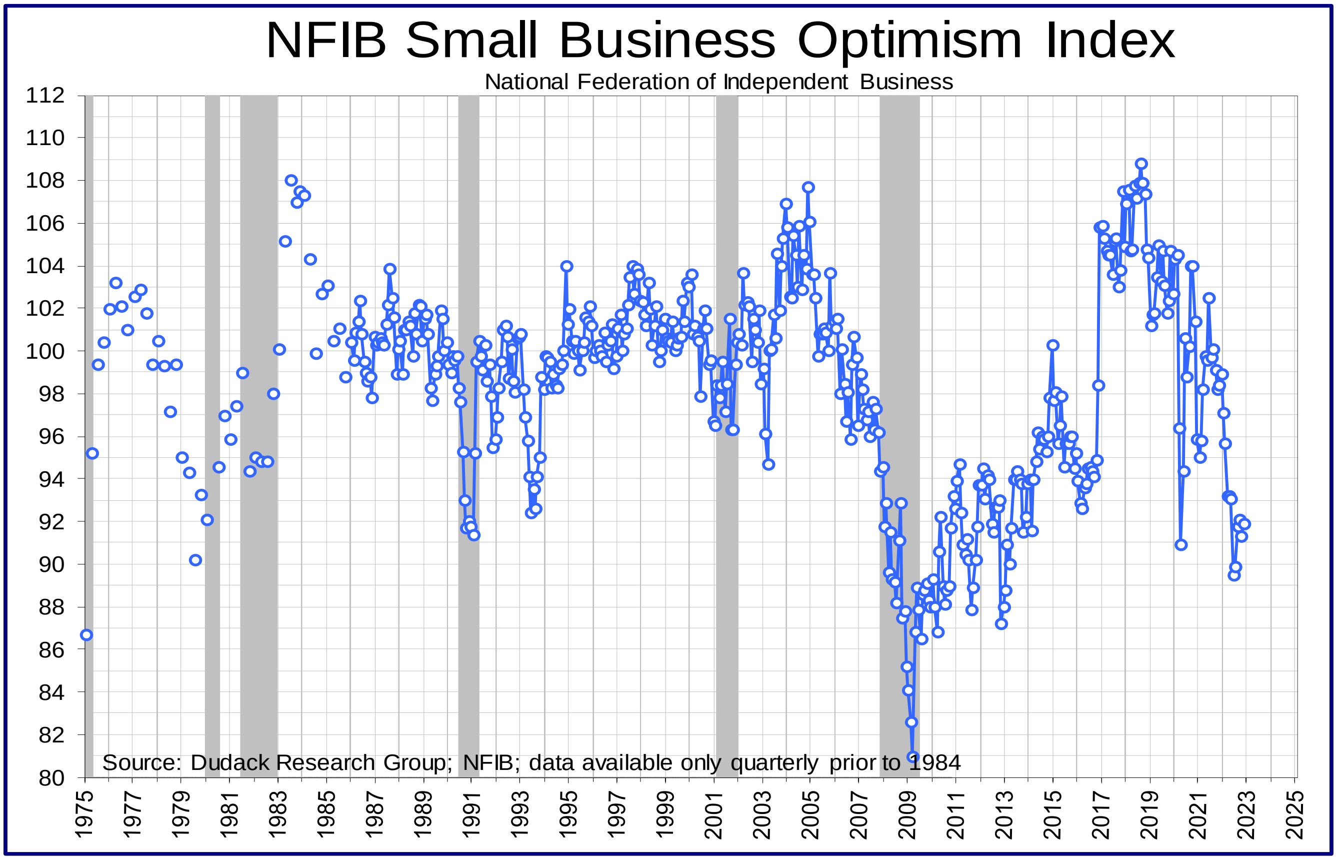


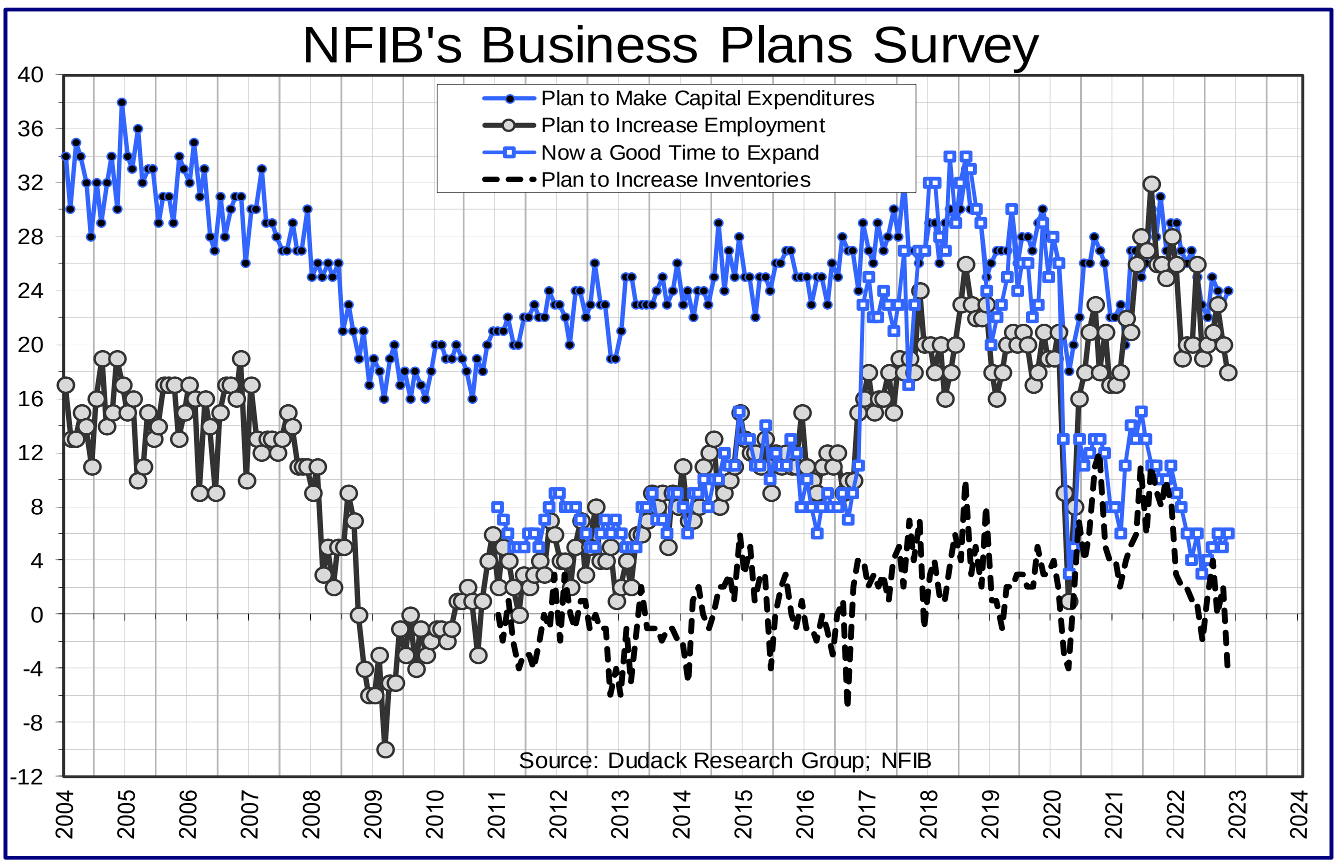
Prices for services have been on the rise across the board since early 2021 and the broad service index rose 7.2% YOY in November, the same as in October, and down only slightly from the peak rate of 7.4% YOY recorded in September. This will make the Fed's job more difficult than most expect in 2023. And as seen in the bottom chart, WTI oil prices have a direct impact on inflation when they rise but have less of an impact when prices fall. In our view, the consensus remains too sanguine about inflation over the next 12 months.





The small business optimism index rose 0.6 points in November to 91.9, but this is the 11th month below the 49-year average of 98. Of the 10 components, 6 increased and 4 decreased. Moreover, 32% of owners indicated that inflation was their single biggest problem. The percentage of owners planning to raise prices rose to more than 50% earlier in the year but now sits at 35%. Owners who think it is a good time to expand improved 1 point to 6 in November, but this remains well below the long-term average of 13.





