MARKET OUTLOOK | 4Q 2022

U.S. Stock Market Falls Back to Rare Undervalued Levels Following Recent Drop

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U.S. Equity Market Valuation Overview

U.S. Stock Market Falls Back to Rare Undervalued Levels Following Recent Drop

U.S. Stock Market has Over-Corrected to Downside
In our 2022 Market Outlook we noted that the U.S. stock market was overvalued coming into the year. The four headwinds we identified have been joined by additional new headwinds, including the appreciation of the U.S. dollar and expectations that Europe is entering a recession. While these headwinds will pressure near-term earnings growth, according to our long-term valuations, the market has overcorrected to the downside and is trading deep into undervalued territory.

Based on a composite of the intrinsic valuation of the approximately 700 stocks we cover that trade on U.S. exchanges, we calculate that the broad U.S. stock market is trading at a price to fair value of 0.79. Growth stocks are the most undervalued, trading at a price to fair value of 0.75, followed by the value category trading at 0.77. Core stocks are trading closer to fair value estimate at 0.86. Investors appear to be best positioned with a barbell-shaped strategy, overweighting both value and growth categories and underweighting core.

Across capitalization levels, large- and mid-cap stocks are trading near the broad market valuation, whereas small-cap stocks are trading at the greatest discount to fair value at 0.62.

Morningstar Equity Research Coverage Price/Fair Value, U.S. Equity Style Box

Size \ Style	All	Value	Core	Growth
All	**0.79**	0.77	0.86	0.75
Large	0.79	0.78	0.87	0.75
Mid	0.78	0.75	0.81	0.76
Small	0.62	0.53	0.72	0.58

Overvalued
- ≥ 1.10
- 1.05 to 1.10

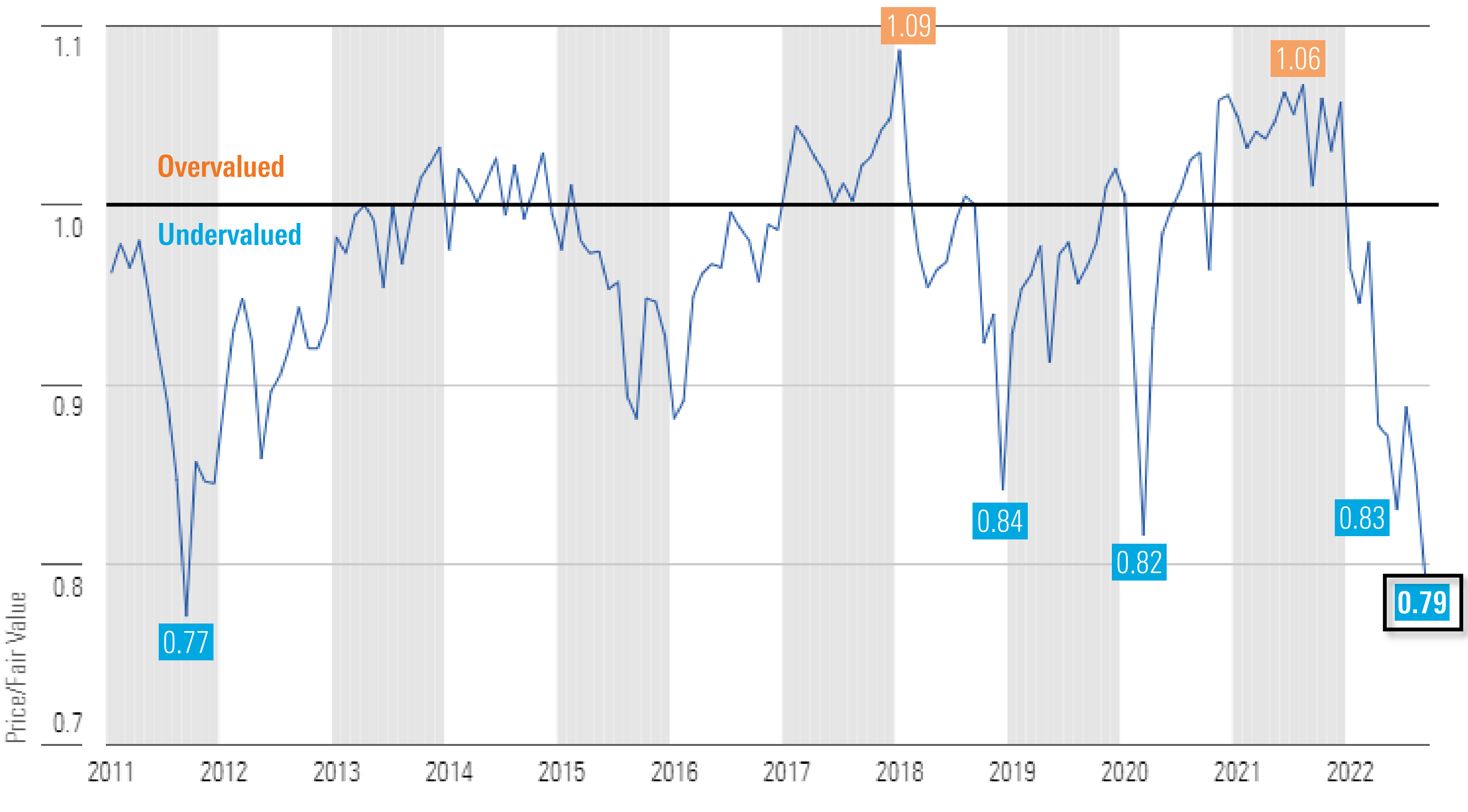
Fairly Valued
- 1.01 to 1.05
- 0.99 to 1.01
- 0.95 to 0.99

Undervalued
- 0.95 to 0.90
- ≤ 0.90

Source: Morningstar Equity Research. Data as of Sept. 26, 2022.

In Very Few Other Instances Have Valuations Been This Low

Morningstar U.S. Coverage Price to Fair Value at month end



Near-Term Dynamics Appear Ugly, But Valuations Provide Large Margin of Safety

The current level of undervaluation is the greatest discount to our long-term, intrinsic valuations since the start of the pandemic. Intra-month March 2020, the price/fair value bottomed out at 0.77 on March 23, 2020.

On a longer historical time frame, there have only been a few other instances when our price/fair value metric had dropped to similar levels. Stocks dropped precipitously in December 2018 as the Fed had already been tightening monetary policy for a year and markets were pricing in a global growth scare. In fall 2011, concerns that possible contagion from the Greek debt crisis was spreading to other countries (Portugal, Italy, and Spain) and that systemic risk from the European sovereign debt crisis was spreading to the European banking system.

While near-term conditions may pressure earnings in the short term, at current valuations we think the market has fallen more than enough to incorporate those headwinds. In our view, we think the market is overly pessimistic regarding the long-term prospects for equity valuations.

Source: Morningstar Equity Research. Data as of Sept. 26, 2022.

Just As Conditions Appeared to Improve, Headwinds Resume in September

In July and August, markets rebounded from June lows as headwinds appeared to begin to abate. However, in September, markets turned for the worse and gave up those gains and more as the headwinds returned and new pressures began to build. The appreciation of the U.S. dollar will hamper foreign earnings, Europe is on the precipice of a recession, and the outlook for economic growth in China appears especially murky. Quarter to date through September 26, the Morningstar U.S. Market Index dropped 3.08%. The worst losses were concentrated in the value category which fell 5.29%. Core stocks dropped 2.46%, less than the market average. Growth stocks fell 3.00%, in line with the broader market.

Morningstar U.S. Market Index Returns

QTD 3Q2022 Return

Size \ Style	All	Value	Core	Growth
All	**-3.1%**	-5.3%	-2.5%	-3.0%
Large	-2.9%	-5.7%	-1.8%	-1.6%
Mid	-3.5%	-4.1%	-3.8%	-2.7%
Small	-4.0%	-4.5%	-3.7%	-3.7%

≥ 8%   -4% to 0%
4% to 8%   -8% to -4%
0% to 4%   ≤ -8%

Year To Date Return

Size \ Style	All	Value	Core	Growth
All	**-23.7%**	-12.2%	-22.4%	-36.2%
Large	-23.8%	-11.9%	-22.1%	-40.3%
Mid	-23.1%	-12.2%	-22.8%	-35.7%
Small	-24.7%	-15.2%	-23.2%	-35.3%

≥ 20%   -10% to 0%
10% to 20%   -10% to -20%
0% to 10%   ≤ -20%

Source: Morningstar Equity Research. Data as of Sept. 26, 2022.

Equity Markets Enter Bear Market. How Did We Get Here and How Long Will It Last?

Coming into 2022, we noted that the U.S. equity market was overvalued and would have to contend with four main headwinds this year. Those were:

- Slowing rate of economic growth,
- Federal Reserve tightening monetary policy,
- Inflation running hot, and
- Our expectation that long-term interest rates were going to rise.

Over the first half of the year, equities fell and bottomed out in June as these headwinds converged. However, in July and August, U.S. equity markets rebounded as it appeared that these headwinds were beginning to abate, and valuations were low.

Yet this reprieve was short-lived as, over September, these headwinds began to resume. What we have seen most recently is:

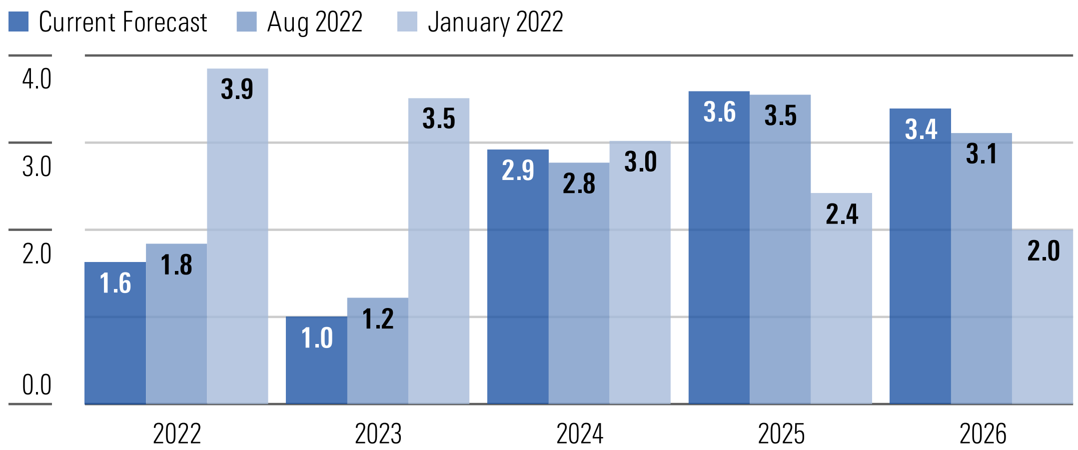
- Even weaker-than-expected economic growth,
- Federal Reserve has become even more hawkish,
- Inflation is still running hot, and
- Long-term rates began rising again, 10-year UST rose 80bps in September to almost 4%

Further compounding these headwinds, additional pressures have emerged including:

- Strong appreciation of the U.S. dollar, which will lower earnings for US companies with significant overseas exposure,
- Europe appears to be heading into recession, with the only questions right now being how long and how deep, and
- Economic outlook for China is especially murky.

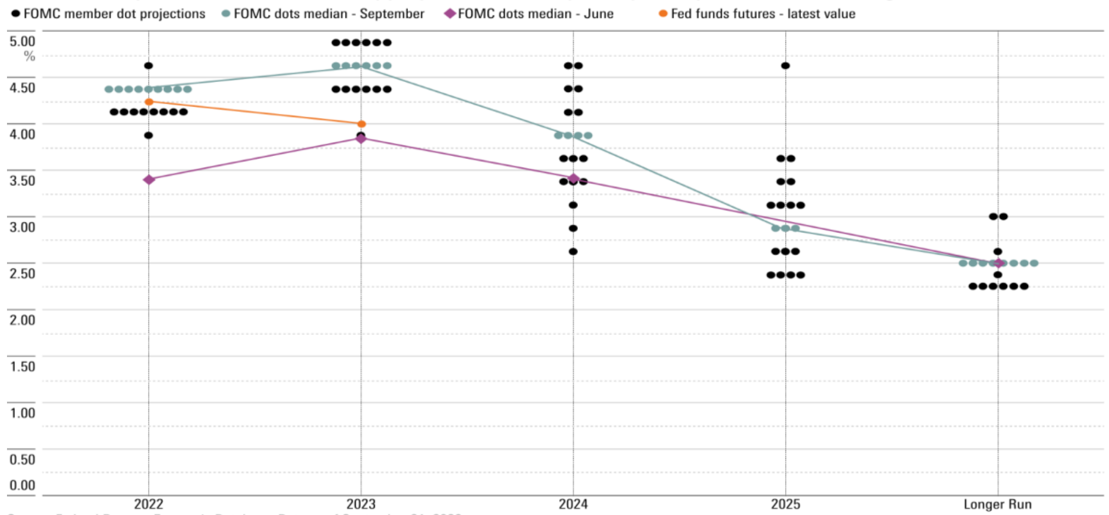
Source: Bureau of Economic Analysis, Morningstar. Data as of Sept. 19, 2022.

GDP Forecast Revisions



The Dot Plot: Federal-Funds Rate Target Levels

FOMC Participants' Assessments of Appropriate Monetary Policy at September 21 Meeting



Source: Federal Reserve Economic Database. Data as of September 21, 2022.

What Will It Take For Equity Market to Establish a Bottom and When Will That Occur?

Yet, with equities selling off 24% year to date, it appears to us that the market has over-corrected to the downside. According to a composite of the stocks we cover that trade on U.S. exchanges, the equity market is significantly undervalued and is trading at about a 20% discount to fair value.

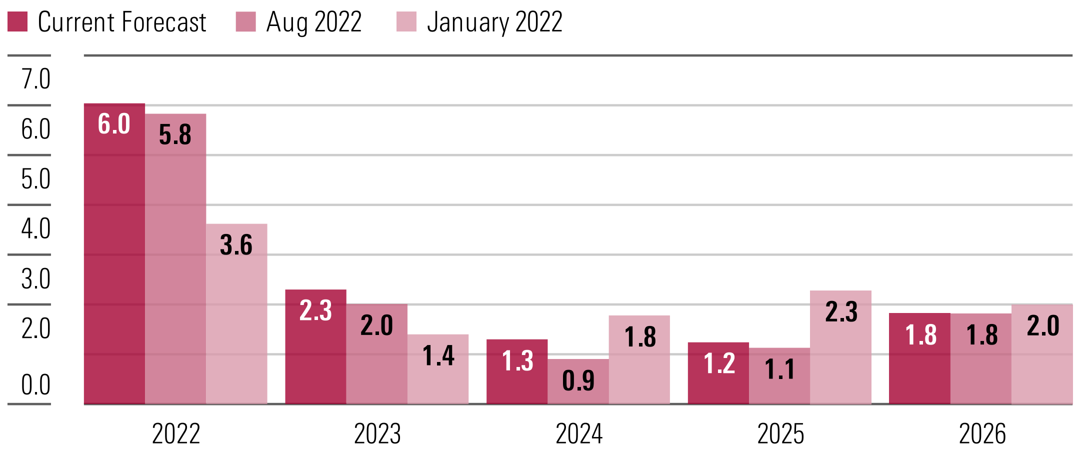
Over the next six-12 months, we expect that the markets will remain under pressure and volatility will remain high for the foreseeable future. In order to establish a bottom, the markets will need clarity as to when economic activity will make a meaningful and sustained rebound, and evidence that inflation will begin to trend downward and return to the Fed's 2% target.

Over this time period, we expect:

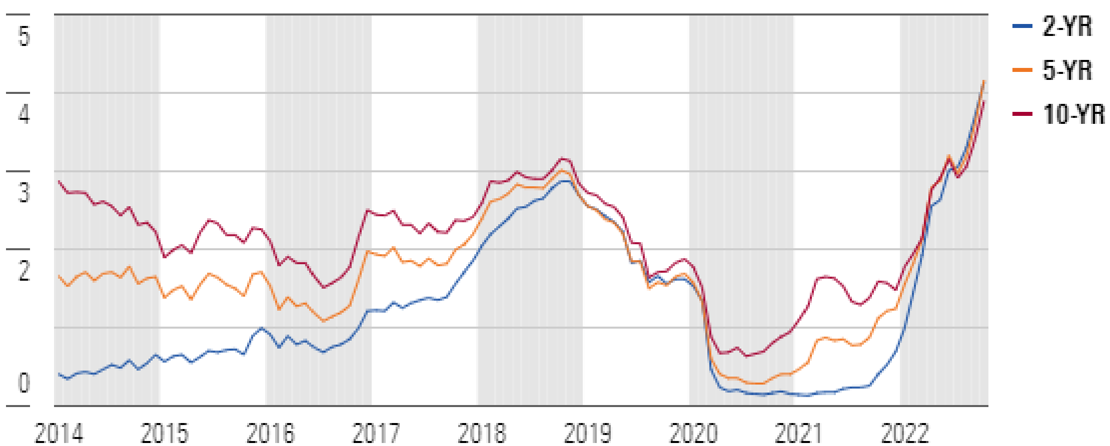
- GDP will remain sluggish and won't start to re-accelerate until 2H23,
- Federal Reserve will conclude tightening policy by the end of 2022,
- Momentum may push interest rates slightly higher over near term, but the preponderance of rising long-term rates has already occurred, and
- Inflation will begin to moderate over next few months and subside in 2023.

We think the combination of these factors will provide the Fed the room it will need to begin easing monetary policy by the end of 2023. Our forecast is that the federal funds rate will drop to 2.00% at the end of 2023 and the yield on the 10-year UST will average 2.75%

Inflation (PCE) Forecast Revisions



U.S. Treasury Yields (%)



Source: Bureau of Economic Analysis. Morningstar. Data as of Sept. 26, 2022.

Q3 Selloff Leads to Widespread Undervaluation Across All Styles and Capitalizations

Across our coverage, the number of fair value estimate increases and decreases were relatively balanced last quarter. We lowered our fair value estimate by more than 3% on 19% of our coverage and lowered our valuation by more than 10% on 7%. We increased our fair value estimate over 3% on 17% of our coverage and increased our valuation over 10% on 4%. Considering core category is closest to fair value, we see the best relative positioning for investors in a barbell-shaped portfolio consisting of growth and value.

Morningstar Equity Research Coverage Price/Fair Value Estimate

June 27, 2022 → **September 26, 2022**

June 27, 2022

Size \ Style	All	Value	Core	Growth
All	**0.83**	0.83	0.91	0.78
Large	0.83	0.84	0.92	0.78
Mid	0.83	0.80	0.87	0.81
Small	0.68	0.60	0.78	0.68

September 26, 2022

Size \ Style	All	Value	Core	Growth
All	**0.79**	0.77	0.86	0.75
Large	0.79	0.78	0.87	0.75
Mid	0.78	0.75	0.81	0.76
Small	0.62	0.53	0.72	0.58

Overvalued
- ≥ 1.10
- 1.05 to 1.10

Fairly Valued
- 1.01 to 1.05
- 0.99 to 1.01
- 0.95 to 0.99

Undervalued
- 0.95 to 0.90
- ≤ 0.90

Source: Morningstar Equity Research. Data as of Sept. 26, 2022.

The Pendulum Swings: From Overvalued to Undervalued

The markets often act like a pendulum and will swing too far in one direction or the other. This year has been a prime example. According to our valuations, the markets ended 2021 trading at a 6% premium over a composite of our fair value estimates. At this point, we think the markets have overreacted to short-term pressures and that the broad equity markets is now trading at a significant discount to our long-term intrinsic valuations.

Morningstar Equity Research Coverage Price/Fair Value

December 31, 2021 → **September 26, 2022**

December 31, 2021

Size \ Style	All	Value	Core	Growth
All	**1.06**	0.97	1.12	1.05
Large	1.06	0.98	1.11	1.06
Mid	1.06	0.95	1.15	1.06
Small	0.90	0.88	1.01	0.72

September 26, 2022

Size \ Style	All	Value	Core	Growth
All	**0.79**	0.77	0.86	0.75
Large	0.79	0.78	0.87	0.75
Mid	0.78	0.75	0.81	0.76
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Source: Morningstar Equity Research. Data as of Sept. 26, 2022.

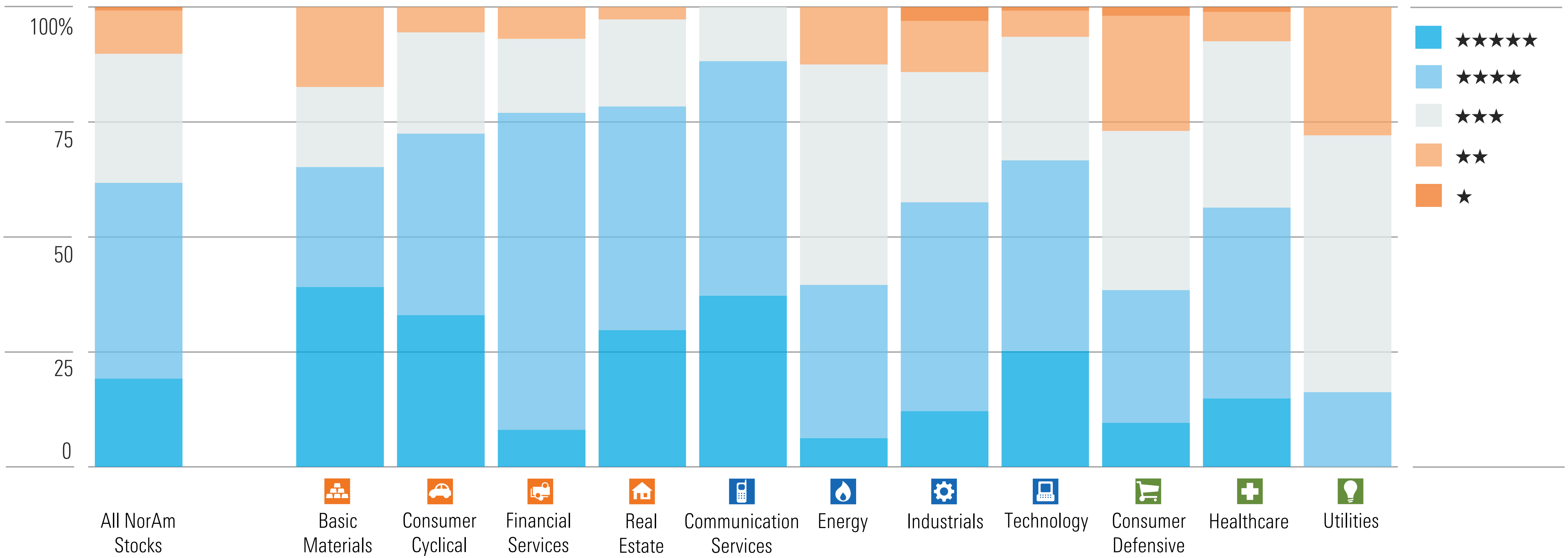
Sector and Top Picks Overview

SECTOR VALUATION

Opportunities Abound

As the markets fell deeper into undervalued territory, the number of undervalued stocks jumped. Of the stocks we cover that trade in North America, 62% are rated 4 or 5 stars. Only 10% are rated 1 or 2 stars. This is a sharp reversal from the end of 2021 when only 24% were 4 or 5 stars and 32% were 1 or 2 stars. The greatest number of undervalued stocks reside in the communications sector, followed by the cyclical sectors, which would be most adversely affected if the economy were to slip into a recession.

Star Rating Distribution by Sector



Source: Morningstar Equity Research. Data as of Sept. 26, 2022.

Deep Undervaluation Found Across Cyclicals, Whereas Defensive Sectors Remain Fairly Valued

Communications Drops Further, Consumer Cyclical Second-Most Undervalued
Meta Platforms and Alphabet both underperformed the market this past quarter and helped to push the Communications sector even deeper into undervalued territory. Yet, even excluding these two stocks, we see significant amount of value among the traditional media and communications companies. Many of these companies are in the midst of building out their own streaming services and the market has been especially pessimistic regarding their long-term prospects.

The price/fair value estimate of the consumer cyclical sector held steady at 0.75. We think the market is overreacting to concerns of a possible near-term recession. In the event of a recession, we think that the sector already factors in enough of a margin of safety at its current valuation. Many of the services-oriented companies in this sector should benefit as the pandemic continues to recede and consumer spending behavior normalizes and shifts back to services and away from goods.

The greatest decline in price to fair value estimate this quarter occurred in the real estate sector as rising interest rates took their toll on net asset values. Oil prices peaked in early June and have generally been on a downward trend. Energy stocks followed suit and fell precipitously in September. Following this pullback, the price to fair value estimate has dropped to 0.91 from 0.99 last quarter.

Generally, the Defensive sectors have held up relatively well this year and are trading closer to fair value, with Utilities skewing a little to the overvalued side. Although we expect inflation will begin to moderate, if inflation remains more persistent, we note that Utilities would be the most negatively affected sector in an inflationary environment.

Morningstar Equity Research Coverage Price to Fair Value Estimate by Sector

Cyclical Sectors	All	Sensitive Sectors	All	Defensive Sectors	All
Basic Materials	0.78	Comm. Services	0.57	Consumer Defensive	0.97
Consumer Cyclical	0.75	Energy	0.91	Healthcare	0.94
Financial Services	0.77	Industrials	0.83	Utilities	1.03
Real Estate	0.83	Tech	0.78		

Source: Morningstar Equity Research. Data as of Sept. 26, 2022.

