September 27, 2023 04:01 AM GMT

Theme Trades | North America

2023 Dividend Playbook

We recommend steady dividend growers in lieu of reaching for the highest yielders. Based on client feedback from last year, we expand our macro regime work, study stock performance following dividend initiation, and highlight single stock screens with best ideas from our industry analysts.

Key Takeaways

– Our work suggests owning dividend growers over high yielders. Dividend growers tend to outperform over time whereas the performance of high yielders can be more volatile.

– Dividend-paying stocks outperform non-payers over time based on two empirical analyses. Stocks that initiate dividends tend to outperform peers after 3 years.

– Today's macro environment is generally supportive of dividend payer outperformance. This year's report includes an enhanced macro regime analysis for dividend stocks.

– We recommend using a holistic, fundamental approach when selecting dividend payers. Valuation, leverage, and volatility should be considered in addition to idiosyncratic industry factors.

– Our analysts provide their top dividend picks in high-yielding industries. These ideas are specific to a 3-5 year outlook and take dividend yield, growth, and overall stability into account. We also include several other dividend-oriented screens.

MORGAN STANLEY & CO. LLC

Nicholas Lentini, CFA
Research Associate
Nick.Lentini@morganstanley.com +1 212 761-5863

Michael J Wilson
Equity Strategist
M.Wilson@morganstanley.com +1 212 761-2532

David Arcaro, CFA
Equity Analyst
David.Arcaro@morganstanley.com +1 212 761-1817

Simon Flannery
Equity Analyst
Simon.Flannery@morganstanley.com +1 212 761-6432

Manan Gosalia
Equity Analyst
Manan.Gosalia@morganstanley.com +1 212 761-4092

Betsy L. Graseck, CFA
Equity Analyst
Betsy.Graseck@morganstanley.com +1 212 761-8473

Robert S Kad
Equity Analyst
Robert.Kad@morganstanley.com +1 212 761-0065

Ronald Kamdem, CFA
Equity Analyst
Ronald.Kamdem@morganstanley.com +1 212 296-8319

Pamela Kaufman, CFA
Equity Analyst
Pamela.Kaufman@morganstanley.com +1 212 761-7151

Adam Kramer
Equity Analyst
Adam.Kramer@morganstanley.com +1 212 761-4623

Dara Mohsenian, CFA
Equity Analyst
Dara.Mohsenian@morganstanley.com +1 212 761-6575

Devin McDermott
Equity Analyst and Commodities Strategist
Devin.McDermott@morganstanley.com +1 212 761-1125

Snehaja Mogre
GVAT Strategist
Snehaja.Mogre@morganstanley.com +1 212 761-5289

Ella Tulchinsky
GVAT Strategist
Ella.Tulchinsky@morganstanley.com +1 212 761-2222

Andrew B Pauker
Equity Strategist
Andrew.Pauker@morganstanley.com +1 212 761-1330

Michelle M. Weaver, CFA
Equity Strategist
Michelle.M.Weaver@morganstanley.com +1 212 296-5254

Diane Ding, Ph.D.
Quantitative Strategist
Qian.Ding@morganstanley.com +1 212 761-6758

Morgan Stanley does and seeks to do business with companies covered in Morgan Stanley Research. As a result, investors should be aware that the firm may have a conflict of interest that could affect the objectivity of Morgan Stanley Research. Investors should consider Morgan Stanley Research as only a single factor in making their investment decision.

For analyst certification and other important disclosures, refer to the Disclosure Section, located at the end of this report.

Table of Contents

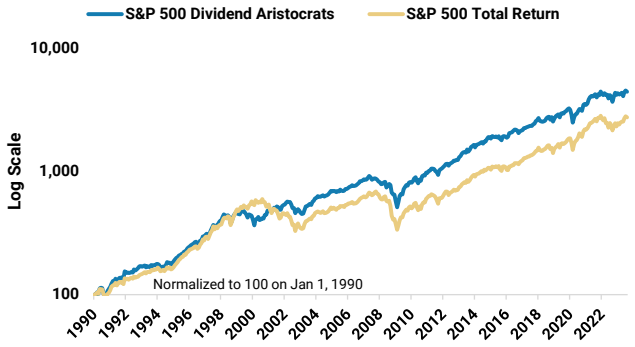
1. **Executive Summary**
2. **Top-Down Views**
    a. Macro Regimes
        i. Inflation Regimes
        ii. PMI Regimes
        iii. Nominal Rate Regimes
        iv. Real Rate Regimes
    b. Does It Pay to Issue a Dividend?
    c. Factor Analysis: Prefer Dividend Growth Over High Yields
    d. Dividend Screens
    e. Key Dividend Metrics
3. **Bottom-Up Views: Industries in Focus**
    a. MLPs/Midstream Energy Infrastructure
    b. Energy
    c. Telecommunication Services and Communications Infrastructure
    d. Real Estate
    e. US Banks
    f. Tobacco and Packaged Foods
    g. Beverages and Household Products
    h. Utilities
4. **Appendix**
    a. Dividend Yields Today
    b. Dividend Growth & Volatility
    c. Leverage & Valuation

Executive Summary

Dividends make an outsized contribution to total returns over the medium-to-long-term and are a key consideration for investors looking for stability and/or income within a portfolio. In this report, we look at both **top-down** and **bottom-up** aspects of dividend investing.

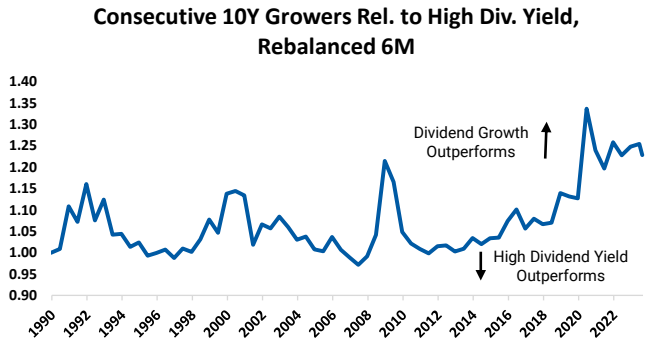
On the top-down view within the context of income investing, we continue to recommend stocks with a consistent track record of dividend growth as opposed to exclusively focusing on the highest yielding stocks. Exhibit 1 shows that Dividend Aristocrats (stocks that have consecutively grown their dividend for 25 years) have outperformed the S&P 500 consistently over time. These equities show relative resilience through uncertain market environments. While high yielding stocks can look attractive in the short-term, our work suggests that they tend to offer more volatile, mean-reverting return profiles.

Exhibit 1: Consistent Dividend Growers Have a Strong Performance Track Record



Source: Compustat, Morgan Stanley Research

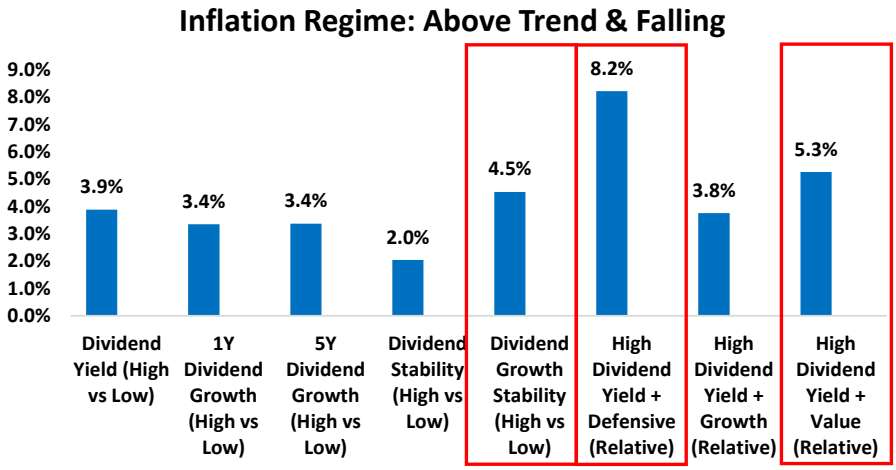
Exhibit 2: High Dividend Growth Factor Has Outperformed High Yield Factor Persistently Since 2010



Source: Compustat, Morgan Stanley Research

An elevated and falling inflation backdrop is positive for dividend stocks. The path of inflation is arguably the most important macro debate today. Our economists are of the view that inflation will continue to slow from elevated levels over the next 12 months. That backdrop is supportive of owning dividend-related factors and defensive dividend payers, in particular (Exhibit 3). Based on client feedback, today's report features a comprehensive macro regime analysis focused on dividend paying industries/stocks. Exhibit 4 provides a snapshot of this analysis.

Exhibit 3: The Current Inflation Backdrop Is Supportive of Owning Dividend-Related Factors



Source: Compustat, Morgan Stanley Research

Exhibit 4: High Dividend Paying Industry Performance In Various Macro Regimes: Inflation, PMI, Nominal Rates, Real Rate Backdrops

Inflation: Top 1000 Avg Industry Group Monthly Excess Returns (Equal-Weighted) under Different Inflation Regimes, Jan 2000 - Aug 2023, Annualized

Factor	Below Trend & Falling	Below Trend & Rising	Above Trend & Falling	Above Trend & Rising
Energy	-36.2%	26.9%	-4.9%	18.4%
Telecommunication Services	-0.2%	-24.8%	-14.6%	-2.9%
Real Estate	18.1%	-13.9%	6.6%	-3.1%
Banks	-0.4%	-4.9%	-2.9%	-3.1%
Food, Beverage & Tobacco	24.8%	-12.9%	11.1%	-7.5%
Utilities	19.9%	-27.3%	13.8%	-7.7%
MLP	-43.7%	60.4%	0.0%	34.8%

PMI: Top 1000 Avg Industry Group Monthly Excess Returns (Equal-Weighted) under Different PMI Regimes, Jan 2000 - Aug 2023, Annualized

Factor	Below Trend & Falling	Below Trend & Rising	Above Trend & Falling	Above Trend & Rising
Energy	2.6%	-8.2%	14.1%	0.5%
Telecommunication Services	-9.4%	-16.9%	-2.9%	-14.2%
Real Estate	-0.7%	7.4%	7.6%	-4.6%
Banks	-3.7%	-9.9%	-2.6%	2.0%
Food, Beverage & Tobacco	5.2%	5.5%	7.4%	-5.1%
Utilities	2.1%	0.3%	13.7%	-13.5%
MLP	2.0%	5.8%	28.2%	22.4%

Nom. 10Yr: Top 1000 Avg Industry Group Monthly Excess Returns (Equal-Weighted) under Different Nominal Rates Regimes, Jan 2000 - Aug 2023, Ann.

Factor	Below Trend & Falling	Below Trend & Rising	Above Trend & Falling	Above Trend & Rising
Energy	-5.6%	4.6%	-7.6%	19.7%
Telecommunication Services	-15.5%	-5.6%	-9.7%	-8.8%
Real Estate	21.4%	-16.7%	5.0%	-6.1%
Banks	-5.3%	4.9%	-22.3%	4.5%
Food, Beverage & Tobacco	18.5%	-11.3%	-7.3%	5.1%
Utilities	14.8%	-19.9%	4.6%	1.4%
MLP	-15.2%	29.8%	25.9%	30.2%

Real 10Yr: Top 1000 Avg Industry Group Monthly Excess Returns (Equal-Weighted) under Different Real Rate Regimes, Jan 2000 - Aug 2023, Annualized

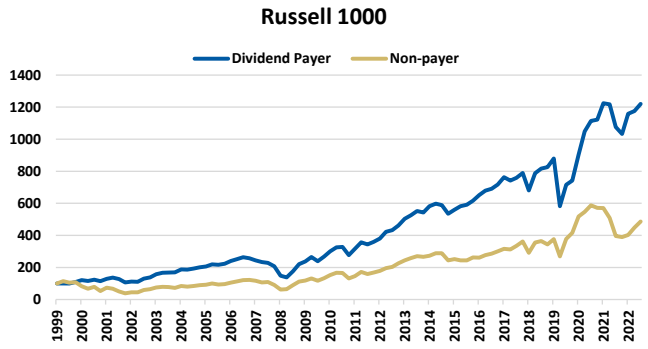
Factor	Below Trend & Falling	Below Trend & Rising	Above Trend & Falling	Above Trend & Rising
Energy	14.8%	1.2%	-5.6%	-6.2%
Telecommunication Services	-15.2%	-2.5%	-16.6%	-3.8%
Real Estate	9.7%	-6.0%	9.3%	-11.2%
Banks	-2.3%	-0.2%	-24.8%	14.4%
Food, Beverage & Tobacco	9.1%	-7.3%	-3.0%	9.4%
Utilities	2.6%	-11.0%	10.7%	-0.4%
MLP	19.1%	23.4%	27.1%	-13.4%

Source: Compustat, Morgan Stanley Research

Do dividend paying stocks outperform over time? Our work says Yes. We ran two empirical analyses on this front, and both point to outperformance of dividend paying stocks over the medium to long-term (Exhibit 5 and Exhibit 6). Dividends provide a positive return cushion with a notable portion of outperformance for payers versus non-payers coming during periods of market volatility. Dividend paying stocks have outperformed non-dividend paying stocks across all large cap sectors since 2000 with the exception of Consumer Discretionary. Relative outperformance of dividend payers is notably less significant within the small cap universe.

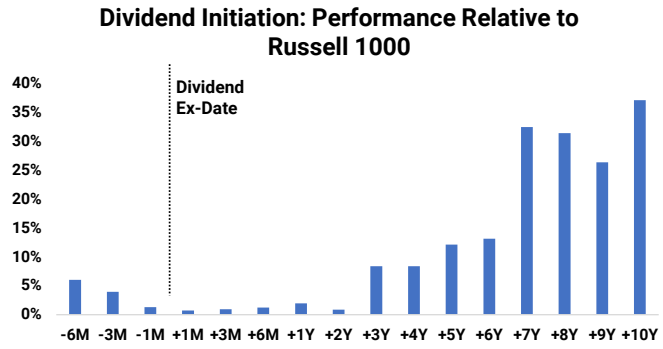
Our analysis in Exhibit 6 shows that stocks that recently initiated a dividend don't necessarily outperform over the first 1-2 years but do in fact **see outperformance over the medium to long-term (3-10 years)**. This outperformance is consistent at the index, sector and industry group level.

Exhibit 5: Dividend Payers Have Outperformed Over Time



Source: Compustat, Morgan Stanley Research

Exhibit 6: Stocks That Have Initiated a Dividend Since 2000 Have Outperformed the Market



Source: Compustat, Morgan Stanley Research

A holistic approach to dividend investing. We think it's important to balance yield with dividend growth, leverage, and underlying equity valuation. We provide the dividend dashboard below to compare and contrast the fundamental backdrop across high dividend paying industries. A few industry takeaways:

- MLPs: High dividend yield (6.2%) but dividends are volatile; attractive valuation but high leverage.
- Telecom Services: High dividend yield (5.6%); concentrated in a few stocks; attractive valuation but elevated leverage.
- Utilities: Offers above average yield (3.6%) and dividend stability over time; high leverage with net debt/ebitda at 5x; mixed on valuation metrics.
- Food Beverage & Tobacco: Above average yield (3.4%); leverage level is moderate; valuation is extended relative to the peer group below.
- Transports: Lower relative yield (2.1%) but high dividend growth and stability; middle of pack on leverage, valuation.

Exhibit 7: Industry Dividend Dashboard

				Leverage	Valuation			
GICS Level 2 Industry Group	Dividend Yield (Fwd)	5yr Dividend CAGR	Volatility of Change in Div. Yield	Net Debt/EBITDA (Fwd)	P/E (Fwd)	P/B (Fwd)	EV/EBITDA (Fwd)	FCF Yield (Fwd)
Alerian Midstream Energy Index	6.2%	6%	73%	3.6	11.8	2.1	8.5	9.9
Telecommunication Services	5.6%	-7%	24%	3.0	8.0	1.3	6.2	12.1
Real Estate	4.4%	3%	19%	5.1	14.7	2.4	16.6	5.0
Banks	3.8%	7%	21%	*	8.8	0.9	-	-
Utilities	3.6%	4%	14%	5.3	16.0	1.8	11.2	-1.2
Food Beverage & Tobacco	3.4%	4%	13%	2.1	17.0	4.8	12.9	5.2
Energy	3.0%	8%	39%	0.7	11.6	2.1	6.3	8.1
Household & Personal Products	2.5%	4%	10%	1.4	23.2	8.0	15.8	4.2
Transportation	2.1%	10%	11%	1.9	13.8	3.6	8.3	4.9
Pharma, Biotech & Life Sciences	2.0%	6%	9%	0.8	17.7	4.7	14.1	5.3
Insurance	2.0%	5%	14%	1.4	12.2	1.7	-	6.7
Materials	2.0%	7%	13%	1.4	16.4	2.5	9.7	4.8
Capital Goods	1.7%	3%	12%	1.2	17.7	4.1	12.5	5.2
S&P Composite 1500	1.6%	6%	9%	1.2	18.1	3.5	12.6	4.7

*Banks do not use Net Debt/EBITDA but run a highly leveraged business model with Assets/Equity of ~11x.

Source: Factset, Morgan Stanley Research

The Bottom-Up View...

2023 Top Dividend Picks from Morgan Stanley Research Analysts. We asked our analysts in high dividend yielding industries to provide their top dividend picks that

combine yield, growth and stability measures and look attractive on a 3-5 year basis from a dividend perspective. Exhibit 8 aggregates these top dividend picks, and key industry commentary from our analysts is provided below. **We feature several more screens in the body of the note,** including High Risk/Reward + High Dividend Yield (Exhibit 48), High Dividend Stability (Exhibit 50), and High Dividend Yield + 5Y Dividend Growth (Exhibit 52).

Exhibit 8: Top Dividend Picks from Morgan Stanley Bottom-Up Analysts

Ticker	Company	Analyst (Primary)	MS Rating	Morgan Stanley Industry	Price ($)	MS 2024 Dividend yield (%)
DTE	DTE ENERGY COMPANY	Arcaro, David	Overweight	Regulated Utilities	106.68	3.8%
EXC	EXELON CORP	Arcaro, David	Overweight	Regulated Utilities	40.83	3.7%
NEE	NEXTERA ENERGY INC	Arcaro, David	Overweight	Diversified Utilities / IPPs	67.36	3.0%
VZ	VERIZON COMMUNICATIONS INC	Flannery, Simon	Overweight	Telecom Services	33.62	8.0%
MTB	M & T BANK CORP	Gosalia, Manan	Overweight	Midcap Banks	126.62	4.3%
RF	REGIONS FINANCIAL CORP	Graseck, Betsy	Overweight	Large Cap Banks	17.82	5.6%
ET	ENERGY TRANSFER LP	Kad, Robert	Overweight	Midstream & Renewable Energy Infrastructure	13.90	9.6%
MPLX	MPLX LP	Kad, Robert	Equal-Weight	Midstream & Renewable Energy Infrastructure	35.08	9.9%
EPD	ENTERPRISE PRODUCTS PARTNERS	Kad, Robert	Equal-Weight	Midstream & Renewable Energy Infrastructure	27.21	7.8%
O	REALTY INCOME CORP	Kamdem, Ronald	Overweight	Real Estate Investment Trusts	53.80	5.8%
ADC	AGREE REALTY CORP	Kamdem, Ronald	Overweight	Real Estate Investment Trusts	58.72	4.6%
GLPI	GAMING AND LEISURE PROPERTIE	Kamdem, Ronald	Overweight	Gaming & Lodging	48.49	6.0%
SPG	SIMON PROPERTY GROUP INC	Kamdem, Ronald	Overweight	Real Estate Investment Trusts	113.76	6.7%
PM	PHILIP MORRIS INTERNATIONAL	Kaufman, Pamela	Overweight	Tobacco	97.71	5.5%
MDLZ	MONDELEZ INTERNATIONAL INC-A	Kaufman, Pamela	Overweight	Food	71.64	2.4%
UDR	UDR INC	Kramer, Adam	Overweight	Real Estate Investment Trusts	37.93	4.4%
INVH	INVITATION HOMES INC	Kramer, Adam	Overweight	Real Estate Investment Trusts	33.96	3.5%
XOM	EXXON MOBIL CORP	McDermott, Devin	Overweight	Integrated Energy	116.41	3.2%
HES	HESS CORP	McDermott, Devin	Overweight	Exploration & Production	156.26	1.2%
LNG	CHENIERE ENERGY INC	McDermott, Devin	Overweight	Diversified Natural Gas	161.30	1.1%
CL	COLGATE-PALMOLIVE CO	Mohsenian, Dara	Overweight	Household & Personal Care	73.76	2.7%
CHD	CHURCH & DWIGHT CO INC	Mohsenian, Dara	Overweight	Household & Personal Care	95.10	1.2%
PG	PROCTER & GAMBLE CO/THE	Mohsenian, Dara	Overweight	Household & Personal Care	153.41	2.5%

Source: Bloomberg, Morgan Stanley Research Estimates

Industry Views:

MLPs/Midstream Energy - Top Dividend Picks: ET, MPLX, EPD. Midstream Energy Infrastructure sector valuation remains dislocated on a FCF basis (median 2024e FCF yield before dividends of 10.5%) despite stable cash flows on long duration assets and healthy fundamentals. We believe incremental return of capital will drive rerating and be a key determinant of intrasector dispersion in performance. With high dividend yields (median 2024e dividend yield of 7.6%) supported by conservative balance sheets and capital allocation strategies, we believe the sector offers attractive yield for income-oriented investors.