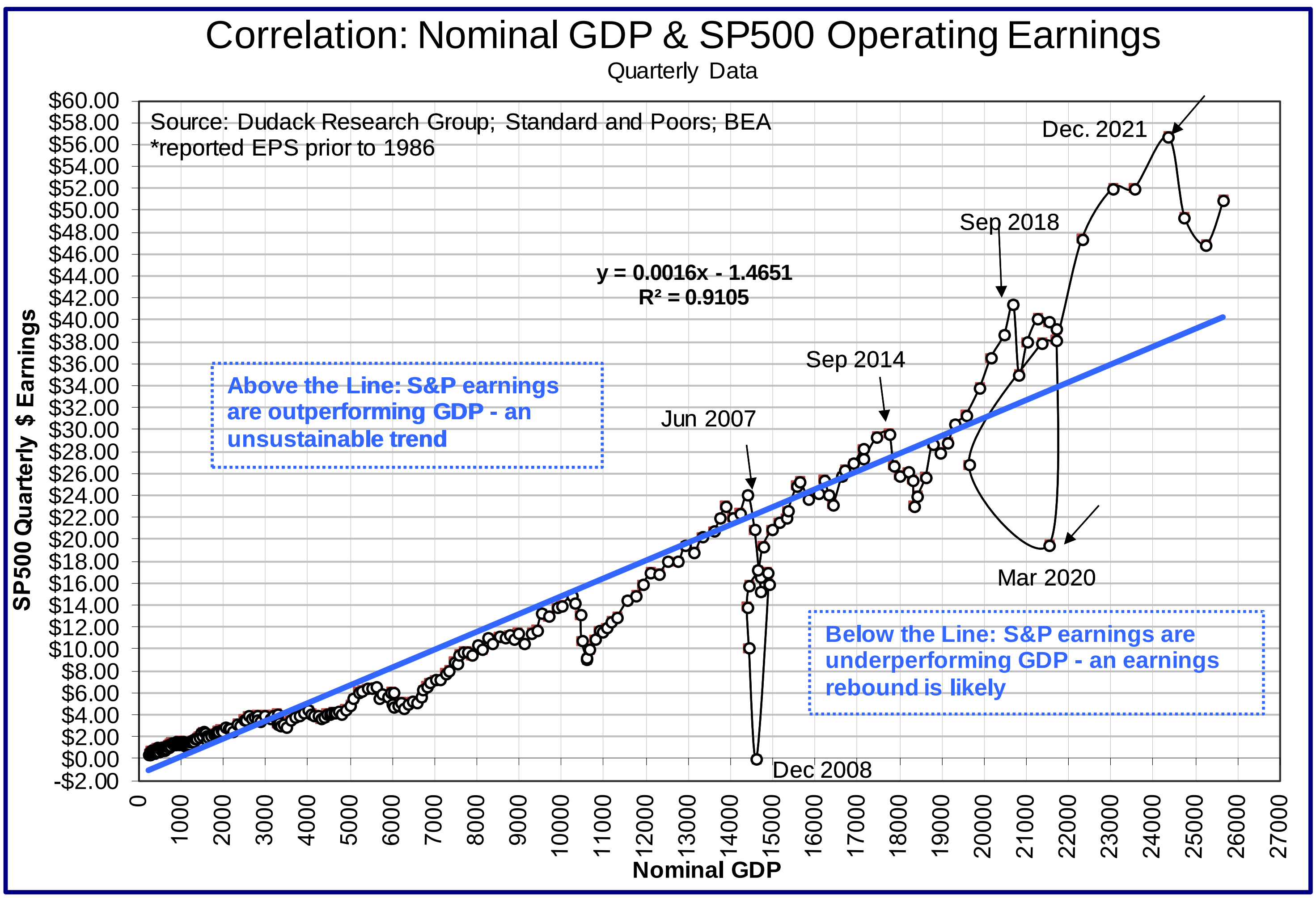
In 2022, investors began to take inflation seriously and focused on tightening monetary policy. As a result, we have seen a steady decline in price earnings multiples. However, the hurdle for 2023 may shift as investors deal with the reality of a recession and the negative impact it will have on earnings.

Although we recently lowered our S&P 500 earnings forecasts for 2022 and 2023 to $202 and $204, this no longer reflects earnings after this year's third quarter results and our 2023 estimate does not include the full risk of a recession. Therefore, we are lowering our 2022 estimate slightly to $200, and taking our 2023 estimate down to reflect a 10% decline, or $180.

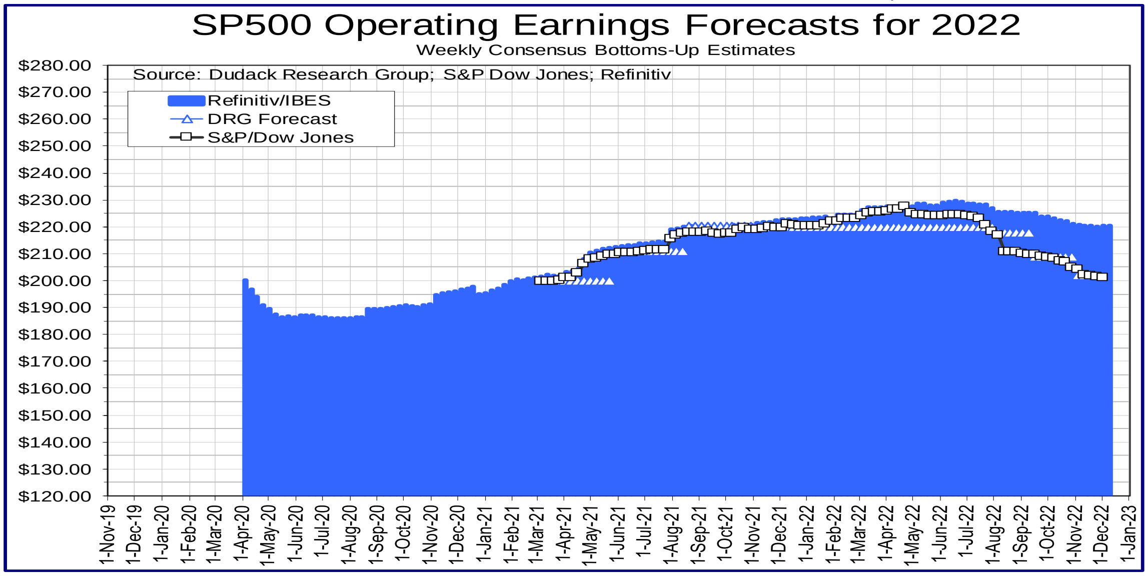
Even without a recession in 2023, the chart below shows that S&P 500 earnings are extremely high relative to the trend in nominal GDP. This relative outperformance of S&P earnings is an unsustainable trend, and it is usually followed by a decline in earnings.

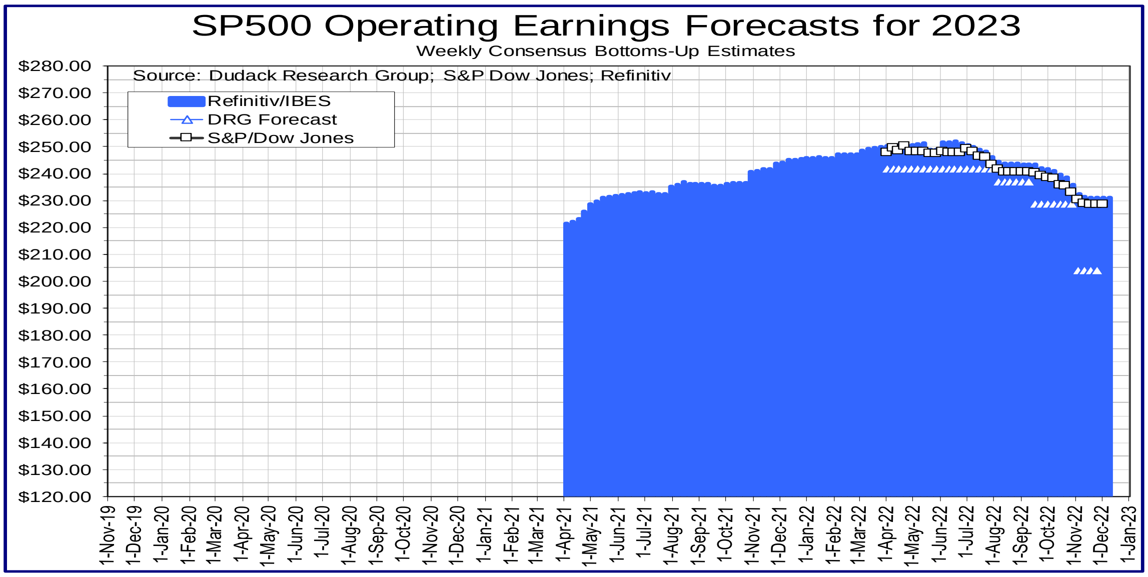
The recent earnings outperformance in this cycle can be explained by the historic level of stimulus pumped into the economy both during and after the Covid shutdown. In short, corporate earnings were artificially elevated, and are apt to underperform, even without a recession in 2023. However, inflation is expected to keep the Fed on track to raise short-term rates to 5% or higher next year. This in turn, is assumed to result in a recession. As we have often noted, inflation in excess of 4% has characteristically resulted in a recession. Double-digit inflation has historically been followed by multi-year rolling recessions.