Consumer Cyclicals Bounce and Utilities Hold Their Value, With Losses Across the Rest of the Board

Consumer Cyclicals Bounce Off Bottom & Utilities Steady—Rest of Market Sinks
Consumer cyclical sector gained 5.31% quarter to date. The sector surged over 18% in July as market headwinds appeared to abate; however, the sector lost much of that gain in August and September as negative economic and inflationary metrics were released. We continue to see a significant number of undervalued opportunities in consumer cyclicals, especially among service-oriented companies that will benefit from consumer behavior normalization as the pandemic recedes. The only other sector to post a gain was the utility sector, which eked out a small positive return as investors sought shelter in this defensive sector.

The communications sector continued its free fall and is the worst performing sector both in the third quarter and year to date. The next worst performing sector was real estate, in which the sharp rise in interest rates took their toll on net asset values. Basic Materials were hit hard as recessionary fears spiked following weak economic metrics.

Energy, which is the only sector in the green thus far this year, posted a small quarterly loss as oil prices peaked in early June and have been steadily falling since.

Morningstar US Sector Index Returns

Morningstar US Market Sector Returns	1Q2022	2Q2022	QTD 3Q2022	YTD 2022
Basic Materials	(1.29)	(17.53)	(7.14)	(24.41)
Communications	(12.20)	(21.89)	(11.24)	(39.12)
Consumer Cyclical	(10.66)	(25.19)	5.31	(29.61)
Consumer Defensive	(1.31)	(5.70)	(3.10)	(9.82)
Energy	38.47	(5.96)	(1.90)	27.74
Financial Services	(3.01)	(17.13)	(2.50)	(21.63)
Healthcare	(4.03)	(7.07)	(4.84)	(15.13)
Industrials	(3.82)	(15.24)	(2.57)	(20.58)
Real Estate	(6.22)	(15.01)	(9.53)	(27.90)
Technology	(9.66)	(22.33)	(3.47)	(32.26)
Utilities	4.48	(5.07)	0.51	(0.31)

Source: Morningstar Equity Research. Data as of Sept. 26, 2022.

Cyclical Sectors: Best Picks

Our best picks in the basic materials sector are plays on three themes. First is the long-term structural shift toward electric vehicles. Second is our forecast for a recovery in deicing salt prices and lastly for elevated specialty chemical prices. In the consumer cyclical sector, our picks are focused on idiosyncratic situations in which we think the market has overestimated transitory profit pressures and rising recessionary concerns. In financial services, we think investors are over-penalizing asset managers based on the stock market's decline into bear market territory and concern that slowing economic growth will lead to greater loan losses and pressure investment banking revenues. In the real estate sector, our picks are focused on stocks that will benefit from normalization of consumer behaviors as the pandemic recedes.

Name/Ticker	Rating	Price ($)	Fair Value ($)	P/FV	Economic Moat	Uncertainty	Sector	Style Box
Celanese CE	★★★★★	88	165	0.53	Narrow	Medium	Basic Materials	Mid Value
Compass Minerals CMP	★★★★★	37	80	0.46	Wide	High	Basic Materials	Small Growth
Lithium Americas LAC	★★★★★	26	65	0.40	None	Very High	Basic Materials	Mid Growth
Bath & Body Works BBWI	★★★★★	35	82	0.42	Narrow	Medium	Consumer Cyclical	Mid Value
Gap GPS	★★★★★	8	25	0.34	None	High	Consumer Cyclical	Small Value
Hanesbrands HBI	★★★★★	8	24	0.32	Narrow	Medium	Consumer Cyclical	Small Value
BlackRock BLK	★★★★	585	850	0.69	Wide	Medium	Financial Services	Large Value
Citigroup C	★★★★★	43	78	0.55	None	Medium	Financial Services	Large Value
Fiserv FISV	★★★★	96	129	0.74	Narrow	Medium	Technology	Large Core
Park Hotels & Resorts PK	★★★★★	11	28	0.40	None	High	Real Estate	Small Growth
Simon Property Group SPG	★★★★★	87	160	0.55	None	Medium	Real Estate	Mid Core
Ventas VTR	★★★★★	42	69	0.60	None	Medium	Real Estate	Mid Core

Source: Morningstar Equity Research. Data as of Sept. 26, 2022.

Economically Sensitive Sectors: Best Picks

Both traditional and non-traditional communications companies have been under extreme investor scrutiny. This scrutiny has ranged from increasingly negative sentiment surrounding online advertising to the impact from slowing broadband customer growth to pessimism regarding economic value of streaming businesses. Valuations have become more attractive in the energy sector following its selloff, but most opportunities remain concentrated in the services and pipelines as only a few undervalued opportunities exist among the exploration and production stocks. The Industrials sector has faced a multitude of headwinds, ranging from slowing economic growth to supply chain disruptions to inflationary pressures; however, we think headwinds will prove to be temporary in nature as we do not foresee a near-term recession, transportation continues to normalize, and we expect inflation will begin to moderate.

Name/Ticker	Rating	Price ($)	Fair Value ($)	P/FV	Economic Moat	Uncertainty	Sector	Style Box
Comcast CMCSA	★★★★★	31	60	0.51	Wide	Medium	Communication Servic	Large Value
The Walt Disney Company DIS	★★★★	98	170	0.58	Wide	High	Communication Servic	Large Growth
Alphabet GOOGL	★★★★	98	169	0.58	Wide	High	Communication Servic	Large Growth
Equitrans Midstream ETRN	★★★★★	8	14	0.56	Narrow	High	Energy	Small Value
Schlumberger SLB	★★★★	34	49	0.69	Narrow	High	Energy	Large Growth
ExxonMobil XOM	★★★	84	102	0.82	Narrow	High	Energy	Large Value
Delta Air Lines DAL	★★★★	28	57	0.49	None	Very High	Industrials	Mid Growth
Itt ITT	★★★★★	67	100	0.67	Narrow	Medium	Industrials	Small Core
Pentair PNR	★★★★★	41	65	0.63	Narrow	Medium	Industrials	Mid Core
ASML Holding ASML	★★★★★	431	696	0.62	Wide	Medium	Technology	Large Growth
Salesforce CRM	★★★★★	146	240	0.61	Wide	Medium	Technology	Large Growth
ServiceNow NOW	★★★★★	370	675	0.55	Wide	Medium	Technology	Large Growth

Source: Morningstar Equity Research. Data as of Sept. 26, 2022.

Defensive Sectors: Top Picks

Within the consumer defensive sector, we find that stocks of alcoholic beverage manufacturers remain undervalued. As consumers begin to venture back out to public events, we expect consumption will shift from at-home to on-premise consumption where consumers typically imbibe higher margin branded products. Our other picks are idiosyncratic in which we have a differentiated view on the underlying growth potential for their category and brands. Within the healthcare sector, we are finding value in the MedTech space, which has sold off as investors shun risk. Utilities have provided investors with a safe have in a turbulent market. While we expect inflation to begin to moderate, we caution that valuations in the utility sector would be most at risk if inflation persists. Utilities are most sensitive to inflation because of their mostly fixed revenues, large capital investment budgets, and borrowing needs.

Name/Ticker	Rating	Price ($)	Fair Value ($)	P/FV	Economic Moat	Uncertainty	Sector	Style Box
Beyond Meat BYND	★★★★★	15	63	0.23	None	High	Consumer Defensive	Small Core
The Hain Celestial Group HAIN	★★★★★	17	38	0.44	None	Medium	Consumer Defensive	Small Core
Boston Beer Co SAM	★★★★★	320	680	0.47	Narrow	Medium	Consumer Defensive	Small Growth
Illumina ILMN	★★★★	184	307	0.60	Narrow	Very High	Healthcare	Mid Core
Moderna Therapeutics MRNA	★★★★	120	232	0.52	None	Very High	Healthcare	Large Value
Zimmer Biomet ZBH	★★★★★	105	175	0.60	Wide	Medium	Healthcare	Mid Core
Dominion Energy D	★★★	76	82	0.92	Wide	Low	Utilities	Large Core
Edison International EIX	★★★★	63	73	0.87	Narrow	Medium	Utilities	Mid Value
NiSource NI	★★★★	27	32	0.86	Narrow	Low	Utilities	Mid Core

Source: Morningstar Equity Research. Data as of Sept. 26, 2022.

Valuation by Economic Moat

Wide-Moat Stocks Are Undervalued

Morningstar Price/Fair Value Estimate by Economic Moat

Moat	All	Size: Large	Size: Mid	Size: Small	Style: Value	Style: Core	Style: Growth
None	**74%**	71%	77%	65%	73%	76%	74%
Narrow	**88%**	91%	78%	58%	78%	90%	91%
Wide	**73%**	73%	80%	70%	78%	84%	67%

Overvalued
- ≥ 1.10
- 1.05 to 1.10

Fairly Valued
- 1.01 to 1.05
- 0.99 to 1.01
- 0.95 to 0.99

Undervalued
- 0.95 to 0.90
- ≤ 0.90

Undervalued Wide-Moat Stocks Especially Compelling
Year to date, companies with a wide Morningstar Economic Moat Rating have fallen slightly more than the broad market. The Morningstar Wide Moat Composite Index has dropped 26.79% compared with the 23.70% decline of the Morningstar U.S. Market Index. However, when you apply a valuation overlay to wide-moat stocks, such as the Morningstar Wide Moat Focus Index, this index has significantly outperformed the broader market, having only dropped 21.00%. Overall, the market is undervaluing wide-moat companies, which are trading at an 27% discount to fair value.

We also believe that in addition to being able to generate excess returns on invested capital over the long term, wide-moat companies generally have greater pricing power. As such, they should be able to pass through any cost increases to clients and be able to better maintain their margins and thus maintain their valuations in an inflationary environment. We also expect that these companies are best positioned to weather a potential recession based on their long-term durable competitive advantages.

Source: Morningstar Equity Research. Data as of Sept. 26, 2022.

Undervalued Large-Cap Stocks with Wide Economic Moats

Name/Ticker	Rating	Price ($)	Fair Value ($)	P/FV	Economic Moat	Uncertainty	Sector	Style Box
Meta Platforms META	★★★★★	136	346	0.39	Wide	High	Communication Servic	Large Core
Comcast CMCSA	★★★★★	31	60	0.51	Wide	Medium	Communication Servic	Large Value
Lam Research LRCX	★★★★★	371	720	0.52	Wide	High	Technology	Large Core
Yum China YUMC	★★★★★	46	86	0.54	Wide	Medium	Consumer Cyclical	Large Core
Bank of America BAC	★★★★	31	40	0.78	Wide	Medium	Financial Services	Large Value
ServiceNow NOW	★★★★★	370	675	0.55	Wide	Medium	Technology	Large Growth
Alphabet GOOGL	★★★★	98	169	0.58	Wide	High	Communication Servic	Large Growth
MercadoLibre MELI	★★★★	800	1,400	0.57	Wide	High	Consumer Cyclical	Large Growth
Applied Materials AMAT	★★★★	83	142	0.58	Wide	High	Technology	Large Core
Amazon.com AMZN	★★★★	115	192	0.60	Wide	High	Consumer Cyclical	Large Growth
The Walt Disney Company DIS	★★★★	98	170	0.58	Wide	High	Communication Servic	Large Growth
Salesforce CRM	★★★★★	146	240	0.61	Wide	Medium	Technology	Large Growth
3M MMM	★★★★	113	183	0.62	Wide	High	Industrials	Large Value
Adobe Systems ADBE	★★★★★	277	450	0.62	Wide	Medium	Technology	Large Growth
Nvidia NVDA	★★★★	122	200	0.61	Wide	High	Technology	Large Growth
Medtronic MDT	★★★★★	81	129	0.63	Wide	Medium	Healthcare	Large Core
Emerson Electric EMR	★★★★★	73	113	0.65	Wide	Medium	Industrials	Large Core
Workday WDAY	★★★★	147	229	0.64	Wide	High	Technology	Large Growth
Microsoft MSFT	★★★★	237	352	0.67	Wide	Medium	Technology	Large Growth
Ecolab ECL	★★★★	146	215	0.68	Wide	Medium	Basic Materials	Large Core

Source: Morningstar Equity Research. Data as of Sept. 26, 2022.

Undervalued Mid-Cap Stocks with Wide Economic Moats

Name/Ticker	Rating	Price ($)	Fair Value ($)	P/FV	Economic Moat	Uncertainty	Sector	Style Box
Teradyne TER	★★★★★	77	167	0.46	Wide	High	Technology	Mid Core
Etsy ETSY	★★★★★	94	180	0.52	Wide	High	Consumer Cyclical	Mid Growth
Equifax EFX	★★★★★	173	320	0.54	Wide	Medium	Industrials	Mid Core
Polaris (US) PII	★★★★★	98	175	0.56	Wide	High	Consumer Cyclical	Mid Value
Veeva Systems VEEV	★★★★★	158	275	0.57	Wide	Medium	Healthcare	Mid Growth
TransUnion TRU	★★★★★	62	106	0.59	Wide	Medium	Industrials	Mid Core
Zimmer Biomet ZBH	★★★★★	105	175	0.60	Wide	Medium	Healthcare	Mid Core
Masco MAS	★★★★★	46	75	0.61	Wide	Medium	Industrials	Mid Core
International Flavors & Fragrances IFI	★★★★★	96	150	0.64	Wide	Medium	Basic Materials	Mid Core
Tyler Technologies TYL	★★★★★	343	530	0.65	Wide	Medium	Technology	Mid Core
MarketAxess Holdings MKTX	★★★★	225	355	0.63	Wide	High	Financial Services	Mid Core
Biogen BIIB	★★★★	196	305	0.64	Wide	High	Healthcare	Mid Value
Monolithic Power Systems MPWR	★★★★	367	562	0.65	Wide	High	Technology	Mid Growth
State Street STT	★★★★	63	92	0.68	Wide	High	Financial Services	Mid Value
Allegion ALLE	★★★★	90	132	0.68	Wide	Medium	Industrials	Mid Core
Tradeweb Markets TW	★★★★	59	84	0.70	Wide	Medium	Financial Services	Mid Core
BNY Mellon BK	★★★★	39	56	0.70	Wide	Medium	Financial Services	Mid Value
Rockwell Automation ROK	★★★★	215	295	0.73	Wide	Medium	Industrials	Mid Core
VeriSign VRSN	★★★★	173	225	0.77	Wide	Medium	Technology	Mid Core
Domino's Pizza DPZ	★★★★	325	405	0.80	Wide	Medium	Consumer Cyclical	Mid Core

Source: Morningstar Equity Research. Data as of Sept. 26, 2022.

Undervalued Small-Cap Stocks with Wide or Narrow Economic Moats

Name/Ticker	Rating	Price ($)	Fair Value ($)	P/FV	Economic Moat	Uncertainty	Sector	Style Box
Lyft LYFT	★★★★★	14	65	0.21	Narrow	Very High	Technology	Small Value
Altice USA ATUS	★★★★★	7	28	0.23	Narrow	High	Communication Servic	Small Value
Hanesbrands HBI	★★★★★	8	24	0.32	Narrow	Medium	Consumer Cyclical	Small Value
RingCentral RNG	★★★★★	41	125	0.32	Narrow	High	Technology	Small Growth
Millicom International Cellular TIGO	★★★★★	12	34	0.34	Narrow	High	Communication Servic	Small Value
Sabre Corporation SABR	★★★★★	5	15	0.34	Narrow	High	Consumer Cyclical	Small Value
Asbury Automotive Group ABG	★★★★★	151	377	0.40	Narrow	High	Consumer Cyclical	Small Value
AMC Networks AMCX	★★★★★	20	51	0.40	Narrow	High	Communication Servic	Small Value
Scotts Miracle-Gro SMG	★★★★★	49	120	0.41	Narrow	High	Basic Materials	Small Value
Core Laboratories CLB	★★★★★	13	32	0.42	Wide	Very High	Energy	Small Growth
Nordstrom JWN	★★★★★	18	42	0.42	Narrow	High	Consumer Cyclical	Small Value
Pegasystems PEGA	★★★★★	32	74	0.43	Narrow	High	Technology	Small Value
Adient ADNT	★★★★★	29	64	0.46	Narrow	Very High	Consumer Cyclical	Small Core
Vontier VNT	★★★★★	17	41	0.42	Narrow	Medium	Technology	Small Value
Compass Minerals CMP	★★★★★	37	80	0.46	Wide	High	Basic Materials	Small Growth
Boston Beer Co SAM	★★★★★	320	680	0.47	Narrow	Medium	Consumer Defensive	Small Growth
Rocket Companies RKT	★★★★★	7	14	0.48	Narrow	High	Financial Services	Small Value
Malibu Boats MBUU	★★★★★	49	100	0.49	Narrow	High	Consumer Cyclical	Small Core
Evercore Group EVR	★★★★★	80	158	0.51	Narrow	High	Financial Services	Small Core
Sensata Technologies ST	★★★★★	38	71	0.53	Narrow	Medium	Technology	Small Core

Source: Morningstar Equity Research. Data as of Sept. 26, 2022.

Economic Outlook

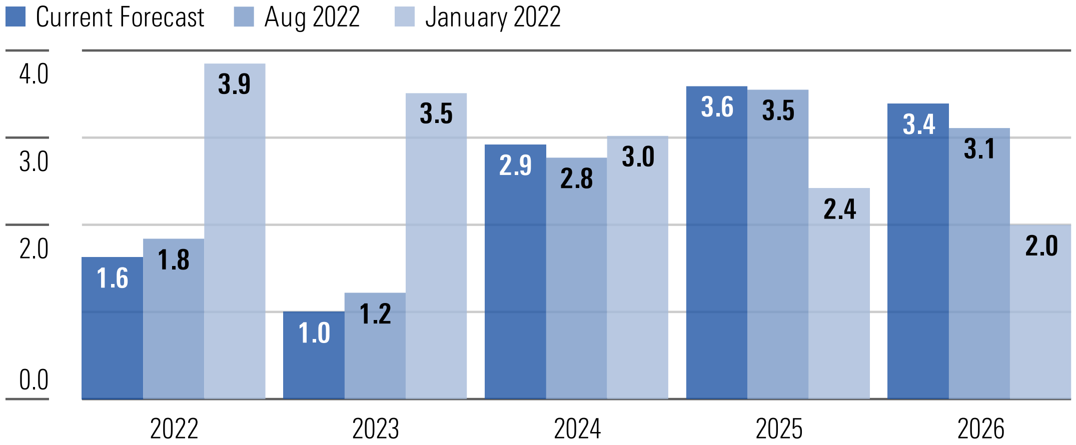
We Still Expect Inflation to Plummet in 2023, Allowing the Fed to Cut Rates and Jump-Start GDP Growth

We Expect Growth to Trough in 2023 and Then Accelerate in 2024

Since our last update in August, we've slightly pulled back on our near-term GDP growth forecasts. In particular, monetary policy looks likely to chart a slightly more hawkish course than previously anticipated, given inadequate progress on the inflation front. For more detail, see our U.S. Economic Pulse: September 2022.

We expect growth to rebound starting in 2024 as the Federal Reserve pivots to cutting interest rates. On a five-year time horizon, our GDP forecasts are driven by our supply side views (labor supply and productivity), and we expect the Fed to calibrate monetary policy so that GDP aligns with its supply-side potential.

GDP Forecast Revisions

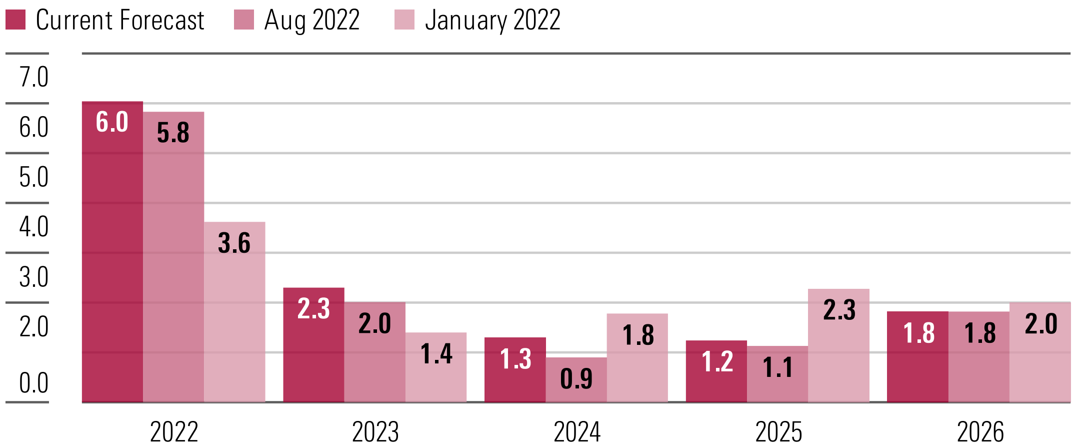


Inflation Should Return to Normal in 2023

We've nudged up our inflation forecast for 2022 and 2023 owing to a lack of progress in bringing down core inflation, even while the drop in energy prices has helped to push down overall prices.

We still expect the inflation problem to be solved in 2023, as supply constraints are lifted and the Fed's tightening successfully cools off the economy. In fact, we expect the Fed to overshoot its goal of bringing inflation back to 2% by 2024, owing to the magnitude of supply expansion and unwinding of various price shocks.

Inflation (PCE) Forecast Revisions



Source: Bureau of Economic Analysis. Morningstar. Data as of Sept. 19, 2022.

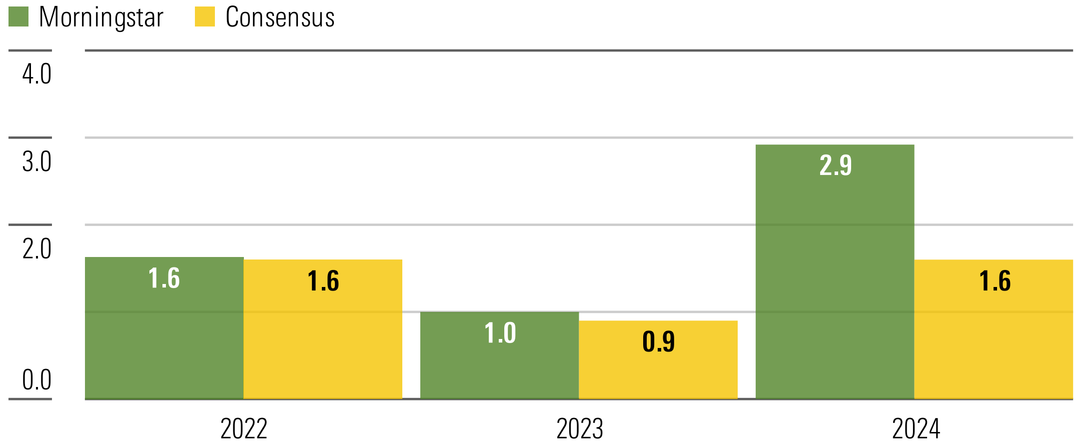
We Still Expect Inflation to Plummet in 2023, Allowing the Fed to Cut Rates and Jump-Start GDP Growth

We're More Bullish Than Consensus on Long-Run GDP

Our GDP forecasts for 2022 and 2023 are in line with consensus. But, starting in 2024, we become far more optimistic. Altogether, we expect a cumulative 250 basis points more real GDP growth through 2026 than consensus does.[1]

Consensus remains overly pessimistic on the recovery in the labor supply and has mistaken short-term supply shocks for a downtrend in productivity. We expect a growth rebound in 2024 as the effects of supply shocks fade, with the Fed providing support by backpedaling on monetary tightening.

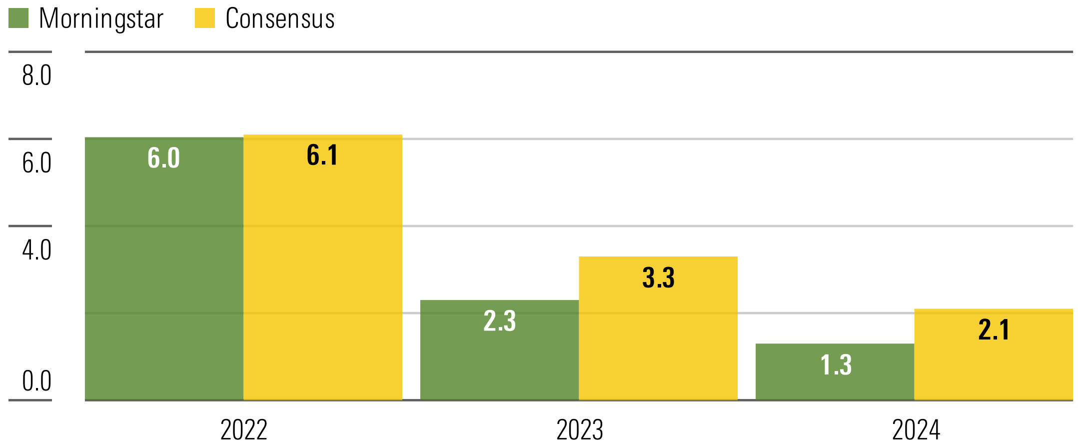
Real GDP Forecast Comparison



We Expect Inflation to Fall Much Faster Than Consensus

On inflation, our views diverge sharply from consensus, especially after 2022. Bond market breakevens imply a similar view as consensus on inflation. While consensus has largely given up on the "transitory" story for inflation, we still think most of the sources of today's high inflation unwind in impact over the next few years. This includes energy, autos, and other durables. Worries about inflation broadening out into the rest of the economy (including via high wage growth) look overblown.

Inflation (PCE) Forecast Comparison



1 This is based on those forecasts that extend out to 2026. Consensus averages typically end just two to three years ahead, which is why we don't display 2025 and 2026 on the chart.

Source: Bureau of Economic Analysis. Bloomberg. Morningstar. Data as of Sept. 19, 2022.