Energy - Top Dividend Picks: XOM, HES, LNG. The Covid-driven price collapse in 2020 brought an end to a cycle defined by overinvestment, weak returns, and persistent underperformance. Concurrently, it ushered in a new period of pervasive capital discipline, which combined with higher oil prices underpins a median 2024 FCF yield of ~12% for the sector, ~2.5x the broader market, and supports an attractive ~7% total yield (dividends + buybacks) next year.

Telecom Services and Communications Infrastructure - Top Dividend Pick: VZ. Within Telecom Services, dividend stability is mixed as capex falls concurrent with 5G network upgrades nearing completion, and subscriber growth and pricing remain resilient. These positives are balanced by secular and competitive risks including generally high sector leverage relative to historical levels. Meanwhile, Tower and Data Center dividend policies in the Communications Infrastructure space largely reflect the earnings and capital gains distribution requirements under REIT rules, although some companies are paying out more than is required.

Real Estate - Top Dividend Picks: O, ADC, SPG, GLPI, INVH, UDR. We expect sectors with strong earnings growth and low maintenance capex levels to be in a relatively strong position to maintain dividend payments over the intermediate term. We are most positive on prospects for dividend growth in the **apartments**, **industrials**, **single family rental**,

towers and select names in triple net sectors. We view O, ADC, SPG, GLPI, INVH and UDR as the companies with the best prospects of maintaining and growing dividends.

Banks - Top Dividend Picks: CFG, HBAN, MTB, WBS, RF. We expect banks will be able to grow dividends ~5% in 2024 even as operating earnings decline given modest dividend payout ratios of 31% and increased flexibility of capital return post stress test rule changes in 2021. While regulators are calling for capital ratios to move higher over the next 6 years for many banks, we expect, if necessary, banks will cut back on buybacks which run at a higher payout ratio today. Even in the bear case of a surprise economic hard landing with commensurately higher credit losses, we expect the vast majority of our covered banks will not have to reduce current dividend per share payouts thanks to modest payout ratios today. More likely, we see dividends increasing over time either through higher payout ratios or rising operating earnings. In particular, we highlight 5 of our overweight names: CFG (6.4%), HBAN (5.9%), RF (4.9%), MTB (4.1%) and WBS (4.0%), which combine above-average dividend yields with balance sheets that are well-positioned for the current environment."

Tobacco & Packaged Foods - Top Dividend Picks: PM, MDLZ. In Tobacco, we view dividends as secure as the industry is highly cash generative, has limited capex needs, has relatively low leverage, and prioritizes dividends as a use of capital. Our preferred OW in the space is PM, which has an attractive HSD EPS outlooks, supporting its ability to sustain steady dividend growth. Within Packaged Food, we view dividends as stable given steady demand, high margins, strong FCF, and modest leverage. MDLZ is our key OW in Packaged Food as we expect double digit EPS growth through 2025, predictable capital expenditures to help sustain its payout ratio of nearly 50%, which we view as stable and predictable.

Beverages & Household Products - Top Dividend Picks: CL, CHD, PG. We view dividends for large cap beverages and HPC companies as highly secure given generally predictable demand for everyday use products and cash generative business models. Most our coverage has relatively low leverage and ample dividend coverage and we generally expect dividend growth to track earnings and free cash flow growth over the next 3-5 years. Our top three picks, CL/CHD/PG, we believe all offer attractive HSD EPS growth and subsequently dividend growth, with sustained market share gains behind strong execution, and a GM recovery tailwind as pricing outweighs cost pressure near-term, allowing for greater reinvestment behind the business. In our view, these companies understand the importance of a steady and rising dividend as part a the total shareholder return to their investor base.

Utilities - Top Dividend Picks: DTE, EXC, NEE. We consider regulated electric and gas utilities to have stable businesses with limited major downside risks that would put ongoing pressure on the ability to pay a consistent and growing dividend. Our top dividend ideas DTE/EXC/NEE combine quality, limited risks, strong growth opportunities and attractive risk reward.

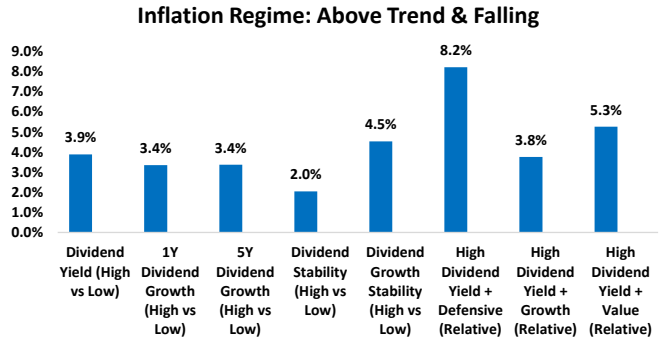
Top-Down Views

Macro Regimes

Dividends perform well in late cycle environments but the dominant macro factor can change performance. In order to determine the relative attractiveness of various dividend factors and industry groups throughout a cycle, we used our regime framework from our initial Inflation and Interest Rate Equity Playbook in 2021. We define regimes both in terms of long-term trend with short-term direction, producing a matrix with four quadrants. Below we present four different regimes analyses: Inflation, PMIs, Nominal 10Yr, and Real 10Yr.

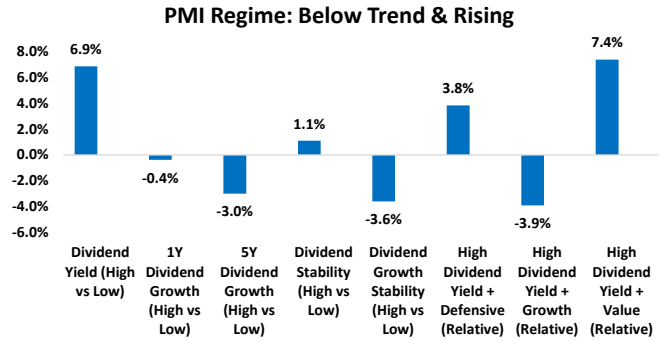
Looking across all regimes, we prefer High Dividend Yield + Defensive and Food, Beverage & Tobacco. Finding a winner across all four regimes is difficult but these were the most consistent results and also line up with our macro view for a late cycle environment. On the High Dividend Yield + Defensive, returns generally won't 'make' your year in terms of relative outperformance but they perform well historically because they tend to not ruin your year either. On the industry side, returns trend on a typical business cycle meaning that Energy/MLPs perform well in accelerating environments while Staples and Utilities perform well in decelerating environments. Most industries with high dividend payers on average tend to have a value bias but it's important to think about the distinction between defensive value and cyclical value. Our view skews toward defensive value or defensive growth but we present all regimes below as a resource to investors. **Lastly, the dominant macro factor driving markets tends to shift over time (i.e. inflation in 2022 and rates in 2023).** It might make sense to focus on only 1 or 2 regimes at a given time depending on your view for the dominant factor going forward.

Exhibit 9: Defensive & Value are Top Performers in Above Trending and Falling Inflation Regime



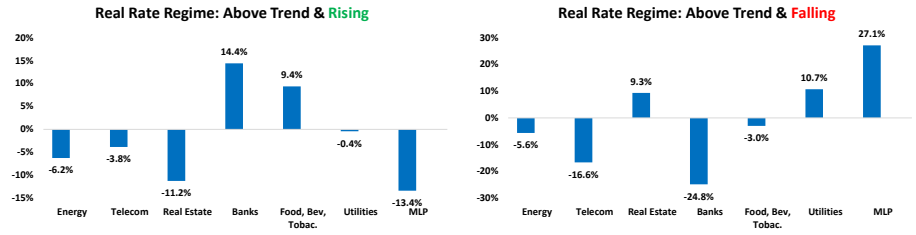
Source: Compustat, Morgan Stanley Research

Exhibit 10: Value & High Div Yield Are Top Performers If PMIs Rise From Here



Source: Compustat, Morgan Stanley Research

Exhibit 11:
The Next Direction for Real Rates Implies Big Performance Delta; MLPs, Banks, REITs see Bifurcated Performance



Source: Compustat, Morgan Stanley Research

Inflation Regimes

Performance based on inflation regimes depends heavily on a rising or falling inflation breakeven view. Based on our framework, we firmly sit in the Above Trend inflation regime. However, whether inflation direction goes up or down as measured by m/m changes in 10yr inflation breakevens is a more difficult question. Rising breakevens in an above trend environment suggest underperformance for most high dividend paying stocks while conversely, falling breakevens suggest a very positive environment for high paying dividend stocks. Looking at the industry group level, Staples and Utilities perform well with falling inflation breakevens while MLPs and Energy perform well with rising breakevens.

Exhibit 12: Inflation Regimes: Factors

Top 1000 Avg Dividend Factors Monthly Returns under Different Inflation Regimes, Jan 2000 - Aug 2023, Annualized

Factor	Below Trend & Falling	Below Trend & Rising	Above Trend & Falling	Above Trend & Rising
Dividend Yield (High vs Low)	2.0%	5.9%	3.9%	-2.0%
1Y Dividend Growth (High vs Low)	2.3%	-7.4%	3.4%	1.6%
5Y Dividend Growth (High vs Low)	0.4%	-4.7%	3.4%	-0.9%
Dividend Stability (High vs Low)	2.6%	-2.9%	2.0%	-3.3%
Dividend Growth Stability (High vs Low)	5.9%	-10.0%	4.5%	-3.8%
High Dividend Yield + Defensive (Relative)	11.4%	-14.1%	8.2%	-5.3%
High Dividend Yield + Growth (Relative)	5.4%	-12.8%	3.8%	-6.8%
High Dividend Yield + Value (Relative)	3.5%	-1.0%	5.3%	-0.8%

Source: Compustat, Morgan Stanley Research

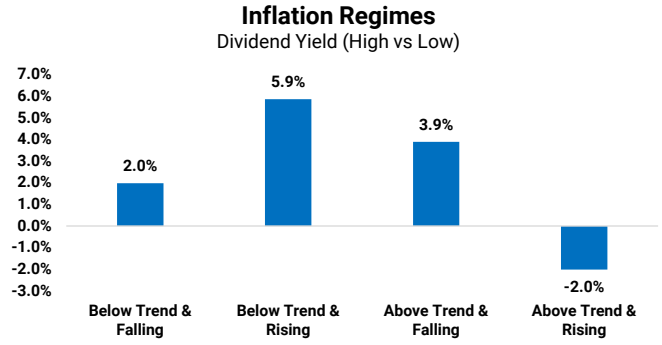
Exhibit 13: Inflation Regimes: Industries

Top 1000 Avg Industry Group Monthly Excess Returns (Equal-Weighted) under Different Inflation Regimes, Jan 2000 - Aug 2023, Annualized

Factor	Below Trend & Falling	Below Trend & Rising	Above Trend & Falling	Above Trend & Rising
Energy	-36.2%	26.9%	-4.9%	18.4%
Telecommunication Services	-0.2%	-24.8%	-14.6%	-2.9%
Real Estate	18.1%	-13.9%	6.6%	-3.1%
Banks	-0.4%	-4.9%	-2.9%	-3.1%
Food, Beverage & Tobacco	24.8%	-12.9%	11.1%	-7.5%
Utilities	19.9%	-27.3%	13.8%	-7.7%
MLP	-43.7%	60.4%	0.0%	34.8%

Source: Compustat, Morgan Stanley Research

Exhibit 14: High Dividend Yield during Inflation Regimes (monthly excess returns)



Source: Compustat, Morgan Stanley Research

Exhibit 15: Inflation Regime Definitions

	Above Trend	Below Trend
Rising Expectations	Core PCE > 5yr Moving Avg 10yr breakeven up m/m	Core PCE <= 5yr Moving Avg 10yr breakeven up m/m
Falling Expectations	Core PCE > 5yr Moving Avg 10yr breakeven down m/m	Core PCE <= 5yr Moving Avg 10yr breakeven down m/m

Source: Morgan Stanley Research

PMI Regimes

Below average PMI environments like today suggest a preference for MLPs and Food, Beverage & Tobacco. We measured PMI regimes as above or below the average since 2000 which comes out to a reading of 53. Given the latest reading of 48, we are in the Below Trend regime but the direction of travel from here remains a debate. Looking across industries in Below Trend environment, Food, Beverage & Tobacco and MLPs offer a positive return spread in both environments which makes for an attractive hedge. On the factor side, returns are bifurcated with the value tilt performing well in a rebounding environment while growth (both dividend growth and the High Div + Growth style) perform better in a below trend and falling environment.

Exhibit 16: PMI Regimes: Factors

Top 1000 Avg Dividend Factors Monthly Returns under PMI Regimes, Jan 2000 - Aug 2023, Annualized

Factor	Below Trend & Falling	Below Trend & Rising	Above Trend & Falling	Above Trend & Rising
Dividend Yield (High vs Low)	0.2%	6.9%	3.7%	-1.5%
1Y Dividend Growth (High vs Low)	3.3%	-0.4%	1.8%	-2.8%
5Y Dividend Growth (High vs Low)	3.5%	-3.0%	1.0%	-2.6%
Dividend Stability (High vs Low)	-1.5%	1.1%	2.1%	-2.3%
Dividend Growth Stability (High vs Low)	3.4%	-3.6%	1.2%	-4.2%
High Dividend Yield + Defensive (Relative)	0.4%	3.8%	6.2%	-7.9%
High Dividend Yield + Growth (Relative)	3.0%	-3.9%	-3.2%	-5.7%
High Dividend Yield + Value (Relative)	-2.0%	7.4%	5.6%	-2.0%

Source: Compustat, Morgan Stanley Research

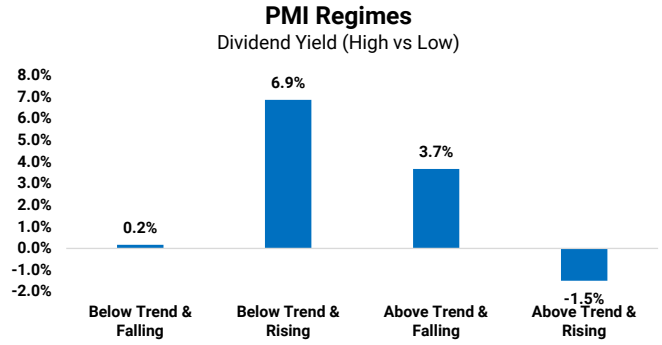
Exhibit 17: PMI Regimes: Industries

Top 1000 Avg Industry Group Monthly Excess Returns (Equal-Weighted) under Different PMI Regimes, Jan 2000 - Aug 2023, Annualized

Factor	Below Trend & Falling	Below Trend & Rising	Above Trend & Falling	Above Trend & Rising
Energy	2.6%	-8.2%	14.1%	0.5%
Telecommunication Services	-9.4%	-16.9%	-2.9%	-14.2%
Real Estate	-0.7%	7.4%	7.6%	-4.6%
Banks	-3.7%	-9.9%	-2.6%	2.0%
Food, Beverage & Tobacco	5.2%	5.5%	7.4%	-5.1%
Utilities	2.1%	0.3%	13.7%	-13.5%
MLP	2.0%	5.8%	28.2%	22.4%

Source: Compustat, Morgan Stanley Research

Exhibit 18: High Dividend Yield during PMI Regimes (monthly excess returns)



Source: Compustat, Morgan Stanley Research

Exhibit 19: PMI Regimes Definitions

	Above Trend	Below Trend
Rising	PMI > Avg since 2000 (~53) PMI up m/m on 3m avg.	PMI <= Avg since 2000 (~53) PMI up m/m on 3m avg.
Falling	PMI > Avg since 2000 (~53) PMI down m/m on 3m avg.	PMI <= Avg since 2000 (~53) PMI up m/m on 3m avg.

Note: Using ISM Manufacturing PMIs. Source: Morgan Stanley Research

Nominal Rate Regimes

MLPs are historically strong performers in above trend 10Yr rate environments. Sensitivity to rates in terms of valuation has a big impact on relative performance during rate regimes. In an above trend environment where we sit today, MLPs are the standout asset class. Energy is the primary beneficiary during rising rates while falling rates historically have pressured Banks. Factor performance benefits the growth style in a falling rate environment while rising rates benefits high dividend payers with the exception of the growth style.

Exhibit 20: Nominal Rate Regimes: Factors

Top 1000 Avg Dividend Factors Monthly Returns under Different Nominal Rates Regimes, Jan 2000 - Aug 2023, Annualized				
Factor	Below Trend & Falling	Below Trend & Rising	Above Trend & Falling	Above Trend & Rising
Dividend Yield (High vs Low)	5.0%	2.1%	-3.1%	1.5%
1Y Dividend Growth (High vs Low)	1.4%	-0.2%	2.4%	-0.5%
5Y Dividend Growth (High vs Low)	2.4%	-2.6%	-2.1%	1.2%
Dividend Stability (High vs Low)	3.0%	-5.4%	-1.4%	1.0%
Dividend Growth Stability (High vs Low)	4.0%	-4.6%	-4.0%	0.3%
High Dividend Yield + Defensive (Relative)	12.3%	-11.7%	-4.6%	1.3%
High Dividend Yield + Growth (Relative)	3.5%	-13.3%	6.8%	-3.8%
High Dividend Yield + Value (Relative)	9.2%	-3.1%	-5.4%	2.5%

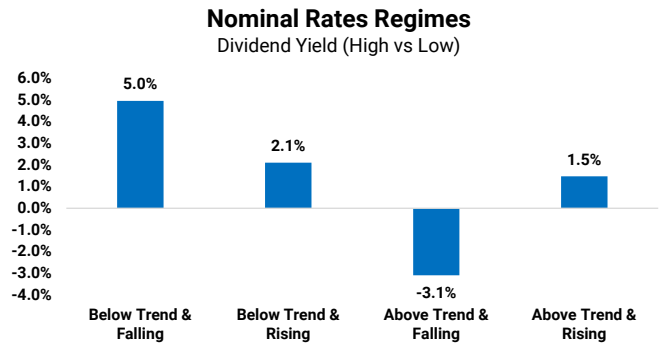
Source: Compustat, Morgan Stanley Research

Exhibit 21: Nominal Rate Regimes: Industries

Top 1000 Avg Industry Group Monthly Excess Returns (Equal-Weighted) under Different Nominal Rates Regimes, Jan 2000 - Aug 2023, Annualized				
Factor	Below Trend & Falling	Below Trend & Rising	Above Trend & Falling	Above Trend & Rising
Energy	-5.6%	4.6%	-7.6%	19.7%
Telecommunication Services	-15.5%	-5.6%	-9.7%	-8.8%
Real Estate	21.4%	-16.7%	5.0%	-6.1%
Banks	-5.3%	4.9%	-22.3%	4.5%
Food, Beverage & Tobacco	18.5%	-11.3%	-7.3%	5.1%
Utilities	14.8%	-19.9%	4.6%	1.4%
MLP	-15.2%	29.8%	25.9%	30.2%

Source: Compustat, Morgan Stanley Research

Exhibit 22: High Dividend Yield during Rate Regimes (monthly excess returns)



Source: Compustat, Morgan Stanley Research

Exhibit 23: Interest Rate Regimes

	Above Trend	Below Trend
Rising	10yr yield > 3yr Moving Avg 10yr yield up m/m	10yr yield <= 3yr Moving Avg 10yr yield up m/m
Falling	10yr yield > 3yr Moving Avg 10yr yield down m/m	10yr yield <= 3yr Moving Avg 10yr yield down m/m

Source: Morgan Stanley Research

Real Rate Regimes

Real rates regimes imply a better environment for high dividend stocks. Comparing real rates to nominal rates offers similar results with two exceptions: 1) high dividend factors imply stronger returns across the board and 2) imply a more negative environment for MLPs and Energy relative to nominal rates. Using real rates, Utilities look to be a better potential risk reward given uncertainty on the next direction of real rates.