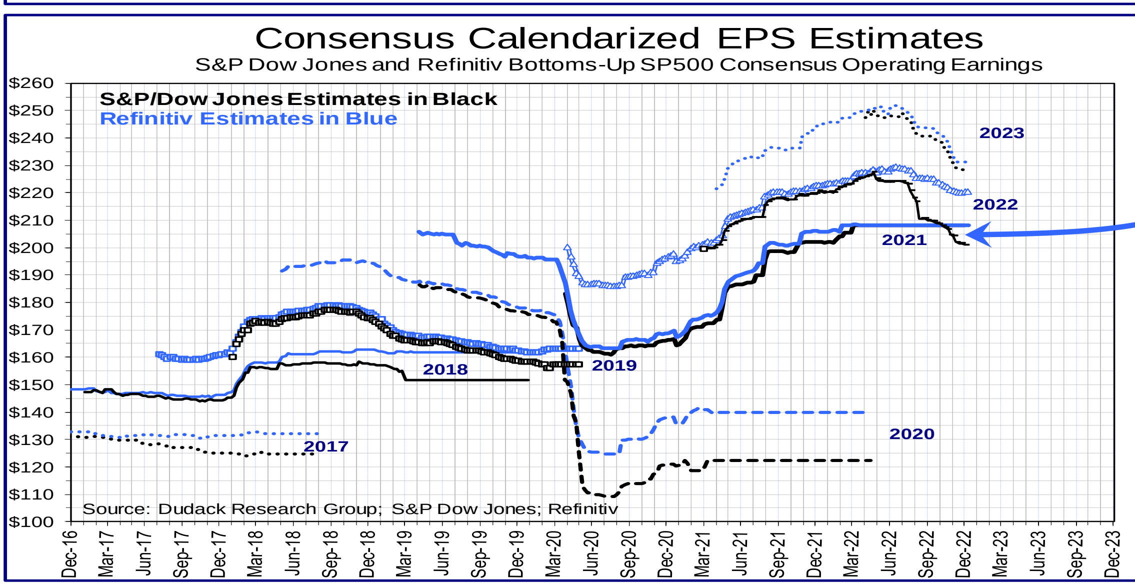
In sum, 2022 was a year of multiple compression and 2023 is apt to be the year of earnings deterioration.



The S&P Dow Jones consensus earnings estimates for 2022 and 2023 fell $0.29 and rose $0.34, respectively. Refinitiv IBES consensus earnings forecasts rose $0.04 and fell $0.11, respectively, leaving estimates at $200.65/$220.40 and $228.03/$231.14, respectively. EPS growth rates for 2022 are (3.6%) and 5.9%, respectively. *(Note: consensus macro-EPS forecasts may differ from four quarter analysts' forecast sums seen on page 16.)* DRG's 2022 and 2023 estimates are lowered this week to $200 and $180 to reflect the weakness seen in 2022 EPS and the impact of Fed rate hikes on 2023's economy.







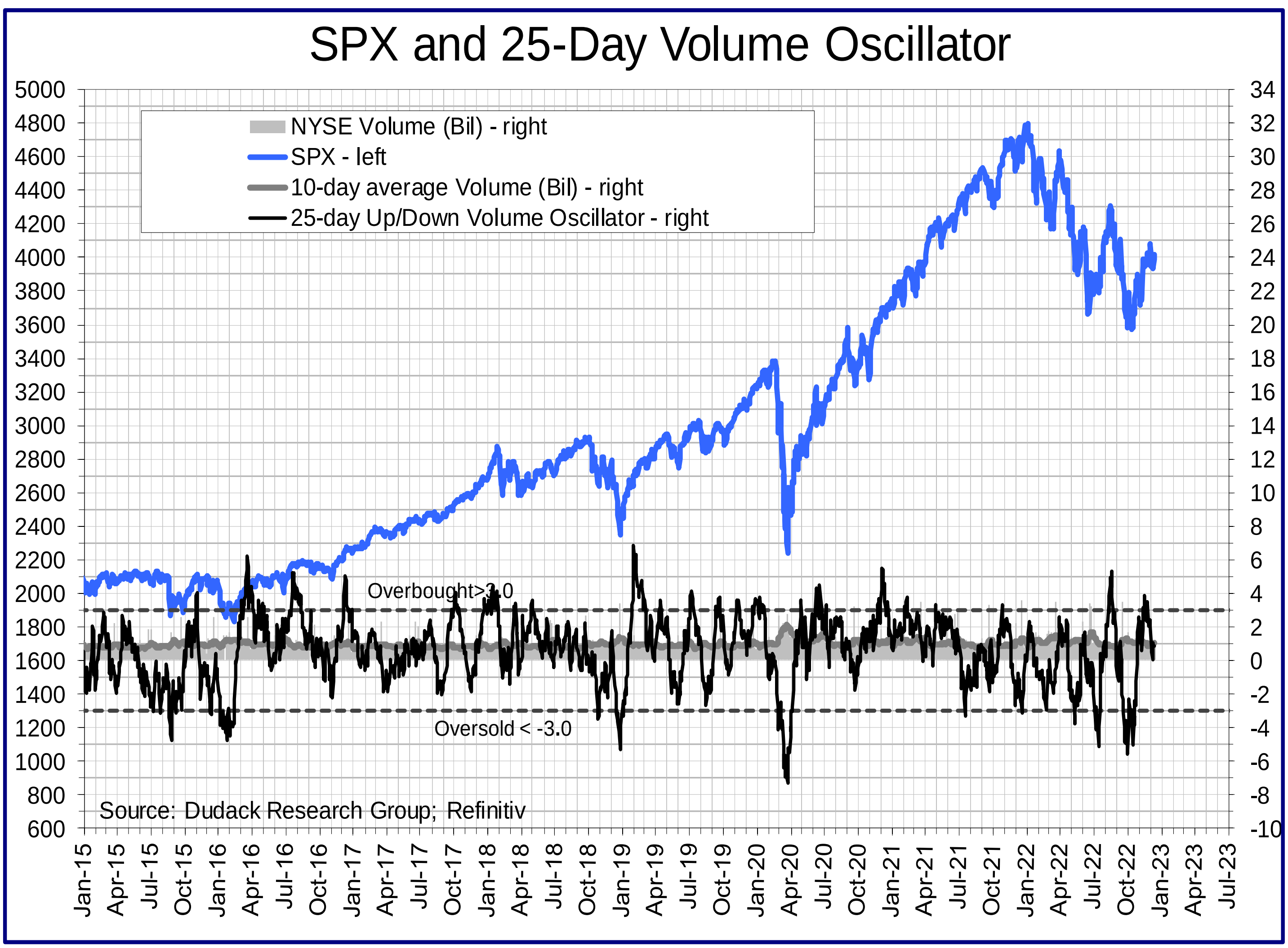
The indices are ordered below in terms of technical strength. The DJIA is the only index to have bettered its long-term 200-day moving average. The RUT and SPX have been testing their 200-day moving averages without clear success. The IXIC has only bettered its 50-day moving average and well below its 200-day moving average. This is an ambiguous combination and is a display of shifting leadership from growth to value. To date, the year-end rally has been lackluster.