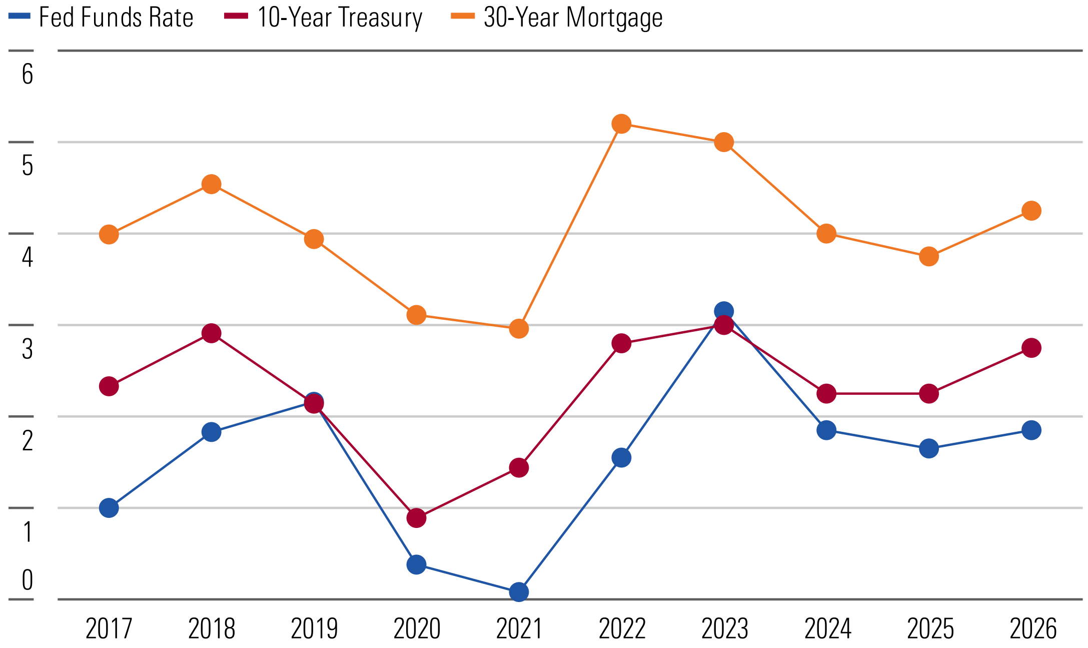
Interest-Rate Forecast Summary

We Expect the Fed to Shift Back to Easing in 2023

Interest rates have soared as expectations of monetary policy tightening have built up and begun to play out. However, we think the Fed will receive the green light from falling inflation to pivot back to easing in mid-2023. GDP growth will be running up against severe headwinds into 2023, owing especially to a sharp drop in housing activity in response to housing affordability deteriorating to its worst since 2007. The Fed will need to lower interest rates to avert a greater fall in housing activity and eventually lead to a rebound. Monetary easing should also provide for more benign financial conditions, supporting the broader economy. By 2026, we expect monetary policy with a neutral stance, with the federal-funds rate and the 10-year Treasury yield in line with our assessment of their long-run natural levels.

We expect easing to proceed far more rapidly than consensus, with our expectation of a year-end 2023 federal-funds rate of 2% compared with consensus at 3.50%. Even more so, near-term interest rates implied by bond markets look far too high. The five-year Treasury yield is at 4.2% as of August, implying an average federal-funds rate of around 3.7%-4.2%, depending on one's term premium assumption. By contrast, we expect an average effective federal-funds rate of about 2% over the next five years.

Interest Rate Forecasts (Annual Avg)



	2022	2023	2024	2025	2026
Federal-Funds Rate	1.55%	3.15%	1.85%	1.65%	1.85%
10-Year Treasury	2.80%	3.00%	2.25%	2.25%	2.75%
30-Year Mortgage	5.20%	5.00%	4.00%	3.75%	4.25%

Source: Federal Reserve. Morningstar. Data as of Sept 19, 2022.

Spotlight | Mega Caps

Overvalued Mega-Cap Stocks Drastically Underperform Broad Market YTD

In 2021, we first noted how a group of significantly overvalued mega-cap stocks had skewed our broad market valuation higher. Of the 15 stocks at the end of 2021 that were rated either 1- or 2-stars and had a market capitalization of over $250 billion, 60% have underperformed the broad market downturn.

Name/Ticker	Rating 12/31/21	Rating 9/26/22	Price ($) 12/31/21	Price ($) 9/26/22	Change (%)	Fair Value 12/31/21	Fair Value 9/26/22	Change (%)	P/FV 12/31/21	P/FV 9/26/22
Netflix NFLX	★	★★★	602	224	-62.8%	275	280	1.8%	2.19	0.80
Nvidia NVDA	★★	★★★★	294	122	-58.4%	194	200	3.1%	1.52	0.61
Nike NKE	★★	★★★★	167	96	-42.4%	128	133	3.9%	1.30	0.72
Accenture ACN	★	★★★	415	258	-37.9%	258	258	0.0%	1.61	1.00
Cisco Systems CSCO	★★	★★★★	63	41	-36.0%	54	54	0.0%	1.17	0.75
The Home Depot HD	★	★★★	415	267	-35.8%	244	267	9.4%	1.70	1.00
Broadcom AVGO	★★	★★★★	665	462	-30.5%	500	624	24.8%	1.33	0.74
Bank of America BAC	★★	★★★★	44	31	-30.3%	38	40	5.3%	1.17	0.78
Pfizer PFE	★	★★★	59	44	-25.8%	46	48	5.5%	1.30	0.91
Thermo Fisher Scientific TMO	★★	★★★	667	514	-22.9%	520	590	13.5%	1.28	0.87
Tesla TSLA	★★	★★★	352	276	-21.6%	227	255	12.5%	1.55	1.08
Procter & Gamble PG	★	★★	164	136	-17.0%	118	126	6.8%	1.39	1.08
Apple AAPL	★★	★★	178	151	-15.1%	124	130	4.8%	1.43	1.16
UnitedHealth Group UNH	★★	★★	502	508	1.2%	382	402	5.2%	1.31	1.26
Eli Lilly LLY	★★	★★	276	308	11.3%	235	256	8.9%	1.18	1.20

Source: Morningstar Equity Research. Data as of Sept. 26, 2022.

Updated List of Overvalued Mega-Cap Stocks

Eleven of the 15 overvalued mega-cap stocks we identified at the end of last year have dropped off the list either because their prices fell enough such that the star rating moved above 2-stars or the market capitalization fell below our cutoff. Currently, there are now only five stocks that have 1- or 2-star ratings with market capitalizations of over $250 billion. Since last quarter, Apple has returned to the list whereas Johnson & Johnson and Coca-Cola fell off the list.

Name/Ticker	Rating	Price ($)	Fair Value ($)	P/FV	Economic Moat	Uncertainty	Sector	Style Box
UnitedHealth Group UNH	★★	508	402	1.26	Narrow	Medium	Healthcare	Large Core
Eli Lilly LLY	★★	308	256	1.20	Wide	Medium	Healthcare	Large Growth
AbbVie ABBV	★★	141	120	1.18	Narrow	High	Healthcare	Large Value
Apple AAPL	★★	151	130	1.16	Narrow	High	Technology	Large Growth
Procter & Gamble PG	★★	136	126	1.08	Wide	Low	Consumer Defensive	Large Core

Source: Morningstar Equity Research. Data as of Sept. 26, 2022.

Undervalued Mega-Cap Stocks

While overvalued mega-cap stocks had skewed the market valuation higher in 2021 and early 2022, the pendulum has swung and now there are 10 undervalued mega-cap stocks that are skewing the broad market valuation lower. By removing these 10 stocks from our broad market price to fair value calculation would increase the price to fair value to 0.85 from its current 0.79, representing a 6-point differential. Interestingly, we rate each of these companies with a Wide Economic Moat.

Name/Ticker	Rating	Price ($)	Fair Value ($)	P/FV	Economic Moat	Uncertainty	Sector	Style Box
Meta Platforms META	★★★★★	136	346	0.39	Wide	High	Communication Servic	Large Core
Alphabet GOOGL	★★★★	98	169	0.58	Wide	High	Communication Servic	Large Growth
Amazon.com AMZN	★★★★	115	192	0.60	Wide	High	Consumer Cyclical	Large Growth
Nvidia NVDA	★★★★	122	200	0.61	Wide	High	Technology	Large Growth
Microsoft MSFT	★★★★	237	352	0.67	Wide	Medium	Technology	Large Growth
J.P. Morgan JPM	★★★★	107	149	0.72	Wide	Medium	Financial Services	Large Value
Berkshire Hathaway BRK.A	★★★★★	399,128	535,000	0.75	Wide	Low	Financial Services	Large Value
Bank of America BAC	★★★★	31	40	0.78	Wide	Medium	Financial Services	Large Value
MasterCard MA	★★★★	290	369	0.79	Wide	Medium	Financial Services	Large Growth
Visa V	★★★★	181	229	0.79	Wide	Medium	Financial Services	Large Growth

Source: Morningstar Equity Research. Data as of Sept. 26, 2022.

Basic Materials

Seth Goldstein, CFA | seth.goldstein@morningstar.com

Basic Materials Sector Underperforms; We See Long-Term Opportunities Amid Broader Market Decline

The Morningstar U.S. Basic Materials Index underperformed the broader market during the third quarter of 2022, by roughly 400 basis points. The materials index declined 7.1% during the quarter, while the U.S. market index was down 3.1%. On a trailing 12-month basis, the materials sector outperformed the market by 400 basis points. As a result of the market decline, we see opportunities across the sector with nearly 65% of the stocks trading in ether 5-star or 4-star territory.

Lithium demand will grow nearly five times by 2030 from 2021 largely due to increased electric vehicle adoption. The lithium market is currently undersupplied, leading to prices at all-time high levels above $70,000 per metric ton, up over 10 times from below $7,000 per metric ton in early 2021. We forecast demand growth will outpace new supply in 2023. Based on our cross-price elasticity model, we forecast prices will rise to $77,000 per metric ton in 2023. This should allow low-cost producers to generate excess returns.

We forecast deicing salt prices will rise 14% in the 2022-23 winter. The rise follows stagnating prices over the last few years as milder winters left producers with excess supply. The 2021-22 winter saw average snow, which led to average deicing salt demand. This dynamic would typically lead to flat price in the upcoming winter. However, producers experienced cost inflation in the previous year, which weighed on profits and led to higher bid prices for this winter. Based on contracted terms, price increases will generally take effect in the fourth quarter of 2022. The increase should help to restore producer profits in the upcoming year.

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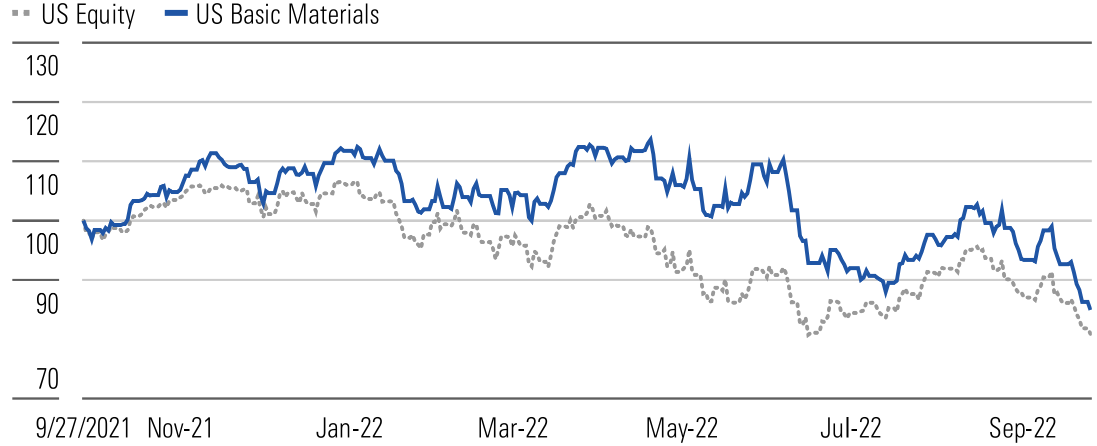
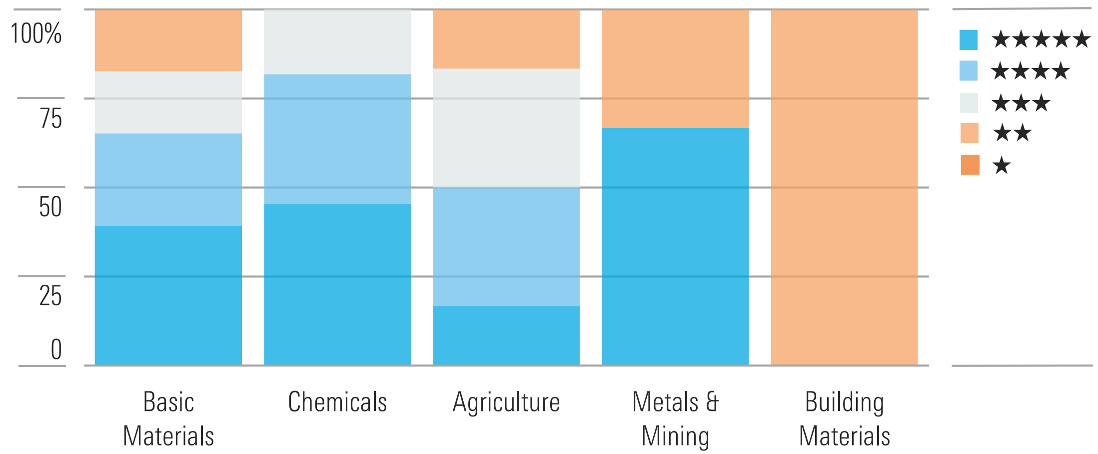
U.S. Basic Materials Index vs. U.S. Market Index



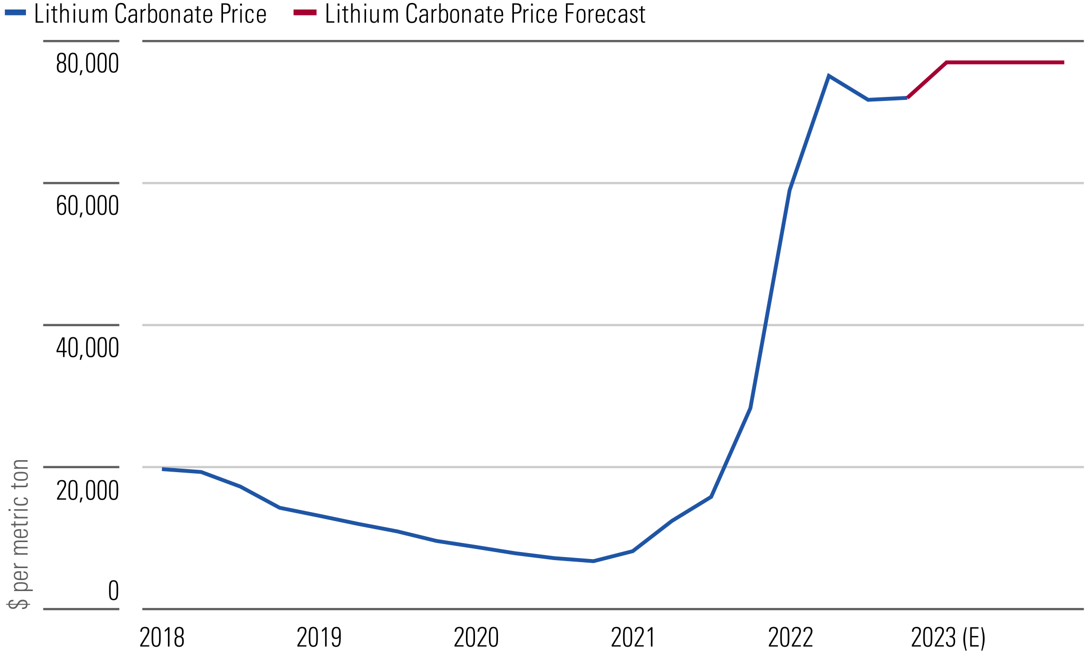
65% of our Basic Materials Names Trade in 5-Star or 4-Star Territory.



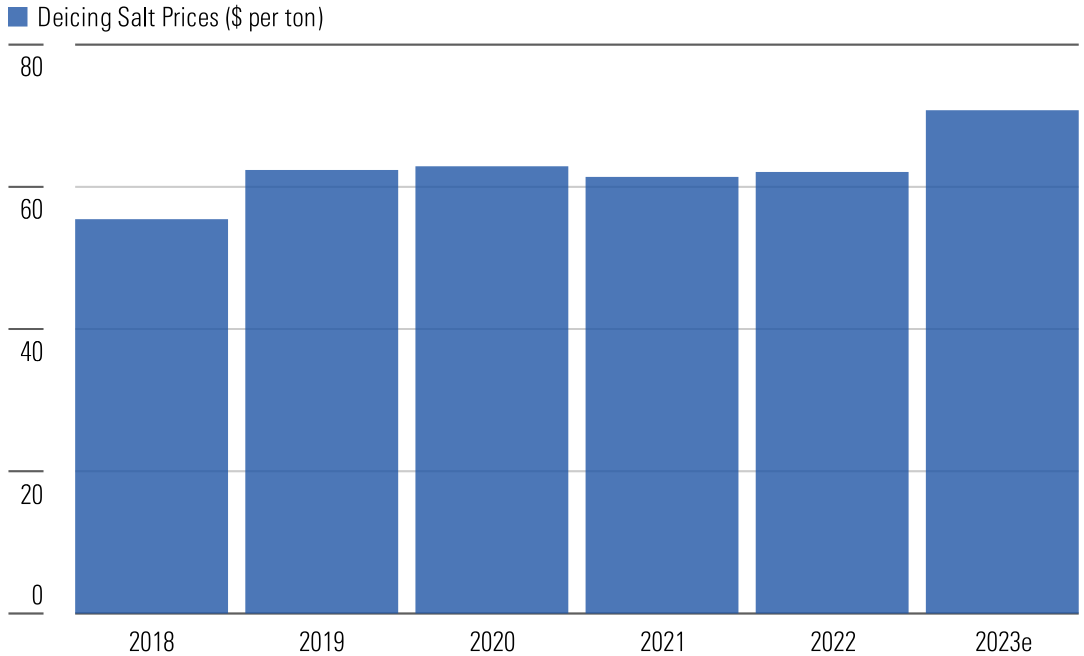
Basic Materials Sector Underperforms; We See Long-Term Opportunities Amid Broader Market Decline

We see commodity chemical prices remaining elevated over the next couple of years. A major driver of commodity chemical prices is Brent oil prices as oil-based naphtha feedstock is typically the marginal cost of production. We forecast Brent oil prices will remain above our midcycle price forecast as the market remains tight. For low-cost chemicals producers, profits should remain elevated.

Lithium Prices Will Rise in 2023 as Demand Outpaces Supply



We Forecast Deicing Salt Prices Will Rise 14% in the 2022-23 Winter



Source: LME. Benchmark Minerals. Fastmarkets. Platts, Compass Minerals, Morningstar. Data as of Sept. 21, 2022.

Basic Materials

Name/Ticker		Rating
Lithium Americas LAC		★★★★★
Price (USD)	**Fair Value (USD)**	**Uncertainty**
26.34	65.00	Very High
Market Cap (USD B)	**Economic Moat**	**Capital Allocation**
3.54	None	Standard

Lithium Americas is our top pick to play higher sustained lithium prices. The stock trades at less than half of our $65 (CAD 84) per share fair value estimate. Lithium Americas does not currently produce any lithium but is developing three lithium resources that should enter production by the end of the decade, with the first resource entering production later this year. Once all projects are fully ramped up, we forecast the company will become a top five producer by capacity globally. We reiterate our very high uncertainty rating on the name due to elevated company-specific risk as a result of no projects currently operating. However, for long-term investors that can tolerate the volatility, we see massive upside in the stock and view it as one of the best ways to invest in higher lithium prices and growing EV adoption.

Name/Ticker		Rating
Compass Minerals CMP		★★★★★
Price (USD)	**Fair Value (USD)**	**Uncertainty**
37.43	80.00	High
Market Cap (USD B)	**Economic Moat**	**Capital Allocation**
1.25	Wide	Standard

Our top pick to invest in rising deicing salt prices is Compass Minerals. The stock trades at roughly half of our $80 per share fair value estimate and in 5-star territory. The majority of Compass Minerals' profits come from its salt business, where Compass enjoys a cost advantage stemming from its unique geological assets. As Compass realizes higher salt prices, we forecast the company's profits will rise in fiscal 2023, which should be a catalyst for materially undervalued the stock.

Name/Ticker		Rating
Celanese CE		★★★★★
Price (USD)	**Fair Value (USD)**	**Uncertainty**
88.28	165.00	Medium
Market Cap (USD B)	**Economic Moat**	**Capital Allocation**
9.52	Narrow	Exemplary

Our top pick to play elevated commodity chemical prices is narrow-moat Celanese. The stock trades at roughly a 40% discount to our $165 per share fair value estimate. Celanese is a low-cost producer of commodity chemicals as the majority of the company's production is made from U.S. natural gas feedstock. Additionally, the company is well positioned to benefit from a long-term recovery in the global auto market as Celanese plans to acquire the majority of DuPont's mobility and materials portfolio in a deal that should close by the end of the year. We view the current share price as an attractive entry point for the cost-advantaged chemicals producer.

Source: Morningstar Equity Research. Data as of Sept. 27, 2022.

Communications Services

Michael Hodel | michael.hodel@morningstar.com

Sentiment Has Turned Sharply Negative Across Nearly Every Corner of the Communication Services Sector

Large-cap telecom stocks piled on to Alphabet and Meta's struggles during the third quarter, dragging the Morningstar U.S. Communication Services Index down another 11%, leaving the sector index roughly 39% lower year to date versus a 24% drop for the market. We continue to see bargains among the carnage.

Comcast, AT&T, Verizon, and Charter each declined 20% or more during the quarter, taking valuations across the telecom industry down to levels not seen in a decade. Only T-Mobile has held up within this group. Over the past year, these five telecom carriers have seen their aggregate market value drop from nearly $1 trillion to $640 billion, pulling their combined enterprise value (market cap and debt outstanding) down to 6.9 times trailing EBITDA versus 8.6 times. While the market has sharply soured on U.S. telecom, the firms remain more optimistic: Over the past couple weeks, Comcast increased its share repurchase authorization to $20 billion, T-Mobile initiated a $14 billion buyback, and Verizon increased its dividend 2%.

We believe the industry has reason for optimism. Growth opportunities for telecom carriers remain modest, but the industry structure remains favorable in our view. We expect the big three wireless carriers to remain focused on deploying recently acquired spectrum for the next couple years while taking an increasingly disciplined approach to promotional efforts. The cable companies have taken modest wireless share, but we expect their resale agreements with the major carriers will prevent them from becoming increasingly competitive on price. We believe the wireless carriers can gain modest home broadband market share but that they will avoid any activity that threatens the network experience of their lucrative smartphone customers. In short, we believe patience is needed with the telecom carriers as these slow-moving trends play out.

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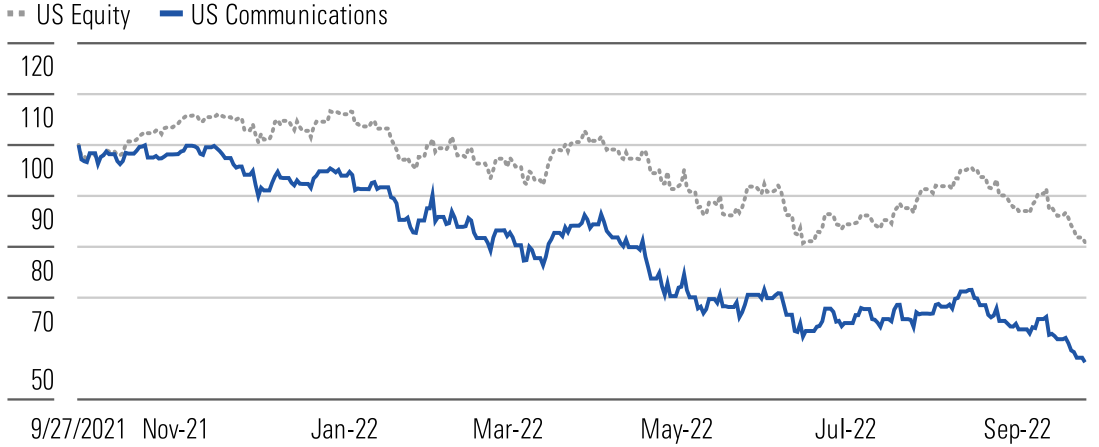
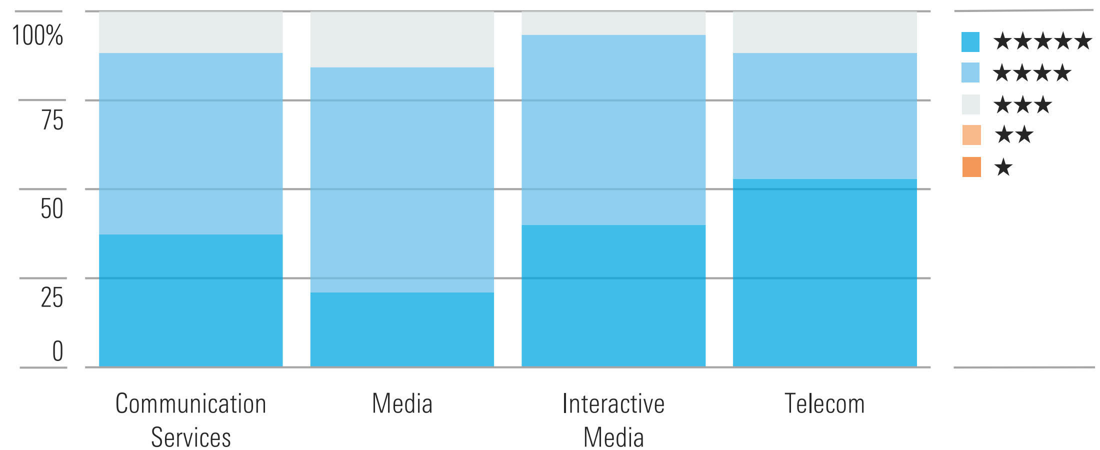
Deep Pessimism Has Reached Nearly Every Corner of the Communications Sector…



…Which we Believe Has Created Multiple Opportunities



Source: Morningstar Equity Research. Data as of Sept. 27, 2022.