Exhibit 24: Real Rate Regimes: Factors

Top 1000 Avg Dividend Factors Monthly Returns under Different Real Rate Regimes, Jan 2000 - Aug 2023, Annualized				
Factor	Below Trend & Falling	Below Trend & Rising	Above Trend & Falling	Above Trend & Rising
Dividend Yield (High vs Low)	4.6%	2.1%	-4.0%	2.0%
1Y Dividend Growth (High vs Low)	0.9%	-3.9%	3.7%	2.1%
5Y Dividend Growth (High vs Low)	2.1%	-5.5%	-0.5%	3.5%
Dividend Stability (High vs Low)	1.6%	-5.1%	-1.1%	1.8%
Dividend Growth Stability (High vs Low)	0.2%	-5.6%	-1.4%	5.1%
High Dividend Yield + Defensive (Relative)	8.5%	-11.2%	-4.8%	3.0%
High Dividend Yield + Growth (Relative)	3.8%	-19.2%	-0.9%	4.8%
High Dividend Yield + Value (Relative)	7.6%	-0.9%	-7.7%	2.4%

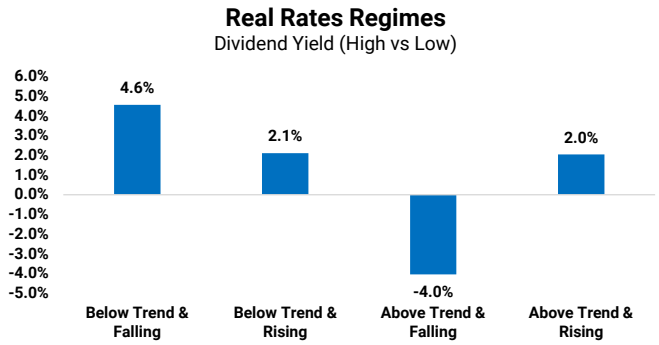
Source: Compustat, Morgan Stanley Research

Exhibit 25: Real Rate Regimes: Industries

Top 1000 Avg Industry Group Monthly Excess Returns (Equal-Weighted) under Different Real Rate Regimes, Jan 2000 - Aug 2023, Annualized				
Factor	Below Trend & Falling	Below Trend & Rising	Above Trend & Falling	Above Trend & Rising
Energy	14.8%	1.2%	-5.6%	-6.2%
Telecommunication Services	-15.2%	-2.5%	-16.6%	-3.8%
Real Estate	9.7%	-6.0%	9.3%	-11.2%
Banks	-2.3%	-0.2%	-24.8%	14.4%
Food, Beverage & Tobacco	9.1%	-7.3%	-3.0%	9.4%
Utilities	2.6%	-11.0%	10.7%	-0.4%
MLP	19.1%	23.4%	27.1%	-13.4%

Source: Compustat, Morgan Stanley Research

Exhibit 26: High Dividend Yield during Real Rate Regimes (monthly excess returns)



Source: Compustat, Morgan Stanley Research

Exhibit 27: Real Rate Regimes

	Above Trend	Below Trend
Rising	Real 10yr yield > 3yr Moving Avg. Real 10yr yield up m/m	Real 10yr yield <= 3yr Moving Avg. Real 10yr yield up m/m
Falling	Real 10yr yield > 3yr Moving Avg. Real 10yr yield down m/m	Real 10yr yield <= 3yr Moving Avg. Real 10yr yield down m/m

Source: Morgan Stanley Research

Does It Pay to Issue a Dividend?

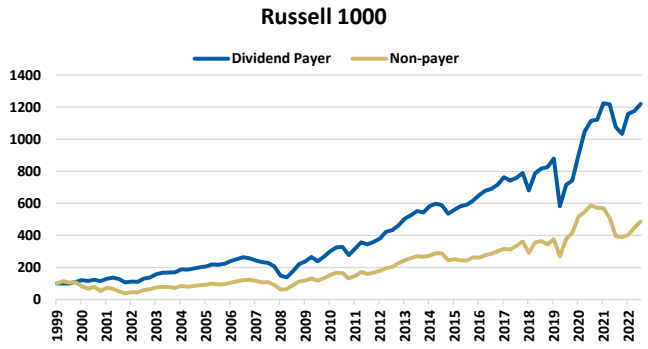
Our work suggests outperformance for dividend paying stocks. We looked at the performance of dividend paying stocks versus non-dividend paying stocks since 2000 and history suggests that dividend-paying stocks outperform non-dividend stocks over the medium to long-term. Specifically, the majority of outperformance comes during large market pullbacks such as 2000, 2008, 2015, and 2020. While it's hard to pinpoint the exact reasons for outperformance, two possible reasons jump out. First, stocks that pay dividends have relative stability due to the guaranteed positive return from the dividend payment. We can see this clearly over the long-term in Exhibit 28 where dividends comprise nearly 40% of total returns over the past century. The second reason, with less proof, is likely a quality bias. Paying a dividend in of itself does not lead to price appreciation over time. Rather, it's likely the cohort of companies that make a long-term decision to pay an annually recurring dividend that leads to longer-term appreciation, inclusion in large cap indexes (survivorship bias), and lower volatility during market downturns.

Paying a dividend is beneficial for all sectors except Discretionary. We ran our payer vs non-payer analysis across different universes and found that paying a dividend is less beneficial within small caps (Russell 2000) compared to large caps and is actually detrimental over time within Consumer Discretionary. Interestingly, both small caps and Discretionary are two high growth areas of the market which potentially tells us that the market prefers reinvestment via capex/R&D within these groups rather than dedicating capital to dividends. With this in mind, it's interesting that dividend payers have still outperformed non-dividend payers in the high growth Tech sector.

The benefit of paying a dividend vs non-payers is highest within Materials, Industrials, Utilities and Real Estate (Exhibit 30). Sectors where performance between payers and non-payers is more muted are Healthcare and Staples. Within these sectors, payers vs non-payers have performed in-line since 2000 but interestingly, a performance gap has recently opened in the post-Covid years. In general, the most relative outperformance comes during market volatility.

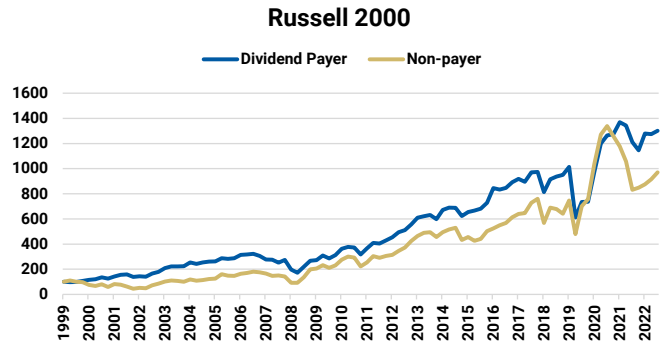
Lastly, we acknowledge this analysis is not perfect because we cannot quantify the opportunity cost of paying a dividend versus other capital uses such as reinvestment into the business or stock buybacks. Of the three general options, dividends tend to be the longest in duration as dividends are generally an annual commitment rather than a one-time injection. This further plays into our quality bias theory that companies that fall within the dividend paying cohort tend to be more stable.

Exhibit 28: Dividend Payers Outperform Over Time



Source: Compustat, Morgan Stanley Research

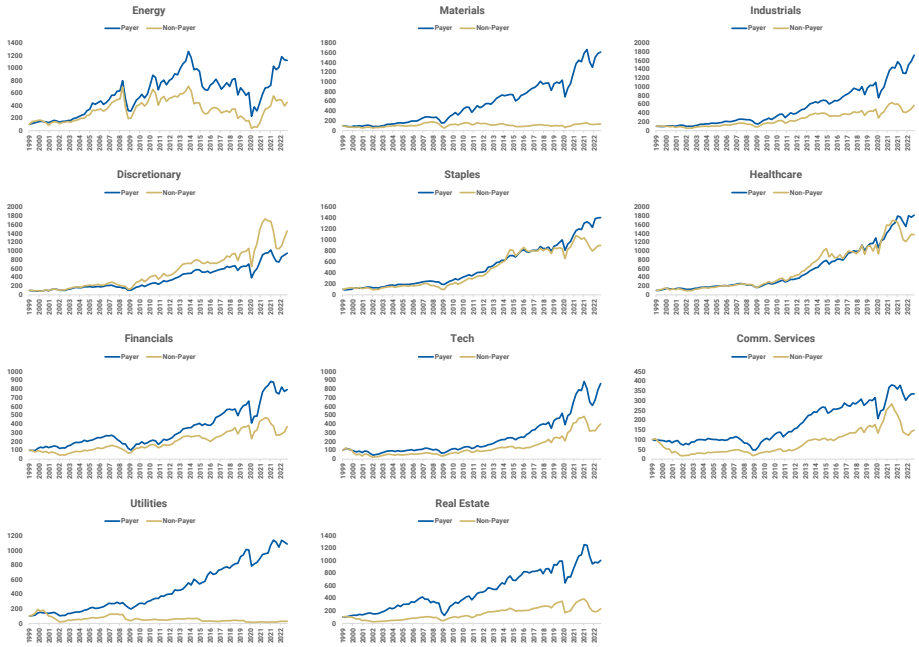
Exhibit 29: The Performance Delta is Less Extreme within Small Caps



Source: Compustat, Morgan Stanley Research

Exhibit 30:

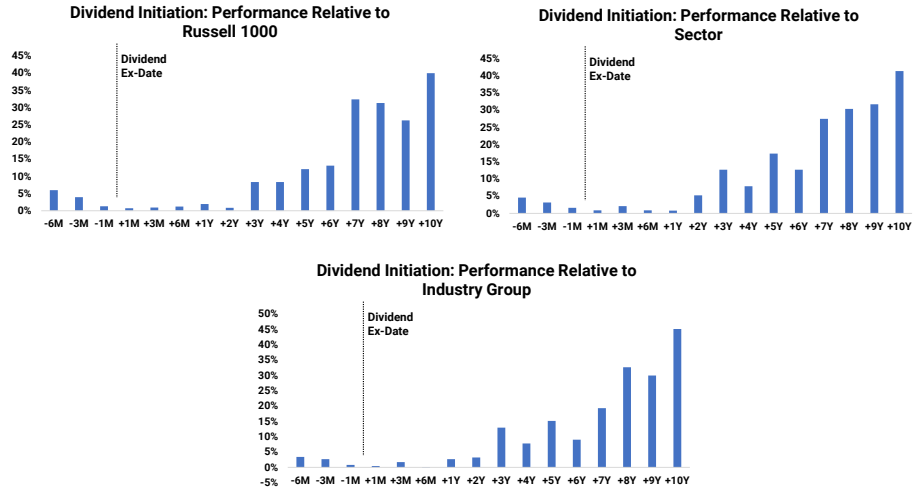
Dividends: Payers vs Non-Payers by Sector



Source: Compustat, Morgan Stanley Research

Our historical analysis suggests long-term outperformance following dividend initiation. We can see in the above exhibits that dividend payers outperform over the long-term but we wanted to check this result by looking at recent dividend initiations and subsequent returns. We analyzed 183 large cap stocks that initiated a dividend since 2000 and found similar results - over the long-term, stocks that initiate a dividend tend to outperform. These 183 stocks outperformed their peers at the index, sector, and industry group level over the medium to long-term. Significant outperformance (5%+) typically takes about 2-3 years to show up in our data but ramped up as we extended the analysis over a longer time frame.

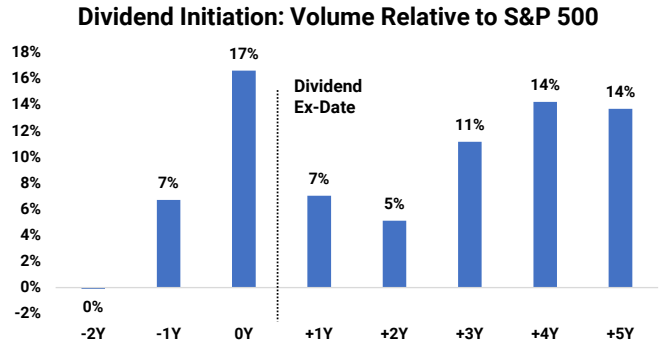
Exhibit 31: Stocks that Initiate Dividends Tend to Outperform after 2-3 Years



Note: Median performance from Dividend Ex-Date based on 183 dividend initiations in the Russell 1000 since 2000. Relative performance is versus the S&P 500 due to data history availability on Russell 1000. The quantity of stocks in each forward return bucket decreases at longer forward periods due to stocks with recent dividend initiations. Source: Bloomberg, Morgan Stanley Research

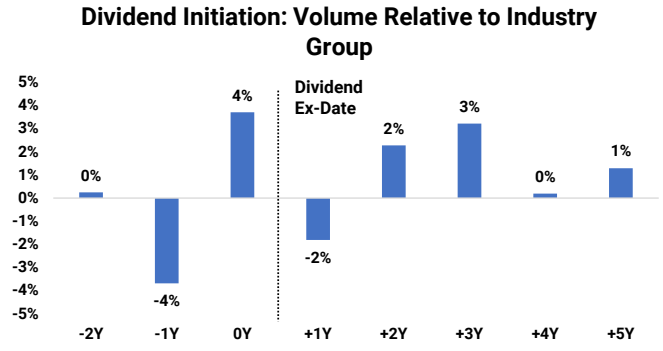
Initiating a Dividend does not necessarily increase trading volume. Aside from price appreciation, management teams have other reasons for issuing a dividend. A common rationale is to reach a new investor base such as people in retirement seeking income which could change the ownership base for the stock. With this in mind, we looked to see if issuing a dividend increases trading volume but with mixed results. We see an increase in the stocks trading volume relative to S&P 500 but we see a more neutral outcome when comparing to the industry group level. We suspect this might be more of a difference within index data versus single stock data and we prefer to trust the single stock vs single stock data which tells us that volume does not see any significant benefit. We can more confidently say that issuing a dividend does not hurt trading volume.

Exhibit 32: Stocks that Initiate Dividends See a Pickup in Volume vs SPX...



Source: Bloomberg, Morgan Stanley Research

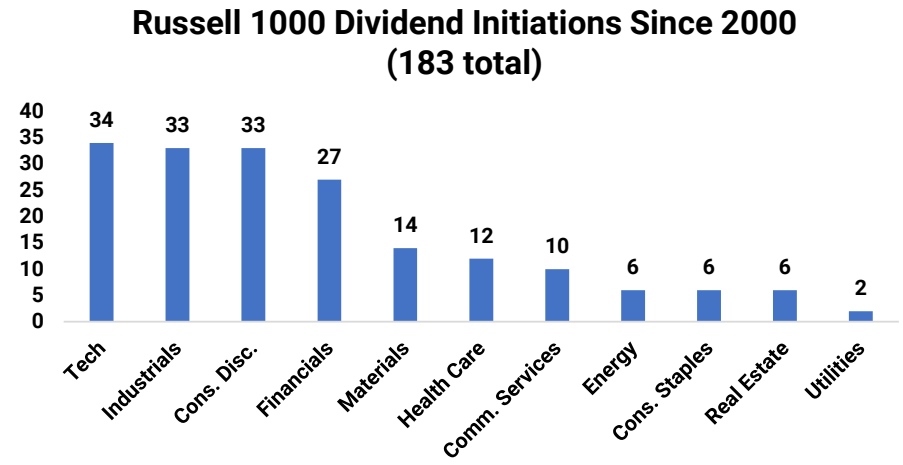
Exhibit 33: ...But There's Little Change vs. The Industry Group



Source: Bloomberg, Morgan Stanley Research

Universe Notes: Universe looks for the 1st issuance of a regular cash dividend since 2000 where the public stock has been listed for at least 6 months prior to issuing a dividend (i.e. excludes IPOs that issue a dividend). Using data ex-date due to data availability whereas the dividend announcement date would be ideal. There can be a gap of several days or weeks between a dividend announcement and the ex-date. However, the impact of initial market reactions should be minimal due to the longer-term nature of the analysis.

Exhibit 34: Large Cap Dividend Initiations since 2000



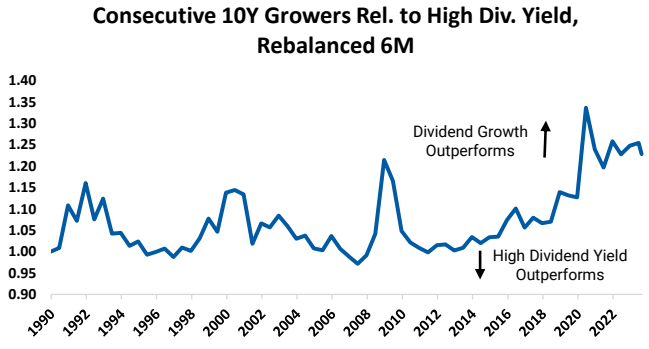
Source: Bloomberg, Morgan Stanley Research

Factor Analysis: Prefer Dividend Growth Over High Yields

Dividend factors have underperformed in 2023. The rotation away from defensives and towards growth in 2023 has coincided with the underperformance of high dividend paying stocks which tend to be more value, cyclical or defensive in nature. While dividend factors have generally underperformed during a growth-dominated 2023, we still see signs of investor uncertainty. Factors that are typically late-cycle safety plays such as **long-term dividend growth and dividend growth stability have performed well in 2023** which suggests the late-cycle environment continues, in our view.

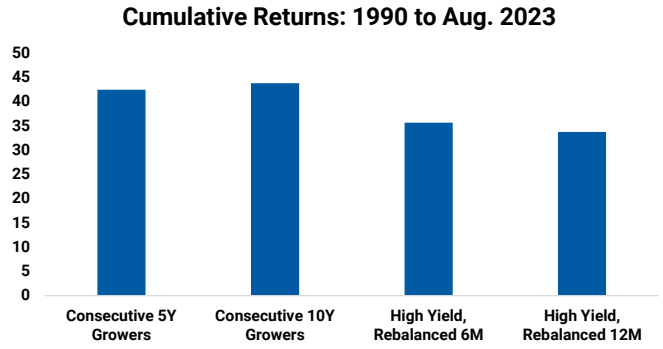
We prefer consecutive dividend growers over high dividend yields. Slow and steady wins the race and that's how we view dividend growth compared to high dividend yield. High dividend yield tends to outperform on market recoveries following a downturn but during most other periods, it underperforms relative to consecutive dividend growers. The conclusion sounds simple but we took a few steps to get there. High dividend yield as a simple factor inherently has a low valuation bias to it and tends to pick up dividend paying stocks after significant drops in price which then provides the outsized dividend yield. For research purposes, this is fine but in reality this creates a large amount of turnover that's unrealistic for most investors. To control for this bias, we created a custom factor that looks for high dividend yield but imposes a 6-month rebalance period to control turnover. We tested both 6-month and 12-month rebalance periods but ultimately, both underperformed steady dividend growers in our long-term analyses. On the short-term, high dividend yield can outperform during market recoveries (i.e. following recessions) but buying low valuation stocks during a market recovery is a generally accepted investing principle.

Exhibit 35: Consistent Dividend Growers Have Outperformed High Dividend Yield in the Post-GFC Era...



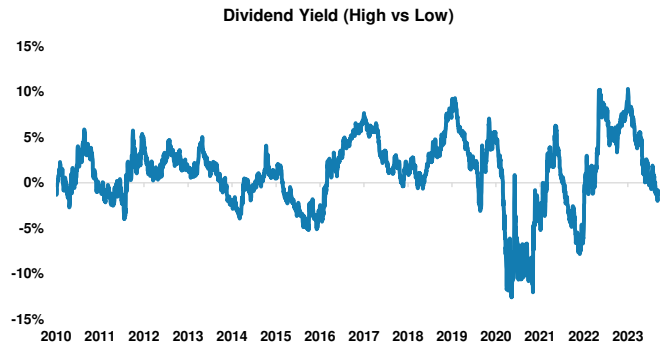
Note: High Dividend Yield factor is the top quintile of Top 1000 Dividend Yield stocks rebalanced on a 6-month basis. Source: Compustat, Morgan Stanley Research

Exhibit 36: ...And Show a Strong Track Record Historically



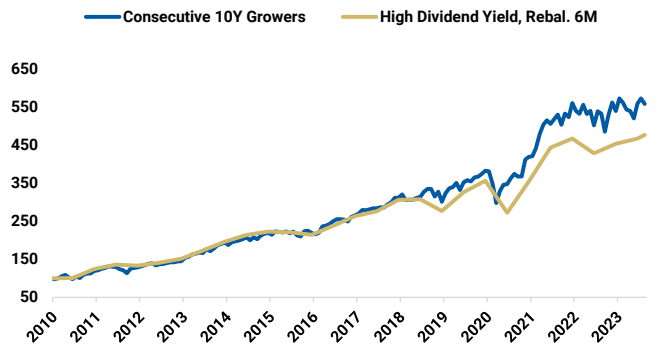
Source: Compustat, Morgan Stanley Research

Exhibit 37: Dividend Yield (High vs Low)



Source: Compustat, Morgan Stanley Research

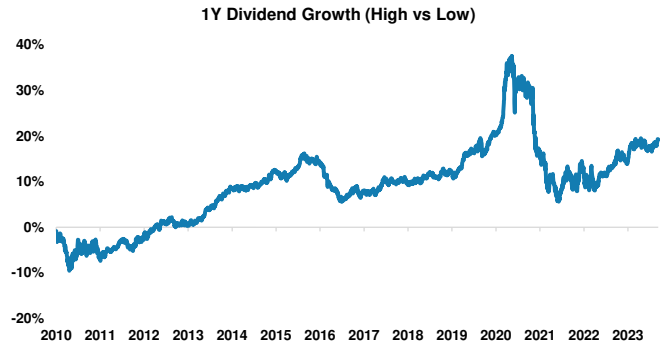
Exhibit 38: Factor Returns since 2010



Note: High Dividend Yield factor is the top quintile of Top 1000 Dividend Yield stocks rebalanced on a 6-month basis. Source: Compustat, Morgan Stanley Research

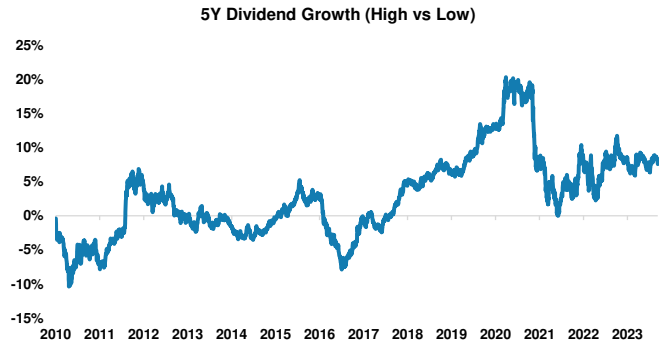
High dividend growth tends to outperform high dividends over time. High dividend yield (Exhibit 37) tends to be mean reverting over time, meaning that reaching for the highest yielding stocks should only be a tactical trade and not a long-term holding. Comparing this to the charts of 1Y and 5Y dividend growth (Exhibit 36-37), they show a more positive return trend (up-right on the graph) that provides slow, steady outperformance over time. The more defensive 1Y and 5Y dividend growth factors performed particularly well in 2017-2020 during the late cycle environment and saw ~25% of outperformance before the Covid crash. It's in these defensive, late cycle environments that the safety of dividend growth stocks shines and can provide attractive relative returns.