Source: Refinitiv

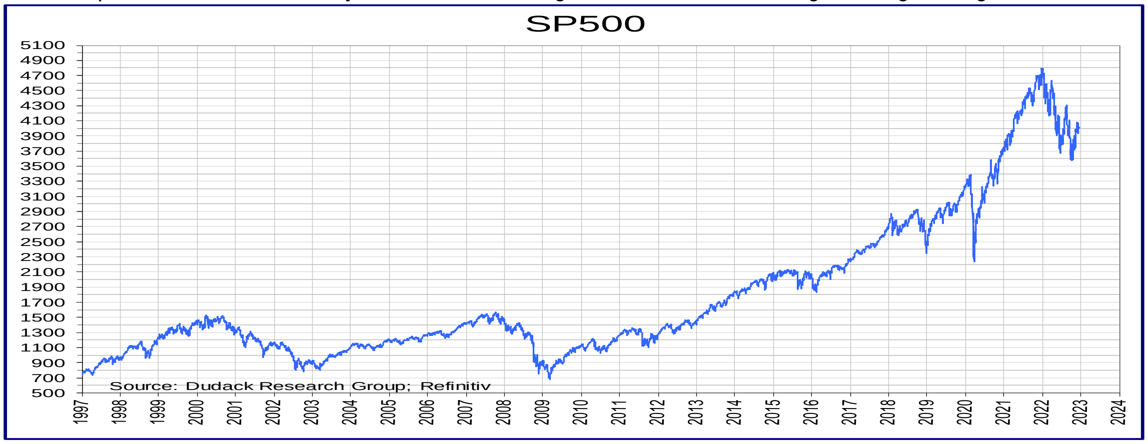
The 25-day up/down volume oscillator is currently neutral with a reading of 0.89, after being in overbought territory for seven of 10 trading days in November. However, it was not overbought for five consecutive trading days, which is a minimum requirement for a positive signal. This action is significant since bear markets rarely reach overbought territory but if they do the reading is brief. A true overbought reading typically persists for at least five to ten consecutive trading days -- hopefully reaching a new overbought high reading -- to be significant. Nevertheless, this will be a key indicator to monitor in the coming weeks to assess the strength of any advance in prices.

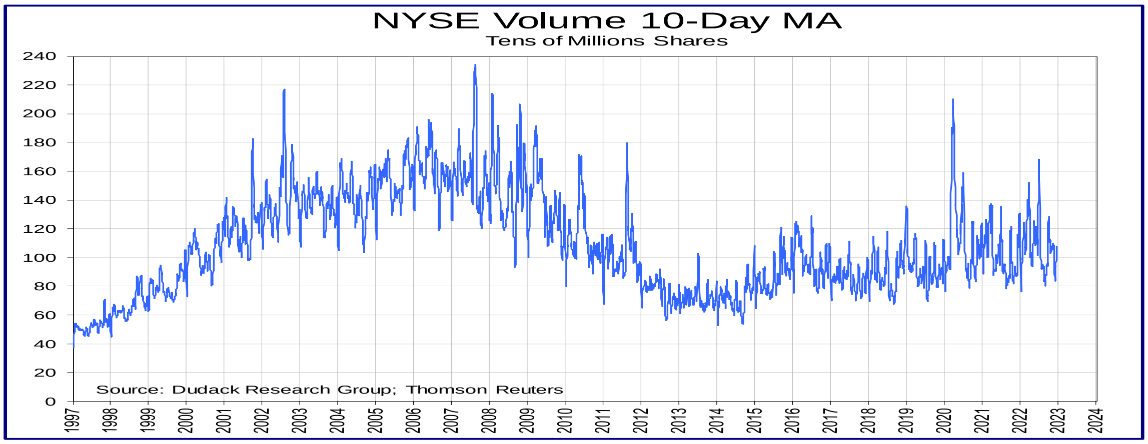
The 25-day up/down volume oscillator hit an oversold reading of negative 5.6 on September 30 which was a deeper oversold reading than the negative 5.17 reading of July 14, 2022. The oscillator was in oversold territory for 8 of 10 consecutive trading sessions in July and oversold for 18 of 24 consecutive trading sessions in September/October. This is much longer than the oversold reading at the previous low which means the test of the June low was unsuccessful by several measures and the bear market continues.

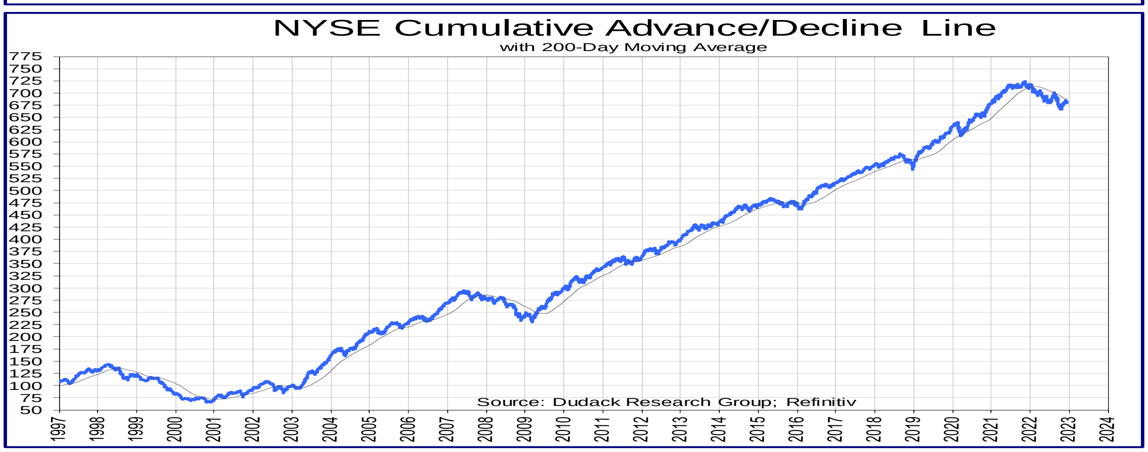
The key to a successful retest of a bear market low is whether or not a new low in price generates a new low in breadth. A successful retest will show there is less selling pressure – a less severe oversold reading -- despite a lower low in price. This "non-confirmation" of a low is a positive and implies that downside risk is subsiding.

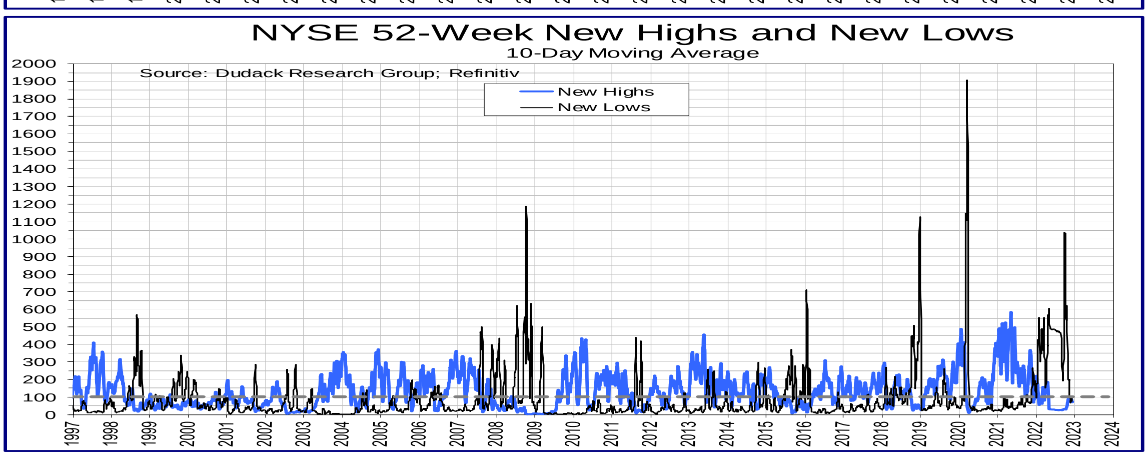


The 10-day average of daily new highs is 75 and daily new lows are 97. This combination is neutral since neither series is above the 100 benchmark. The 10-day moving average of new lows was 1038 on September 26 and exceeded the previous peak of 604 made in early May. The advance/decline line fell below the June low on September 22 and is currently 43,798 net advancing issues from its 11/8/21 high – a negative sign.