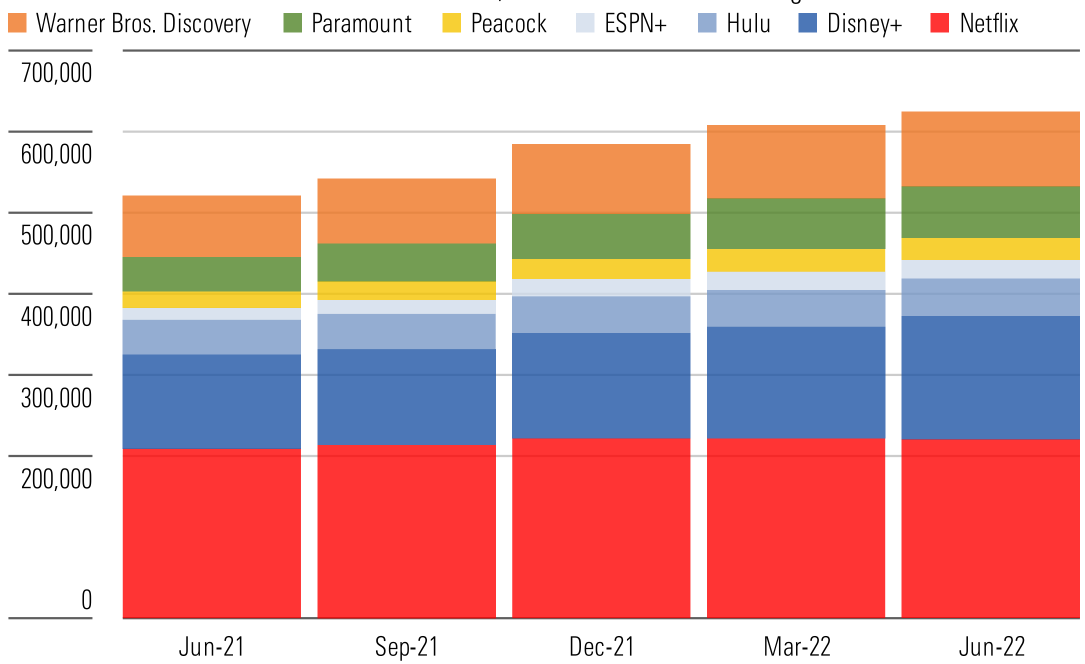
Sentiment Has Turned Sharply Negative Across Nearly Every Corner of the Communications Services Sector

Pessimism around media stocks has also continued to grow as investors remained concerned about the streaming video business model. As we've discussed previously, subscriber growth at Netflix hit a wall in the first quarter. Despite beating very negative forecasts, second-quarter results at the streaming giant confirmed investor fears as the firm lost almost one million customers globally, two million net customer losses in the U.S. over the first half of 2022. While Netflix management expects growth to rebound in the second half, the market seems to remain worried about the overall market opportunity and saturation in the U.S. for the firm and its competitors like Disney. Both Disney and Netflix are planning to launch ad-supported service tiers over the next six months, but we remain cautious on the impact in the near term as some growth could come from cannibalization of existing customers. As the market is beginning to appear crowded, inflation and the strong dollar are also weighing on the industry, both crimping consumers and elevating content creation costs. While both new and traditional players are restraining content spending growth, we don't expect that any firm could massively cut programming costs given the highly competitive landscape. Additionally, the higher inflation could limit streaming platforms' ability to push through subscription prices without harming customer acquisition. Despite these challenges, most streaming platforms continued to post solid customer gains, including the newly constituted Warner Bros. Discovery.

U.S. telecom valuations have been hit hard.

Telecom aggregate performance includes Comcast, Charter, Altice USA, Verizon, AT&T, T-Mobile, and Lumen.

Netflix's Global Subscriber Count Has Flatlined, but Others are Still Growing.



Source: Company filings. Morningstar. Data as of Sept. 26, 2022.

Communications Services

Name/Ticker		Rating
Walt Disney DIS		★★★★★
Price (USD)	**Fair Value (USD)**	**Uncertainty**
95.85	170.00	High
Market Cap (USD B)	**Economic Moat**	**Capital Allocation**
178.88	Wide	Standard

Disney remains the best-situated traditional media firm to navigate the transition to streaming, in our view. The firm's deep content library, teeming with major franchises, and its strong studios provide both the more family friendly fare Disney is famous for and content suited to older audiences. We expect that fans will continue to flock to the firm's parks and resorts as pandemic restrictions lift globally. The cable networks, like ESPN, will likely continue to lose subscribers, but they generate cash flow to fund the firm's streaming ambitions, including platforms like Hulu and ESPN+ that will gradually displace traditional cable. The firm's flagship streaming service Disney+ also continues to build momentum with audiences around the world, providing the platform that will likely become the primary touchpoint with consumers over the long term.

Name/Ticker		Rating
Comcast CMCSA		★★★★★
Price (USD)	**Fair Value (USD)**	**Uncertainty**
30.26	60.00	Medium
Market Cap (USD B)	**Economic Moat**	**Capital Allocation**
136.32	Wide	Standard

Comcast faces a double whammy as concerns over slowing broadband customer growth have dogged the core cable business and fears surrounding increased content investments have hounded NBC Universal. We expect broadband customer growth will slow further as the market is maturing and the phone companies will likely gain share as their fiber upgrades progress. But we still expect Comcast will grow broadband revenue through the combination of modest customer additions and solid pricing power. NBC Universal will need to invest to increase interest around Peacock, but we still like the firm's position overall thanks to its solid stable of content franchises, strong theme parks, and still highly profitable traditional television business. With a strong balance sheet, Comcast should be able to direct most of its free cash flow to shareholder returns, including a solid dividend and heavy share repurchases.

Name/Ticker		Rating
Alphabet GOOG		★★★★
Price (USD)	**Fair Value (USD)**	**Uncertainty**
98.09	169.00	High
Market Cap (USD B)	**Economic Moat**	**Capital Allocation**
1,284.47	Wide	Exemplary

We expect indications of improvement in the macroeconomic environment, whenever they surface, will push Alphabet shares higher. The firm's search and YouTube platforms continue to attract various advertiser sizes and types - enterprises and small and medium businesses – offering broad based and direct response campaigns. Plus, Apple's iOS policies regarding data privacy and security have not affected Alphabet as much as they have hit the likes of Meta and Snap. The firm is also progressing toward reducing its dependency on advertising revenue as the cloud business continues to grow well and make headway toward profitability.

Source: Morningstar Equity Research, Data as of September 27, 2022

Consumer Cyclical

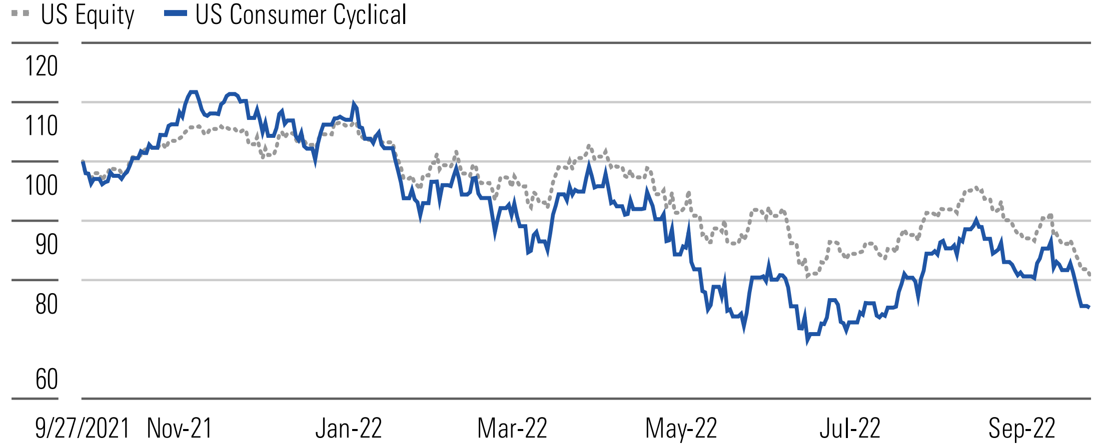
Erin Lash, CFA | erin.lash@morningstar.com

Despite Sector Gains in Q3, Consumer Cyclical Still Offers Compelling Opportunities

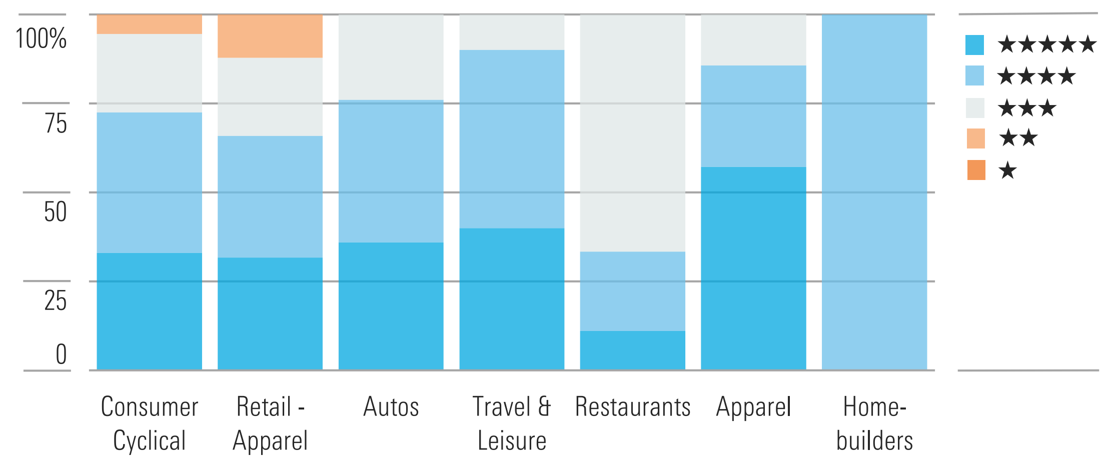
The consumer cyclical sector recouped prior 2022 losses in the third quarter by garnering roughly a 5% return, outperforming the U.S. equity market's 3% decline, as of Sept. 27. Still, the consumer cyclical sector trades at a 25% discount to our fair value estimates, with 72% of stocks in our sector coverage trading in 4- or 5-star territory. We surmise the lingering pessimism stems in part from near-term concerns over consumer willingness to spend, given persistent inflation, rising interest rates, and plunging personal savings rates. However, we think this is more than baked into the shares, rendering travel and leisure and apparel retail as two of the more undervalued spaces, at 35% and 33% discounts to our intrinsic valuation, respectively.

To buoy our stance, improving U.S. hotel occupancy levels quantitatively suggest travel volume remains resilient. Particularly, average daily rates, which more than fully recovered in the second quarter of 2022, reaching 114% of 2019 levels, showcase hotel operators' stout pricing power thanks to the pent-up desire to travel, wallet share shift to service consumption, and incremental trips from remote work flexibility. While heated inflation could further pinch consumer pocketbooks and curb discretionary spending (including on travel), we do not expect to see softening travel demand in aggregate over the near term. Rather, a recovery in business and international trips that have been lagging the rebound in leisure trips should invigorate the travel industry ahead, in our view.

Consumer Cyclical Stocks Chalked Up Robust Gains in the Quarter



However, Each Consumer Cyclical Subsector Still Offers Opportunities



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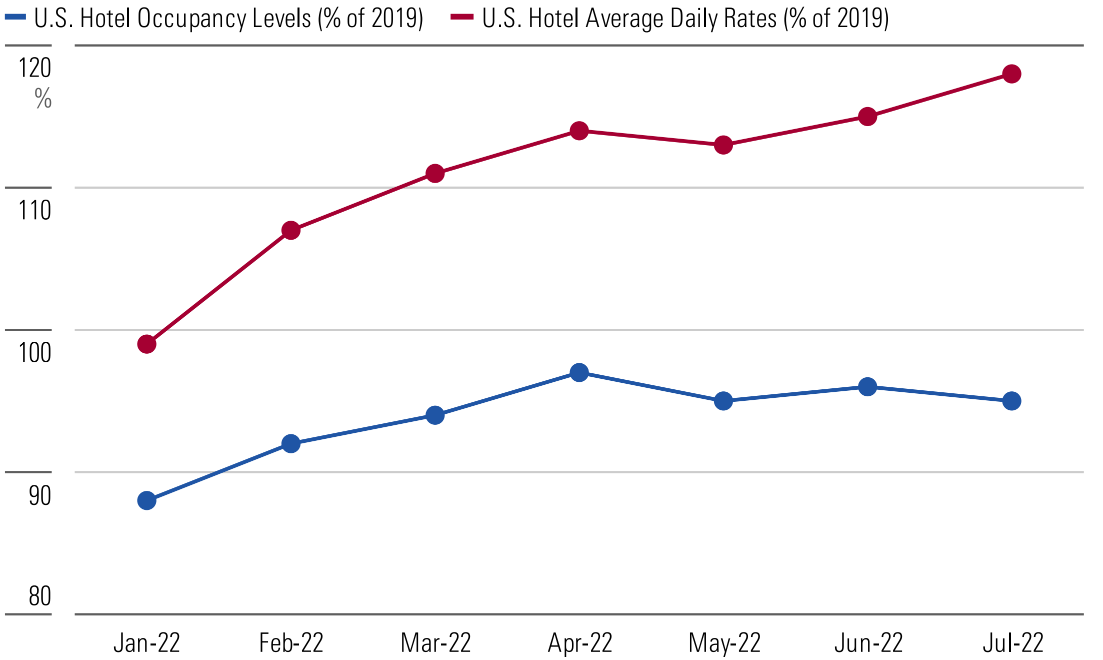
Source: Morningstar Equity Research, Data as of Sept. 27, 2022.

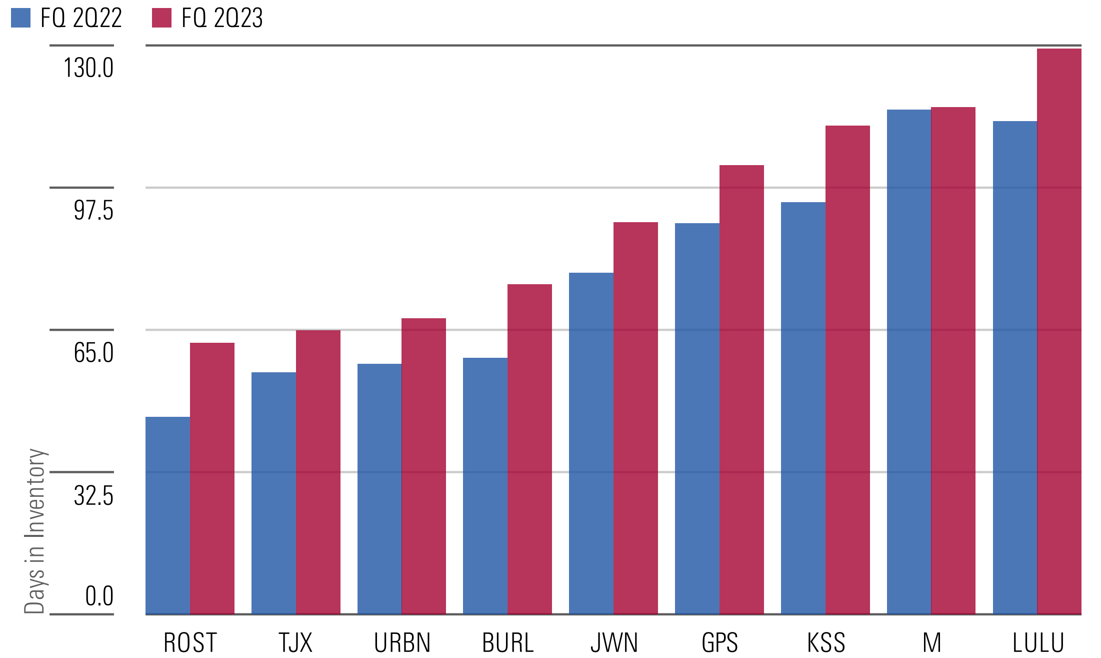
Despite Sector Gains in Q3, Consumer Cyclical Still Offers Compelling Opportunities

As for apparel retail, the amalgamation of shifting consumer purchasing decisions and supply chain disruption that led to bare shelves during the last holiday season left retailers with a conundrum of estimating appropriate inventory positions. Specifically, early ordering to cope with supply chain constraints coupled with sales declines in some categories amid inflation resulted in elevated inventory levels. However, as retailers act to curtail inventories at the shelf ahead of the upcoming holiday season (through aggressive markdowns, order cancellations, and assortment changes), we expect inventory levels to improve over the next few months, positioning apparel retailers for a better 2023.

Demand for travel persists even amid macro challenges.



Clothing retailers' inventories pilling up, but firms not sitting still.



Source: Smith Travel Research. Company filings. Morningstar. Data as of Sept. 22, 2022

Consumer Cyclical

Name/Ticker		Rating
Hanesbrands HBI		★★★★★
Price (USD)	**Fair Value (USD)**	**Uncertainty**
7.37	24.00	Medium
Market Cap (USD B)	**Economic Moat**	**Capital Allocation**
2.65	Narrow	Standard

We believe narrow-moat Hanesbrands, currently trading at a 67% discount to our $24 per share fair value estimate, offers a good opportunity for investors. Although higher costs, freight delays, and unfavorable currency movements are expected to impact near-term profitability, we remain confident in the company's long-term strategic plan, Full Potential. We view the plan favorably, particularly its emphasis on widening the athleisure brand Champion, and we think the firm is in capable hands under former Walmart executive Steve Bratspies, who took over as Hanes' CEO in August 2020.

Name/Ticker		Rating
Bath & Body Works BBWI		★★★★★
Price (USD)	**Fair Value (USD)**	**Uncertainty**
34.40	82.00	Medium
Market Cap (USD B)	**Economic Moat**	**Capital Allocation**
7.94	Narrow	Standard

Narrow-moat Bath & Body Works is attractive, trading at around a 54% discount to our $82 fair value estimate. We contend the market is fixating on transitory profit pressures and rising recessionary concerns. However, despite an economic slowdown, Bath & Body Works will remain relevant, in our view, offering affordable products that support demand. With its operational agility, we think continued growth in line with the market should lead to share gains both at home and abroad. Outside its home turf, we see opportunities through digital and physical store channels that should support the brand intangible asset on a global scale.

Name/Ticker		Rating
Gap GPS		★★★★★
Price (USD)	**Fair Value (USD)**	**Uncertainty**
8.44	25.00	High
Market Cap (USD B)	**Economic Moat**	**Capital Allocation**
3.05	None	Standard

No-moat Gap offers a compelling investment opportunity, trading roughly at a 64% discount to our $25 fair value estimate. We contend the market is overly concerned with the recent merchandising and supply chain woes, while overlooking Gap's efforts to regain relevance. In this context, we believe Gap's recovery from the pandemic and its Power Plan may unlock value. Specifically, we think Gap's focus on growing brands that align with market trends (Old Navy and Athleta), while downsizing and fixing struggling brands (Gap Global and Banana Republic) should allow profitability upside, ultimately reaching a 7.5% operating margin by 2025.

Source: Morningstar Equity Research, Data as of September 27, 2022

Consumer Defensive

Erin Lash, CFA | erin.lash@morningstar.com

Despite a Dearth of Undervalued Options, Investors Should Still Find Favor with Competitively Advantaged Consumer Defensive Firms

The Morningstar US Consumer Defensive Index languished in the third quarter, in line with the overall market's negative 3% return, as of September 27.

However, this more tempered appreciation hasn't unlocked much in the way of attractive opportunities on which to stock up, the consumer defensive sector trades at just 3% discount to our fair value estimates. For investors interested in the consumer defensive space, we'd point to alcoholic beverages, where shares trade at a 22% discount to our intrinsic valuations, and consumer packaged goods where more than one-third of our coverage trades in 4- or 5-star territory. We reckon investors' reluctance to embrace shares in these niches is attributable to overweighting the persistence of supply chain constraints while underweighting efforts related to product innovation and brand prowess that ultimately conjure pricing power.

To be sure, supply chain constraints have served to upend stock at the shelf and compound cost pressures. In this context, the heightened demand that ensued since the pandemic took hold strangled the intermodal industry, given insufficient capacity and labor needed to boost volumes. While it appears some of these challenges could be subsiding, we aren't blind to the fact that the pressure on freight capacity is real and other impediments could lead to greater disruption, as exemplified by the threat of rail strikes. We surmise any potential freight relief will still take time, but we think competitively-advantaged operators with negotiating prowess should navigate this volatile backdrop relatively unscathed.

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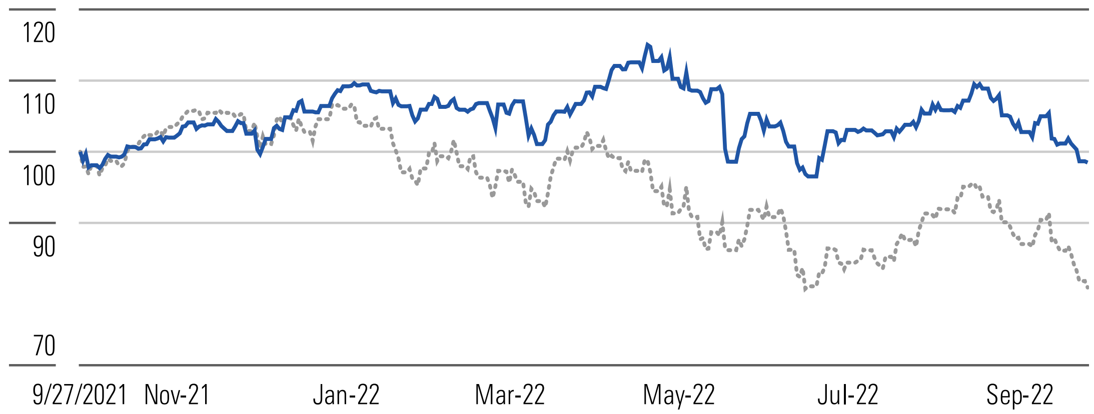
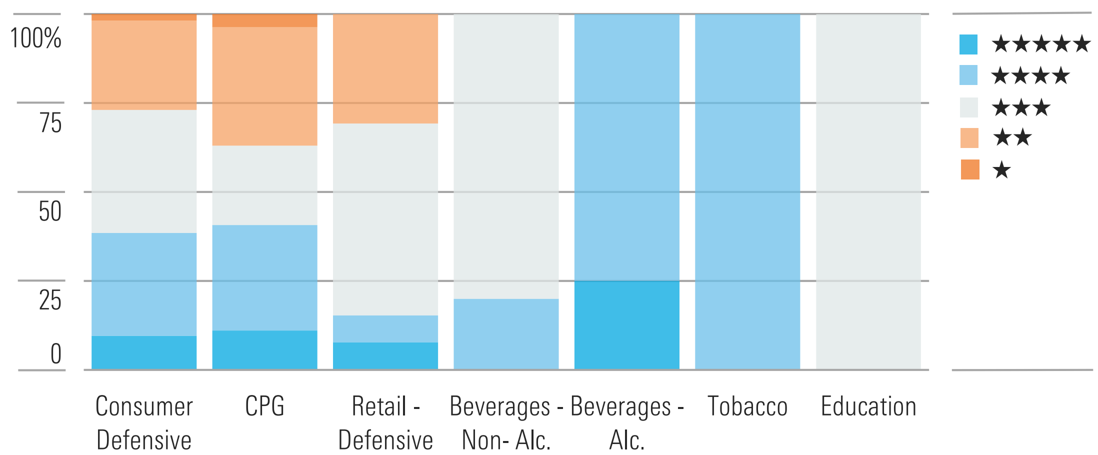
Market Bests Consumer Defensive's Modest Q3 gains.



The Alcoholic Beverage Space Strikes Us As Particularly Attractive.