Exhibit 39: 1Y Dividend Growth



Source: Compustat, Morgan Stanley Research

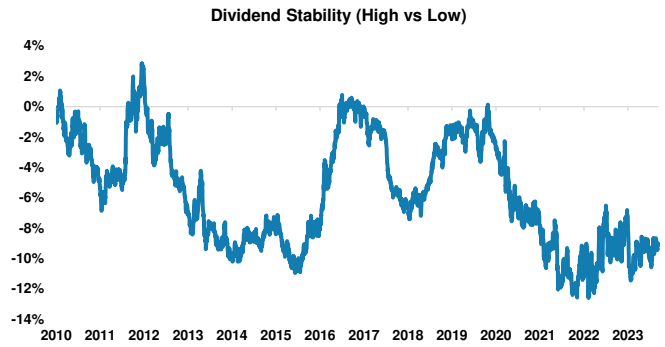
Exhibit 40: 5Y Dividend Growth



Source: Compustat, Morgan Stanley Research

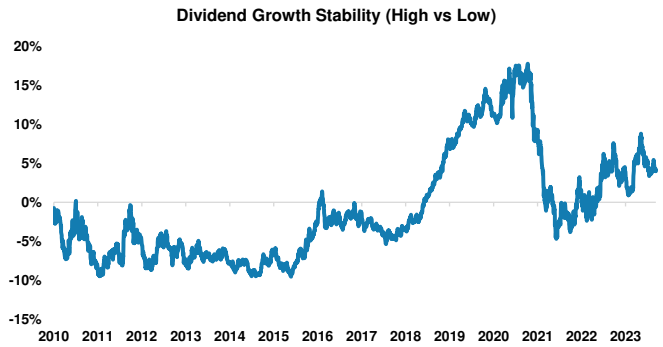
Dividend growth stability has held up. Dividend stability (Exhibit 41)is defined as the top quintile of low DPS volatility among top 1000 US stocks. while dividend *growth* stability looks at the volatility of this DPS growth. Dividend stability has been rangebound for most of 2022/2023 but dividend *growth* stability, a late cycle outperformer like in 2018-2020, has performed well in 2023 as investors looks for relative safety.

Exhibit 41: Dividend Stability (High vs Low)



Source: Compustat, Morgan Stanley Research

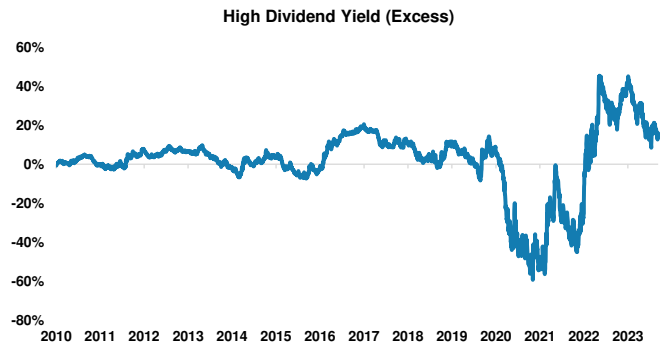
Exhibit 42: Dividend Growth Stability (High vs Low)



Source: Compustat, Morgan Stanley Research

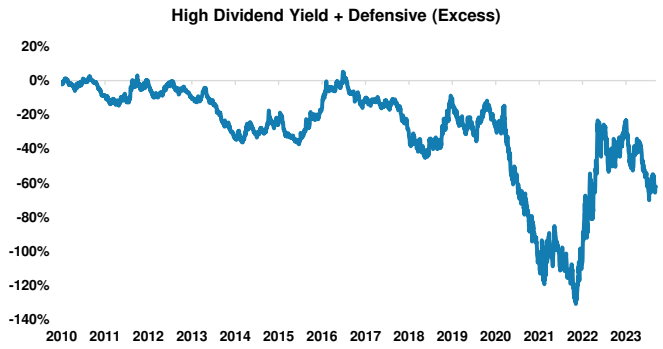
High dividend yield has underperformed in 2023. After two years of high dividend outperformance in 2021 and 2022, high dividend yield has lagged in 2023 as megacap tech and AI stocks dominate market returns. Looking at different styles within high dividend yield, GARP has held up slightly better than Defensive and Value which aligns with growth's relative outperformance at the index level. Value and defensive stocks saw a brief rebound in July as performance broadened to the average stock but that rally has faded in August. Lastly, we would note that screening on high dividend yield alone can be tricky given that some stocks can move into this category following large price selloffs which boost the yield.

Exhibit 43: High Dividend Yield, Relative to Top 1000



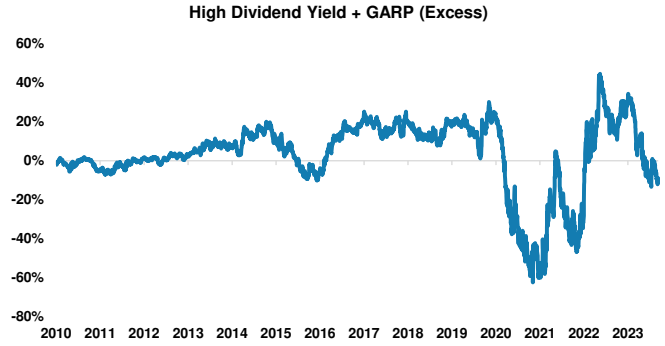
Source: Compustat, Morgan Stanley Research

Exhibit 44: High Dividend Yield + Defensive, Relative to Top 1000



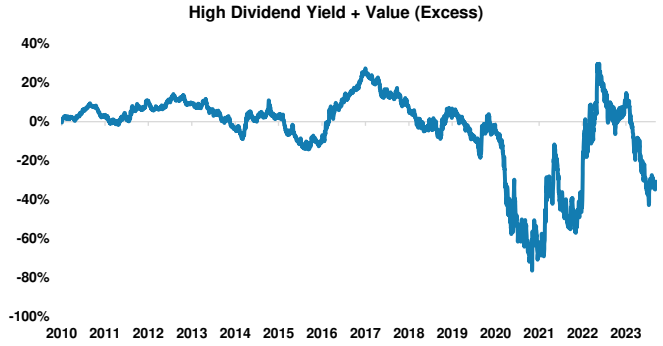
Source: Compustat, Morgan Stanley Research

Exhibit 45: High Dividend Yield + GARP, Relative to Top 1000



Source: Compustat, Morgan Stanley Research

Exhibit 46: High Dividend Yield + Value, Relative to Top 1000



Source: Compustat, Morgan Stanley Research

Dividend Screens

We provide 6 different dividend screens in the section below in order to help narrow down top dividend picks. The first screen aggregates the top dividend picks from our Morgan Stanley coverage analysts and the second screen is a proprietary quantitative framework using MS Research forecasts. The following four screens focus on more quantitative measures and include many of the dividend factors in the section prior.

Screen 1: Analyst Top Dividend Picks - The top dividend picks from MS coverage analysts in high dividend industries. We asked analysts to provide their top dividend paying stocks within their coverage and not necessarily their top picks overall. These stocks combine yield, growth, and stability measures and look attractive on a 3-5 year basis from a dividend yield perspective.

Exhibit 47: Screen 1: Top Dividend Picks from Morgan Stanley Bottom-Up Analysts

Ticker	Company	Analyst (Primary)	MS Rating	Morgan Stanley Industry	Price ($)	MS 2024 Dividend yield (%)
DTE	DTE ENERGY COMPANY	Arcaro, David	Overweight	Regulated Utilities	106.25	3.8%
EXC	EXELON CORP	Arcaro, David	Overweight	Regulated Utilities	40.21	3.7%
NEE	NEXTERA ENERGY INC	Arcaro, David	Overweight	Diversified Utilities / IPPs	67.70	3.0%
VZ	VERIZON COMMUNICATIONS INC	Flannery, Simon	Overweight	Telecom Services	33.28	8.0%
MTB	M & T BANK CORP	Gosalia, Manan	Overweight	Midcap Banks	124.26	4.3%
RF	REGIONS FINANCIAL CORP	Graseck, Betsy	Overweight	Large Cap Banks	17.07	5.6%
ET	ENERGY TRANSFER LP	Kad, Robert	Overweight	Midstream & Renewable Energy Infrastructure	13.82	9.6%
MPLX	MPLX LP	Kad, Robert	Equal-Weight	Midstream & Renewable Energy Infrastructure	35.03	9.9%
EPD	ENTERPRISE PRODUCTS PARTNERS	Kad, Robert	Equal-Weight	Midstream & Renewable Energy Infrastructure	27.39	7.8%
O	REALTY INCOME CORP	Kamdem, Ronald	Overweight	Real Estate Investment Trusts	51.56	5.8%
ADC	AGREE REALTY CORP	Kamdem, Ronald	Overweight	Real Estate Investment Trusts	56.94	4.6%
GLPI	GAMING AND LEISURE PROPERTIE	Kamdem, Ronald	Overweight	Gaming & Lodging	46.61	6.0%
SPG	SIMON PROPERTY GROUP INC	Kamdem, Ronald	Overweight	Real Estate Investment Trusts	111.68	6.7%
PM	PHILIP MORRIS INTERNATIONAL	Kaufman, Pamela	Overweight	Tobacco	94.97	5.5%
MDLZ	MONDELEZ INTERNATIONAL INC-A	Kaufman, Pamela	Overweight	Food	70.43	2.4%
UDR	UDR INC	Kramer, Adam	Overweight	Real Estate Investment Trusts	36.23	4.4%
INVH	INVITATION HOMES INC	Kramer, Adam	Overweight	Real Estate Investment Trusts	32.68	3.5%
XOM	EXXON MOBIL CORP	McDermott, Devin	Overweight	Integrated Energy	114.97	3.2%
HES	HESS CORP	McDermott, Devin	Overweight	Exploration & Production	150.07	1.2%
LNG	CHENIERE ENERGY INC	McDermott, Devin	Overweight	Diversified Natural Gas	159.78	1.1%
CL	COLGATE-PALMOLIVE CO	Mohsenian, Dara	Overweight	Household & Personal Care	72.45	2.7%
CHD	CHURCH & DWIGHT CO INC	Mohsenian, Dara	Overweight	Household & Personal Care	94.72	1.2%
PG	PROCTER & GAMBLE CO/THE	Mohsenian, Dara	Overweight	Household & Personal Care	151.56	2.5%

Source: Bloomberg, Morgan Stanley Research Estimates

Screen 2: Systematic Dividend Picks to Own/Avoid - We ran a quantitative screen using Morgan Stanley Research bull-base-bear forecasts to optimize total return and risk-reward among dividend paying stocks. This methodology compares upside/downside to price target, projected dividend yields, and bull-bear spread, and 1-year volatility to optimize risk and return metrics. We then ran the final 'To Own' (Exhibit 48) and 'To Avoid' (Exhibit 49) stocks by our coverage analysts as a fundamental overlay. The below lists represent the top and bottom two deciles of total return (PT upside + dividend yield) stocks as ranked by our model.

Exhibit 48: Screen 2a: Systematic Top Dividend Picks - To Own

Ticker	Company name	Analyst	Morgan Stanley industry	Current Price, as of 9/22/2023	MSe Price Target	MS Rating	Dividend yield (%) Mse '24	Total Expected Return
RPRX	Royalty Pharma Plc	Flynn, Terence	Major Pharmaceuticals	26.33	53	Overweight	2.9% e	85%
AES	AES Corp.	Arcaro, David	Diversified Utilities / IPPs	15.95	29	Overweight	4.1% e	74%
CCI	Crown Castle Corp.	Flannery, Simon	Communications Infrastructure	91.98	151	Overweight	6.6% e	61%
LHX	L3Harris Technologies Inc	Liwag, Kristine	Defense	173.64	264	Overweight	3.0% e	59%
CNK	Cinemark Holdings, Inc.	Swinburne, Benjamin	Media & Entertainment	17.64	24	Overweight	9.6% e	56%
BRDG	Bridge Investment Group	Cyprys, Michael	Brokers, Asset Managers & Exchanges	9.39	15	Overweight	8.6% e	56%
ETRN	Equitrans Midstream Corp	Kad, Robert	Midstream & Renewable Energy Infrastructure	9.56	14	Overweight	8.8% e	54%
HOG	Harley-Davidson Inc	Jonas, Adam	Autos & Shared Mobility	32.60	50	Overweight	3.0% e	52%
FMC	FMC Corporation	Andrews, Vincent	Chemicals	68.37	100	Overweight	3.4% e	50%
EMN	Eastman Chemical Co	Andrews, Vincent	Chemicals	75.77	115	Overweight	4.2% e	49%
RF	Regions Financial Corp	Graseck, Betsy	Large Cap Banks	17.07	26	Overweight	5.5% e	48%
EQH	Equitable Holdings Inc	Daily, Nigel	Insurance - Life/Annuity	28.06	40	Overweight	7.1% e	46%
WES	Western Midstream Partners LP	Kad, Robert	Midstream & Renewable Energy Infrastructure	26.72	35	Overweight	9.1% e	43%
O	Realty Income Corp	Kamdem, Ronald	Real Estate Investment Trusts	51.56	74	Overweight	5.7% e	40%
VZ	Verizon Communications	Flannery, Simon	Telecom Services	33.28	44	Overweight	7.9% e	37%
CNR	Canadian National Railway Co.	Shanker, Ravi	Freight Transportation	148.52	199	Overweight	2.0% e	36%
TRGP	Targa Resources Corp.	Kad, Robert	Midstream & Renewable Energy Infrastructure	84.45	114	Overweight	2.2% e	36%
NEE	NextEra Energy Inc	Arcaro, David	Diversified Utilities / IPPs	67.70	90	Overweight	3.0% e	36%
ET	Energy Transfer LP	Kad, Robert	Midstream & Renewable Energy Infrastructure	13.82	17	Overweight	9.7% e	34%
MDT	Medtronic PLC	Wood, Patrick	Medical Technology	80.27	104	Overweight	3.6% e	32%
CI	Cigna Corp	Wright, Erin	Healthcare Facilities & Managed Care	289.29	365	Overweight	3.6% e	31%
PM	Philip Morris International Inc	Kaufman, Pamela	Tobacco	94.97	118	Overweight	5.7% e	31%
JCI	Johnson Controls International Plc	Pokrzywinski, Joshua	Multi-Industry	55.15	73	Overweight	3.1% e	30%
AEP	American Electric Power Co	Arcaro, David	Diversified Utilities / IPPs	79.17	95	Overweight	4.6% e	27%
FE	FirstEnergy Corp	Arcaro, David	Regulated Utilities	36.05	43	Overweight	4.7% e	25%
MCD	McDonald's Corporation	Harbour, Brian	Restaurants	272.25	330	Overweight	2.4% e	20%

Source: Morgan Stanley Research Estimates, Eikon

Exhibit 49: Screen 2b: Systematic Top Dividend Picks - To Avoid

Ticker	Company name	Analyst	Morgan Stanley industry	Current Price, as of 9/22/2023	MSe Price Target	MS Rating	Dividend yield (%) Mse '24	Total Expected Return
VNO	Vornado Realty Trust	Kamdem, Ronald	Real Estate Investment Trusts	22.42	12	Underweight	4.2% e	-48%
UPS	United Parcel Service	Shanker, Ravi	Freight Transportation	153.75	100	Underweight	3.6% e	-33%
SAH	Sonic Automotive Inc	Jonas, Adam	Autos & Shared Mobility	49.16	35	Underweight	2.3% e	-30%
CHRW	C.H. Robinson Worldwide Inc.	Shanker, Ravi	Freight Transportation	85.93	62	Underweight	2.4% e	-26%
EIX	Edison International	Arcaro, David	Regulated Utilities	68.08	51	Underweight	4.5% e	-23%
VCTR	Victory Capital Holdings Inc	Cyprys, Michael	Brokers, Asset Managers & Exchanges	33.73	26	Underweight	3.9% e	-20%
EBAY	eBay Inc	Schenk, Lauren	Internet	43.13	34	Underweight	2.3% e	-20%
WU	Western Union Co	Faucette, James	Payments and Processing	13.05	10	Underweight	8.0% e	-15%
ED	Consolidated Edison Inc	Arcaro, David	Regulated Utilities	90.83	73	Underweight	3.7% e	-15%
DK	Delek US Holdings Inc	Laetsch, Joe	Refining & Marketing	29.18	25	Underweight	3.1% e	-15%
AEO	American Eagle Outfitters, Inc.	Straton, Alex	Retail, Specialty Retail	14.99	13	Underweight	2.6% e	-14%
XRX	Xerox Corp	Woodring, Erik	IT Hardware	16.09	13	Underweight	6.5% e	-13%
MC	Moelis & Co	Kenny, Ryan	Midcap Advisors	44.60	39	Underweight	4.6% e	-13%
UE	Urban Edge Properties	Kamdem, Ronald	Real Estate Investment Trusts	15.75	14	Underweight	3.9% e	-11%
VRTS	Virtus Investment Partners	Cyprys, Michael	Brokers, Asset Managers & Exchanges	200.89	173	Underweight	3.5% e	-11%
XHR	Xenia Hotels & Resorts Inc	Grambling, Stephen	Gaming & Lodging	11.51	10	Underweight	6.6% e	-10%
MGEE	MGE Energy, Inc.	Arcaro, David	Diversified Utilities / IPPs	73.44	63	Underweight	2.4% e	-10%
HPE	Hewlett Packard Enterprise	Marshall, Meta	IT Hardware	17.02	15	Underweight	2.8% e	-9%

Source: Morgan Stanley Research Estimates, Eikon

Screen 3: High Dividend Stability - Quantitative screen looking at the top 40 stocks with the lowest 5 year Dividend Per Share (DPS) volatility, sorted by the lowest volatility at the top. Universe is top 1000 US stocks by market cap excluding Underweight rated stocks.

Exhibit 50: Screen 3: High Dividend Stability (sorted by most stable)

Ticker	Company Name	Sector	Industry Group	Price	Market Cap ($MM)	MS Rating
NVT	NVENT ELECTRIC PLC	Industrials	Capital Goods	52.43	9,373	Not Covered
FRFHF	FAIRFAX FIN	Financials	Insurance	843.40	20,716	Not Covered
NWSA	NEWS CORP NEW CLASS	Communication Services	Media & Entertainment	19.59	12,414	Not Covered
CC	CHEMOURS COMPANY	Materials	Materials	28.61	5,038	Equal-Weight
FTV	FORTIVE CORP	Industrials	Capital Goods	73.27	27,757	Overweight
JBL	JABIL IN	Information Technology	Technology Hardware & Equipment	104.98	14,975	Not Covered
BWA	BORG WARNER	Consumer Discretionary	Automobiles & Components	39.84	9,579	Overweight
L	LOEWS CORP	Financials	Insurance	63.92	14,002	Not Covered
NYCB	NEW YORK COMMUNITY B	Financials	Banks	11.26	8,872	Equal-Weight
VRT	VERTIV HOLDINGS LLC	Industrials	Capital Goods	35.52	14,989	Not Covered
TXT	TEXTRON INC	Industrials	Capital Goods	78.00	15,392	Overweight
OGN	ORGANON & CO	Health Care	Pharmaceuticals, Biotechnology & Life Sciences	17.25	5,612	Equal-Weight
EFX	EQUIFAX INC	Industrials	Commercial & Professional Services	180.25	25,366	Equal-Weight
RVTY	REVVITY INC	Health Care	Pharmaceuticals, Biotechnology & Life Sciences	108.93	14,527	Not Covered
TFX	TELEFLEX INC	Health Care	Health Care Equipment & Services	199.94	9,997	Equal-Weight
STWD	STARWOOD PROPERTY TR	Financials	Financial Services	19.42	6,390	Not Covered
IBKR	INTERACTIVE BROKERS	Financials	Financial Services	86.30	9,743	Not Covered
AYI	ACUITY BRANDS WI	Industrials	Capital Goods	164.64	4,982	Not Covered
COO	COOPER COS INC	Health Care	Health Care Equipment & Services	322.07	18,317	Equal-Weight
ZBH	ZIMMER BIOMET HOLDIN	Health Care	Health Care Equipment & Services	112.44	24,892	Equal-Weight
MRVL	MARVELL TECHNOLOGY I	Information Technology	Semiconductors & Semiconductor Equipment	51.71	50,258	Equal-Weight
ARMK	ARAMARK	Consumer Discretionary	Consumer Services	34.79	9,706	Equal-Weight
OHI	OMEGA HEALTHCARE	Real Estate	Equity Real Estate Investment Trusts (REITs)	33.31	7,792	Not Covered
NVDA	NVIDIA CORP	Information Technology	Semiconductors & Semiconductor Equipment	419.11	1,219,069	Overweight
AIRC	APARTMENT INCOME REI	Real Estate	Equity Real Estate Investment Trusts (REITs)	30.62	5,083	Not Covered
IRM	IRON MOUNTAIN	Real Estate	Equity Real Estate Investment Trusts (REITs)	59.88	18,544	Not Covered
REYN	REYNOLDS CONSUMER PR	Consumer Staples	Household & Personal Products	25.97	5,731	Not Covered
AIG	AMER INTL GROUP	Financials	Insurance	61.25	41,660	Equal-Weight
IBM	INTL BUSINESS MACHIN	Information Technology	Software & Services	143.24	133,763	Equal-Weight
AZN	ASTRAZENECA PLC-SPON	Health Care	Pharmaceuticals, Biotechnology & Life Sciences	68.22	209,420	Not Covered
BKR	BAKER HUGHES CO	Energy	Energy	35.71	36,539	Overweight
DOV	DOVER CORP	Industrials	Capital Goods	139.85	20,743	Equal-Weight
K	KELLOGG CO	Consumer Staples	Food, Beverage & Tobacco	59.19	20,890	Equal-Weight
AMCR	AMCOR PLC	Materials	Materials	9.10	13,886	Not Covered
FE	FirstEnergy Corp	Utilities	Utilities	35.31	20,681	Overweight
FLS	FLOWSERVE CORP	Industrials	Capital Goods	38.91	5,192	Equal-Weight

Source: Compustat, Morgan Stanley Research

Screen 4: High Dividend Yield + Defensive - Top quintile of dividend yield combined with the top quintile of our proprietary defensive factor. The defensive factor is a based on a mix of short/long term market beta, volatility, earnings estimate dispersion, volatility of ROE, and average underperformance in market declines. Universe is top 1000 US stocks by market cap excluding Underweight rated stocks.