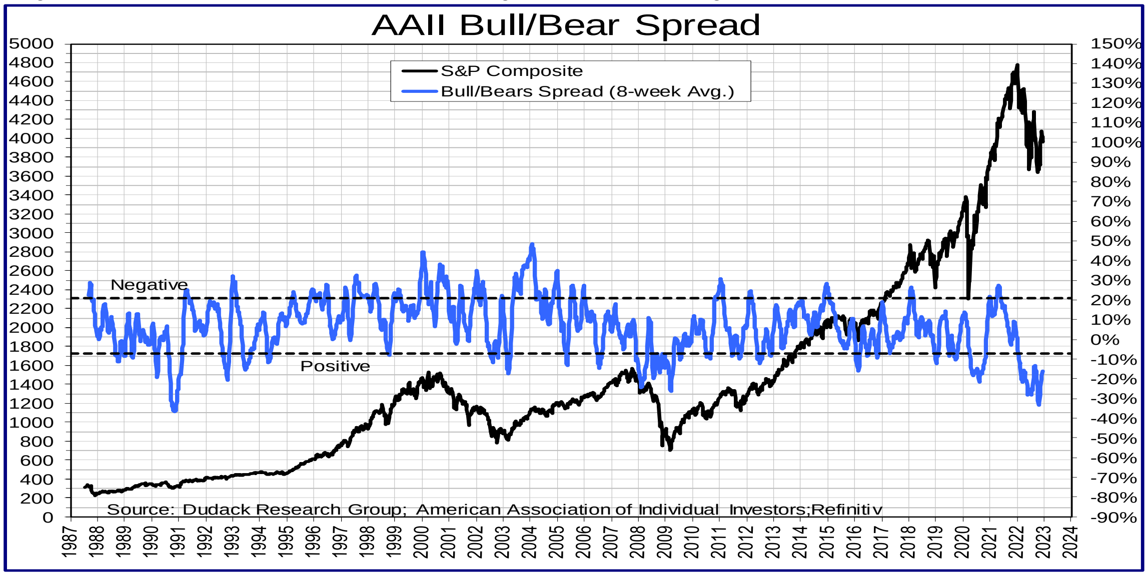


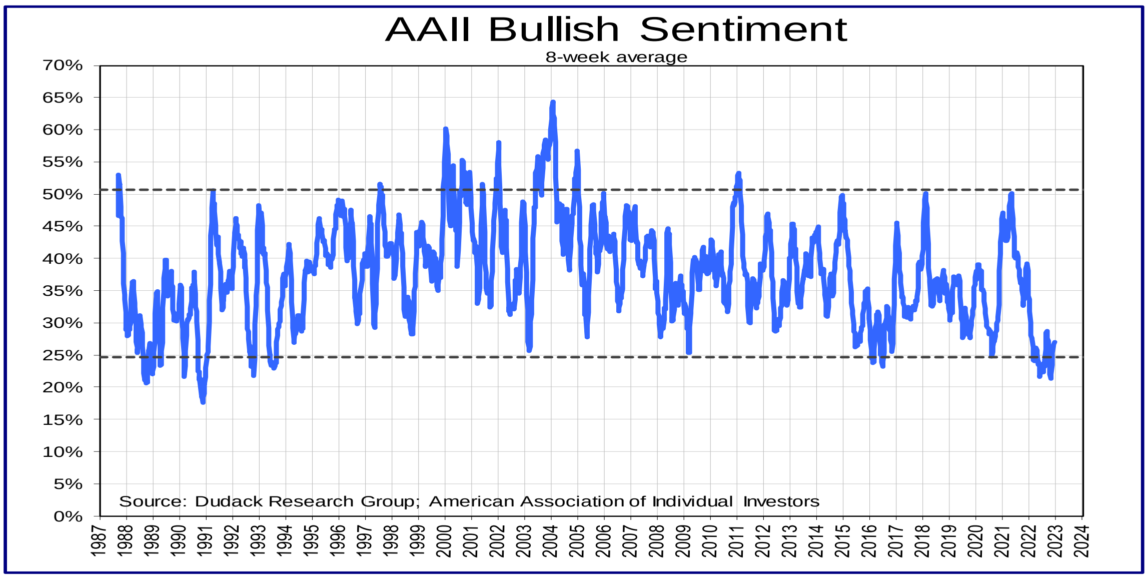


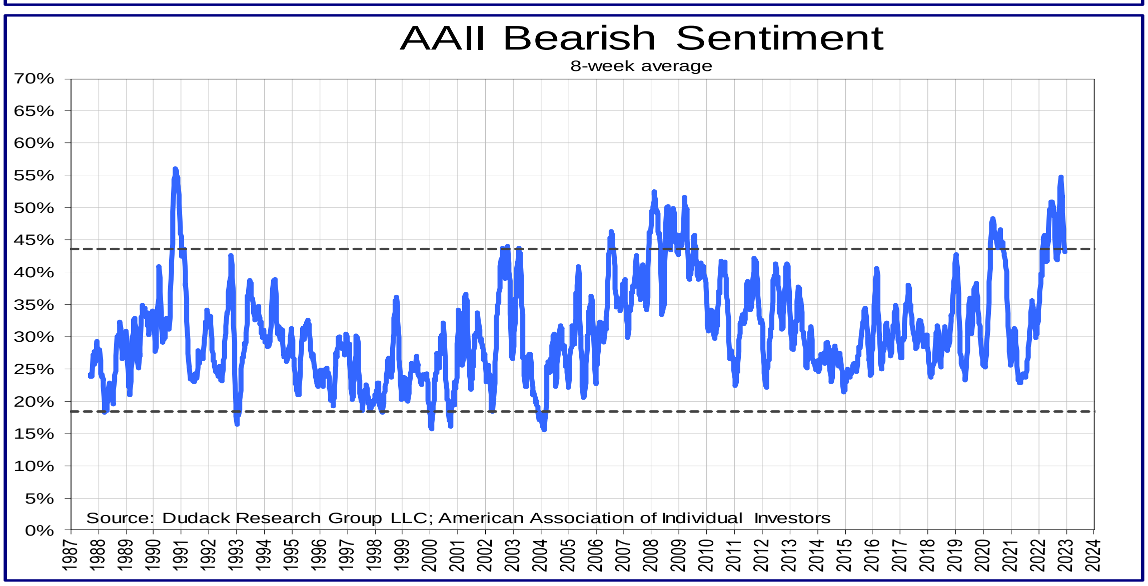




Last week's AAII readings showed a 0.2% increase in bulls to 24.7% and a 1.4% increase in bears of 41.8%. Bullishness remains below the long-term average of 37.5% and bearishness is slightly above its long-term average of 40.2%. Sentiment readings were extreme on September 21, 2022, and equity prices tend to be higher in the next six and/or twelve months following such extreme readings.



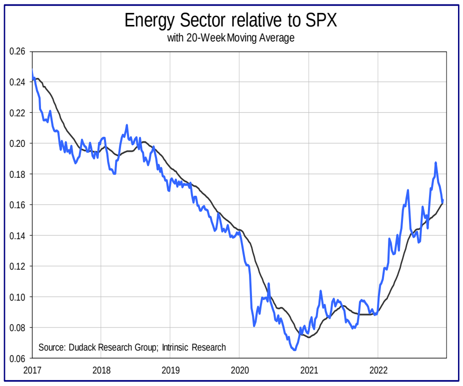


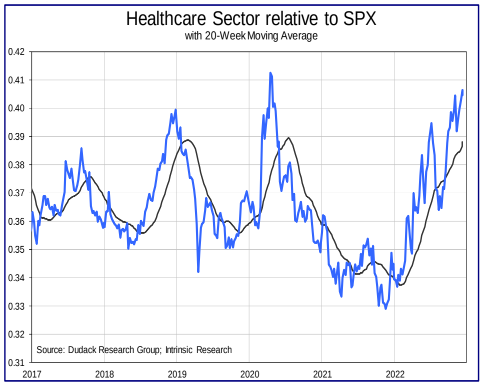


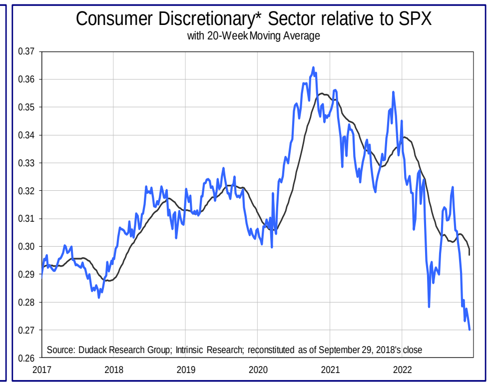
SECTOR RELATIVE PERFORMANCE – RELATIVE OVER/UNDER/ PERFORMANCE TO S&P 500

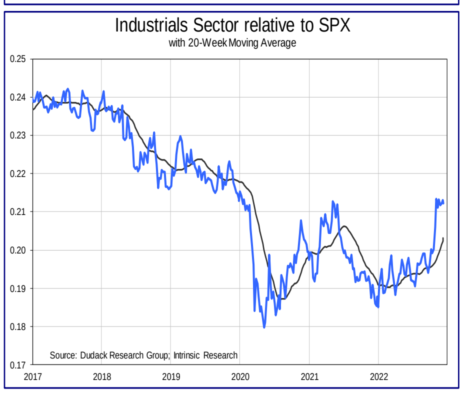
DRG Recommended Sector Weights				
Overweight		**Neutral**		**Underweight**
Energy Industrials Staples Utililties		Healthcare Technology Materials Financials		Consumer Discretionary REITS Communication Services