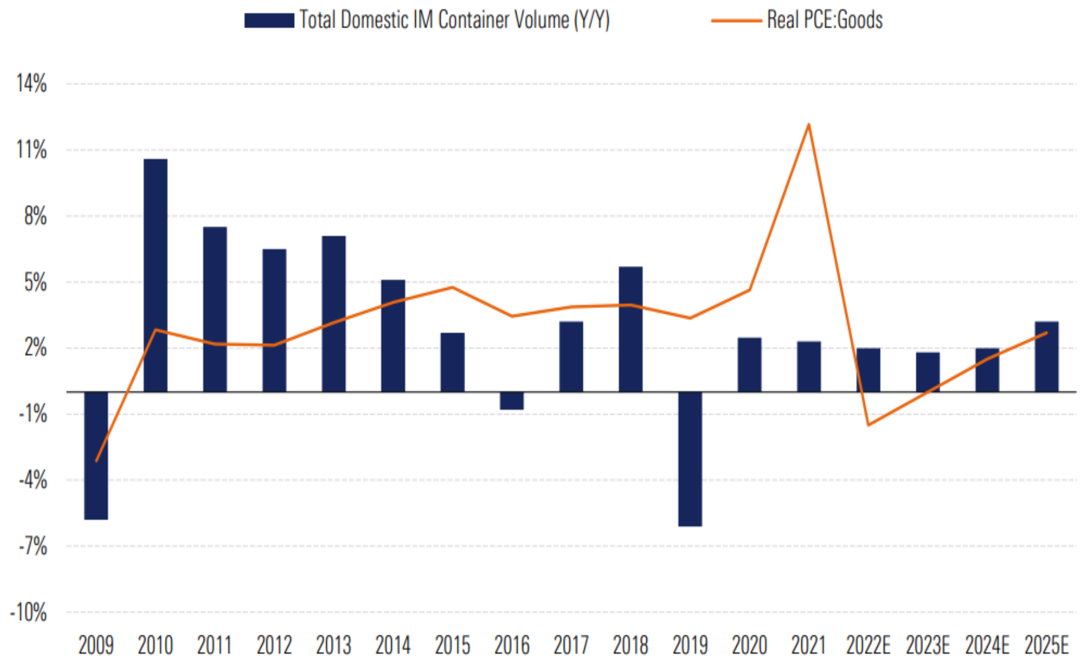


Source: Morningstar Equity Research, Data as of Sept. 27, 2022

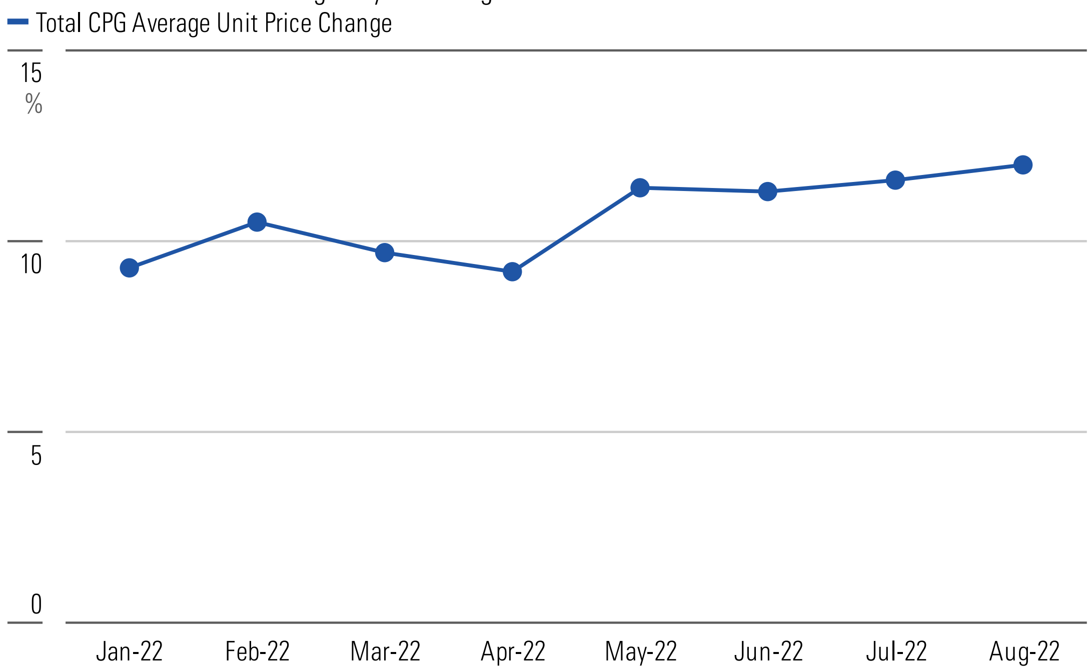
Despite a Dearth of Undervalued Options, Investors Should Still Find Favor with Competitively Advantaged Consumer Defensive Firms

To blunt pronounced inflationary headwinds stemming from heightened input, labor, and freight costs, CPG firms raised prices to the tune of 12% in August against the previous year. But with an influx of strains on their pocketbooks, we think consumers may ultimately alter purchasing patterns by pursuing lower unit prices found in larger pack sizes (fewer trips to the store), opting for lower-priced private label, and/or defaulting to products with lower opening price points. To defend against this, we posit moaty firms will continue investing in consumer-valued innovation and marketing to enable products to win at the shelf.

Demand Normalization Could Relax Supply Chain Constraints.



No relief: Consumers Challenged by Mounting Prices at the Shelf.



Source: IANA. St. Louis Federal Reserve. NielsenIQ USxAOC. Morningstar. Data as of Sept. 27, 2022.

Consumer Defensive

Name/Ticker		Rating
Beyond Meat BYND		★★★★★
Price (USD)	**Fair Value (USD)**	**Uncertainty**
14.73	63.00	High
Market Cap (USD B)	**Economic Moat**	**Capital Allocation**
0.93	None	Exemplary

Beyond Meat shares are attractive, trading at a 75% discount to our $63 fair value estimate. We think investor fears about slowing demand are overblown, as the slowdown in the category is related to widespread inflation, leading consumers to trade down to lower-priced meat since plant-based meat demands a premium. Beyond Meat's products require 99% less water, 93% less land, 46% less energy, and emit 90% fewer greenhouse gases than their meat equivalents and should benefit from consumer demand for sustainable goods. We believe Beyond Meat will capture a 20% sales CAGR over the next 10 years with operating margins in the high teens.

Name/Ticker		Rating
Boston Beer Co SAM		★★★★★
Price (USD)	**Fair Value (USD)**	**Uncertainty**
324.67	680.00	Medium
Market Cap (USD B)	**Economic Moat**	**Capital Allocation**
3.94	Narrow	Exemplary

Shares of narrow-moat Boston Beer, a leader in U.S. high-end malt beverage and adjacent categories, trade more than 50% below our $680 fair value estimate. We posit that the firm has shown a proclivity to augment its portfolio in alignment with the latest consumer trends and capture a disproportionate share of the economic rents generated from this growth by being one of the first movers. While seltzer trends have slowed, negatively affecting its Truly seltzer line, the firm's innovation prowess should continue to support Boston Beer's sales, evidenced by the launches of hard seltzer Truly Margarita and Hard Mountain Dew.

Name/Ticker		Rating
The Hain Celestial Group HAIN		★★★★★
Price (USD)	**Fair Value (USD)**	**Uncertainty**
16.17	37.50	Medium
Market Cap (USD B)	**Economic Moat**	**Capital Allocation**
1.48	None	Standard

Hain trades at a 55% discount to our $37.50 fair value estimate, partially the byproduct of weakness in its European arm, as well as inflation and supply chain disruptions in the U.S. We view these issues as largely transitory, and with a portfolio of organic and natural fare aligned with consumer preferences, we surmise Hain is well positioned for the long term. Additionally, Hain's supply chain integration efforts strike us as prudent, which should generate significant cost efficiencies and purchasing synergies. All in all, we expect a 13.5% operating margin by 2032, a notable improvement from 2021's 7.5%.

Source: Morningstar Equity Research, Data as of September 27, 2022

Energy

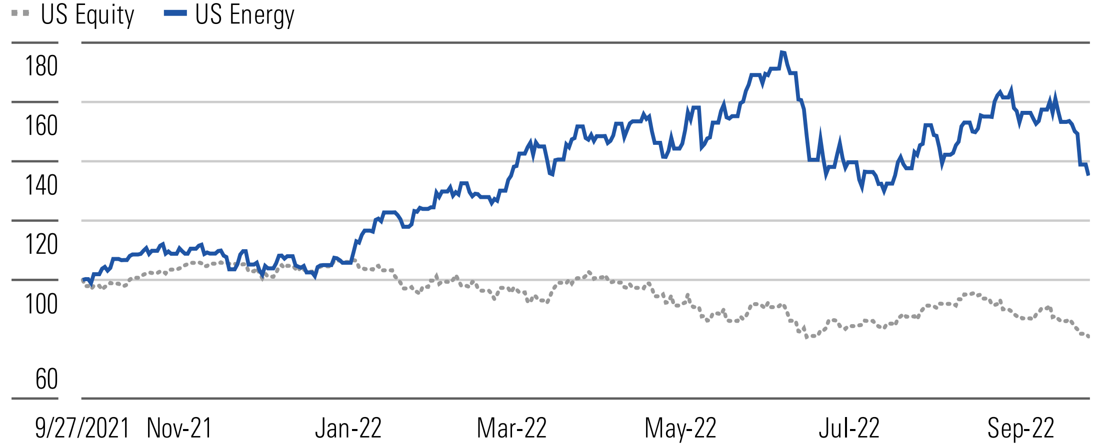
Dave Meats, CFA | david.meats@morningstar.com

Energy Sector Declines as Oil Prices Retreat from June's Highs

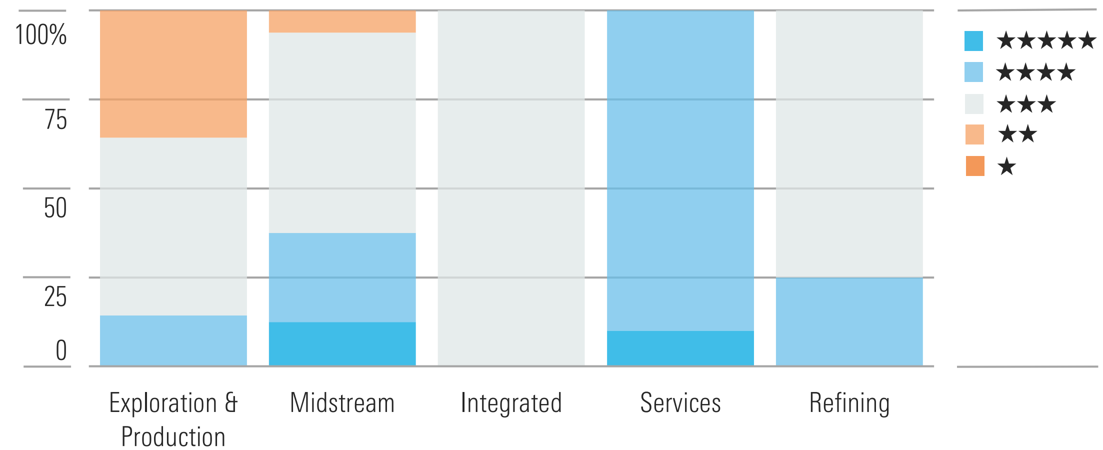
The Morningstar US Energy Index dropped 1.9% in the second quarter compared with the market's 3.1% decline. Given the sector's outperformance over the last 12 months, we now view the sector as much closer to fairly valued on average than our other sector coverages, with the median stock trading at a 9% discount. However, we continue to see opportunities in the oil-services segment, which trades at an average discount of 33%.

A slowing demand outlook, primarily due to recession fears in the U.S. and Europe along with a continued zero-COVID policy in China, has helped alleviate some tightness in global oil markets. WTI prices have retracted from recent highs, dipping below $90 per barrel in August, the lowest level since the start of the Russia-Ukraine conflict in February. Thus far, the impact of sanctions on oil supply has been milder than many anticipated and, although the EU ban on Russian imports has yet to take effect, the disruption now looks likely to stay in the low end of the range of early estimates of 1 million-4 million barrels per day. Rystad Energy expects Russian oil supply to fall to 9.5 mmb/d in 2022 and 8.9 mmb/d in 2023 (from 9.6 mmb/d in 2021).

Energy Sector Still Leads Over the last Year.



Opportunities persist in the oil-services segment.



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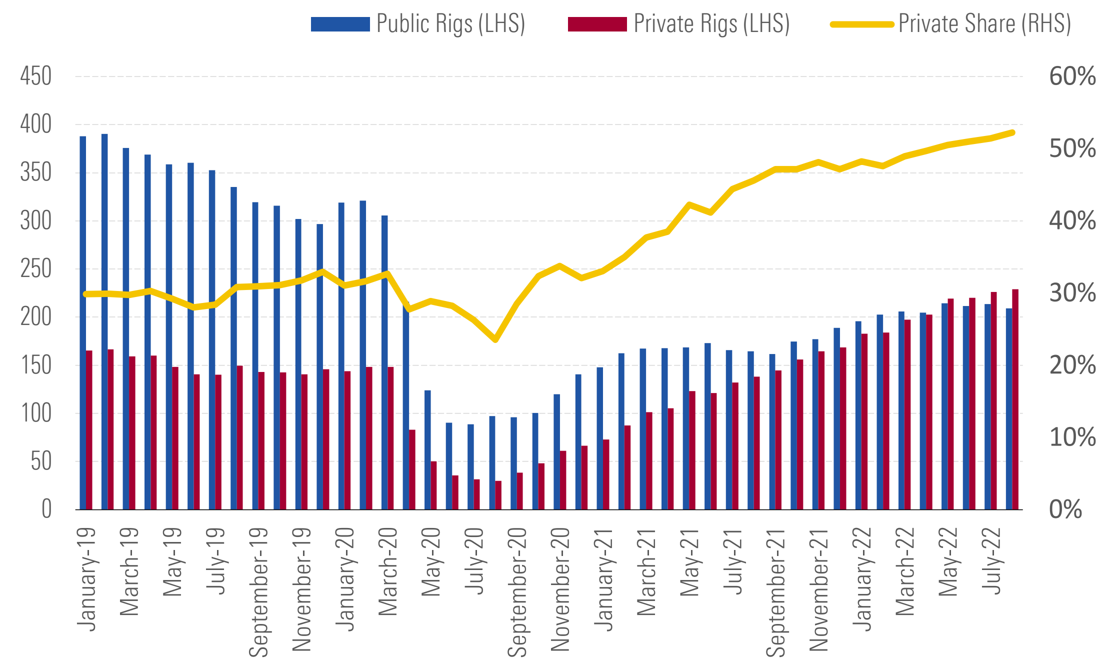
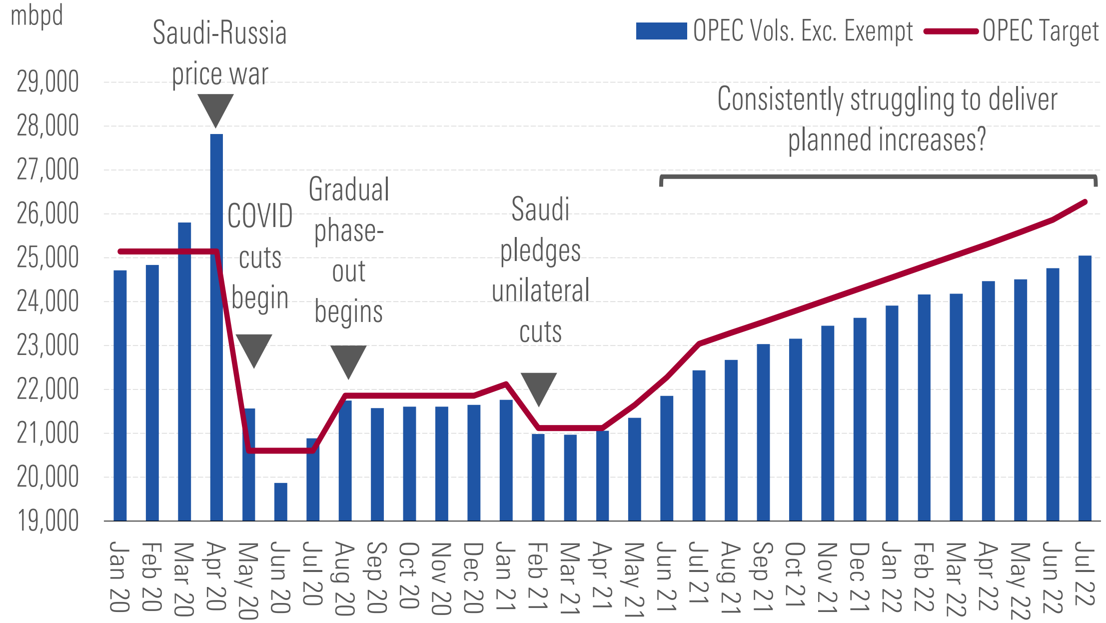
Energy Sector Declines as Oil Prices Retreat From June's Highs

Traditional swing players such as the United States and OPEC will help replace forgone Russian supply. In the U.S., public producers have maintained their commitments of capital discipline but are still expected to deliver 3% and 4% annual growth in 2022 and 2023 respectively. And private producers have been ramping more quickly given favorable economics. The U.S. rig count increased to 695 in August from 569 at the start of the year. Likewise, while OPEC has been systematically failing to deliver its targeted volumes, output has been growing nonetheless and is closing in on prepandemic levels. In July, the cartel's core producers missed their cumulative target by 1.2 mmb/d but still delivered 29 mmb/d (6.8 mmb/d higher than the June 2020 low and within 0.5 mmb/d of the December 2019 level). As a result, global crude inventories have been edging closer to historical norms throughout 2022, despite the crisis in Ukraine. But prices will remain above midcycle levels in the back half of 2022 unless the Ukraine crisis completely subsides immediately, or a full-blown recession takes hold.

Private U.S. Producers Continue to Follow Prices



OPEC Continues to Underproduce its Targets



Source: OPEC. Rystad. Morningstar. Data as of Sept. 19, 2022.

Energy

Name/Ticker		Rating
Schlumberger SLB		★★★★
Price (USD)	**Fair Value (USD)**	**Uncertainty**
33.98	49.00	High
Market Cap (USD B)	**Economic Moat**	**Capital Allocation**
47.89	Narrow	Exemplary

Rallying share prices have removed much of our oilfield services coverage from deeply undervalued territory, but investors can still get industry leader Schlumberger for a bargain. High demand for oilfield services lends service firms a good deal of pricing power, which we expect will support margin expansion over the next few quarters. Schlumberger's leading-edge technological advancements continue to distinguish the firm from peers: its myriad innovations consistently add value for customers, preserving Schlumberger's ability to command premium pricing over and above the currently favorable operating environment.

Name/Ticker		Rating
ExxonMobil XOM		★★★
Price (USD)	**Fair Value (USD)**	**Uncertainty**
85.74	102.00	High
Market Cap (USD B)	**Economic Moat**	**Capital Allocation**
350.00	Narrow	Exemplary

Exxon plans to double earnings from 2019 levels by 2025 and double cash flow by 2027 on a combination of structural operating cost reductions, portfolio improvement, and growth across its upstream, downstream, and chemical segments. Exxon estimates that under the current plan, it will generate about $100 billion in surplus cash, after funding investment and paying the dividend, during the next five years. Combined with currently higher than expected commodity prices, its current repurchase program of $30 billion through 2023, is likely just the beginning.

Name/Ticker		Rating
Equitrans Midstream ETRN		★★★★★
Price (USD)	**Fair Value (USD)**	**Uncertainty**
7.81	14.00	High
Market Cap (USD B)	**Economic Moat**	**Capital Allocation**
3.41	Narrow	Poor

Equitrans now expects the Mountain Valley Pipeline , or MVP, to be in service in the second half of 2023 with a revised cost estimate of $6.6 billion. The recently announced proposed energy permitting provisions (separate legislation from the Inflation Reduction Act of 2022) contains direct benefits for MVP, thanks to West Virginia's Sen. Joe Manchin's support, given the pipeline's presence in West Virginia. We expect the permits to be completed by the end of 2022, allowing construction to proceed in 2023. Equitrans reaffirmed the current dividend payout as safe and does not see any debt compliance issues.

Source: Morningstar Equity Research. Data as of Sept. 27, 2022

Financial Services

Michael Wong, CFA, CPA | michael.wong@morningstar.com

Financials May Have Near-Term Pressure On Fee Revenue From a Softening Economy, But We Believe They are Undervalued

The Morningstar U.S. Financial Services Index trails the Morningstar U.S. Markets Index over the previous year by 280 basis points, but outperformed in the previous quarter, down 2.5% compared to the market that's down 3.8%. The median North American financial sector stock trades at a 23% discount to its fair value estimate, compared to a 21% discount at the end of the second quarter of 2022 and a 2% premium at the end of the fourth quarter of 2021. We currently rate around 77% of the North American financial sector stocks that we cover as undervalued 5- or 4-star stocks with about 7% rated overvalued 2- and 1-star stocks.

In September, the Federal Open Market Committee raised the federal funds rate by another 75-basis points to a range of 3% to 3.25%. The FOMC members also materially revised their economic projections compared to the June meeting with the median committee member now believing the federal funds rate will end 2022 at 4.25% to 4.5% compared to a range of 3.25% to 3.5% and that the unemployment rate in 2023 will rise to 4.4% compared to 3.9%. Despite the tightening monetary policy over the previous couple quarters, both inflation and the economy have been fairly resilient so far. The August inflation report was higher than expected with the consumer price index increasing 8.3% from a year ago and the index excluding volatile energy and food components increasing 6.3%. Consumer spending also hasn't significantly decreased, as the unemployment rate has remained low, and households have a buffer of cash that they accumulated over the previous several years.

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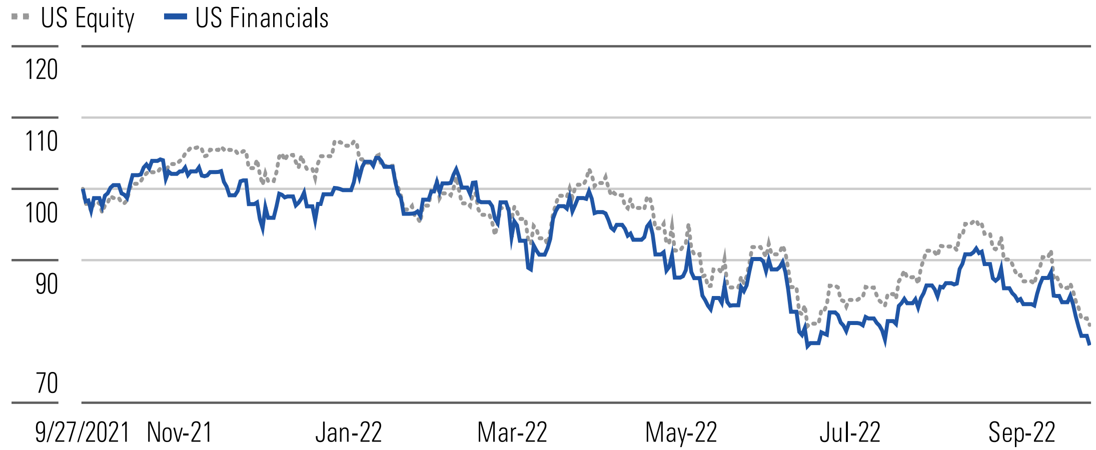
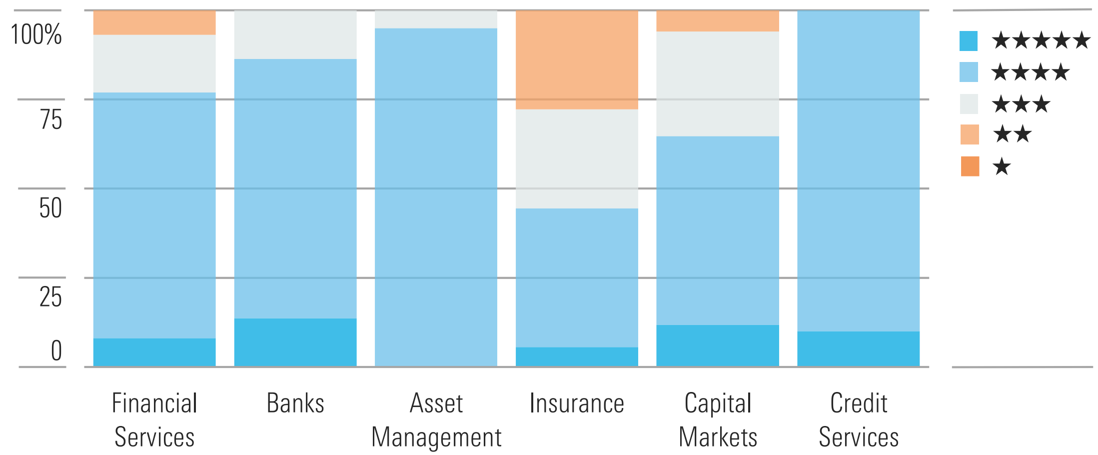
Higher Interest Rates Are not Enough to Offset Negative Economic Sentiment.



Financial Services Stocks Are Undervalued Despite Likely Softening Economy.

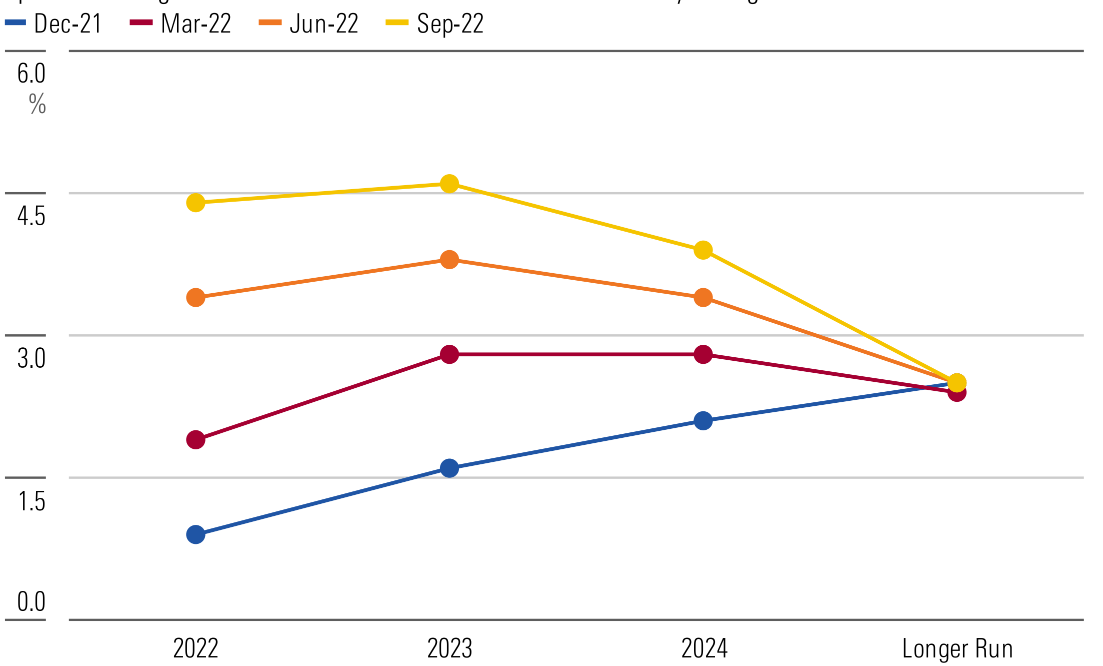


Source: Morningstar Equity Research. Data as of Sept. 27, 2022.