Exhibit 51: Screen 4: High Dividend Yield + Defensive

Ticker	Company Name	Sector	Industry Group	Price	Market Cap ($MM)	MS Rating
T	AT & T INC	Communication Services	Telecommunication Services	15.07	105,740	Equal-Weight
HAS	HASBRO	Consumer Discretionary	Consumer Durables & Apparel	65.70	9,989	Not Covered
GRMN	GARMIN LTD	Consumer Discretionary	Consumer Durables & Apparel	105.49	20,298	Equal-Weight
HRB	H & R BLOCK INC	Consumer Discretionary	Consumer Services	42.54	5,877	Not Covered
CAG	CONAGRA BRANDS INC	Consumer Staples	Food, Beverage & Tobacco	28.39	14,279	Equal-Weight
FLO	FLOWERS FOODS ORD	Consumer Staples	Food, Beverage & Tobacco	22.75	4,979	Not Covered
KHC	KRAFT HEINZ CO/THE	Consumer Staples	Food, Beverage & Tobacco	34.20	40,644	Equal-Weight
K	KELLOGG CO	Consumer Staples	Food, Beverage & Tobacco	59.40	20,890	Equal-Weight
MO	ALTRIA GROUP INC	Consumer Staples	Food, Beverage & Tobacco	41.98	78,473	Equal-Weight
PM	PHILIP MORRIS	Consumer Staples	Food, Beverage & Tobacco	93.62	149,118	Overweight
FHN	FIRST HORIZON CORP	Financials	Banks	11.17	7,012	Not Covered
TFC	TRUIST FINANCIAL COR	Financials	Banks	28.65	40,692	Equal-Weight
NYCB	NEW YORK COMMUNITY B	Financials	Banks	11.23	8,872	Equal-Weight
NLY	ANNALY CAPITAL MANAG	Financials	Financial Services	19.87	10,012	Not Covered
AGNC	AGNC INVESTMENT CORP	Financials	Financial Services	9.79	6,006	Not Covered
STWD	STARWOOD PROPERTY TR	Financials	Financial Services	19.84	6,390	Not Covered
CNA	CNA FIN CORP	Financials	Insurance	40.41	10,653	Not Covered
AFG	AMER FINANCIAL	Financials	Insurance	113.61	9,837	Not Covered
RLI	RLI CORP	Financials	Insurance	139.63	5,997	Not Covered
ORI	OLD REPUBLIC	Financials	Insurance	27.40	7,519	Not Covered
MDT	MEDTRONIC INC	Health Care	Health Care Equipment & Services	79.80	108,489	Overweight
CVS	CVS HEALTH CORP	Health Care	Health Care Equipment & Services	72.16	83,704	Overweight
VTRS	VIATRIS INC	Health Care	Pharmaceuticals, Biotechnology & Life Sciences	9.69	12,895	Not Covered
ABBV	ABBVIE INC	Health Care	Pharmaceuticals, Biotechnology & Life Sciences	154.28	259,391	Overweight
PRGO	PERRIGO CO PLC	Health Care	Pharmaceuticals, Biotechnology & Life Sciences	32.12	4,739	Not Covered
GILD	GILEAD SCIENCES INC	Health Care	Pharmaceuticals, Biotechnology & Life Sciences	74.70	95,295	Equal-Weight
OGN	ORGANON & CO	Health Care	Pharmaceuticals, Biotechnology & Life Sciences	17.97	5,612	Equal-Weight
HON	HONEYWELL INTERNATIO	Industrials	Capital Goods	190.87	124,785	Equal-Weight
LHX	L3HARRIS TECHNOLOGIE	Industrials	Capital Goods	174.33	33,683	Overweight
JCI	JOHNSON CONTROLS INT	Industrials	Capital Goods	55.02	40,180	Overweight
LMT	LOCKHEED MARTIN CORP	Industrials	Capital Goods	412.57	112,909	Equal-Weight
RTX	RTX CORP	Industrials	Capital Goods	71.56	124,936	Equal-Weight
HII	HUNTINGTON INGALLS I	Industrials	Capital Goods	201.97	8,784	Not Covered
PAYX	PAYCHEX INC	Industrials	Commercial & Professional Services	113.58	44,070	Equal-Weight
TRI	THOMSON REUTERS CORP	Industrials	Commercial & Professional Services	125.93	58,520	Equal-Weight
RBA	RB GLOBAL INC	Industrials	Commercial & Professional Services	63.34	11,236	Not Covered
IBM	INTL BUSINESS MACHIN	Information Technology	Software & Services	146.80	133,763	Equal-Weight
ERIC	ERICSSON ADS	Information Technology	Technology Hardware & Equipment	5.02	17,174	Not Covered
HPQ	HP INC	Information Technology	Technology Hardware & Equipment	26.40	29,293	Equal-Weight
CSCO	CISCO SYSTEMS	Information Technology	Technology Hardware & Equipment	53.47	233,705	Equal-Weight
GOLD	BARRICK GOLD	Materials	Materials	15.59	28,400	Not Covered
NEM	NEWMONT CORP	Materials	Materials	40.29	31,328	Not Covered
GLPI	GAMING AND LEISU	Real Estate	Equity Real Estate Investment Trusts (REITs)	46.47	12,449	Overweight
CCI	CROWN CASTLE INC	Real Estate	Equity Real Estate Investment Trusts (REITs)	91.83	43,585	Overweight
PNW	PINNACL WEST CAP	Utilities	Utilities	77.42	8,756	Equal-Weight
DUK	DUKE ENERGY CORP	Utilities	Utilities	93.07	68,439	Equal-Weight
OGE	OGE ENERGY	Utilities	Utilities	35.04	6,820	Not Covered

Source: Compustat, Morgan Stanley Research

Screen 5: High Dividend Yield + 5Y Dividend Growth - Top quintile of dividend yield combined with the top quintile of our High 5 year dividend growth. Universe is top 1000 US stocks by market cap excluding Underweight rated stocks.

Exhibit 52: Screen 5: High Dividend Yield + 5Y Dividend Growth

Ticker	Company Name	Sector	Industry Group	Price	Market Cap ($MM)	MS Rating
BBY	BEST BUY CO INC	Consumer Discretionary	Consumer Discretionary Distribution & Retail	69.64	17,199	Equal-Weight
DDS	DILLARD DEPT A	Consumer Discretionary	Consumer Discretionary Distribution & Retail	317.21	5,660	Not Covered
DVN	DEVON ENERGY	Energy	Energy	47.265	32,733	Equal-Weight
CTRA	COTERRA ENERGY INC	Energy	Energy	26.595	21,285	Equal-Weight
CMA	COMERICA INC	Financials	Banks	41.315	6,340	Equal-Weight
CFG	CITIZENS FINANL	Financials	Banks	26.56	13,286	Overweight
RLI	RLI CORP	Financials	Insurance	139.63	5,997	Not Covered
ABBV	ABBVIE INC	Health Care	Pharmaceuticals, Biotechnology & Life Sciences	154.275	259,391	Overweight
AGCO	AGCO CORP	Industrials	Capital Goods	115.97	9,699	Not Covered
TRI	THOMSON REUTERS CORP	Industrials	Commercial & Professional Services	125.93	58,520	Equal-Weight
RBA	RB GLOBAL INC	Industrials	Commercial & Professional Services	63.34	11,236	Not Covered
GOLD	BARRICK GOLD	Materials	Materials	15.59	28,400	Not Covered
NEM	NEWMONT CORP	Materials	Materials	40.285	31,328	Not Covered
SCCO	SOUTHERN COPPER CORP	Materials	Materials	74.455	62,359	Not Covered
UGI	UGI CORP HLDS	Utilities	Utilities	24.435	5,275	Not Covered

Source: Compustat, Morgan Stanley Research

Screen 6: High Dividend + Low Leverage - Top quintile of dividend yield combined with the bottom quintile by net debt/EBITDA. Universe is top 1000 US stocks by market cap excluding Underweight rated stocks.

Exhibit 53: Screen 6: High Dividend Yield + Low Leverage

Ticker	Company Name	Sector	Industry Group	Price	Market Cap ($MM)	MS Rating
DDS	DILLARD DEPT A	Consumer Discretionary	Consumer Discretionary Distribution & Retail	317.21	5,660	Not Covered
CHK	CHESAPEAKE ENERGY CO	Energy	Energy	82.98	11,675	Not Covered
CHRD	CHORD ENERGY CORP	Energy	Energy	158.71	6,707	Not Covered
CIVI	CIVITAS RESOURCES IN	Energy	Energy	80.305	7,709	Not Covered
PRU	PRUDENTIAL FINANCIAL	Financials	Insurance	96.87	34,403	Equal-Weight
SNA	SNAP-ON INC	Industrials	Capital Goods	255.8	14,213	Not Covered
RHI	ROBERT HALF INC	Industrials	Commercial & Professional Services	74.01	7,790	Not Covered
PAYX	PAYCHEX INC	Industrials	Commercial & Professional Services	113.58	44,070	Equal-Weight
GOLD	BARRICK GOLD	Materials	Materials	15.59	28,400	Not Covered
OGE	OGE ENERGY	Utilities	Utilities	35.035	6,820	Not Covered

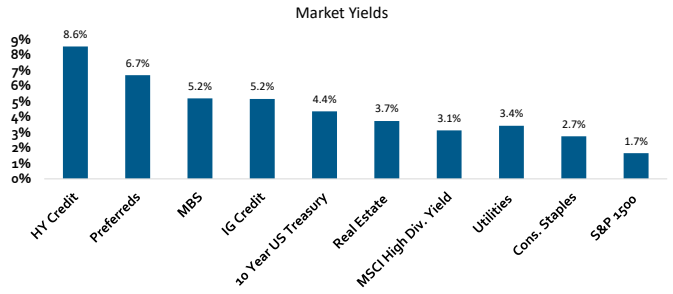
Source: Compustat, Morgan Stanley Research

Key Dividend Metrics

We group a number of macro-oriented charts in this section to show dividend metrics across both broad indexes and to show relationships over time.

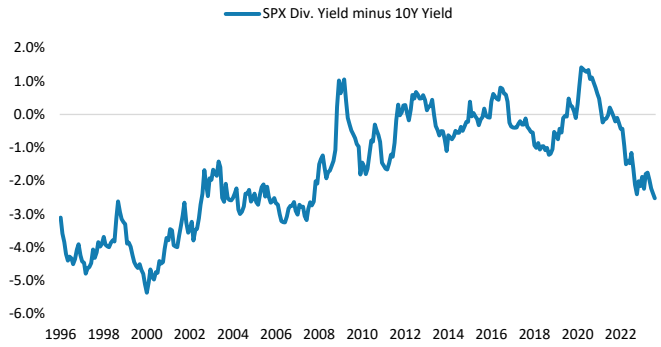
Relative Yields. We first compare market relative yields on the cross-asset spectrum, comparing yields across equities, rates, and credit. While equities provide lower yields than credit, certain sectors such as Real Estate or Utilities can bridge this gap. However, the steepest competition for dividend yield often comes from the 10-Year Treasury, which as the time of publishing, yields 4.4%. While some investors may be constrained to equity as an asset class, the higher yields from Treasuries create an opportunity cost for investors at this time.

Exhibit 54: Relative Market Yields



Source: Bloomberg, Factset, Morgan Stanley Research

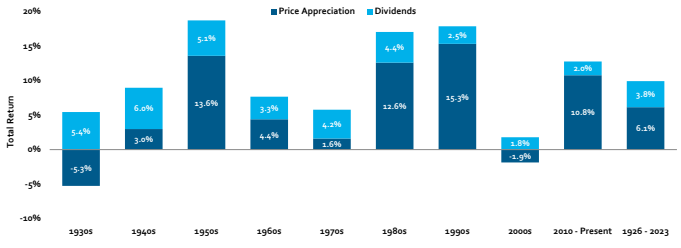
Exhibit 55: S&P 500 Dividend Yield minus 10-Year Treasury Yield



Source: Bloomberg, Factset, Morgan Stanley Research

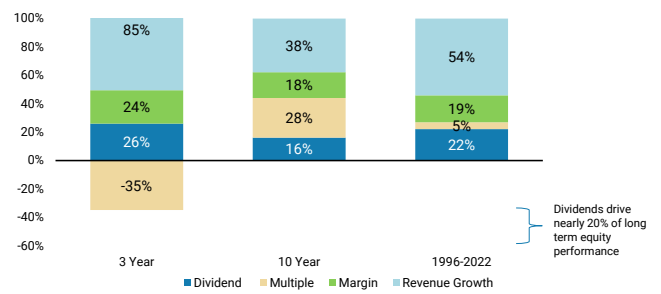
Dividends hold high importance for long-term investors with dividends making up nearly 40% of total return in the past century (1926-2023) and yielding between 2%-6% return in every decade. Over a shorter time period and one that's more applicable to individual investors, we ran a decomposition of S&P 500 total return since 1996 and dividends still make up 22% of total return. While dividends are never guaranteed on a single stock basis, they can provide stable return in aggregate and can cushion capital market losses during periods such as the Lost Decade (2000-2009).

Exhibit 56: Importance of Dividends to Capital Appreciation



Source: Bloomberg, Factset, Morgan Stanley Research

Exhibit 57: Drivers of S&P 500 Return

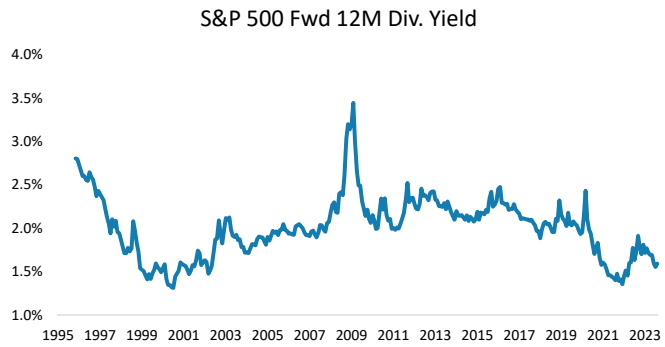


Source: Bloomberg, Factset, Morgan Stanley Research

Forward dividend yields are pricing 1.6%. Historically, this is on the lower end of dividend

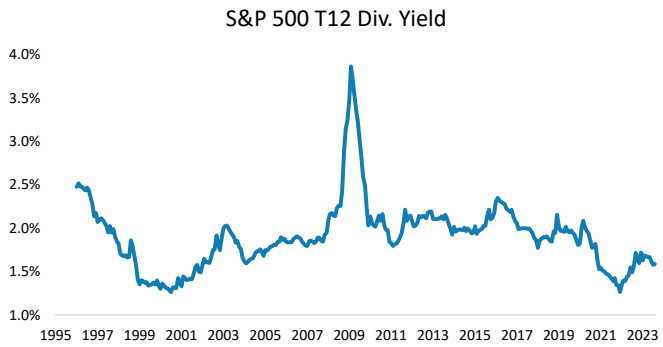
yields as price multiples today are higher than the historical average (~16x since 2000). Today's 1.6% dividend yield remains below the post-GFC average of 1.9% but is still higher than the 1.3% trough in Dec 2022 when the S&P 500 reached ~4800. Markets are currently pricing 6% NTM dividend growth which is in-line with historical averages but below the 10% growth peak in early 2023.

Exhibit 58: S&P 500 12M Forward Dividend Yield



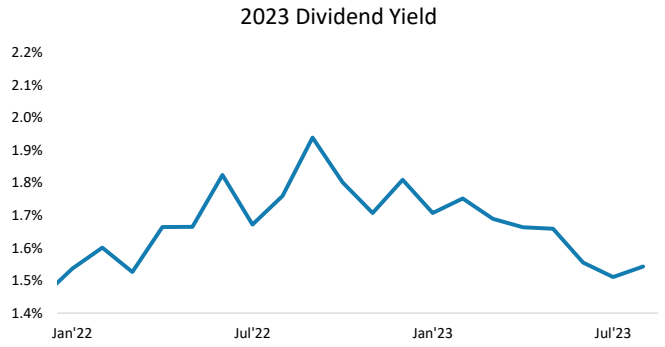
Source: Bloomberg, Factset, Morgan Stanley Research

Exhibit 59: S&P 500 T12 Dividend Yield



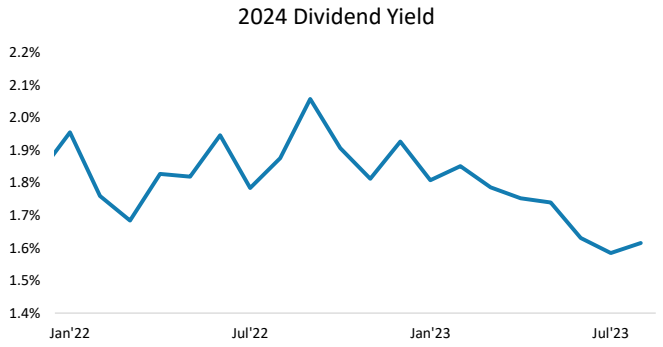
Source: Bloomberg, Factset, Morgan Stanley Research

Exhibit 60: 2023 Consensus Dividend Yield



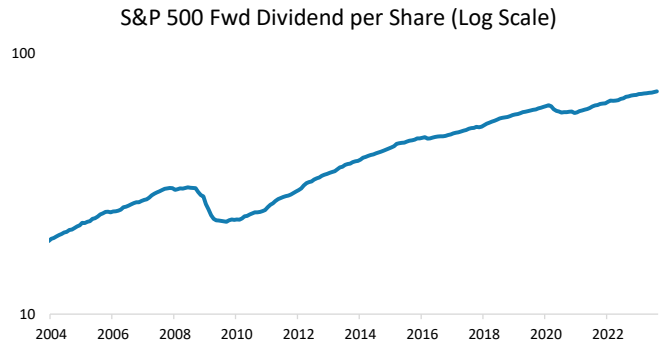
Source: Bloomberg, Factset, Morgan Stanley Research

Exhibit 61: 2024 Consensus Dividend Yield



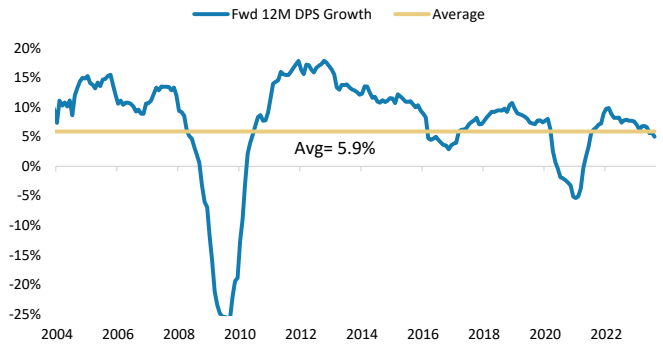
Source: Bloomberg, Factset, Morgan Stanley Research

Exhibit 62: S&P 500 12M Fwd Dividend Per Share



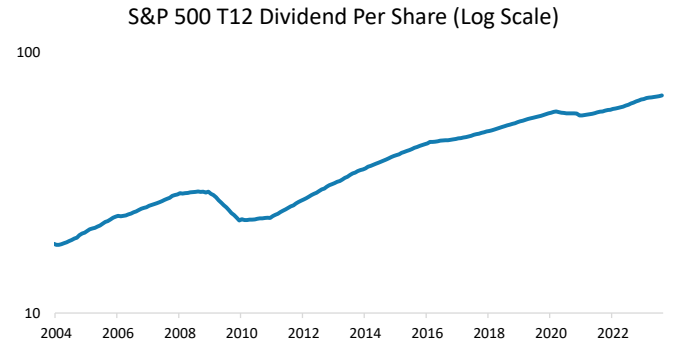
Source: Bloomberg, Factset, Morgan Stanley Research

Exhibit 63: S&P 500 12M Fwd Dividend Per Share Growth



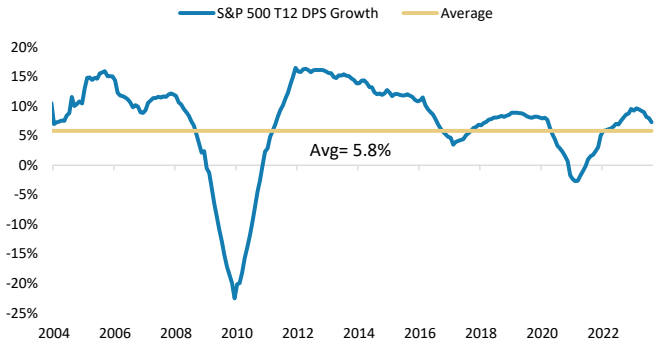
Source: Bloomberg, Factset, Morgan Stanley Research

Exhibit 64: S&P 500 T12 Dividend Per Share



Source: Bloomberg, Factset, Morgan Stanley Research

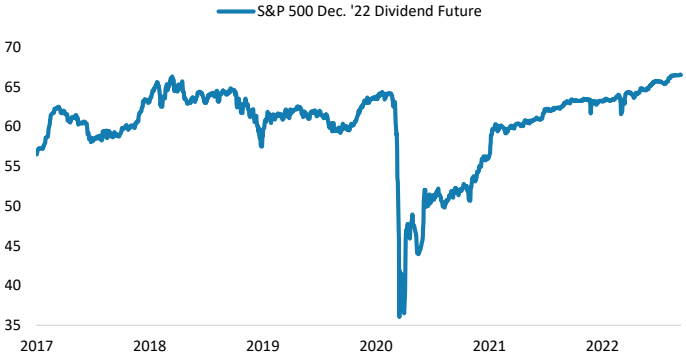
Exhibit 65: S&P 500 T12 Dividend Per Share Growth



Source: Bloomberg, Factset, Morgan Stanley Research

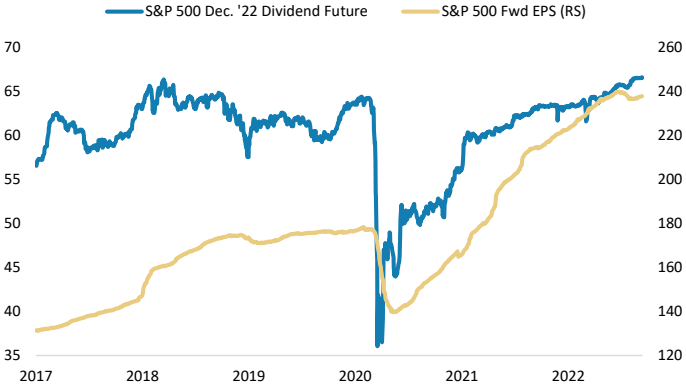
Dividend futures are a relatively small market in the US but have some historical efficacy at projecting forward earnings (Exhibit 67) and valuations (Exhibit 68) for the broad market. While we don't see any wide divergences today like we did six months ago when forward P/Es were closer to 22x, any future spreads are worth monitoring.