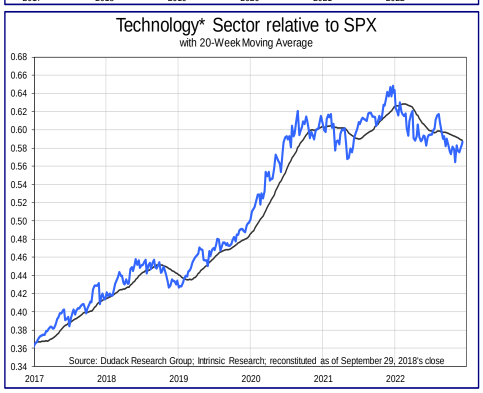
3/8/2022:Materials upgraded from underw eight to neutral/communication service dow ngraded from neutral to underw eight. 3/1/2022 Financials dow ngraded to neutral and Industrials upgraded to overw eight.

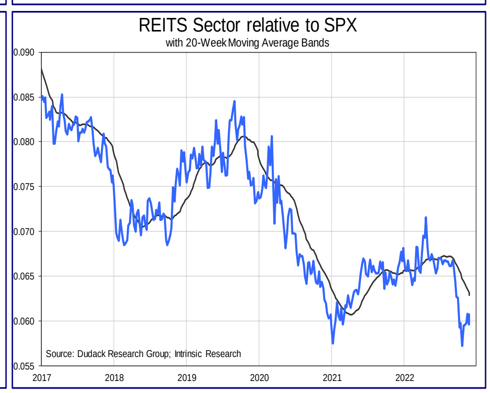


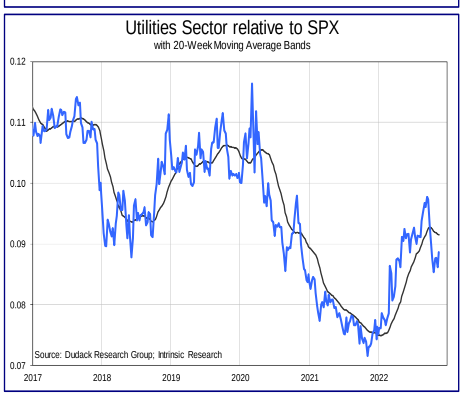


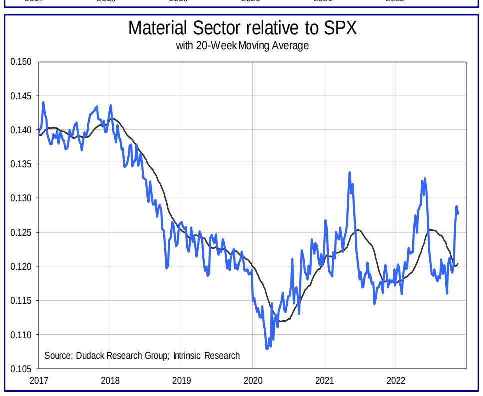


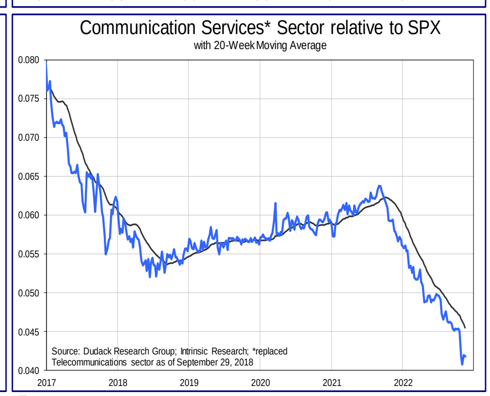


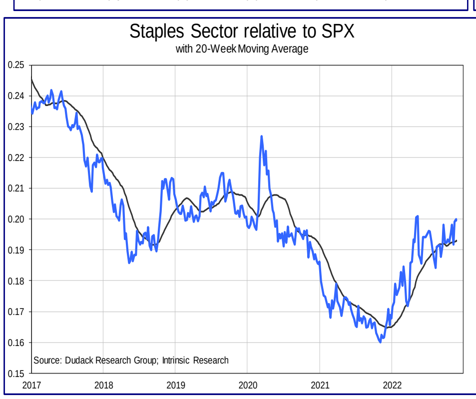


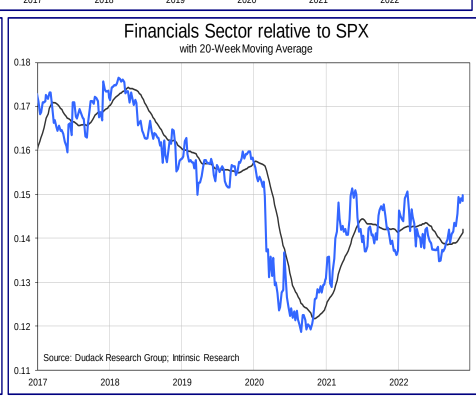












2022 Performance - Ranked	
SP500 Sector	% Change
S&P ENERGY	55.3%
S&P UTILITIES	0.9%
S&P CONSUMER STAPLES	-1.1%
S&P HEALTH CARE	-1.1%
S&P INDUSTRIALS	-4.7%
S&P MATERIALS	-8.9%
S&P FINANCIAL	-10.6%
S&P 500	-15.7%
S&P INFORMATION TECH	-22.8%
S&P REITS	-24.1%
S&P CONSUMER DISCRETIONARY	-32.6%
S&P COMMUNICATIONS SERVICES	-37.1%