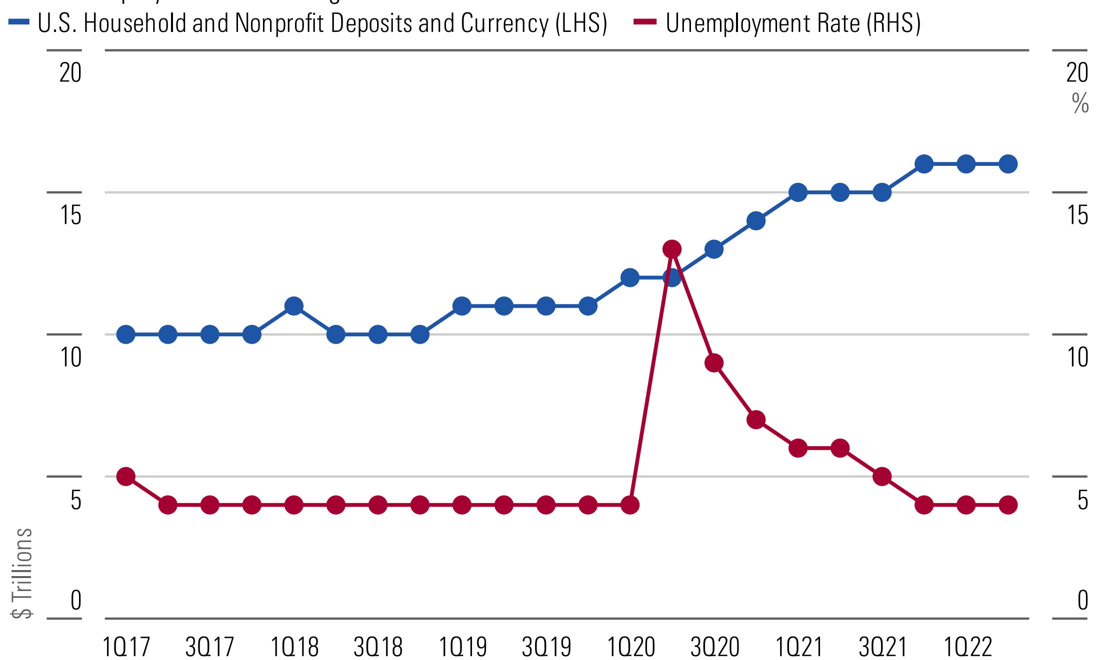
Financials May Have Near-Term Pressure On Fee Revenue From a Softening Economy, but we Believe They Are Undervalued

While higher interest rates are positive for many financial sector companies, the more rapid increase and higher expected level of medium-term interest rates have increased the probability that the United States will enter a recession. We had already expected that earnings for many financial companies would normalize lower over the next couple of years, as 2021 earnings were elevated from strong mortgage refinancing, investment banking, and trading revenue along with negative loan loss provisioning. While we project earnings will face some near-term pressure, we believe much of this is already priced into financial sector stocks and that many are undervalued on a long-term basis.

Speed and Magnitude of Interest Rate Increases Have Materially Changed.



Low Unemployment and Savings Have so far Blunted Economic Slowdown.



Source: Federal Reserve. U.S. Bureau of Labor Statistics. Morningstar. Data as of Sept. 2, 2022

Financial Services

Name/Ticker		Rating
BlackRock BLK		★★★★
Price (USD)	**Fair Value (USD)**	**Uncertainty**
578.60	850.00	Medium
Market Cap (USD B)	**Economic Moat**	**Capital Allocation**
88.15	Wide	Exemplary

BlackRock has traded off harder than other asset managers this year, but there's no fundamental reason for the company to be trailing its peers' performance wise. The company is at its core a passive investor. Through its iShares exchange-traded fund platform and institutional index fund offerings, the wide-moat firm sources two thirds of its managed assets (and half its annual revenue) from passive products. In an environment where investors are seeking out passive products, as well as asset managers that have greater scale, established brands, solid long-term performance, and reasonable fees, BlackRock is well positioned.

Name/Ticker		Rating
Citigroup C		★★★★★
Price (USD)	**Fair Value (USD)**	**Uncertainty**
42.59	78.00	Medium
Market Cap (USD B)	**Economic Moat**	**Capital Allocation**
83.26	None	Standard

Citigroup is the most undervalued traditional U.S. bank under our coverage and is trading below tangible book value. The bank is busy shedding non-performing segments, refocusing its operations on core competencies and geographies, and is dealing with consent orders from regulators. Further, Citigroup is not one of the most rate sensitive names, which we think contributes to its current lack of popularity. While the bank faces some headwinds, we think an eventual recovery in card balances will help to drive revenue growth for the bank. We also think the completion of business segment sales and an eventual resolution of consent orders should all serve as future catalysts.

Name/Ticker		Rating
The Goldman Sachs Group GS		★★★★★
Price (USD)	**Fair Value (USD)**	**Uncertainty**
291.38	438.00	Medium
Market Cap (USD B)	**Economic Moat**	**Capital Allocation**
100.57	Narrow	Standard

Goldman Sachs and other investment banks will likely face headwinds over the next year or two, as investment banking and trading revenue normalize lower from elevated 2020 and 2021 levels. That said, we believe much of this normalization is already factored into the stock's price. The company is only modestly interest rate sensitive, so not much of its valuation is dependent on interest rates climbing and remaining high. In the medium term, the market may reward the company for initiatives that should improve the stability of its earnings, such as its push into consumer banking and changes in its investment management business.

Source: Morningstar Equity Research, Data as of September 27, 2022

Healthcare

Damien Conover, CFA | damien.conover@morningstar.com

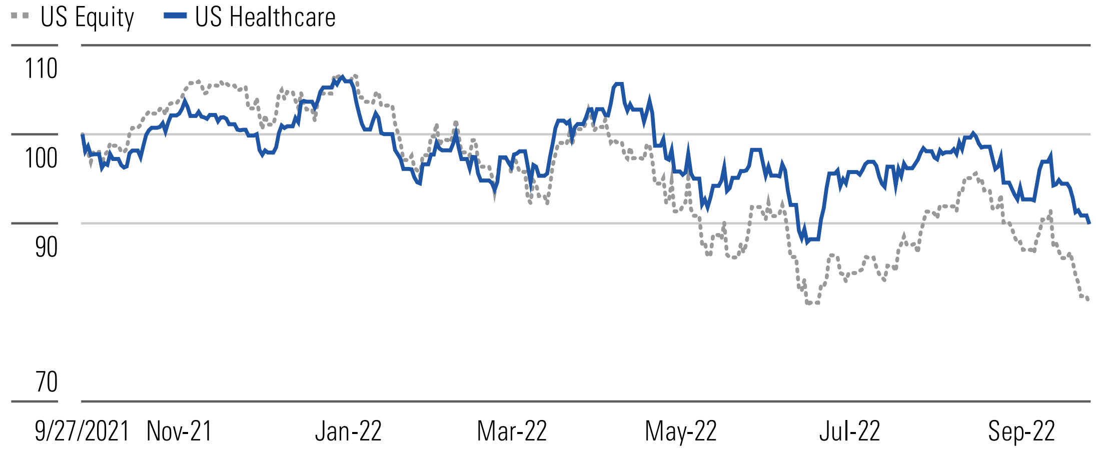
Healthcare's Defensive Nature Helps Against Macro Challenges while New U.S. Drug Policy Looks Manageable

As the markets continue to pull back on several macro headwinds and potentially high valuations, the trailing 12-month performance has fallen with the Morningstar US Healthcare Index down 10%, but still ahead of the broader equity market's 19% decline. We believe the defensive nature and relative safety of healthcare stocks is supporting the minor outperformance. For the most part, we expect our healthcare coverage (especially firms with moats) will be able to pass along price increases due to any inflationary pressures given the strong pricing power enjoyed by the sector due to patents and high switching costs. However, the labor shortages are affecting some healthcare services companies, which may limit capacity and pressure margins in the near term for the industry. Additionally, recessionary concerns are increasing as interest rates climb to combat inflation, but healthcare demand is fairly inelastic and holds up well during recessions. Further, the war in Ukraine shouldn't have much of an impact on healthcare as the sector generates less than 2% of sales in Ukraine and Russia.

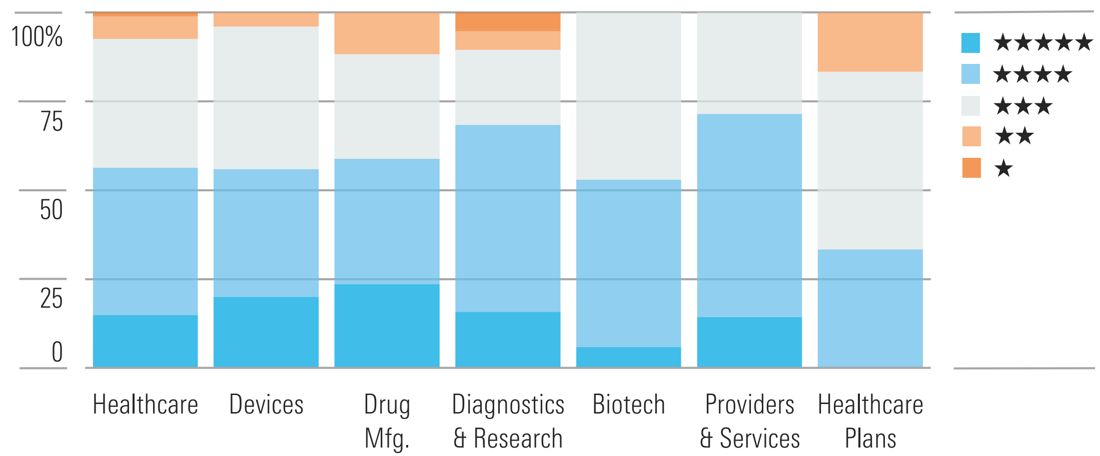
Finally, in a surprising move, the U.S. Congress passed new drug policies as part of the Inflation Reduction Act that will have global implications, as the U.S. drug market represents close to half of the global market. However, we view the new price controls and reimbursement changes in Medicare as a manageable negative headwind for the biopharma group.

We view the healthcare sector as modestly undervalued. Our sector coverage trades below our overall estimate of intrinsic value at a price to fair value at 0.94. We see just over 50 "buys" in the sector, with over half of our coverage rated 4 or 5 stars.

Healthcare Performance vs. U.S. Equity Index



Healthcare Rating Distribution by Industry



Source: Morningstar Equity Research. Data as of Sept. 27, 2022

Healthcare's Defensive Nature Helps Against Macro Challenges while New U.S. Drug Policy Looks Manageable

Overall, healthcare looks undervalued, and we believe the market is missing important areas of exponential growth. Biopharma stocks represent one of the most undervalued industries within the healthcare sector, and we believe the biopharma group is well positioned within areas of potential exponential growth. While the new U.S. drug policies embedded within the Inflation Reduction Act may create headwinds, we view the changes as manageable. We expect Big Biopharma to adapt to the new policy through a combination of cost-cutting, agreements with generic firms for limited authorized generic launches (to avoid the list for negotiated drugs), and higher launch prices (to counter pressure on price increases and earlier declines due to negotiation).

The healthcare services industry also looks undervalued. Labor constraints are adding pressure to margins in this industry, but we expect these headwinds to eventually pass, through a stabilization of the labor market and the likely eventual passage of these costs to insurers. These trends will take time, and the market doesn't look willing to appreciate the current stock price valuations.

Key Healthcare Areas of Exponential Growth With Leading Innovators

Industry	Area of Exponential Growth	What the Market is Missing
Pharmaceuticals	Targeted Drugs	Stronger Pricing Power for Focused Patient Populations
Biotechnology	RNA/Gene Therapy	New Opportunities to Treat Disease
Medical Devices	Transcatheter Valves	Expansion of Eligible Population
Diagnostics	Liquid Biopsy	Easily and Comprehensively Diagnosing Diseases
Tool and Services	Gene Sequencing	Unlocking Disease Understanding For New Products

Three key Biopharma Provisions of the Inflation reduction Act: Impact on Firms and Budget

Category	Medicare Part D Redesign	Medicare Inflation Caps	Medicare Part B/Part D Negotiation
Description	Out-of-pocket spending caps and drug firms pay more in catastrophic phase	Rebate price increases above inflation	Price discounts on eligible drugs (launched >9 years for small molecules and >13 years for biologics)
Budget Impact*	$25 billion cost	$62 billion savings	$100 billion savings
Headwind to U.S. Biopharma Sales	1%	2%	5%

Source: Morningstar Equity Research and Company reports. CBO estimate of government budget impact, 2022-31, Data as of Sept. 11, 2022.

SECTOR TOP PICKS

Healthcare

Name/Ticker		Rating	
Illumina ILMN		★★★★	Illumina represents a growth-at-a-reasonable-price opportunity for investors with a long-term horizon, in our opinion. As the leading provider of genomic sequencing tools, the company should be able to capitalize on the continued expansion of these applications in research and clinical settings. Also, Illumina owns the Grail liquid biopsy assets, which are targeting a nascent exponential technology opportunity for the earlier detection of cancer. While regulators may eventually force Illumina to unwind the Grail transaction, we suspect the company will be able to hold on to those assets for several more years through any appeals processes, which could be enough for the market to recognize the significant growth potential in those assets. While Illumina may face more competition in its legacy genomic sequencing technology in the future, we think the factors that determine its economic moat in genomic sequencing — intangible assets and switching costs for end users — may help Illumina generate economic profits for the long run.
Price (USD)	**Fair Value (USD)**	**Uncertainty**	
186.84	307.00	Very High	
Market Cap (USD B)	**Economic Moat**	**Capital Allocation**	
28.96	Narrow	Exemplary	

Name/Ticker		Rating	
Moderna Therapeutics MRNA		★★★★	The shares were on a roller-coaster in 2021; we think investors first became overly enthusiastic about the potential of the company's technology but subsequently too bearish on its post-coronavirus growth. While we have modest expectations for sales of the firm's COVID-19 vaccine following massive pandemic demand in 2021 and 2022, we think Moderna's technology is particularly well validated in the field of respiratory virus vaccines; the firm's RSV vaccine, seasonal flu vaccine and COVID-19 vaccine could eventually form the basis for a single vaccine, as mRNA technology is well suited for combinations.
Price (USD)	**Fair Value (USD)**	**Uncertainty**	
122.23	232.00	Very High	
Market Cap (USD B)	**Economic Moat**	**Capital Allocation**	
46.82	None	Standard	

Name/Ticker		Rating	
Zimmer Biomet ZBH		★★★★★	With the addition of smaller competitor Biomet, Zimmer is the undisputed king of large joint reconstruction, by far. We expect favorable demographics, which include aging baby boomers and rising obesity, to fuel solid demand for large-joint replacement that should offset price declines. However, Zimmer stumbled into a series of pitfalls in 2016-2017, including integration issues, supply and inventory challenges, and quality concerns that have caught the attention of the U.S. Food and Drug Administration. But new management has tackled these issues, and the firm is poised to ramp up its growth.
Price (USD)	**Fair Value (USD)**	**Uncertainty**	
104.82	175.00	Medium	
Market Cap (USD B)	**Economic Moat**	**Capital Allocation**	
22.06	Wide	Exemplary	

Source: Morningstar Equity Research. Data as of Sept. 27, 2022.

Industrials

Brian Bernard, CFA | brian.bernard@morningstar.com

Attractive Long-Term Opportunities Arise Among the Industrial Sector as Investors React to Economic Headwinds

The Morningstar U.S. Industrials Index modestly outperformed the Morningstar US Market Index during a tumultuous third quarter 2022, while extending its trailing 12-month outperformance to nearly 300 basis points. Year to date, the aerospace and defense and waste management industries have led the Morningstar U.S. Industrials Index's outperformance. Contrarily, the business services, transportation and logistics, and industrial products industries have lagged the market.

The aerospace and defense and waste management industries have attracted investor flows as a decline in risk appetite has led to outperformance among industries with dependable cash flows and shareholder-friendly capital allocation policies.

Record stimulus and spending triggered robust industrial activity in 2021, as companies spent heavily to keep pace with demand and expand production capacity. However, concerns of an imminent economic recession have led to a precipitous sell-off in the industrial products industry. While we expect slowing economic growth near-term, we believe the industry now offers several attractive investment opportunities for patient investors. We prefer businesses with strong brand-related intangible assets, exposure to growing end markets, and exposure to consistent aftermarket sales channels. Notably, we believe ITT and Pentair satisfy the aforementioned factors within the industrial products industry.

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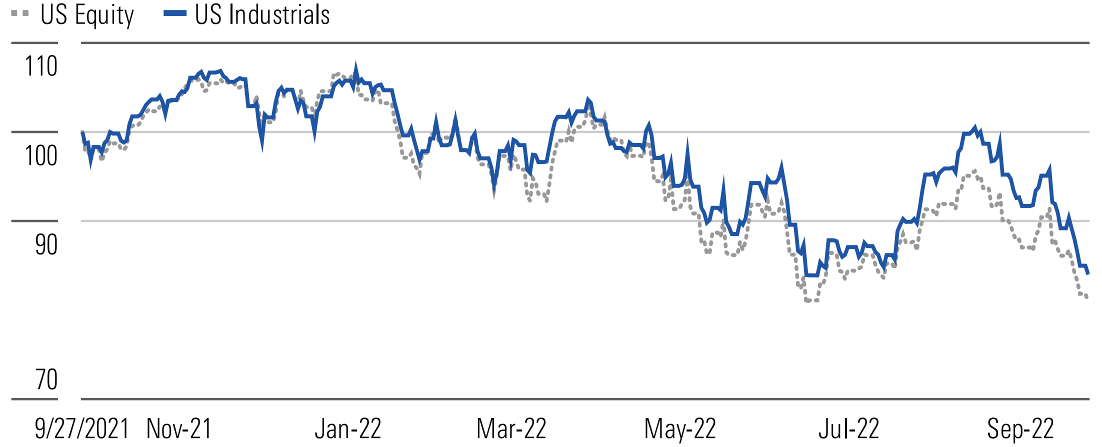
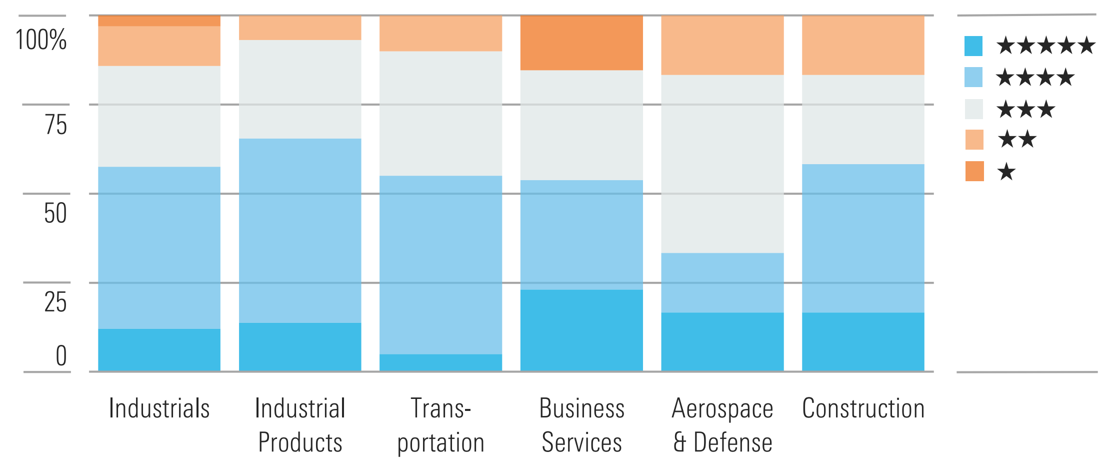
Industrials Sector Outperforms Despite a Tumultuous Q3.



More Than Half of Industrials Stocks Are Undervalued as Headwinds Intensify.

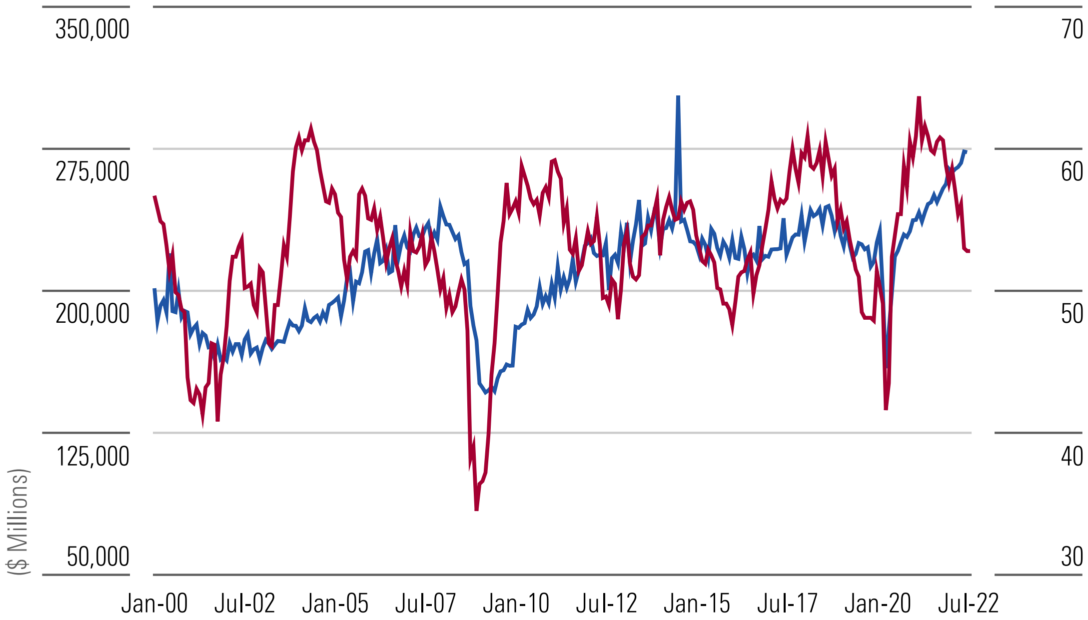


Attractive Long-Term Opportunities Arise Among the Industrial Sector as Investors React to Economic Headwinds

A robust economy and unwieldy supply chains enabled unprecedented pricing power and financial performance for the transportation and logistics industry in 2021. Share prices have since fallen from elevated levels amid recession fears, rising inventory levels, and declines in spot transportation rates. While we expect a continued normalization in supply chain and transportation fundamentals, we believe attractive opportunities are available. Air travel has also rebounded from 2020 lows and continues to approach prepandemic levels. Despite the rebound, concerns of a weaker economy and prolonged labor shortages have weighed on investor sentiment of the airline industry, which we believe now offers attractive investment opportunities. We anticipate a continued ascent in leisure and business air travel volume, with revenue per available seat mile surpassing 2019 levels by 2024.

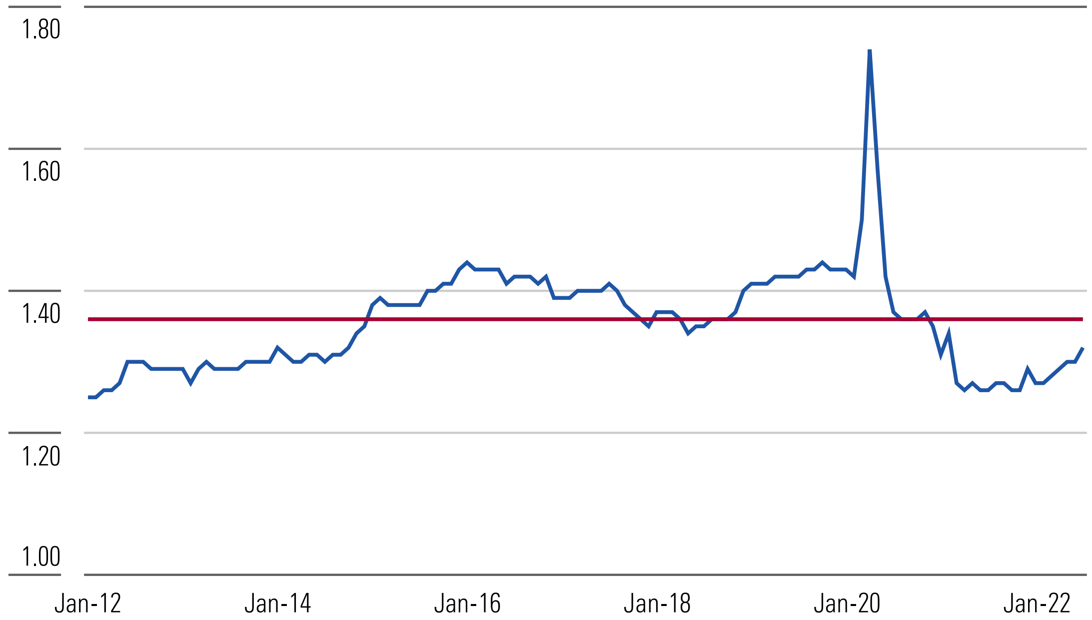
New Orders Remain Resilient but PMI Points to a Slowdown

Manufacturer's New Orders (LHS) ISM PMI (RHS)



Near-Term Headwinds may be in Store as Inventories Continue to Climb.