Exhibit 66: S&P 500 Dividend Future



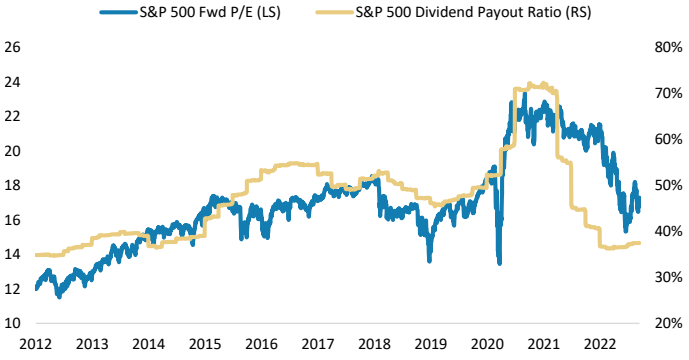
Source: Bloomberg, Factset, Morgan Stanley Research

Exhibit 67: S&P 500 Dividend Future vs Forward EPS



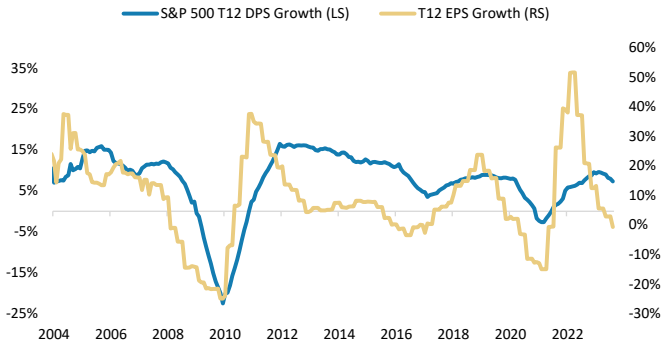
Source: Bloomberg, Factset, Morgan Stanley Research

Exhibit 68: S&P 500 Dividend Payout Ratio vs Forward P/E



Source: Bloomberg, Factset, Morgan Stanley Research

Exhibit 69: Dividend Growth Trends with EPS Growth

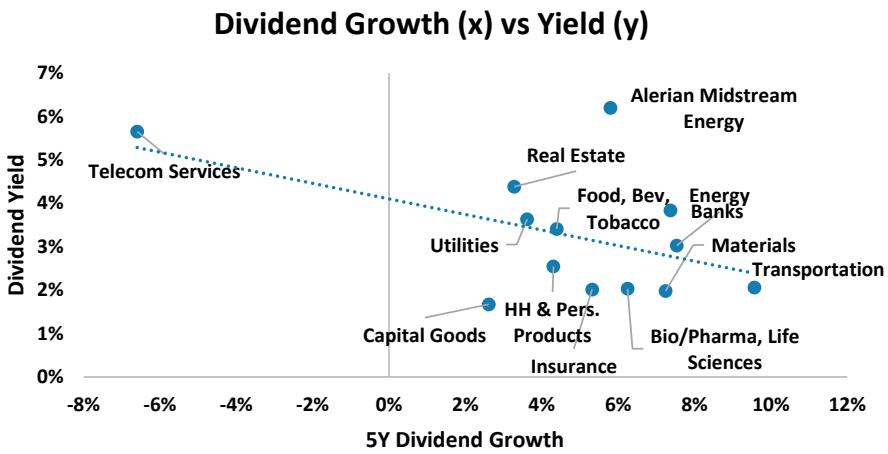


Source: Bloomberg, Factset, Morgan Stanley Research

Dividend Yield, Payout and Growth by sector. 80% of S&P 500 members have paid a dividend in 2022, which is down from 84% in 2014 and 88% in 1992. At the sector level, Energy and Real Estate currently pay the highest dividend yields as of September 2022 with a 3.2% yield. Lastly in Exhibit 73 , the S&P 500 has a 38% earnings payout ratio in

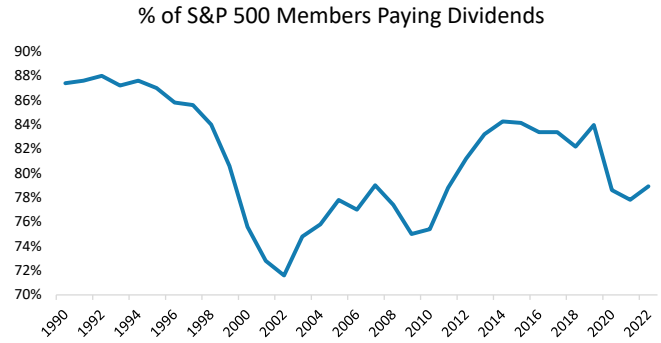
the form of dividends with the least number of dividend paying stocks coming from Software & Services and Media & Entertainment.

Exhibit 70: The Dividend Frontier



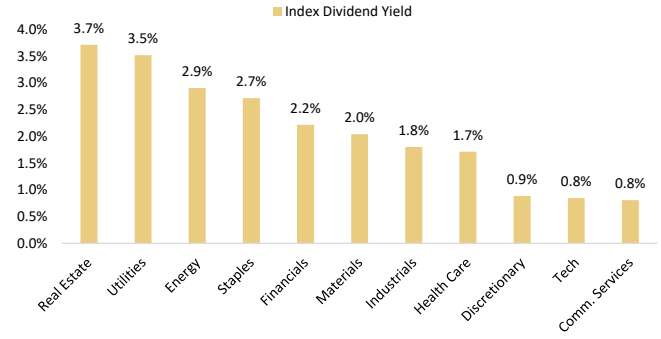
Source: Factset, Morgan Stanley Research

Exhibit 71: Percentage of S&P 500 Members Paying Dividends



Source: Bloomberg, Factset, Morgan Stanley Research

Exhibit 72: S&P 500 Sector Dividend Yields



Source: Bloomberg, Factset, Morgan Stanley Research

Exhibit 73:

S&P 500 Dividend Table by Industry Group

Sector	Industry Group	% of Total Paying Dividend	Median Dividend Yield	Payout Ratio	Median DPS Growth
S&P 500		80%	2.3%	38%	7.1%
Consumer Discretionary	**Discretionary**	**67%**	**2.0%**	**30%**	**10.0%**
	Automobiles & Components	80%	1.1%	21%	178%
	Consumer Durables & Apparel	85%	2.8%	30%	7%
	Consumer Services	53%	1.6%	40%	10%
	Consumer Discretionary Distrib	65%	2.2%	30%	13%
Energy	**Energy**	**100%**	**2.3%**	**35%**	**9.0%**
Financials	**Financials**	**94%**	**2.5%**	**28%**	**6.3%**
	Banks	100%	5.3%	31%	6%
	Financial Services	88%	1.7%	23%	10%
	Insurance	100%	2.0%	38%	4%
Health Care	**Health Care**	**63%**	**1.3%**	**47%**	**6.4%**
	Health Care Equipment & Servi	67%	1.3%	34%	8%
	Pharmaceuticals, Biotechnolog	59%	2.7%	57%	6%
Industrials	**Industrials**	**87%**	**1.5%**	**35%**	**8.9%**
	Capital Goods	91%	1.5%	35%	8%
	Commercial & Professional Ser	87%	1.5%	43%	10%
	Transportation	71%	2.0%	31%	11%
Materials	**Materials**	**100%**	**1.9%**	**42%**	**6.6%**
Real Estate	**Real Estate**	**94%**	**4.1%**	**123%**	**5.1%**
Consumer Staples	**Staples**	**92%**	**2.7%**	**70%**	**5.7%**
	Consumer Staples Distribution	88%	2.5%	54%	14%
	Food, Beverage & Tobacco	96%	2.9%	76%	6%
	Household & Personal Product	86%	2.6%	71%	4%
Information Technology	**Tech**	**54%**	**1.6%**	**30%**	**9.9%**
	Semiconductors & Semiconduc	71%	1.3%	44%	12%
	Software & Services	32%	1.3%	30%	10%
	Technology Hardware & Equipr	63%	2.6%	23%	5%
Utilities	**Utilities**	**97%**	**3.7%**	**80%**	**5.9%**
Communication Services	**Comm Services**	**48%**	**1.7%**	**26%**	**3.0%**
	Media & Entertainment	45%	1.6%	8%	4%
	Telecommunication Services	67%	7.8%	126%	-14%

Source: Bloomberg, Factset, Morgan Stanley Research

Bottom-Up Views: Industries in Focus

MLPs/Midstream Energy Infrastructure

Robert Kad

Top Dividend Picks: ET, MPLX, EPD

Dividend Stability within Industry

The past dozen years have been an ongoing iteration of the midstream business model to address vulnerabilities and reflect changes in investor preferences. This has largely reversed a narrow historical focus on dividend payout maximization. In shifting away from a full payout model, midstream companies have had to unwind the associated business model deficiencies that had elevated risk around what are often otherwise relatively stable cash flows. Reliance on recurring equity capital market access has been eliminated, leverage has been reduced in many cases, and complex and conflicted organizational structures have been restructured (GP/IDR eliminations). Industry growth has moderated (a function of both U.S. shale maturation and longer-term decarbonization trends), reinforced by more limited access to capital (investor aversion to either equity issuance or leverage that places credit ratings or covenants at risk in down cycles) and reduced incentives for growth (IDRs had previously been a significant motivating factor).

Full dividend payout models left little cushion in the event of dividend coverage shortfalls and little cash retention to support other calls on capital. With the cumulative impact of a large number of dividend cuts over multiple tail events in recent years, the industry no longer enjoys the valuation support of yields that were previously perceived to be safe and prioritized above other objectives (in effect, treated as an implicit covenant with investors).

Post-Covid onset, as the midstream industry has moved toward adoption of FCF generation as a strategic objective — accomplished through capital discipline with more stringent return focus rather than emphasis on growth — we see the broader de-risking of these business models having served to restabilize dividends in our coverage and recalibrating growth to more modest levels. Although we do not expect yield support for valuation to be restored as dividend cuts are now viewed as more discretionary management choices (rather than a function covenant non-compliance or credit metric deterioration that challenges ratings), we see limited risk to current dividend payouts across the substantial majority of our coverage.

Prospects for Dividend Growth within Industry (next 3-5 years)

The midstream value proposition is ultimately more one of cash flow resiliency than commodity torque, making growth more reliant on incremental capital investment. As noted, midstream industry growth has slowed in recent years given maturation of US shale production, regulatory headwinds to new project development, and an energy economy that is transitioning toward a low carbon future. However, selective capital investment opportunities still exist around smaller, more capital efficient investments that address system bottlenecks, while the energy transition offers longer-term opportunities to repurpose pipeline and storage infrastructure for lower carbon uses.

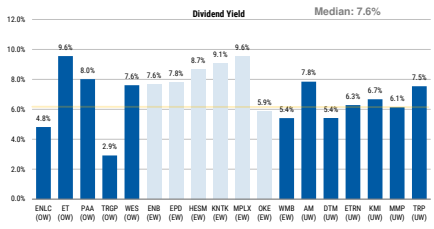
With respect to dividends, capital investment discipline and resulting FCF generation have accompanied a pivot away from a narrow focus on dividend growth and payout maximization to other cash return measures with lower execution and terminal value risk.

Historically, the full dividend payout model offered the collateral benefit of agency risk mitigation, returning predictable levels of cash and requiring ongoing investor approval of capital investment decisions to secure exogenous capital. Unfortunately, solving for both full payout and ongoing growth led to untenable funding risk and overly aggressive pursuit of capex. Moving to a model of capital discipline, positive FCF and capital structure reduction with more limited growth potentially offers a better pathway to risk mitigation.

- We see share repurchase announcements, if sizeable and credible (e.g., recurring execution), to be one of the most important potential idiosyncratic near-term catalysts within managements' control and differentiators of relative stock performance. Beyond positive signalling on capital discipline and opportunities it creates for capital structure reduction, positive FCF generation applied toward debt or share count reduction allows for positive stock performance without requiring multiple expansion or EBITDA growth.
- Return of capital is also an effective tool to address terminal value risk. While considerable debate exists around the timeline and extent to which the global energy economy might transition away from hydrocarbons to renewable sources, the burden of proof effectively now resides with the companies themselves and other industry participants to establish the longevity of hydrocarbon demand. In the absence of specifics around repurposing potential, managements can still de-risk terminal values through sustained capital discipline and redirection of cash flows to capital structure reduction, increasing and accelerating the residual claim on cash flows.
- While investors will likely continue to debate preferences for different strategies (share buybacks, leverage reduction, dividend growth, capital reinvestment to offset EBITDA declines) and variant optimal approaches across companies, we see prioritization of debt/equity repurchases (in whatever balance) as critical to elevating the primacy of attractive FCF yields as a midstream valuation metric.

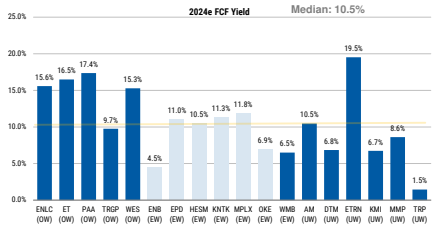
The implication then for midstream dividends is that while payout strategies are evolving (and historical precedent has become less instructive), most companies are likely to grow dividends at levels consistent with EBITDA growth – likely mid- to high-single digits. Exceptions exist, however, where dividends had been cut and have not yet been normalized and/or FCF generation is so high (and capital needs so low) that above average – and potentially quite meaningful – dividend growth is supported.

Exhibit 74: Morgan Stanley Midstream Coverage 2024e Dividend Yield



Source: Refinitiv, Morgan Stanley Research estimates.

Exhibit 75: Morgan Stanley Midstream Coverage 2024e Free Cash Flow Before Dividends/Market Capitalization



Source: Refinitiv, Morgan Stanley Research estimates.

Key Risks to Dividends

The primary near-term risk to underlying FCF generation is less variability or deterioration in cash flows and more reacceleration of capital reinvestment. While much work has been done, capital discipline and positive FCF generation remain recent developments within midstream and still require either longer histories or forward guidance – including commitments to capital structure reduction (share buybacks, leverage targets) – to telegraph management buy-in to investors. Instances in which companies stretch on organic capital reinvestment or M&A and re-lever balance sheets could reintroduce dividend risk in a period of more pronounced cyclical downturn, but one we view as lower probability. One case within our coverage where dividend risk could exist (ETRN) is largely idiosyncratic, tied to regulatory uncertainty around a largely funded but not completed project.

Over time, should the energy transition materially diminish hydrocarbon demand, opportunities for repurposing prove unavailable, and midstream companies elect not to allocate FCF to leverage reduction, deteriorating cash flows viewed against non-amortizing debt could create long-term leverage issues that threaten dividend safety. While we see both the runaway for global hydrocarbon demand (and associated energy security) and the essential role of midstream assets in enabling the energy transition to be underappreciated by the market and see this risk as relatively low, individual outcomes across companies could still vary.

Top Dividend Picks

ET ($17 PT, +34% total return, including 9.5% distribution yield): Highly dislocated stock (2024e FCF yield of 16.5%) that we expect to re-rate through (1) ongoing deleveraging execution (targeted 4.0-4.5x debt/EBITDA), (2) unit repurchases once the lower end of that range has been reached, a catalyst that we think could emerge in 2H24, and (3) cost and eventual revenue synergies from recent acquisitions that are underappreciated by the market and present upside to EBITDA in future years.

MPLX ($42 PT, +29% total return, including 9.5% distribution yield): MPLX offers an attractive yield for income investors, supported by stable, well-contracted assets and a conservative balance sheet and capital allocation strategy. We see potential for MPLX to raise its distribution in 3q23 by 7-10% given strong FCF generation and retained cash.

EPD ($33 PT, +30% total return, including 7.8% distribution yield): EPD is a bellwether MLP with a high quality set of diversified and vertically integrated midstream infrastructure assets, a conservatively levered balance sheet, and a track record for distribution security and prudent capital investment. EPD has sought to balance capital investment with distribution growth, leverage reduction and modest unit buybacks.

Energy

Devin McDermott

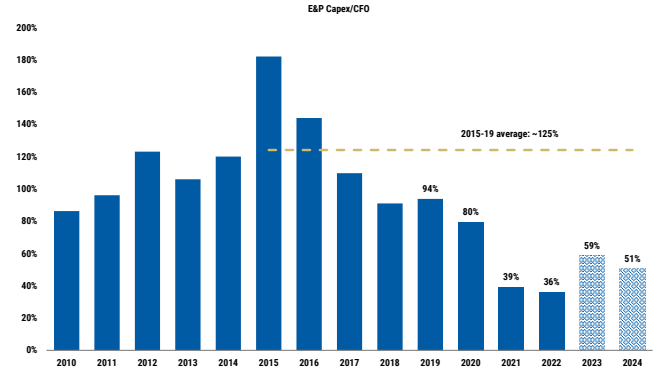
Top Dividend Picks: XOM, HES, LNG

Dividend Outlook

For the Energy sector, the Covid-driven price collapse in 2020 brought an end to a cycle defined by overinvestment, weak returns, and persistent underperformance. Concurrently, it ushered in a new period of pervasive capital discipline and rising shareholder returns. This new value proposition has not only proven supportive of oil & gas markets, but also helped drive record FCF for E&Ps and Integrated Energy stocks, collectively generating > $200 B in 2022.

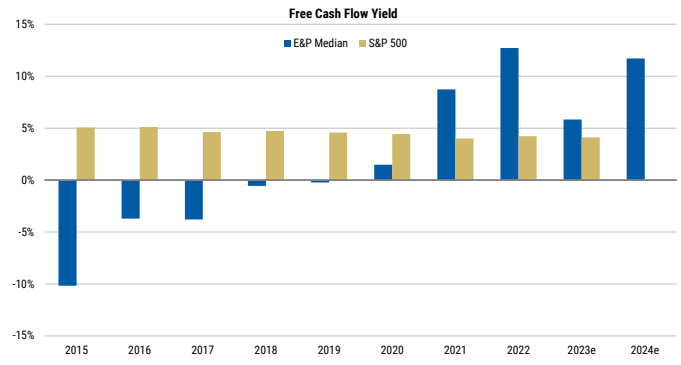
While inflation has put upward pressure on capex, the industry is spending at a much lower reinvestment rate than historical levels. For 2023/24, we estimate reinvestment rates of ~60%/50% of CFO, compared to an average of ~125% over 2015-19. Lower reinvestment rates help mitigate the spending of capex changes on the sector's attractive FCF profile. Next year we estimate the median E&P yields 12%, ~2.5x the broader market. Further, across our US E&P and Integrated Energy coverage, FCF/base dividend coverage is robust at ~5x.