Source: Dudack Research Group; Refinitiv; Monday closes

Global Markets and Commodities - Ranked by 2022 Trading Performance

Index/EFT	Symbol	Price	5-Day%	20-Day%	QTD%	YTD%
iShares DJ US Oil Eqpt & Services ETF	IEZ	20.23	1.2%	-7.6%	40.5%	56.9%
Energy Select Sector SPDR	XLE	86.46	1.3%	-7.2%	20.0%	55.8%
United States Oil Fund, LP	USO	65.86	1.0%	-11.5%	0.9%	21.2%
Gold Future	GCc1	2452.10	0.2%	0.9%	2.1%	10.8%
Silver Future	SIc1	23.80	7.6%	10.0%	25.5%	2.0%
iShares Silver Trust	SLV	22.79	6.9%	9.5%	24.7%	1.7%
Utilities Select Sector SPDR	XLU	72.67	2.3%	6.7%	10.9%	1.5%
iShares MSCI Mexico Capped ETF	EWW	51.00	-2.0%	-4.9%	15.3%	0.8%
Oil Future	CLc1	75.39	1.5%	-15.3%	-5.2%	0.2%
SPDR Communication Services ETF	XLC	56.15	0.0%	0.0%	0.0%	0.0%
Consumer Staples Select Sector SPDR	XLP	76.58	1.1%	4.2%	14.8%	-0.7%
Health Care Select Sect SPDR	XLV	139.88	1.8%	5.1%	15.5%	-0.7%
SPDR Gold Trust	GLD	168.51	2.2%	2.4%	8.9%	-1.4%
Industrial Select Sector SPDR	XLI	101.15	1.7%	1.6%	22.1%	-4.4%
iShares MSCI United Kingdom ETF	EWU	31.44	-0.5%	5.3%	20.0%	-5.1%
iShares MSCI Brazil Capped ETF	EWZ	26.50	-13.8%	-13.5%	-10.6%	-5.6%
iShares MSCI India ETF	INDA.K	43.21	0.2%	-1.9%	6.0%	-5.7%
SPDR DJIA ETF	DIA	341.81	1.6%	1.2%	19.0%	-5.9%
DJIA	.DJI	34108.64	1.5%	1.1%	18.7%	-6.1%
iShares MSCI Australia ETF	EWA	23.10	0.2%	1.3%	17.7%	-7.0%
iShares Russell 1000 Value ETF	IWD	155.69	1.1%	0.1%	14.5%	-7.3%
iShares MSCI Hong Kong ETF	EWH	21.45	2.8%	11.7%	17.6%	-7.5%
Materials Select Sector SPDR	XLB	82.81	1.8%	1.9%	21.8%	-8.6%
iShares MSCI Malaysia ETF	EWM	22.62	-0.7%	4.3%	12.0%	-9.6%
iShares MSCI Singapore ETF	EWS	19.25	1.6%	3.9%	12.5%	-10.0%
Financial Select Sector SPDR	XLF	35.08	1.0%	-2.2%	15.5%	-10.2%
iShares Nasdaq Biotechnology ETF	IBB.O	136.00	2.1%	1.3%	16.3%	-10.9%
PowerShares Water Resources Portfolio	PHO	53.80	2.6%	2.5%	17.6%	-11.6%
iShares MSCI Canada ETF	EWC	33.73	-0.5%	-3.7%	9.7%	-12.2%
Shanghai Composite	.SSEC	3176.33	-1.1%	3.0%	2.8%	-12.7%
iShares Russell 2000 Value ETF	IWN	143.57	-0.4%	-3.7%	11.4%	-13.5%
iShares MSCI EAFE ETF	EFA	67.79	1.9%	3.6%	21.0%	-13.8%
Vanguard FTSE All-World ex-US ETF	VEU	52.13	1.7%	3.1%	17.5%	-14.9%
SP500	.SPX	4019.65	2.0%	0.7%	12.1%	-15.7%
SPDR S&P Bank ETF	KBE	46.01	-0.4%	-7.6%	3.9%	-15.7%
iShares MSCI Japan ETF	EWJ	55.92	2.4%	1.8%	14.5%	-16.5%
iShares Russell 1000 ETF	IWB	220.26	1.7%	0.2%	11.6%	-16.7%
iShares iBoxx $ Invest Grade Corp Bond	LQD	109.67	0.8%	4.9%	7.0%	-17.2%
iShares Russell 2000 ETF	IWM	181.38	0.7%	-3.0%	10.0%	-18.5%
iShares MSCI Emerg Mkts ETF	EEM	38.59	-1.2%	1.1%	10.6%	-21.0%
iShares MSCI Germany ETF	EWG	25.70	2.5%	3.5%	30.2%	-21.6%
Technology Select Sector SPDR	XLK	135.35	3.9%	1.7%	14.0%	-22.2%
iShares China Large Cap ETF	FXI	28.36	-1.5%	11.4%	9.7%	-22.5%
iShares MSCI BRIC ETF	BKF	34.67	-1.9%	5.5%	8.5%	-22.5%
iShares Russell 2000 Growth ETF	IWO	224.06	1.8%	-2.1%	8.5%	-23.5%
iShares US Real Estate ETF	IYR	88.57	2.5%	0.6%	8.8%	-23.7%
SPDR S&P Semiconductor ETF	XSD	185.39	5.3%	2.7%	21.9%	-23.8%
iShares MSCI Austria Capped ETF	EWO	19.08	-2.2%	-2.7%	23.0%	-25.0%
iShares Russell 1000 Growth ETF	IWF	228.86	2.2%	0.2%	8.8%	-25.1%
iShares MSCI South Korea Capped ETF	EWY	58.25	2.0%	-4.1%	23.0%	-25.2%
SPDR Homebuilders ETF	XHB	63.29	4.9%	0.7%	15.7%	-26.2%
Nasdaq Composite Index Tracking Stock	ONEQ.O	44.27	2.3%	-0.4%	6.8%	-27.3%
iShares 20+ Year Treas Bond ETF	TLT	107.70	0.7%	10.0%	5.1%	-27.3%
NASDAQ 100	NDX	11834.21	2.5%	0.1%	7.9%	-27.5%
SPDR S&P Retail ETF	XRT	64.18	-1.2%	-2.1%	13.7%	-28.9%
iShares US Telecomm ETF	IYZ	23.32	2.6%	1.9%	11.7%	-29.1%
Consumer Discretionary Select Sector SPDR	XLY	139.78	0.2%	-3.7%	-1.9%	-31.6%
iShares MSCI Taiwan ETF	EWT	41.94	-15.0%	-12.8%	-2.7%	-37.0%

Outperformed SP500
Underperformed SP500

Source: Dudack Research Group; Thomson Reuters   Priced as of December 13, 2022

Blue shading represents non-US and yellow shading represents commodities

US Asset Allocation

	Benchmark	DRG %	Recommendation
Equities	60%	70%	Overweight
Treasury Bonds	30%	20%	Underweight
Cash	10%	10%	Neutral
	100%	100%	

Source: Dudack Research Group; raised equity and lowered cash 5% on November 9, 2016