Total Business Inventories/Sales Average



Source: U.S. Census Bureau. Morningstar. Data as of Sept. 26, 2022

Industrials

Name/Ticker		Rating	
Itt ITT		★★★★★	We view ITT as a high-quality industrial manufacturer with underappreciated exposure to favorable end markets such as automotives and aerospace. ITT manufactures various components such as brake pads, valves, pumps, and connectors for various industrial customers. We believe the market underappreciates the economics of the highly engineered brake pad business, as the company holds valuable relationships with OEMs that should prove beneficial as new electric vehicle models are rolled out. A rebound in aerospace activity and potential margin expansion through operational efficiencies also provides a catalyst for earnings growth.
Price (USD)	**Fair Value (USD)**	**Uncertainty**	
66.22	100.00	Medium	
Market Cap (USD B)	**Economic Moat**	**Capital Allocation**	
5.50	Narrow	Standard	

Name/Ticker		Rating	
Pentair PNR		★★★★★	Pentair manufactures various water treatment and pool equipment to residential and commercial customers. The company carries a strong brand reputation and generates most sales in the aftermarket, limiting reliance on new installation. Residential water treatment and pool products exhibited robust volume growth during 2021 due to exceptional stimulus and consumer spending. However, volume growth has stalled in recent quarters, prompting a precipitous decline in share price. Despite near-term growth headwinds, we believe Pentair's robust install base and favorable aftermarket exposure is underappreciated by the market.
Price (USD)	**Fair Value (USD)**	**Uncertainty**	
40.82	65.00	Medium	
Market Cap (USD B)	**Economic Moat**	**Capital Allocation**	
6.68	Narrow	Standard	

Name/Ticker		Rating	
Delta Air Lines DAL		★★★★	Delta Air Lines operates one of the largest airlines in North America, serving both the leisure and business travel markets. We anticipate a continued recovery in passenger volumes from the pandemic induced lows and expect long-term secular growth to be consistent with GDP. The company provides favorable product segmentation enabling premium options for customers, along with traveler benefits such as co-branded credit cards and frequent-flyer miles. Despite an increasingly commoditized and fragmented industry, we believe Delta remains the highest quality legacy carrier and trades at an attractive valuation.
Price (USD)	**Fair Value (USD)**	**Uncertainty**	
28.50	57.00	Very High	
Market Cap (USD B)	**Economic Moat**	**Capital Allocation**	
17.97	None	Exemplary	

Source: Morningstar Equity Research, Data as of September 27, 2022

Real Estate

Kevin Brown | kevin.brown@morningstar.com

Rising Interest Rates Have Led to a Decline in the Real Estate Sector's Performance Despite Strong Fundamental Growth

The Morningstar US Real Estate Index is down 18.5% over the trailing 12 months, which is slightly better than the 19.1% decline seen by the broader U.S. equity market over the same period. The real estate sector declined 9.5% in the third quarter of 2022, significantly below the U.S. equity market's down 3.1%. However, the sector's negative performance over the past 12 months does not reflect the state of real estate fundamentals, with occupancy continuing to recover from the pandemic lows and high inflation allowing many real estate subsector to drive record level rate increases in the second quarter.

The real estate sector is currently trading below our fair value estimates. Our real estate sector coverage currently trades at a 17% discount to our estimate of fair value, which is in line or better than many other North American sectors. Currently, 78% of the real estate sector is trading in either the 5-star or 4-star range, 19% is trading in the 3-star range, and 3% is trading in the 2-star range while no company is currently trading in the 1-star range.

Over the past decade, REITs have provided a dividend yield that is approximately 1.5% higher than the available rate on the US 10-year Treasury. While the spread jumped during the first year of the pandemic as the Federal Reserve lowered interest rates to stimulate the economy while the drop in share prices increased REIT dividend yields, the sector returned to the historical average spread in the second half of 2021. However, the rise in interest rates in 2022 has negatively affected the sector as REITs are not able to raise dividends as quickly as interest rates, so income-oriented investors have reduced their REIT exposure across their portfolios, which has led to a drop in share prices.

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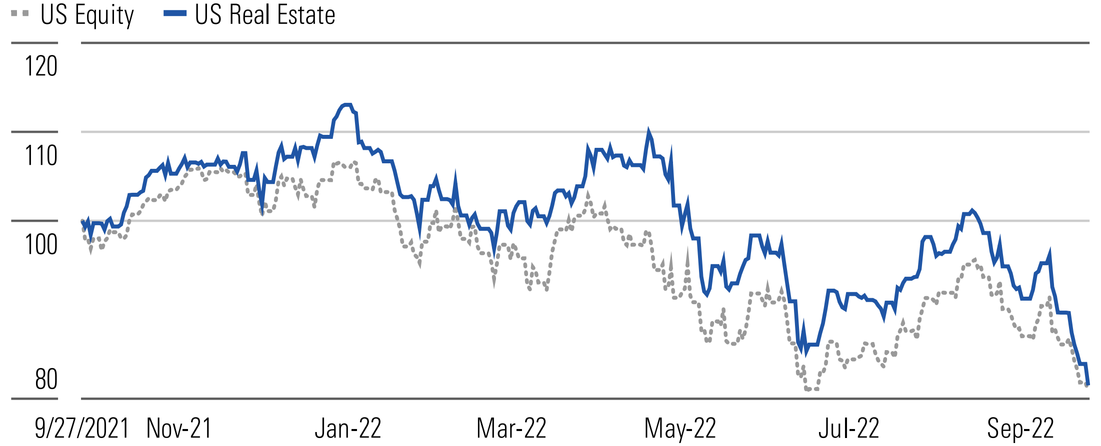
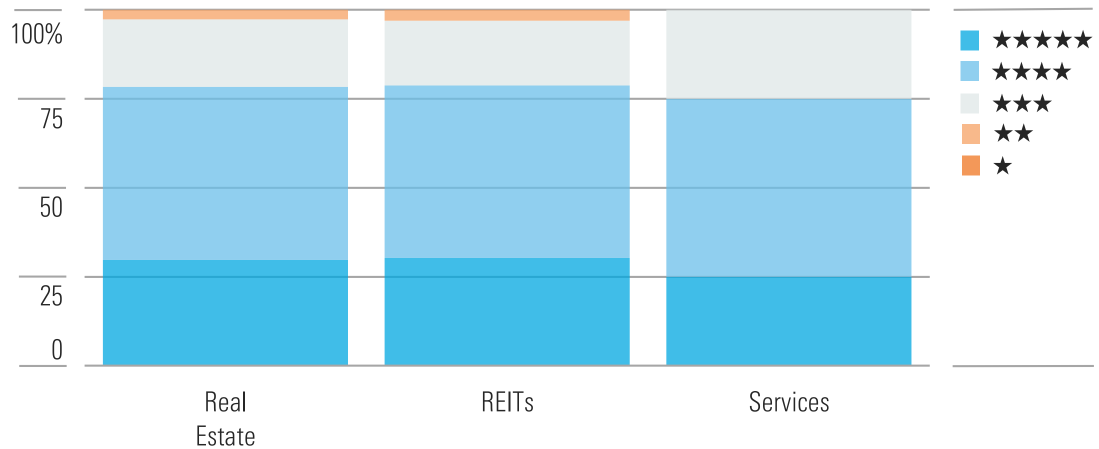
Real estate declines have been roughly in line with the broader market.



Majority of Stocks in Real Estate Sectors Trade at a Discount to our Fair Value Estimates.

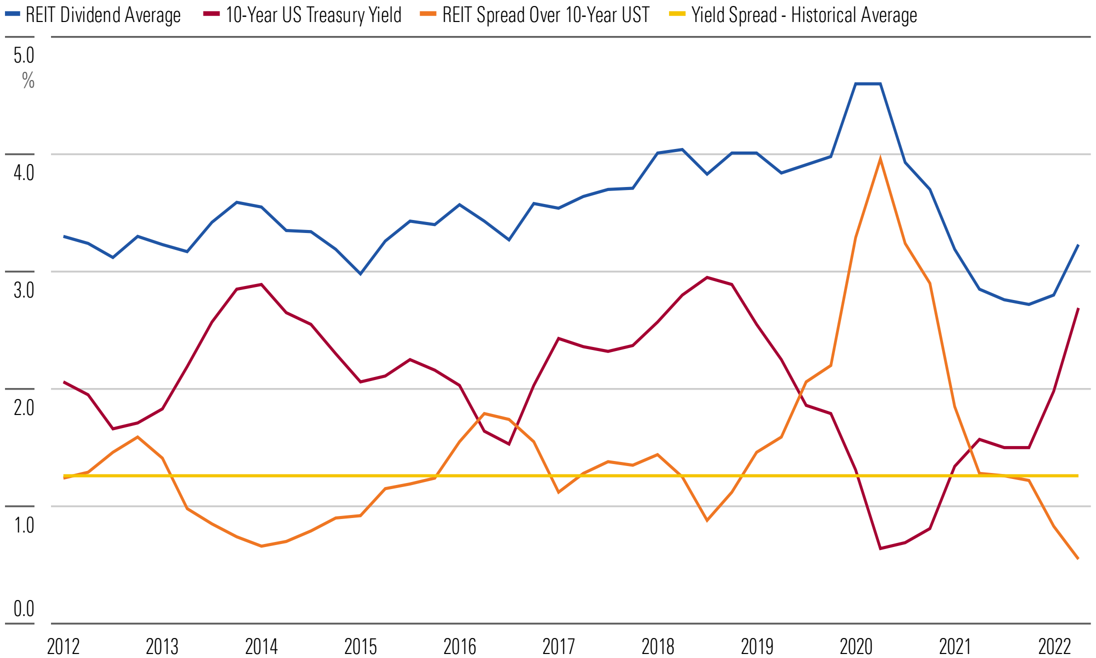


Source: Morningstar Equity Research, Data as of Sept. 27, 2022.

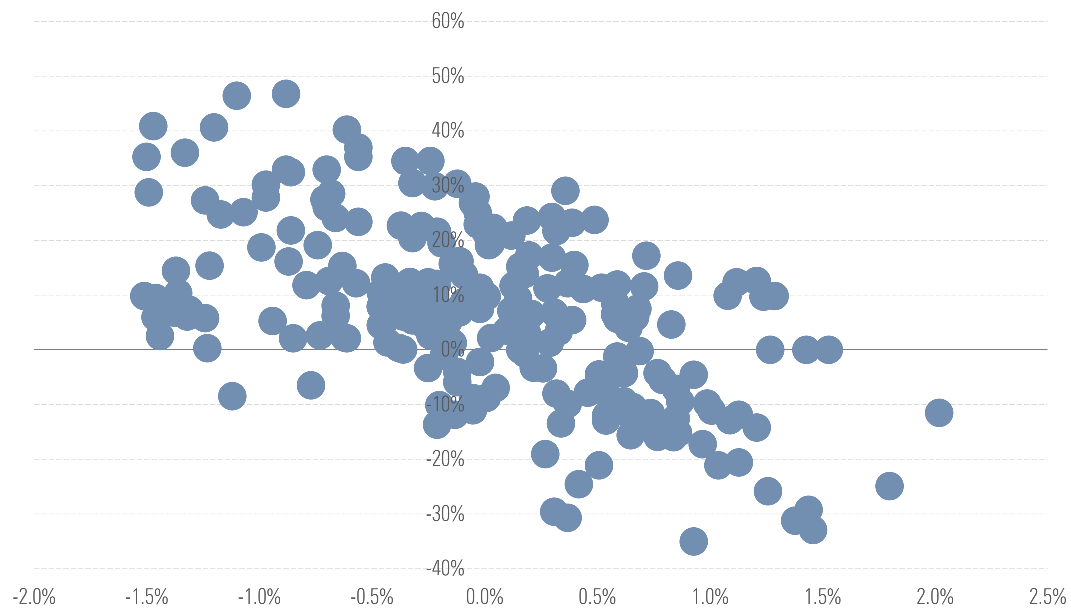
Rising Interest Rates Have Led to a Decline in the Real Estate Sector's Performance Despite Strong Fundamental Growth

Since 2000, the relative performance of REITs compared to the broader equity market has shown a significant negative relationship to interest rate movements for the 10-year U.S. Treasury. This trend has continued in 2022, with announcements of rising rates leading to REITs underperforming the broader equity market. However, despite the short-term negative stock price performance for REITs caused by income-oriented investors rotating out of the sector, interest rates have little impact on the long-term cash flows generated by most REITs. While acquisition activity might slow as debt becomes more expensive, we believe the impact to long-term fair value estimates is small. Therefore, we believe the short-term disruption to the sector has created significant discounts for investors looking to increase their real estate exposure.

REIT dividends historically have been 1.25% above the 10-Year UST rate.



REIT relative performance is negatively correlated with interest rates.



Source: FRED. U.S. Bureau of Labor Statistics. FTSE Russell. Morningstar. Data as of Sept. 6, 2022.

Real Estate

Name/Ticker		Rating	
Simon Property Group SPG		★★★★★	Class A malls continue to outperform other forms of brick-and-mortar retail. While the stock sold off significantly during the height of the pandemic, it recovered to prepandemic levels by the end of 2021 as brick-and-mortar sales rebounded with consumers returning to shop in store. Tenants are now much healthier with occupancy costs at the lowest levels in over 6 years, which should allow Simon to see further occupancy and rent increases. Additionally, Simon recently acquired Class A mall competitor Taubman Centers, which should increase cash flows and provide more leverage when negotiating with tenants.
Price (USD)	**Fair Value (USD)**	**Uncertainty**	
89.03	160.00	Medium	
Market Cap (USD B)	**Economic Moat**	**Capital Allocation**	
28.60	None	Exemplary	

Name/Ticker		Rating	
Park Hotels & Resorts PK		★★★★★	While the coronavirus significantly impacted Park's operating results with high-double-digit revPAR declines and negative hotel EBITDA in 2020, the company's portfolio started to recover in 2021 that has carried into 2022. Leisure travel has rebounded to near pre-pandemic levels, leading to a return of positive hotel EBITDA. Additionally, business and group travel have shown recent signs of improvement in 2022. We think business and group demand will eventually return close to pre-pandemic levels by the end of 2024, leading to years of strong growth for Park.
Price (USD)	**Fair Value (USD)**	**Uncertainty**	
11.25	28.00	High	
Market Cap (USD B)	**Economic Moat**	**Capital Allocation**	
2.52	None	Exemplary	

Name/Ticker		Rating	
Ventas VTR		★★★★★	Ventas owns high-quality assets in the senior housing, medical office, and life science fields. While the company's medical office and life science portfolios should be relatively unaffected by either the pandemic or a potential recession, the senior housing portfolio saw a large drop in occupancy in the first year of the pandemic as the coronavirus has the highest lethality rate among senior citizens. However, occupancies have slowly recovered in 2021 and 2022 and the industry should see strong long-term growth from the coming demographic wave of baby boomers aging into senior housing facilities.
Price (USD)	**Fair Value (USD)**	**Uncertainty**	
40.41	69.00	Medium	
Market Cap (USD B)	**Economic Moat**	**Capital Allocation**	
16.59	None	Exemplary	

Source: Morningstar Equity Research, Data as of September 27, 2022

Technology

Brian Colello, CPA | brian.colello@morningstar.com

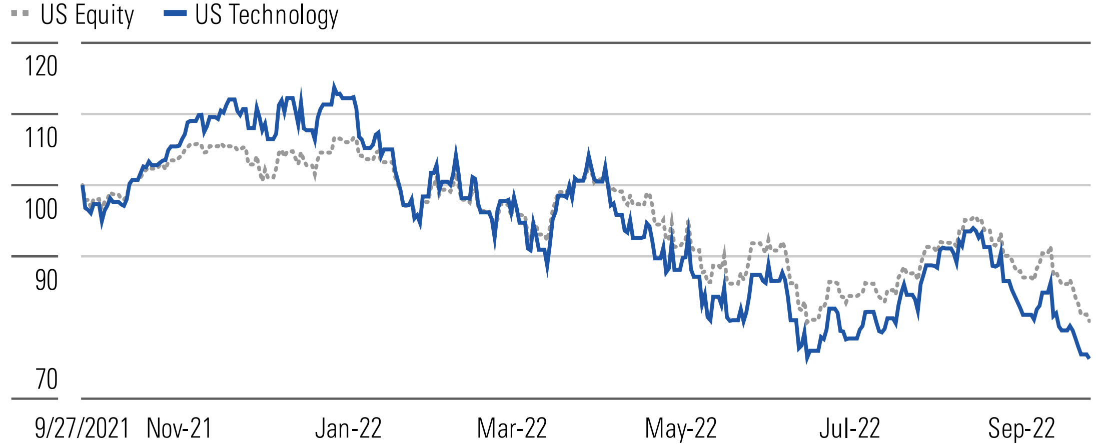
Technology's Prior Outperformance Has Evaporated, But the Selloff is Overdone in Software

After several years of market outperformance, the Technology sector is now a drag on the U.S. equity market. While mega-cap tech stocks (Apple, Microsoft) are still holding up relatively well, we continue to see punitive selloffs across the rest of the Tech investment landscape. We remain optimistic about secular tailwinds in technology, such as cloud computing and rising semiconductor demand. However, a softer macroeconomic environment and a stronger U.S. dollar is providing some headwinds. We especially see sluggish demand for PCs and lower-end smartphones weighing on both hardware companies and the providers of processors, graphic cards, and memory chips going into such devices. Nonetheless, for long-term patient investors, we would still recommend high quality, wide-moat names in software and semis.

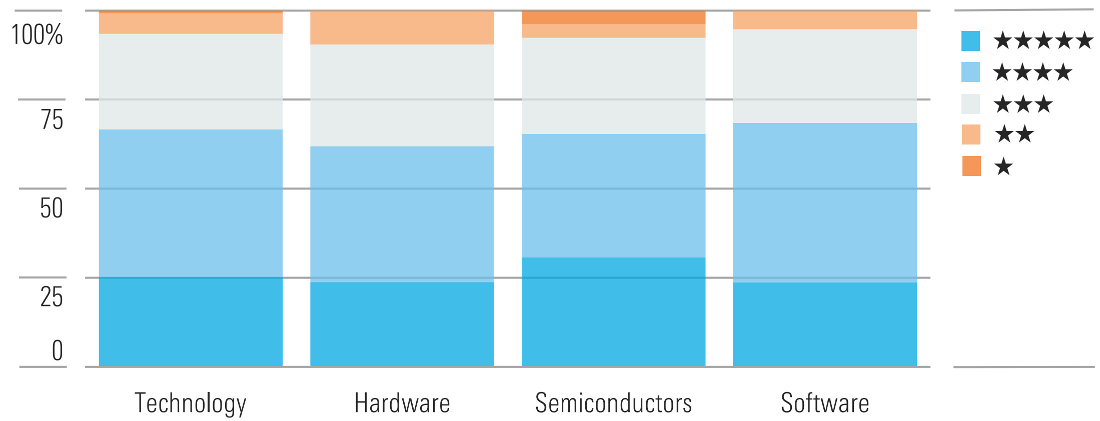
As of Sept. 27, the Morningstar U.S. Technology Index was down 24% on a TTM basis, a sharp reversal from the +33% TTM performance just nine months ago. The U.S. equity market is down 19% on a TTM basis. Over the past quarter, both Tech and the U.S. equity market are down roughly 3% each.

As of Sept. 27, the U.S. technology sector was 22% undervalued, a complete flip-flop from a sector that was 14% overvalued at this time a year ago. Software remains the most attractive sub-sector of tech as the median stock is 28% undervalued. However, the median semiconductor stock is 26% undervalued, and we see more buying opportunities for investors this quarter than in the recent past. The median Hardware stock is 25% undervalued.

Technology Performance



Technology Star Rating Distribution by Industry



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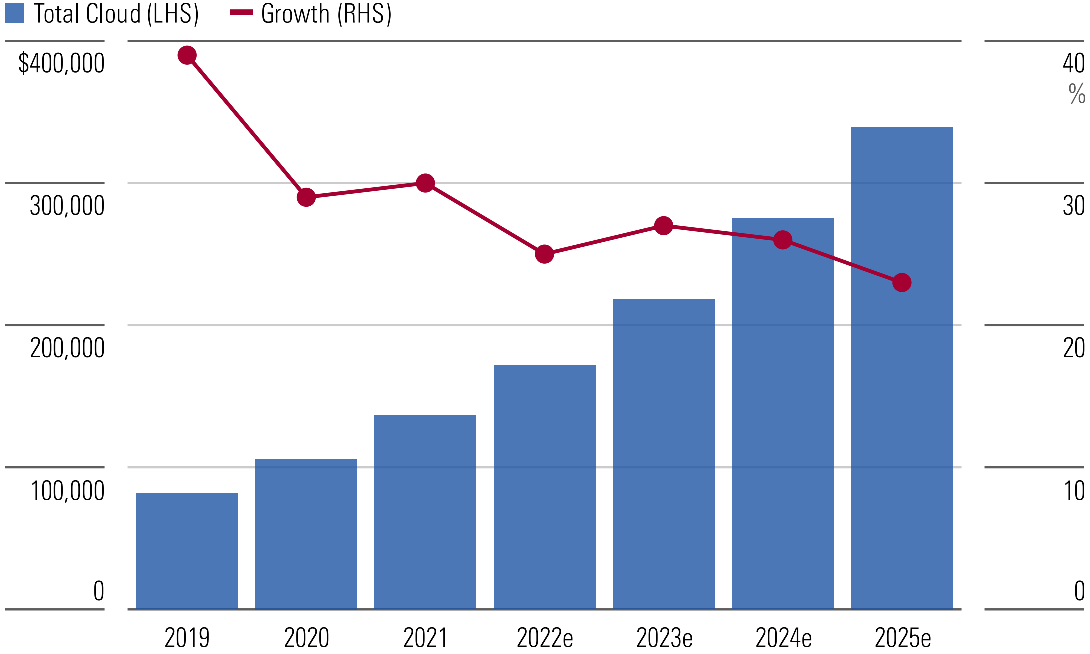
Source: Morningstar Equity Research, Data as of Sept. 27, 2022.

Technology's Prior Outperformance Has Evaporated, But the Selloff Is Overdone in Software

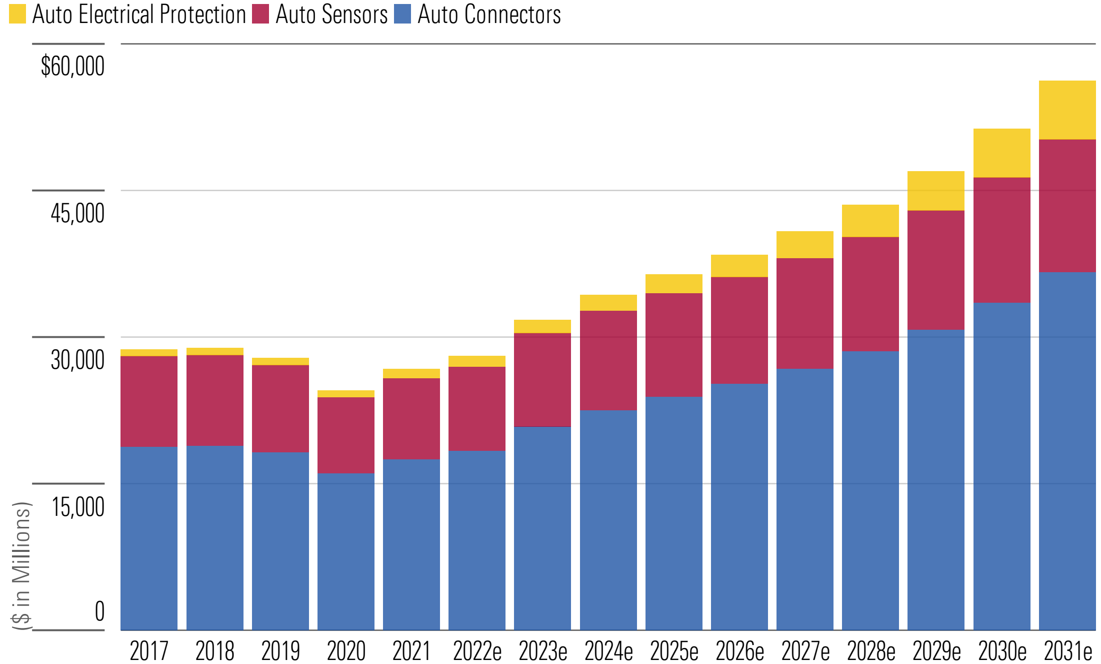
In software, IT departments have been focused on digital transformation, first from the secular shift to cloud computing and software as a service, or SaaS, followed by the coronavirus pandemic and the critical rush to implement remote working tools. We foresee enterprises using software to modernize all types of business processes, in turn leading to software industry growth at a low double digit CAGR.

We view the electronic components space, such as sensors, connectors, and electrical protectors, as underappreciated. We think these mission-critical electronic components are the result of decades of robust engineering development by their suppliers. They ensure flawless performance of the planes, trains, and automobiles we rely on daily--eliciting strong switching costs and commanding pricing power by doing so. The electrification of the automotive market is an increasingly important growth theme for these suppliers.

The Cloud Opportunity Is the Most Obvious Secular Theme in Software.



We Forecast the Auto Electronic Components Market to Grow at a 8% CAGR by 2031.



Source: Gartner. Morningstar. Data as of June 27, 2022.