Exhibit 76: After years of outspending cash flows, US E&Ps are taking a more disciplined approach



Source: Bloomberg, Morgan Stanley Research

Exhibit 77: At $80 WTI (near the current strip), our E&P coverage offers a 12% median FCF next year, ~2.5x the broader market



Source: Bloomberg, Morgan Stanley Research. Note: Assumes $75/bbl WTI in 2023, $80/bbl WTI in 2024

Prospects for Dividend Growth

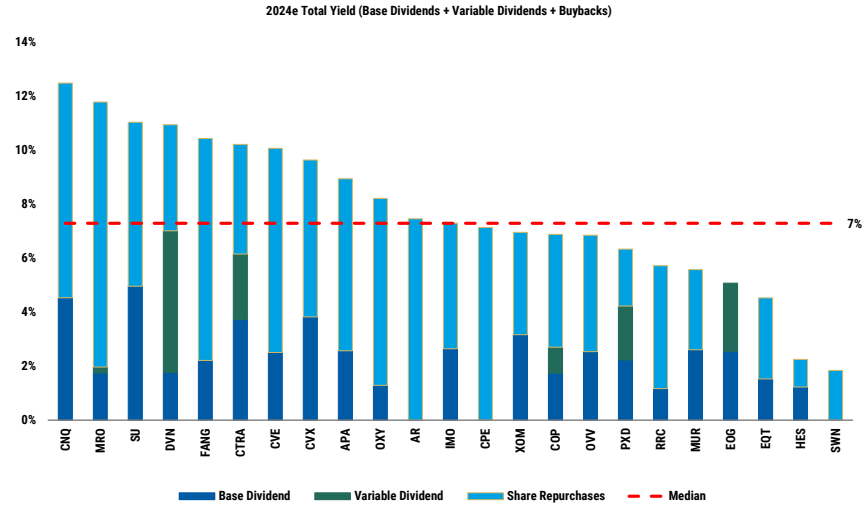
Across our coverage, US majors **XOM** and **CVX** are best positioned for long-term dividend growth with integrated business models (upstream & downstream) and globally diversified cash flows. Both companies have long track records of base dividend growth and defended their dividends through the 2020 downturn. Notably, since the end of 2020, the majors have collectively generated ~$175 B in FCF, repairing balance sheets and increasing shareholder returns through dividends & buybacks. With both below targeted leverage ranges, we see dividends well covered and a path of continued stable growth.

Beyond the majors, select E&Ps are also well positioned to grow dividends over time. We highlight **HES**, which has highly economic, long-cycle growth in Guyana balanced by short-cycle optionality in the Bakken. This underpins a rate of change story that should support

HES's longer-term plan to return up to 75% of FCF annually through the base dividend and opportunistic share repurchases.

We also highlight **COP**, which benefits from its globally diversified business and has committed to return >30% of CFO to shareholders annually. Ongoing share repurchases should allow COP to keep its absolute dividend burden manageable while supporting consistent base dividend increases, in our view. In December 2021, COP also initiated a three-tier return of capital program – adding a variable dividend component to go along with its base dividend and share repurchases. This year, COP has paid and declared a total of ~$2.50/sh in variable dividends (a ~2.0% variable dividend yield), on top of its 1.6% base dividend yield.

Exhibit 78: While many E&Ps slowed shareholder returns alongside falling commodity prices for the first half of this year, stronger oil should begin to support higher buybacks and/or variable dividends as we move through 2H23 and into 2024.



Source: Morgan Stanley Research estimates

Key Risks to Dividends

We generally do not see risk to base dividends given strong balance sheets and robust dividend coverage across the group. Most companies have set base dividend payouts at levels that can be fully covered with organic cash flow down to $40/bbl oil prices (versus ~$90/bbl currently). Furthermore, low leverage (avg. net debt/EBITDA ~0.5x at strip prices) would allow companies to sustain payouts even if oil prices were to fall below $40 for a period of time. While many E&Ps slowed shareholder returns alongside falling commodity prices for the first half of this year, stronger oil should begin to support higher buybacks and/or variable dividends as we move through 2H23 and into 2024.

Top Dividend Picks

ExxonMobil (XOM): XOM offers a 3.2% 2024 dividend yield backed by ~250% dividend coverage and a strong balance sheet (5% net debt/cap as of 2Q23), supplemented by ~$35 B of buybacks over 2023/24. Additionally, we see an attractive rate of change in FCF as its portfolio of growth projects come online. We also expect management to announce a new cost reduction target (in addition to the $9B already identified) as part of the corporate update this December, further supporting earnings and cash flow growth.

Hess (HES): HES benefits from long-cycle growth in Guyana balanced by short-cycle optionality in the Bakken. This underpins a rate of change story that is differentiated within the sector as HES's breakeven oil price is set to fall from over $70/bbl in 2019 to < $40/bbl by 2026, shifting the company toward the lower end of the global cost curve. Longer term, HES plans to return up to 75% of FCF annually through the base dividend and opportunistic share repurchases. Due to HES's differentiated portfolio, which is anchored on a multi-decade low-breakeven investment opportunity in Guyana, we view this cash return framework as more durable and offering longer duration than many other US E&Ps.

Cheniere (LNG): Cheniere is the dominant LNG player in the US and is structurally advantaged compared to smaller independent US peers given its scale, low cost expansion opportunities, and existing platform of stable cash flows backed by long-term contracts. As the largest US exporter, the company is also well-positioned to benefit from higher marketing margins associated with ongoing market tightness and escalating geopolitical tensions. Over the next several years, strong FCF drives declining leverage, growing dividends, and share repurchases. Cheniere's dividend sits at $1.58/sh annualized (~1% yield). Through 2026, Cheniere now anticipates >$20 B of available deployable cash and is targeting 10% annual dividend growth - that said, on our estimates we see ample room for upside to dividends over the next few years.

Telecommunication Services and Communications Infrastructure

Simon Flannery

Top Dividend Pick: VZ

Dividend Stability within Industry

Telecom Services – Dividend stability with the Telecom Services sector is mixed. On the positive side, capital intensity is falling sharply as 5G network upgrades near completion, while wireless service revenue growth remains in the low single digit range with solid subscriber growth and select pricing actions. Telecom business models benefit from recurring subscription-based revenue streams, with wireless and broadband seen as critical services even in a downturn. Secular and competitive risks remain however, with sector leverage generally above historical levels. Dividend payout ratios among US carriers are generally within target ranges, but are above target levels in Canada. In the past year we have seen some Telcos cut (AT&T) and even eliminate (Lumen) their dividend payouts, while T-Mobile recently initiated a dividend program for the first time.

Communications Infrastructure – Tower and Data Center dividend policies largely reflect the earnings and capital gains distribution requirements under REIT rules, although some companies such as Uniti are paying out more than is required. Strong secular growth drivers have generally translated into solid long term dividend growth. Rising interest rates, capex and churn have in some cases been pressuring free cash flow however, requiring some companies to borrow, issue equity or sell assets to partially fund their dividends.

Prospects for Dividend Growth within Industry (next 3-5 years)

The 3-5 year dividend growth outlook varies significantly across the sector. The first bucket of companies includes those who are unlikely to increase their dividends in the near term due to leverage and or payout considerations (AT&T, Digital Realty, Rogers, TDS & Uniti). Note that TDS could pay a special dividend depending on the outcome of the strategic review for US Cellular. The second bucket of companies are likely to deliver low to mid-single digit annual dividend growth in coming years (Verizon, BCE & Crown Castle (low for the next couple of years before accelerating)). The third bucket should deliver mid to high single digit dividend growth or better over this period (American Tower, Equinix, Iridium, SBA Communications, Telus & T-Mobile).

Key Risks to Dividends

Some parts of Telecom such as business wireline and DSL face significant secular challenges, while the risk of intensifying wireless price wars could be another threat to dividend payouts. We have a number of companies within our coverage with elevated leverage and/or payout ratios. These companies may see incremental pressure from ratings agencies to delever more rapidly, particularly if we were to see deteriorating operational performance in a macro downturn for example.

Top Dividend Pick

Verizon offers a 7.8% dividend yield, representing a c. 65% payout of 2023e FCF and one of the highest in the S&P 500. The company raised their dividend payout by 2% in

September, the 17th consecutive annual increase. Verizon has an investment grade Balance Sheet and capital intensity is set to fall further in 2024 as 5G capex winds down.

Dividend At Risk Stocks

Companies with elevated leverage and/or payout ratios in our coverage include: BCE, Crown Castle, Digital Realty, Rogers, Telus & Uniti. Both BCE and Telus have recently reiterated their commitment to their dividend growth models. Uniti has said that the board is reviewing its dividend policy to determine whether it would be better to lower the payout closer to levels required by REIT rules.

Real Estate

Ronald Kamdem, Adam Kramer

Top Dividend Picks: O, ADC, SPG, GLPI, INVH, UDR

Dividend Stability within Industry

We view the dividend outlook across REITs as mixed with REIT TTM free cash flow payout ratios increasing +200bps QoQ to +76% (Exhibit 79). Storage, Data Centers, Timber, Regional Malls, Apartments, SFRs, and Lodging REITs have the healthiest payout ratios at 70% or below. Timber has had the largest jump in FCF payout due to FCF deceleration outpacing peers. Healthcare (+129%), Infrastructure (+105%), Specialty (+86%), and Diversified (+81%) remain the most at elevated.

Exhibit 79: REIT FCF Payout Ratios by Subsector

Subsector	2Q23 TTM FCF	2Q23 TTM Total Dividends	2Q23 TTM FCF Payout Ratio	1Q23 TTM FCF Payout Ratio	Delta
Healthcare	$4,980,571	$6,408,403	129%	129%	0%
Infrastructure	$5,712,959	$5,978,255	105%	111%	-6%
Specialty	$4,730,216	$4,053,242	86%	81%	5%
Diversified	$2,060,206	$1,661,996	81%	86%	-6%
Manufactured Homes	$1,130,970	$849,266	75%	69%	6%
Industrial	$5,928,797	$4,230,020	71%	71%	0%
Triple Net	$4,366,248	$3,098,403	71%	69%	2%
Office	$5,282,784	$3,739,224	71%	73%	-2%
Shopping Centers	$4,412,877	$3,117,362	71%	69%	2%
Storage	$4,570,715	$3,214,349	70%	67%	3%
Data Centers	$3,997,642	$2,726,389	68%	65%	3%
Apartments	$6,422,254	$4,125,156	64%	63%	1%
Regional Malls	$4,019,417	$2,547,635	63%	62%	2%
Timber	$1,519,847	$929,459	61%	42%	19%
Single Family Rental	$1,506,599	$889,146	59%	55%	4%
Lodging/Resorts	$3,178,709	$1,163,892	37%	30%	7%
Total	**$63,820,809**	**$48,732,197**	**76%**	**74%**	**2%**

Source: Company Data, Refinitiv, S&P Global, Morgan Stanley Research.

Prospects for Dividend Growth within Industry (next 3-5 years)

We expect sectors with strong relative earnings growth and low maintenance capex levels to be in a relatively strong position to maintain dividend payments over the intermediate term. We are most positive on prospects for dividend growth in the **apartments**, **industrials**, **single family rental**, **towers** and select names in **triple net** sectors. We broadly expect dividend growth for these subsectors to remain in the high single digit to low double digit range over the next two years given the subsectors continue to benefit from healthy rent growth. We see flat dividend growth for healthcare and office REITs given the companies under coverage require larger capex reserves and typically utilize excess cash to fund external growth.

Key Risks to Dividends

We see office REITS (with average div yields of +6.3%) to have the largest relative challenges in maintaining dividends as we estimate recurring capex accounts for a ~20-35% of NOI on an annualized basis and we expect flat earnings growth over the next year for the subsector. The largest risk to dividend growth for the subsector is continued declines in occupancy combined with little capital market relief into 24e as if financing and asset sale market remain tight, office REITs may continue to right size dividends in an effort to preserve liquidity.

Top Dividend Picks

We view **O**, **ADC**, **SPG**, **GLPI**, **INVH** and **UDR** as the companies with the best prospects of maintaining and growing dividends. Indeed on top of 4.8x leverage ratio and recent dividend raise, cash flows from GLPI's new development and ground lease would further support its dividend growth. O has been raising its monthly dividend for the past 29 years and we see accretive earnings growth from Bellagio deal. We highlight SPG (6.5% yield), as the company's new quarterly dividend run-rate of $1.85 per share compares to 4Q19 dividend of $2.10 and we continue to expect the company to emphasize raising the quarterly dividend given cash flow generation recovery to '19 levels. Finally, UDR increased their '23 annualized dividend +10.5% vs. '22 and has the highest dividend yield (4.1%) among the large cap apartment REITs on a TTM basis, with payout ratio in-line.

Dividend At Risk Stocks

Office REITS (**OPI**, **HPP, VNO, SLG**) have the highest dividend risk in our view with OPI and HPP facing both deteriorating fundamentals and upcoming corporate debt maturities while SLG's FCF payout ratio remains near 100%. OPI in particular faces the greatest dividend challenges followed the company's terminated merger as with $1bn of unsecured debt maturing through 25e (vs a market cap of <$300mn), we see the company rightsizing its dividend in 24e as a means to preserve liquidity. We see a FCF payout ratio of ~120% by 24e as low in place debt is refinanced in the HSD range and occupancy continues to fall for the company. VNO has suspended its dividend to preserve liquidity.

US Banks

Betsy Graseck, Manan Gosalia

Top Dividend Picks: CFG, HBAN, MTB, WBS, RF

Tight regulation post GFC kept a lid on dividend payouts for a decade. Then, in 2021, the Fed enacted the new Stress Capital Buffer (SCB) approach to the annual Comprehensive Capital Analysis and Review (CCAR) process. This change gave banks more flexibility in determining the level and distribution of their capital return. As a result, dividend payouts rose by a median ~500bps across the group.

We expect banks will prioritize dividend stability, even in today's tougher earnings and regulatory environment: 2023 has been marked by earnings pressures across multiple income statement drivers, including rising deposit costs, slowing loan growth, higher expenses, normalizing loan losses and tougher capital requirements. We expect this pressure will continue into 2024 driving a second consecutive year of declining operating earnings. We believe management teams and boards want bank stocks to be as attractive to income funds as possible, and despite this tougher environment, even in many of our bear case EPS estimates, we do not expect dividends are at risk. One reason is that most bank payout ratios are below long-term averages with a median of only 31%. Second, is the earnings declines we are looking for are also a very modest median low digit percent year/year. In fact we expect most banks will continue to raise dividends at a modest pace (~5%) in 2024.

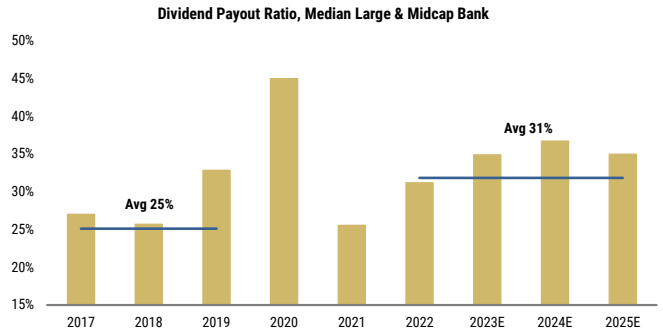
Tougher regulations are also a headwind, but we don't expect they will hit dividends: Bank capital needs are likely to increase from here for several reasons: 1) The "Basel III endgame" rules are driving significantly higher capital requirements for the largest GSIBs (Global Systemically Important Banks); 2) New rules are going to remove the benefit large non-GSIB banks (with assets of $100-700B) get from excluding the negative mark-to-market on the Available-for-Sale securities book; 3) The annual stress test is likely to get tougher and incorporate multiple scenarios, including stress testing for interest rate volatility in addition to credit risk. In addition to capital requirements, large non-GSIB banks will also face higher liquidity and long-term bail-inable debt requirements which will weigh on growth and earnings. Even then, we expect banks will protect their dividends and manage through these requirements by cutting buybacks and more tightly managing loan growth, which impacts the Risk Weighted Assets (RWAs, the denominator for regulatory capital ratios).

A hard landing with significantly higher loan losses is the biggest risk: Banks are cyclically exposed to the credit cycle. In a recession, increasing level of loan losses pressures earnings. The question is whether it will pressure earnings enough where dividends have to be cut. The answer is it really depends on how severe the recession is. Our expectation is that banks can increase their dividends 5% y/y in 2024, even as credit losses continue to rise to cycle average levels, given what we outline above. In a bear case recession outcome with unemployment at 6%, we anticipate the vast majority of banks in our coverage can hold dividends flat although the payout ratios could rise significantly for banks with a greater credit risk skew.

Most preferred names with strong dividend yields: Across the US banks, we prefer banks that are more defensively positioned, with higher levels of excess capital and

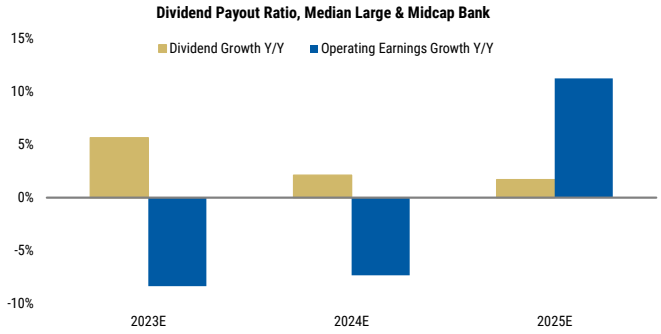
liquidity, strong deposit franchises and higher positive operating leverage over time. Our Overweight names with above average dividend yields include: **CFG** (6.4%), **HBAN** (5.9%), **RF** (4.9%), **MTB** (4.1%) and **WBS** (4.0%). We are also Overweight **WFC** (3.0%), **JPM** (2.8%) and **AXP** (1.5%) which are trading at an attractive valuation but have lower dividend yields than the median bank in our group.

Exhibit 80: Tight regulation post GFC kept a lid on dividend payouts for a decade. In 2021, the Fed allowed the banks more flexibility in determining their capital return



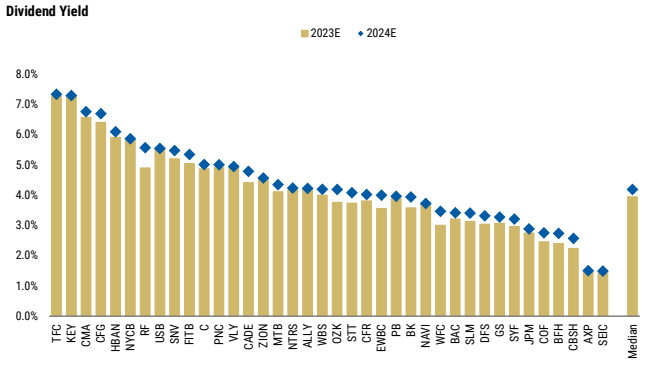
Source: Company data, Morgan Stanley Research estimates

Exhibit 81: We expect banks will prioritize dividend stability and even modest growth despite a weaker earnings environment



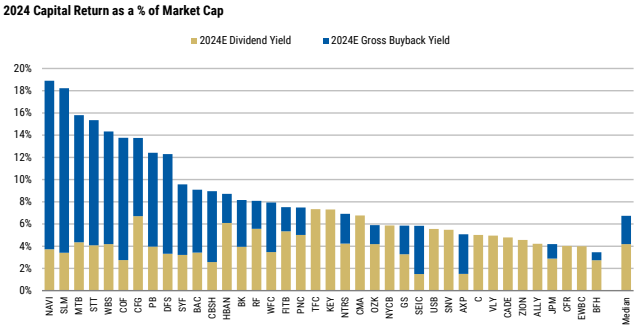
Source: Morgan Stanley Research estimates

Exhibit 82: Bank dividend yields are attractive relative to the market, at median 4%



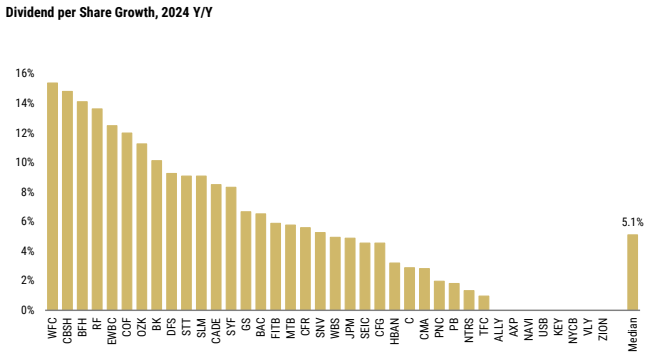
Source: Refinitiv, Morgan Stanley Research estimates

Exhibit 83: In a riskier economic scenario, banks will look to cut buybacks first, which are a cushion against dividend risk



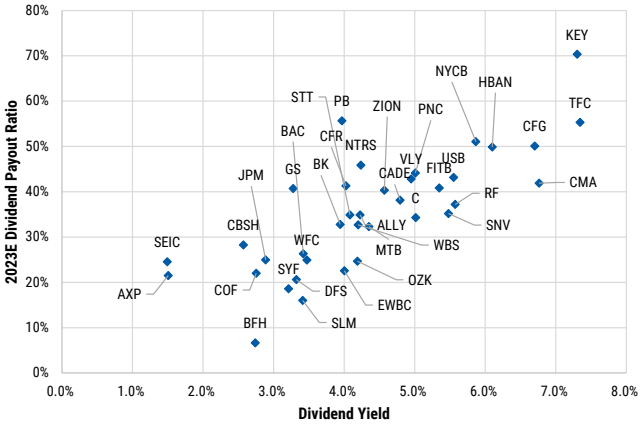
Source: Refinitiv, Morgan Stanley Research estimates

Exhibit 84: WFC, CBSH, BFH have the highest dividend growth in our coverage



Source: Company data, Morgan Stanley Research estimates

Exhibit 85: Banks with the highest dividend yields, intuitively, have the highest dividend payout ratios.