DRG Earnings and Economic Forecasts

	S&P 500 Price	S&P Reported EPS**	S&P Operating EPS**	DRG Operating EPS Forecast	DRG EPS YOY %	Refinitiv Consensus Bottom-Up $ EPS**	Refinitiv Consensus Bottom-Up EPS YOY%	S&P Op PE Ratio	S&P Divd Yield	GDP Annual Rate	GDP Profits post-tax w/ IVA & CC	YOY %
2005	1248.29	$69.93	**$76.45**	$76.45	13.0%	**$76.28**	13.7%	16.3X	1.8%	3.5%	$1,108.90	9.7%
2006	1418.30	$81.51	**$87.72**	$87.72	14.7%	**$88.18**	15.6%	16.2X	1.8%	2.8%	$1,216.10	9.7%
2007	1468.36	$66.18	**$82.54**	$82.54	-5.9%	**$85.12**	-3.5%	17.8X	1.8%	2.0%	$1,141.40	-6.1%
2008	903.25	$14.88	**$49.51**	$49.51	-40.0%	**$65.47**	-23.1%	18.2X	2.5%	0.1%	$1,029.90	-9.8%
2009	1115.10	$50.97	**$56.86**	$56.86	14.8%	**$60.80**	-7.1%	19.6X	2.6%	-2.6%	$1,182.90	14.9%
2010	1257.64	$77.35	**$83.77**	$83.77	47.3%	**$85.28**	40.3%	15.0X	1.9%	2.7%	$1,456.50	23.1%
2011	1257.60	$86.95	**$96.44**	$96.44	15.1%	**$97.82**	14.7%	13.0X	2.0%	1.5%	$1,529.00	5.0%
2012	1426.19	$86.51	**$96.82**	$96.82	0.4%	**$103.80**	6.1%	14.7X	2.1%	2.3%	$1,662.80	8.8%
2013	1848.36	$100.20	**$107.30**	$107.30	10.8%	**$109.68**	5.7%	17.2X	2.0%	1.8%	$1,648.10	-0.9%
2014	2127.83	$102.31	**$113.01**	$113.01	5.3%	**$118.78**	8.3%	18.8X	2.2%	2.3%	$1,713.10	3.9%
2015	2043.94	$86.53	**$100.45**	$100.45	-11.1%	**$118.20**	-0.5%	20.3X	2.1%	2.7%	$1,664.20	-2.9%
2016	2238.83	$94.55	**$106.26**	$96.82	-3.6%	**$118.10**	-0.1%	21.1X	1.9%	1.7%	$1,661.50	-0.2%
2017	2673.61	$109.88	**$124.51**	$124.51	28.6%	**$132.00**	11.8%	21.5X	1.8%	2.3%	$1,816.60	9.3%
2018	2506.85	$132.39	**$151.60**	$151.60	21.8%	**$161.93**	22.7%	16.5X	1.9%	2.9%	$2,023.40	11.4%
2019	3230.78	$139.47	$157.12	$157.12	3.6%	**$162.93**	0.6%	20.6X	1.8%	2.3%	$2,065.60	2.1%
2020	3756.07	$94.14	$122.38	$122.38	-22.1%	**$139.72**	-14.2%	30.7X	1.6%	-3.4%	$1,968.10	-4.7%
2021	4766.18	$197.87	$208.17	$208.17	70.1%	**$208.12**	49.0%	22.9X	1.3%	5.7%	$2,424.60	23.2%
2022E	~~~~~	$181.33	$200.65	$200.00	-3.9%	**$220.40**	5.9%	17.9X	NA	NA	NA	NA
2023E	~~~~~	$205.36	$228.02	$180.00	-10.0%	**$231.14**	4.9%	17.6X	NA	NA	NA	NA
2015 1Q	2108.88	$21.81	$25.81	$25.81	-5.5%	$28.60	1.5%	18.9	2.0%	3.3%	$1,706.90	9.2%
2015 2Q	2166.05	$22.80	$26.14	$26.14	-10.9%	$30.09	0.1%	20.0	2.0%	2.3%	$1,689.20	-1.4%
2015 3Q	1920.03	$23.22	$25.44	$25.44	-14.1%	$29.99	-0.2%	18.4	2.2%	1.3%	$1,675.60	-6.6%
2015 4Q	2043.94	$18.70	$23.06	$23.06	-13.8%	$29.52	-3.3%	20.3	2.1%	0.6%	$1,585.20	-11.1%
2016 1Q	2059.74	$21.72	$23.97	$23.97	-7.1%	$26.96	-5.7%	20.9	2.1%	2.4%	$1,664.90	-2.5%
2016 2Q	2098.86	$23.28	$25.70	$25.70	-1.7%	$29.61	-1.6%	21.4	2.1%	1.2%	$1,624.20	-3.8%
2016 3Q	2168.27	$25.39	$28.69	$28.69	12.8%	$31.21	4.1%	21.4	2.1%	2.4%	$1,649.90	-1.5%
2016 4Q	2238.83	$24.16	$27.90	$27.90	21.0%	$31.30	6.0%	21.1	2.0%	2.0%	$1,707.00	7.7%
2017 1Q	2362.72	$27.46	$28.82	$28.82	20.2%	$30.90	14.6%	21.3	2.0%	1.7%	$1,772.60	6.5%
2017 2Q	2423.41	$27.01	$30.51	$30.51	18.7%	$32.58	10.0%	20.9	1.9%	2.0%	$1,789.20	10.2%
2017 3Q	2519.36	$28.45	$31.33	$31.33	9.2%	$33.45	7.2%	21.2	1.9%	3.4%	$1,829.30	10.9%
2017 4Q	2673.61	$26.96	$33.85	$33.85	21.3%	$36.02	15.1%	21.5	1.8%	4.1%	$1,875.10	9.8%
2018 1Q	2640.87	$33.02	$36.54	$36.54	26.8%	$38.07	23.2%	20.0	1.9%	2.8%	$1,983.30	11.9%
2018 2Q	2718.37	$34.05	$38.65	$38.65	26.7%	$41.00	25.8%	19.4	1.9%	2.8%	$1,981.40	10.7%
2018 3Q	2913.98	$36.36	$41.38	$41.38	32.1%	$42.66	27.5%	19.4	1.8%	2.9%	$2,033.10	11.1%
2018 4Q	2506.85	$28.96	$35.03	$35.03	3.5%	$41.18	14.3%	16.5	2.1%	0.7%	$2,095.90	11.8%
2019 1Q	2834.40	$35.02	$37.99	$37.99	4.0%	$39.15	2.8%	18.5	1.9%	2.2%	$1,999.80	0.8%
2019 2Q	2941.76	$34.93	$40.14	$40.14	3.9%	$41.31	0.8%	19.0	1.9%	2.7%	$2,083.20	5.1%
2019 3Q	2976.74	$33.99	$39.81	$39.81	-3.8%	$42.14	-1.2%	19.5	1.9%	3.6%	$2,090.30	2.8%
2019 4Q	3230.78	$35.53	$39.18	$39.18	11.8%	$41.98	1.9%	20.6	1.8%	1.8%	$2,089.20	-0.3%
2020 1Q	2584.59	$11.88	$19.50	$19.50	-48.7%	$33.13	-15.4%	18.6	2.3%	-4.6%	$1,924.00	-3.8%
2020 2Q	4397.35	$17.83	$26.79	$26.79	-33.3%	$27.98	-32.3%	35.1	1.9%	-29.9%	$1,701.50	-18.3%
2020 3Q	3363.00	$32.98	$37.90	$37.90	-4.8%	$38.69	-8.2%	27.3	1.7%	35.3%	$2,135.10	2.1%
2020 4Q	3756.07	$31.45	$38.19	$38.19	-2.5%	$42.58	1.4%	30.7	1.6%	3.9%	$2,111.90	1.1%
2021 1Q	3972.89	$45.95	$47.41	$47.41	143.1%	$49.13	48.3%	26.4	1.5%	6.3%	$2,207.70	14.7%
2021 2Q	4297.50	$48.39	$52.03	$52.03	94.2%	$52.58	87.9%	24.5	1.3%	7.0%	$2,440.60	43.4%
2021 3Q	4307.54	$49.59	$52.02	$52.02	37.3%	$53.72	38.8%	22.7	1.4%	2.7%	$2,522.70	18.2%
2021 4Q	4766.18	$53.94	$56.71	$56.71	48.5%	$53.95	26.7%	22.9	1.3%	7.0%	$2,527.40	19.7%
2022 1Q	4530.41	$45.99	$49.36	$49.36	4.1%	$54.80	11.5%	21.6	1.4%	-1.6%	$2,402.90	8.8%
2022 2Q	3785.38	$42.74	$46.87	$46.87	-9.9%	$57.62	9.6%	18.5	1.7%	-0.6%	$2,620.40	7.4%
2022 3QE	3585.62	$44.31	$50.46	$51.00	-2.0%	$56.04	4.3%	18.5	1.8%	2.6%	NA	NA
2022 4QE*	4019.65	$48.29	$53.96	$52.77	-6.9%	$54.44	0.9%	20.0	NA	NA	NA	NA

Source: DRG; S&P Dow Jones; Refinitiv Consensus estimates; **quarterly EPS may not sum to official CY estimates 12/13/2022

Regulation AC Analyst Certification

I, Gail Dudack, hereby certify that all the views expressed in this report accurately reflect my personal views about the subject company or companies and its or their securities. I also certify that no part of my compensation was, is, or will be, directly or indirectly related to the specific views contained in this report.

IMPORTANT DISCLOSURES

RATINGS DEFINITIONS:

Sectors/Industries:
"Overweight": Overweight relative to S&P Index weighting
"Neutral": Neutral relative to S&P Index weighting
"Underweight": Underweight relative to S&P Index weighting

Other Disclosures
This report has been written without regard for the specific investment objectives, financial situation, or particular needs of any specific recipient, and should not be regarded by recipients as a substitute for the exercise of their own judgment. The report is published solely for informational purposes and is not to be construed as a solicitation or an offer to buy or sell securities or related financial instruments. The securities described herein may not be eligible for sale in all jurisdictions or to certain categories of investors. The report is based on information obtained from sources believed to be reliable, but is not guaranteed to be accurate, nor is it a complete statement or summary of the securities, markets or developments referred to in the report. Any opinions expressed in this report are subject to change without notice and the Dudack Research Group division of Wellington Shields & Co. LLC. (DRG/Wellington) is under no obligation to update or keep current the information contained herein. Options, derivative products, and futures are not suitable for all investors, and trading in these instruments is considered risky. Past performance is not necessarily indicative of future results, and yield from securities, if any, may fluctuate as a security's price or value changes. Accordingly, an investor may receive back less than originally invested. Foreign currency rates of exchange may adversely affect the value, price or income of any security or related instrument mentioned in this report.

DRG/Wellington relies on information barriers, such as "Chinese Walls," to control the flow of information from one or more areas of DRG/Wellington into other areas, units, divisions, groups, or affiliates. DRG/Wellington accepts no liability whatsoever for any loss or damage of any kind arising out of the use of all or any part of this report.

The content of this report is aimed solely at institutional investors and investment professionals. To the extent communicated in the U.K., this report is intended for distribution only to (and is directed only at) investment professionals and high net worth companies and other businesses of the type set out in Articles 19 and 49 of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2001. This report is not directed at any other U.K. persons and should not be acted upon by any other U.K. person. Moreover, the content of this report has not been approved by an authorized person in accordance with the rules of the U.K. Financial Services Authority, approval of which is required (unless an exemption applies) by Section 21 of the Financial Services and Markets Act 2000.
Additional information will be made available upon request.

Dudack Research Group a division of Wellington Shields & Co. LLC.
Main Office:
Wellington Shields & Co. LLC
140 Broadway
New York, NY 10005
212-320-3511
Research Sales: 212-320-2046

Florida office:
549 Lake Road
Ponte Vedra Beach, FL 32082
212-320-2045