SECTOR TOP PICKS

Technology

Name/Ticker		Rating	
Salesforce CRM		★★★★★	We believe Salesforce.com represents one of the best long-term growth stories in large-cap software due to its ever-expanding portfolio of complimentary solutions that allow users to completely embrace their customers, thereby building relationships, strengthening retention, and driving revenue. In our view, Salesforce will benefit further from natural cross selling among its clouds, upselling more robust features within product lines, pricing actions, international growth, and continued acquisitions such as the recent deals for Slack and Tableau.
Price (USD)	**Fair Value (USD)**	**Uncertainty**	
148.89	240.00	Medium	
Market Cap (USD B)	**Economic Moat**	**Capital Allocation**	
146.32	Wide	Standard	

Name/Ticker		Rating	
ServiceNow NOW		★★★★★	ServiceNow excels at executing the land and expand strategy, and it continues to leverage its strength in workflow automation to penetrate existing customers more deeply in IT and more broadly with HR, customer service specific, and other back-office products. We expect both tiered offerings and vertical specific versions to continue to provide a nice tailwind to revenues. We think ServiceNow has become a key partner in digital transformation as shown in retention statistics, which remains at the elite level. Importantly, we are impressed with ServiceNow's excellent balance between strong and highly visible revenue growth and robust margins.
Price (USD)	**Fair Value (USD)**	**Uncertainty**	
378.95	675.00	Medium	
Market Cap (USD B)	**Economic Moat**	**Capital Allocation**	
74.76	Wide	Exemplary	

Name/Ticker		Rating	
ASML Holding ASML		★★★★★	ASML is one of our top picks in the semiconductor space, thanks to the increasing adoption of extreme ultraviolet lithography at large chipmakers such as TSMC and Intel to support explosive chip demand. Although the firm's first-quarter outlook is negatively affected by supply chain constraints, we think ASML will outgrow the wafer fab equipment industry in 2022. With TSMC, Intel, and Samsung all vying for process technology leadership, we expect ASML to be a primary beneficiary as it sells tools to all three chipmakers.
Price (USD)	**Fair Value (USD)**	**Uncertainty**	
433.29	696.00	Medium	
Market Cap (USD B)	**Economic Moat**	**Capital Allocation**	
172.79	Wide	Exemplary	

Source: Morningstar Equity Research. Data as of Sept. 27, 2022.

Utilities

Travis Miller | travis.miller@morningstar.com

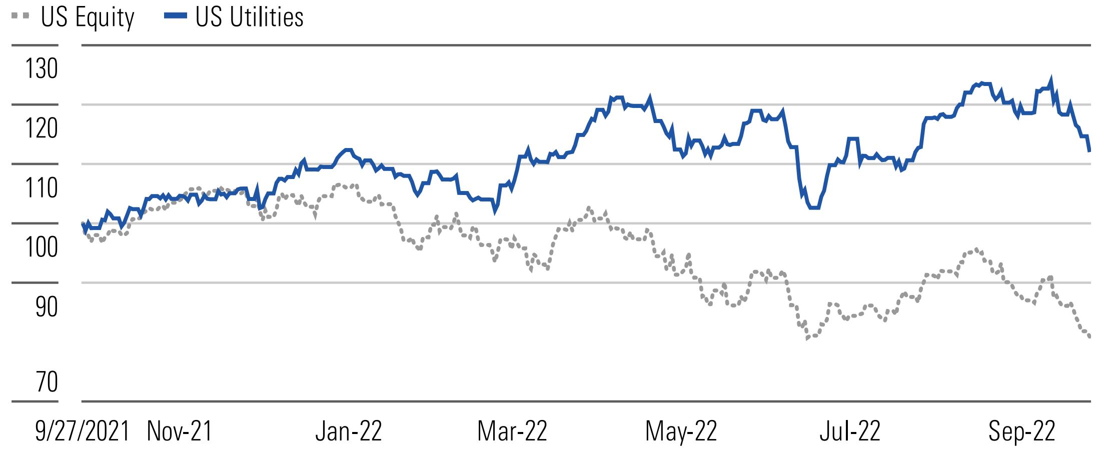
What's Up With Utilities?

Despite high inflation and rising interest rates, utilities investors aren't scared. Utilities stocks are outperforming the market by more than 30 percentage points going into the fourth quarter. If they hold that lead, utilities would outperform the market by the widest margin since 2000. Absolute returns have been solid as well. Utilities and energy are the only two sectors with positive year-to-date returns.

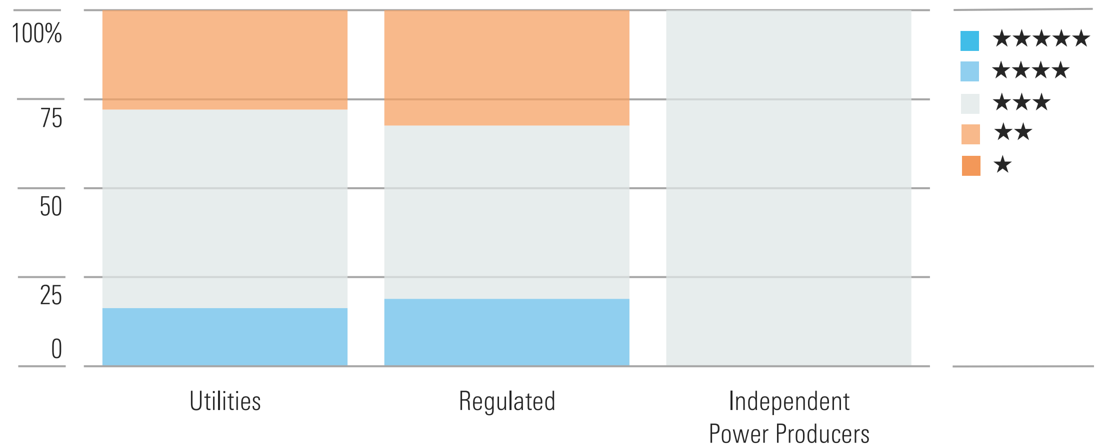
Unsurprisingly, utilities have benefited from the market's recession concerns. Utilities also outperformed ahead of the 2001 and the 2007-09 recessions. Once the market digested the last two recessions, utilities' outperformance quickly reversed. Utilities lagged the market for three consecutive years following the 2000 recession and four of the five years following the 2007-09 recession.

We think this cycle could be even more painful for utilities investors. Unlike the previous downturns, utilities face two headwinds for the first time in more than 30 years: high inflation and rising interest rates. During the last two recessions, inflation never topped 3%, and interest rates were on a secular decline, helping utilities investors avoid significant pain. Even though utilities underperformed the market in the post-recession years, their 10% average annual return since 2008 has nearly matched the market's 12% annual return and far outpaced utilities' pre-2008 returns.

Recession Fears Have Boosted Utilities' Performance in 2022.



Utilities' Stretched Valuations are a Risk for Investors.



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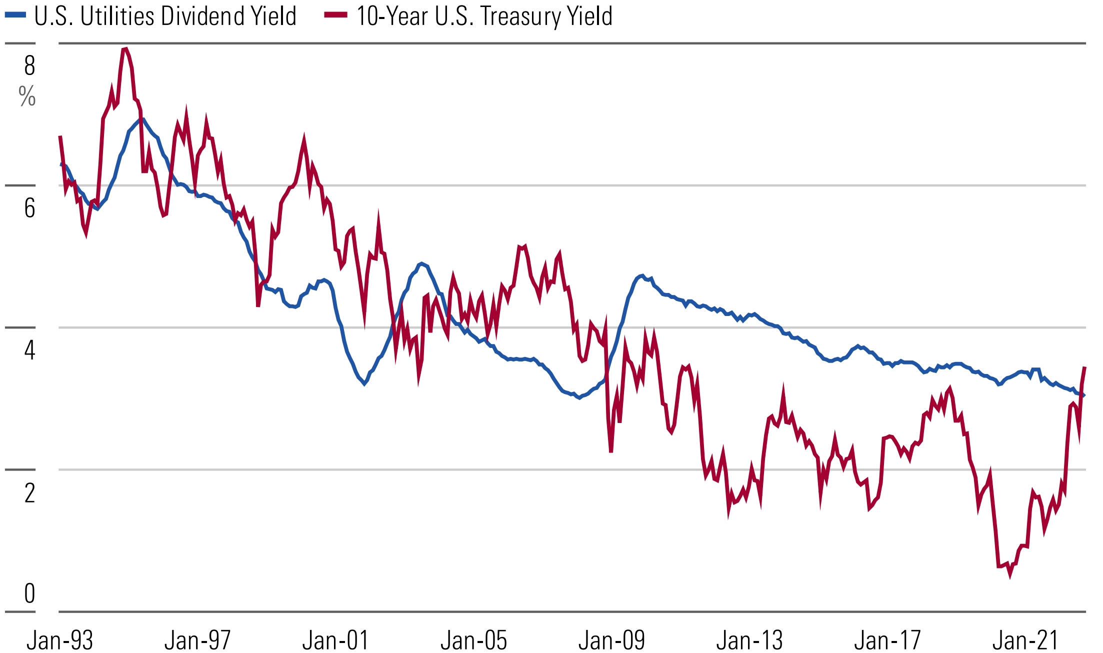
Source: Morningstar Equity Research. Data as of Sept. 27, 2022.

What's Up With Utilities?

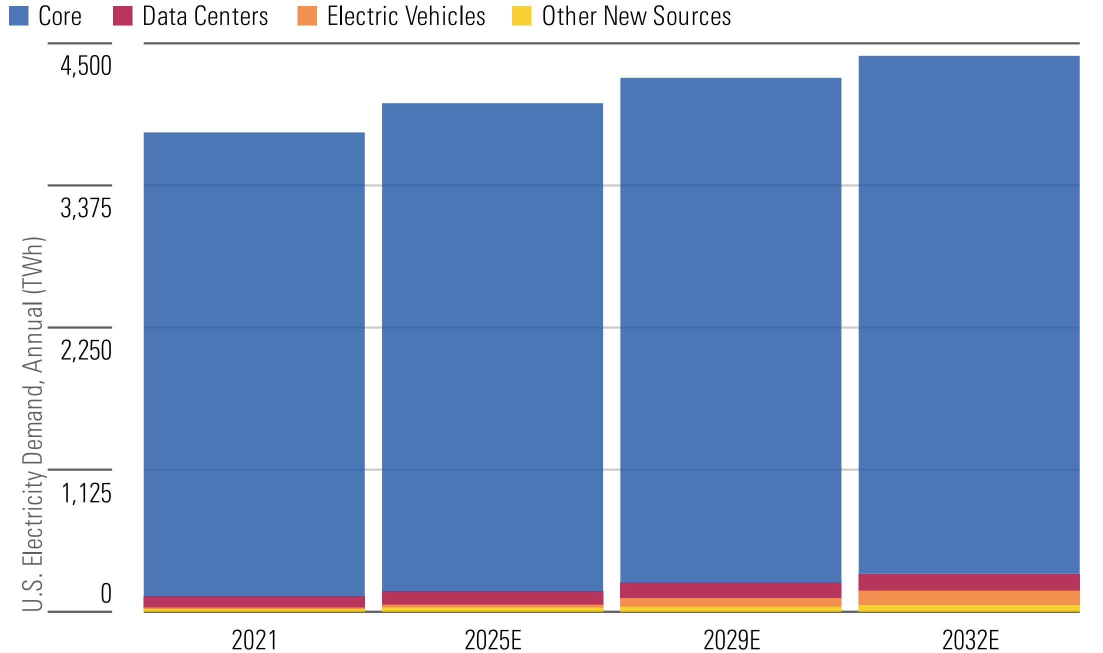
We think utilities will struggle to match those returns going forward. U.S. utilities are 3% overvalued based on our fair value estimates, making it the most overvalued sector. Dividend yields have lost their appeal. In June, 10-year U.S. Treasury rates topped the Morningstar U.S. Utilities Index dividend yield for the first time in 14 years.

Growth is the only way we think utilities can avoid a steep correction. We forecast a long runway of 6% average earnings growth for the sector, offsetting some of the valuation downside. Renewable energy has state and federal policy tailwinds. Electric vehicle sales drive our bullish outlook for electricity demand. Safety, reliability, and resiliency are top of mind following extreme weather events and record-breaking electricity demand this summer in Texas and California. If utilities can convince regulators and policymakers to support their growth investments, utilities investors might avoid a worst-case scenario.

Utilities Yield Premium Erased for First Time Since 2008.



EVs and Data Growth Support our Bullish Outlook for Electricity Demand.



Source: Morningstar. Data as of Sept. 27, 2022.

Utilities

Name/Ticker		Rating	
Edison International EIX		★★★★	Edison continues to trade at a sizable discount to its peers despite a growth outlook, 4% dividend yield, and clean energy profile that tops most other U.S. utilities. California's progressive energy policies and utility rate regulation support Edison's $6 billion annual investment plan to harden the grid against natural disasters, integrate renewable energy, and support electric vehicle adoption. We forecast 6% annual earnings growth for at least the next five years and similar dividend growth. Edison is one of the few pureplay electric utilities that owns no power generation and has no direct fossil-fuel exposure.
Price (USD)	**Fair Value (USD)**	**Uncertainty**	
61.37	73.00	Medium	
Market Cap (USD B)	**Economic Moat**	**Capital Allocation**	
24.10	Narrow	Standard	

Name/Ticker		Rating	
NiSource NI		★★★★	We think NiSource has the best clean energy transition growth in the sector as its Indiana electric business replaces coal generation with renewable energy. Safety investments at its natural gas distribution business also provide near-term growth. NiSource trades at similar valuation multiples and dividend yield as the sector, but we think it should trade at a premium because of its higher long-term earnings growth potential and constructive rate regulation. In November, NiSource's new CEO plans to announce his long-term strategic plan, which could include divesting some of its small gas utilities.
Price (USD)	**Fair Value (USD)**	**Uncertainty**	
26.86	32.00	Low	
Market Cap (USD B)	**Economic Moat**	**Capital Allocation**	
11.11	Narrow	Standard	

Name/Ticker		Rating	
Dominion Energy D		★★★★	Dominion has transitioned to a predominantly rate-regulated utility operating in highly constructive regulatory environments. The company's five-year $37 billion capital investment plan focusing on clean energy supports our 6.5% annual earnings growth forecast. Virginia is the company's most important subsidiary and has the most constructive regulation. Dominion expects 90% of its capital investment in the region will be eligible for rate riders, reducing regulatory risk in an inflationary environment.
Price (USD)	**Fair Value (USD)**	**Uncertainty**	
74.03	82.00	Low	
Market Cap (USD B)	**Economic Moat**	**Capital Allocation**	
63.14	Wide	Standard	

Source: Morningstar Equity Research, Data as of September 27, 2022

Fixed Income Overview

Rising Interest Rates Continue to Drive Losses Across Fixed-Income Universe

Fixed-income securities continued to suffer losses in the third quarter. In our 2022 Outlook, we noted that we expected interest rates to rise as the market priced in tightening monetary policy in the short end of the curve and high inflation took its toll in the longer end of the curve.

The Morningstar US Core Bond Index (our broadest measure of the fixed income universe) fell 5.12% quarter to date through September 26 and has dropped 14.83% year to date. Among the shorter duration indexes, with a duration of only 2.2, the Morningstar Asset-Backed Securities Index only declined 1.45% thus far this quarter and 5.30% year to date.

Longer-duration fixed income, such as the MBS and Treasury indexes fell 6.66% and 4.72% due to their heightened interest rate risk exposure. Both the Corporate and High Yield indexes fell less this quarter as losses were partially offset by tightening corporate credit spreads.

Morningstar Fixed Income Index Returns

Morningstar Fixed Income Index	Effective Yield	Duration	1Q 2022	2Q 2022	QTD 3Q2022	YTD 2022
Morningstar US ABS	5.27%	2.2	-2.69%	-1.24%	-1.45%	-5.30%
Morningstar US CMBS	5.20%	4.3	-5.06%	-2.83%	-3.87%	-11.31%
Morningstar US Core	4.73%	6.2	-6.00%	-4.50%	-5.12%	-14.83%
Morningstar US Corporate	5.57%	7.1	-7.88%	-6.94%	-4.54%	-18.17%
Morningstar US High-Yield	9.13%	4.2	-4.53%	-9.90%	-0.22%	-14.17%
Morningstar US MBS	4.79%	6.3	-5.03%	-3.96%	-6.66%	-14.86%
Morningstar US TIPS	1.88%	5.7	-2.44%	-6.25%	-4.63%	-12.77%
Morningstar US Treasury	4.21%	6.0	-5.50%	-3.65%	-4.72%	-13.24%

Source: Morningstar Equity Research. Data as of Sept. 26, 2022.

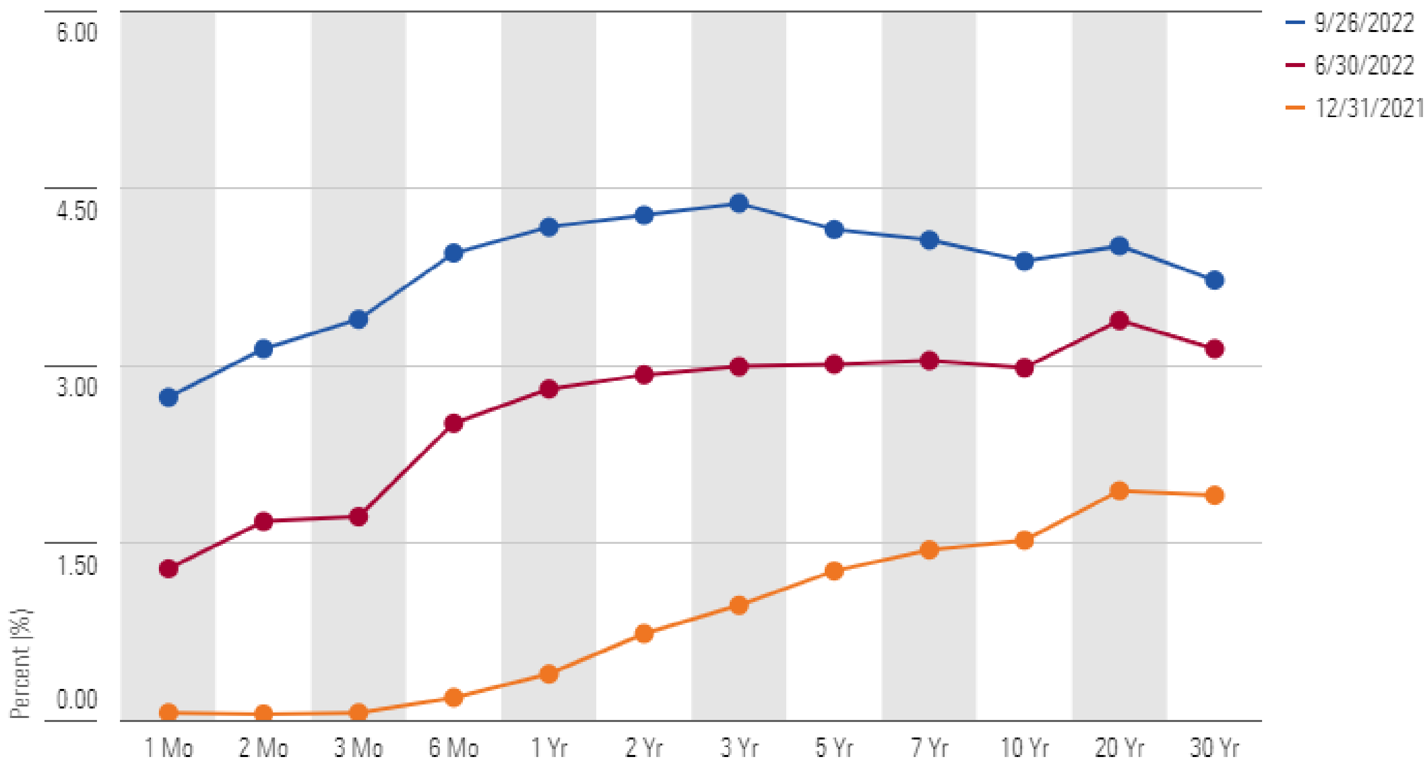
Rising Interest Rates Pummel Fixed Income

Rates have continued to rise and the curve has not only flattened but has inverted. In the shorter end, quarter to date, the 2-year UST has risen 135 basis points to 4.27% and in the longer end of the curve, the 10-year has risen 90 basis points to 3.88%. These are the highest yields the 2-year and 10-year have traded at since 2007 and 2011, respectively.

While the impact of the Fed's doubling of its balance sheet roll off in September and momentum may lead to higher long-term rates in the short run, we think the preponderance of the increases in yields has already occurred. We forecast that the yield on the 10-year U.S. Treasury will average 3.00% in 2023.

While we project inflation will average 6.0% over 2022, we project that it will begin to decrease later this year and drop to 2.3% in 2023 and bottom out at 1.2% in 2025 before normalizing a little over 2% thereafter.

U.S. Treasury Yield Curve



Source: U.S. Treasury and Morningstar Equity Research, Data as of Sept. 26, 2022.

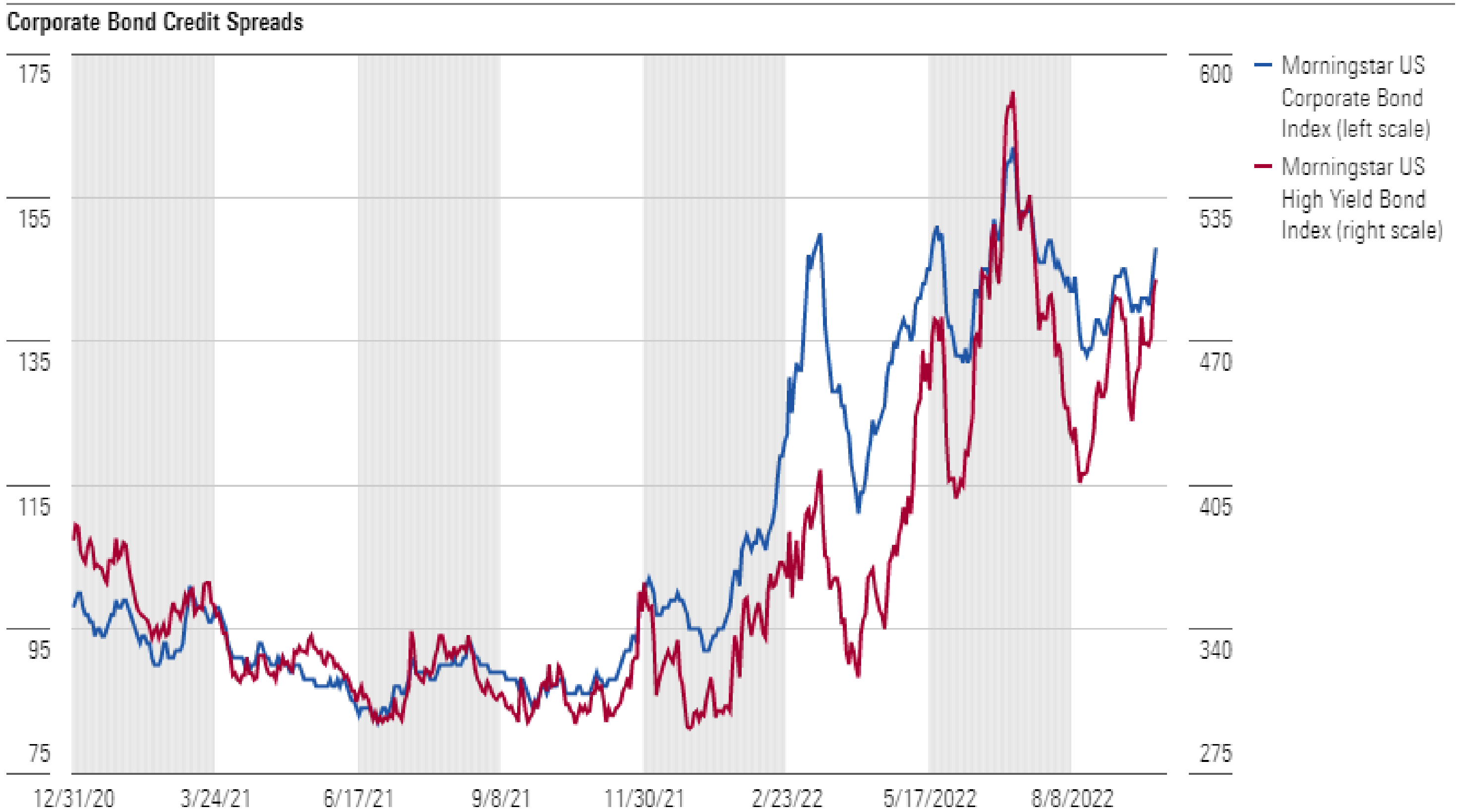
Corporate Credit Spreads Tighten From July Peak

Corporate credit spreads hit their widest levels in early July, tightened considerably through August as headwinds appeared to abate, but have now begun to rise again. Quarter to date, the average spread of our investment grade index tightened 11 basis points to +148 and the high yield index has tightened 72 basis points to +498.

At the current credit spread levels, the markets are pricing in a relatively high probability of a near term recession. Considering we do not expect that the U.S. will enter a recession, we think spread levels provide investors with an attractive yield pickup for the added credit risk

The effective yield of our investment grade and high yield indexes are 5.57% and 9.13%, much higher than the 4.73% yield of our core bond index or the 4.21% of our U.S. Treasury index. On a duration-adjusted basis, the greater yield carry on investment grade and high yield bonds will help offset principal losses in a rising rate environment.

Corporate Credit Spreads in Corporate Bond and High Yield Bond Indexes



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