Source: Refinitiv, Morgan Stanley Research estimates

Tobacco and Packaged Food

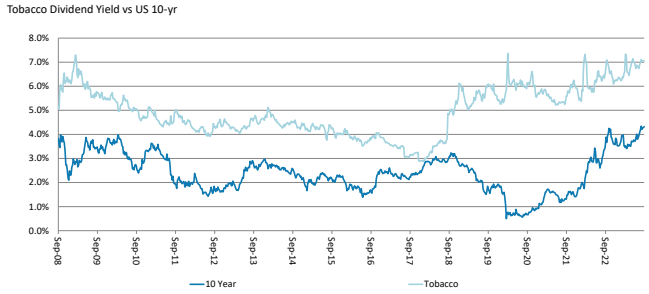
Pamela Kaufman

Top Dividend Picks: PM, MDLZ

Tobacco: Attractive Cash Flow Generation Supports Dividend Growth

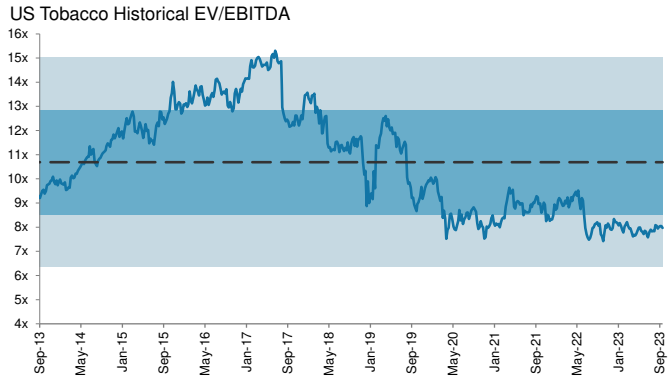
Within Tobacco, we view dividends as secure as the industry is highly cash generative, has limited capex needs, has relatively low leverage, and prioritizes dividends as a use of capital. Tobacco dividend yields are above historical averages as the current dividend yield for US and Global Tobacco stocks within our coverage is 7.0%, above the 5% average between 2007 and 2022 and also above the 10-year average of 4.3%. Since 2007, the dividend yield ranged from 1.7% to 8.7%. Tobacco dividend yields reflecting increasing investor concerns around the long-term growth outlook for the industry and have been impacted by an increasing focus on ESG, which has weighed on sector valuations. Notably, Tobacco yields are ~150 bps higher than the broader Staples group's 5.5% (including tobacco), slightly narrower than their historical premium of ~200 bps. Tobacco dividend yields are ~270 bps above Treasuries, nearly in-line with their average 250 bps spread between 2007 and 2022.

Exhibit 86: Tobacco Dividend Yields Roughly 270 bps Above Treasuries



Source: Company data, Morgan Stanley Research

Exhibit 87: US Tobacco EV/EBITDA Below Historical Average



Source: Company data, Morgan Stanley Research

In US tobacco, MO had historically targeted an 80% dividend payout ratio, but released a new target at its 2023 investor day of growing its dividend MSD YoY. MO has historically grown its dividend by 8.1% over the last ten years, in-line with its average annual EPS growth. We believe MO's move to a MSD dividend growth target gives MO the flexibility to leverage ABI proceeds to buy back its own shares without stepping up its dividend/share, allowing the company to reinvest the dividends saved. Looking forward, we expect slower EPS growth of 3.3% annually through 2025 reflecting accelerating cigarette volume declines (MSe -7% from 2023-2025E) and increasing investment needs behind reduced risk products. As a result, we expect softer dividend growth of 4.8% annually as the company maintains its dividend payout ratio. We do not see risk to MO's ability to pay dividends as the company has a 10% levered FCF yield. MO generates ~$1.5 bn in excess cash, post dividends.

PM offers an attractive high single digit earnings growth outlook, which supports it ability

to sustain a steady dividend growth rate. The company offers an 5.4% dividend yield and has grown dividends at 3.6% annually since 2018. The primary risk to PM's dividend is FX due to the strengthening USD as the majority of its business is outside of the US, but the company pays dividends in USD. However, PM's recent acquisition of Swedish Match (SWMA) and planned entry into the US market with IQOS in 2024 will provide a USD cash flow stream, mitigating PM's sensitivity to the USD. We expect the company to continue to support its dividend, despite FX headwinds and view its 84% payout ratio as manageable, particularly given it has averaged at 87% over the last five years.

Packaged Food: Stable Dividend Growth Outlook

The packaged food industry offers a stable dividend growth outlook given steady demand, high margins, strong FCF generation, and modest leverage. Packaged Food companies offer an 3.1% dividend yield on average and we forecast mid to high single digit EPS growth that supports the outlook for dividend growth. Within our coverage we recommend companies with higher long-term topline growth trajectories supported by attractive category exposure and strong execution. We believe companies with exposure to snacking, better-for-you categories, and emerging markets are likely to see sustained strong topline growth. Within the large cap group, MDLZ is our key OW recommendation as it offers an attractive topline and EPS growth outlook, supporting its dividend growth. MDLZ has consistently raised its dividend annually over the last 5 years by 12% on average. With an expected ~10.5% EPS growth through 2025, predictable capital expenditure forecast, and a FCF yield of 4.2%, we see the payout ratio of nearly 50% as stable and predictable.

Top Dividend Picks

PM: PM (OW) offers attractive long-term growth prospects supported by its peer-leading MSD topline and double-digit EPS growth (8.7% CAGR through 2025) through its shift to IQOS, expansion into new reduced risk product categories, pricing power, and cost savings. We see compelling strategic and financial benefits from PM's SWMA acquisition with ZYN and further opportunity through its eventual entry into the US market with IQOS in 2024.

MDLZ: We are OW MDLZ given our outlook for accelerating topline growth driven by positive strategic changes, improved market share performance, a balance between volume vs. pricing growth, and continued momentum in emerging markets. MDLZ's topline/EPS growth profile is similar to higher growth mega-cap CPG peers (KO/PEP/PG/CL), and valuation looks compelling at an ~5% CY23 EV/EBITDA discount.

Beverages and Household Products

Dara Mohsenian

Top Dividend Picks: CL, CHD, PG

Dividend Stability within Industry

High Dividend Stability: We view dividends for large cap beverages and HPC companies as highly secure given generally predictable demand for everyday use products and cash generative business models. While historically commodity costs and FX have driven EPS fluctuations given heightened moves in each area the last few years, most of our coverage has relatively low leverage and ample dividend coverage. CL/PG, for example, have raised their dividends for 60/66 consecutive years and CL/CHD/PG has paid dividends for 128/122/132 consecutive years, through economic and commodity cycles, M&A, internal restructuring programs, and even wars, and other exogenous events. In our view, these companies understand the importance of a steady and rising dividend as part a the total shareholder return to their investor base.

Prospects for Dividend Growth Within The Industry (next 3-5 years)

Dividend Growth to Track Earnings and Cash Flow Over Time: We generally expect dividend growth to track earnings and free cash flow growth over the next 3-5 years, which we estimate is in the HSD annual range over the medium term for CL/CHD/PG. We anticipate that organic sales growth will decelerate in the near term for the staples industry from outsized growth in recent years as pricing growth decelerates as the hyper inflationary environment continues to dissipate, but still be solid in the MSD range. MSD sales growth should be driven by population growth, pricing, and consumer trade-up, particularly in emerging markets, as well as company share gains at PG/CL/CHD. With slight margin expansion and lower leverage, this should drive HSD EPS growth and HSD dividend increases with a similar dividend payout ratio over time.

Top Picks With Strong Dividend Support:

CL: Robust Long-Term Organic Sales Growth Above Peers. We view CL as a MSD long-term topline grower post the hyper inflationary environment with topline growth landing better than peers**.** Growth is driven by: 1) recent corporate strategy changes are driving higher growth with improved market share performance, 2) greater sustainable growth and increased mix contribution from the pet business, 3) stronger corporate pricing power vs. peers with CL's EM exposure geographically and lower private label penetration from a product category perspective, 4) CL being a trade down beneficiary with its weighted avg. price at a -16% discount vs. its categories, and 5) higher international mix where CL has more favorable pricing power with consumer more use to consistent inflation and long term growth potential with higher emerging markets population growth and consumer trade-up. CL has now met or exceeded its 3-5% corporate organic sales growth target for 18 straight quarters. Recent operating performance has been strong with CL beating consensus OSG by 240 bps in 2Q, and unlike most peers accelerated OSG by 30 bps sequentially to 6.9% in Q2 vs 6.6% in each of the last two quarters. CL valuation looks compelling as it trades at a -11% discount on CY24 P/E vs. its large cap HPC peer group of PG/CHD/CLX, with overblown concerns in our minds on weak US scanner data (offset by strength in our minds in its international business), and worries about pet food trade-

down, which we think is more limited for CL's science-based products and given its high-end consumer base vs pet food peers.

CHD: Confident on the Long term Growth Opportunity with High Visibility in its Near Term Recovery and Acceleration into the 2H23. We are confident in CHD's long term growth prospects with MSD organic sales growth (OSG) as they continue to invest back into supporting their brands, benefit from consumer trade down, sustain solid momentum in its core business, while incrementally driving OSG with high growth/margin acquisitions. CHD also has a long history of driving incremental topline growth through its M&A strategy, where the company has averaged about one acquisition per year and reported a net sales CAGR from 2004 to 2022 of +7.5%, far exceeding its evergreen growth model for +3% organic sales growth annually. We also believe there is +80 bps of upside in gross margins vs. consensus in 2H as input cost pressures dissipate, pricing remains resilient, and with a recovery in volume, which should drive ST upside, but also LT growth as CHD reinvest in marketing in 2023. We anticipate CHD's recent acquisition of the Hero brand will incrementally add ~150 bps to its organic sales growth for 2024 when it moves into OSG for the first time, furthering boosting growth prospects. While CHD's valuation has moved back up, its premium valuation is close to peers vs its history, and we see the multiple supported by near term EPS upside and higher LT growth than the market perceives.

PG: We are OW PG longer-term, with peer-leading execution and PG better using its large scale with long-term strategy changes helping to drive robust MSD LT topline growth and HSD EPS growth. PG has been gaining share within the HPC industry as the company invests behind marketing, innovation, and has used strong execution to further product superiority. PG is trading at a -2% 2024 P/E discount to HPC peers despite highly visible growth potential from sustained US share gains (boosted short-term by easing US comparisons), a sequential post-COVID China recovery, GM upside with lower costs, and an increase reinvestment into marketing in H2 of FY23 that is already assumed in its FY24 guidance.

Utilities

David Arcaro

Top Dividend Picks: DTE, EXC, NEE

Utility dividends are highly stable and predictable. We consider regulated electric and gas utilities to have stable businesses with limited major downside risks that would put ongoing pressure on the ability to pay a consistent and growing dividend. Pricing levels are regulated, there are generally moderate year-to-year fluctuations in revenue from changes in sales volume (for weather, customer growth, increased usage), cost escalation gets recovered through higher customer rates, and payout ratios are in the 60-70% range. Utilities invest significant capex into growing the asset base such that we expect free cash flow to be consistently negative, but balance sheets are broadly stable (almost all investment grade) and capital markets are accessible through utility and parent debt and moderate equity issuances needed across the group.

We expect 6% dividend growth annually, in-line with EPS growth over time. The average EPS growth rate is ~6% through 2027, with many utilities generally expecting a 5-7% annual growth rate range for earnings. Rate base growth is ~100-200bps faster than this rate to support the growth in earnings when considering a modest financing drag. Such growth is driven by asset maintenance and replacement, energy transition initiatives to shut coal and build renewables, transmission grid expansion and storm hardening investments. This asset growth is generally low risk in nature, with much of the capital plan necessary to maintain the existing system, most projects moderately sized and repeated often with low operational risk, and cleared in advance with the regulator. Utility dividend payout ratios are generally in the same 60-70% range as the historical norm, and we don't foresee any major changes in utility dividend strategy. As a result, we would expect dividends to grow around 6% annually. We see a long runway for the renewables buildout, gas pipe replacement, resiliency to extreme weather, and transmission grid expansion so this growth rate appears sustainable over the long-term.

Key risks. Downside risks to the current dividend would stem from individual company-specific risks: major wildfires for CA utilities, divestitures (though the dividend is often prioritized), balance sheet stress, or significantly unfavorable regulatory treatment (generally a rare occurrence). A key risk to the growth outlook is the affordability of utility bills which typically grow at a 2-4% annual rate but with the higher commodity price backdrop and inflation in labor and equipment many utilities are experiencing well above average rate hikes. This could result in regulators slowing the growth in utility investment to make bills more affordable for customers.

Top Dividend Picks

DTE: Constructive regulatory backdrop, robust growth prospects and top notch operational execution at attractive valuation (P/E in line with the utility average and 7.5% discount to its peer CMS). DTE`s current discount is mostly driven by several temporary headwinds this year, including a challenging regulatory outcome that will not recur, milder than normal weather, and multiple extreme weather events including severe ice storms and tornadoes – All while long-term earnings power is still intact. Going forward, we see positive catalysts in the near term, such as a potential rate case settlement in the next 2 weeks, distribution grid filing at the end of the month (offering potential upside to capex),

and roll-forward of key financial guidance on the 3Q earnings call - Diminishing the impact in our view of any 2023 EPS weakness vs. the company's guidance.

EXC: EXC combines above-average EPS growth (6-8% vs. 6% annual growth rate for peers), low business risk associated with being a wires-only utility, long tail of strong growth opportunities supported by the material need for transmission infrastructure in the country, strong ESG profile with no generation exposure (no exposure to fossil fuels), and low exposure to physical risks from climate change.

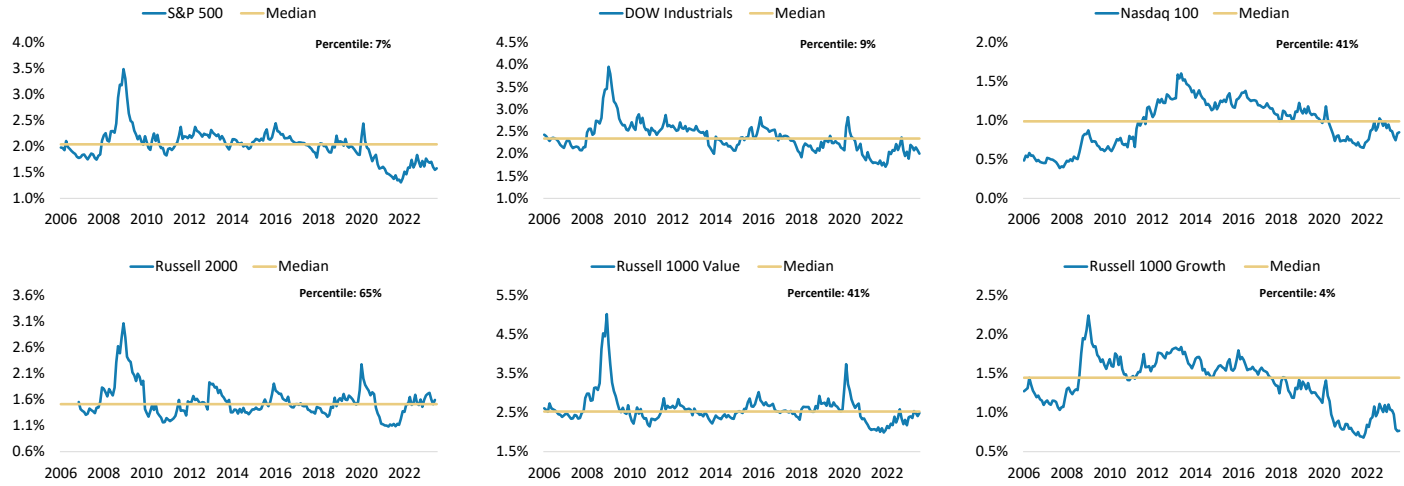
NEE: Limited regulatory risk, long track record of execution, and upside to the long-term EPS growth outlook from renewables. NEE is poised to be one of the biggest beneficiaries of the Inflation Reduction Act, which brings faster solar, wind, and storage growth over 10+ years. Also, the company has underappreciated green hydrogen upside - policy clarifications could come out in October (more details here) - that could grow the renewables market 25% and offer attractive returns. We view probability of material economic damage from Florida lobbying headlines as low.

Appendix

Dividend Yields Today

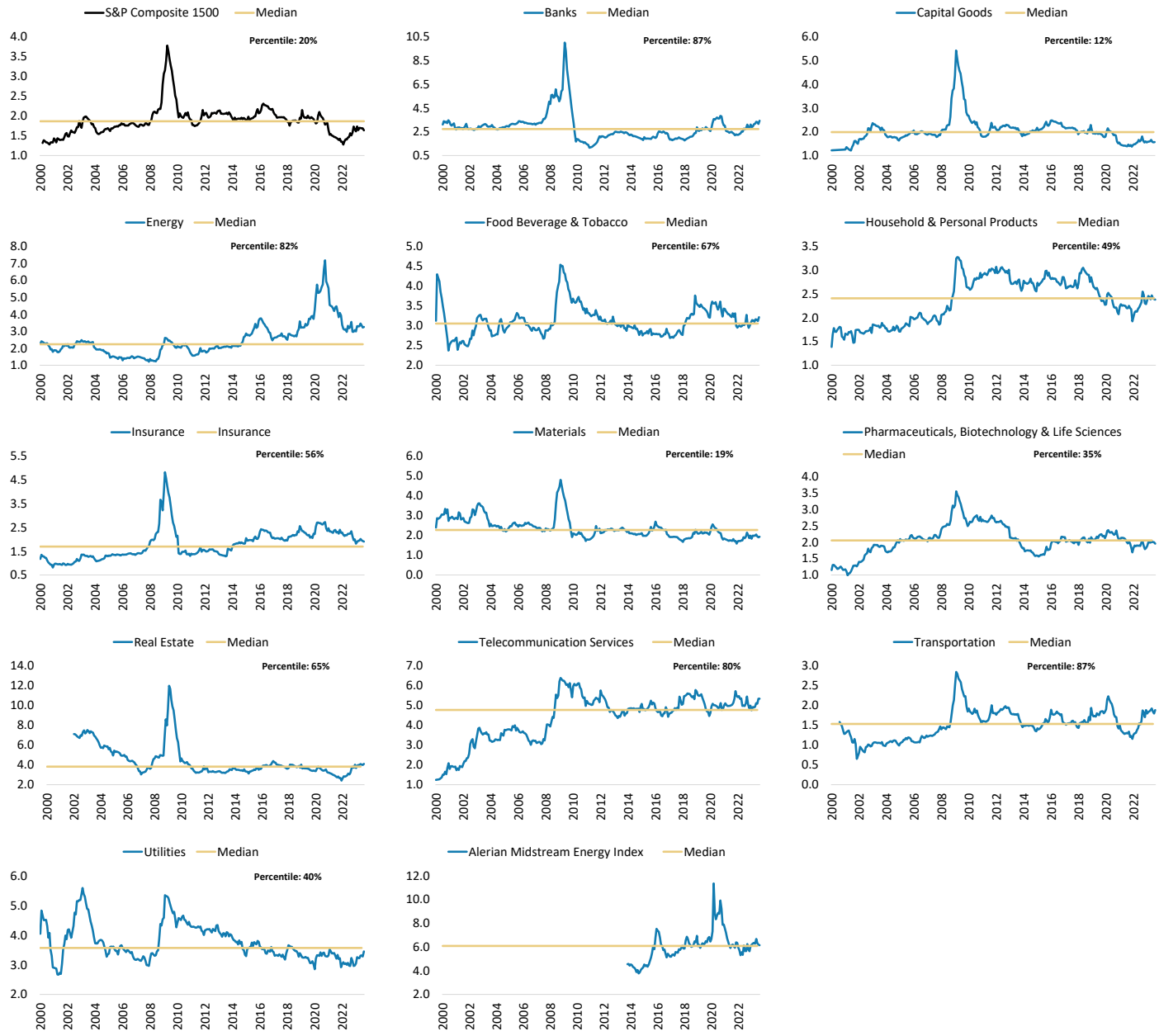
Dividend yields are historically low across major indexes. The majority of trailing dividend yields are below median levels with the S&P 500 currently yielding a 1.6% dividend yield, marking the 7th percentile since 2006. The Russell 2000 is the exception with an above average dividend yield historically but sees strong bifurcation between small cap growth and value styles. Large cap value historically has the highest dividend yield at 2.5% on median and is closely following by Dow Industrials at 2.3%. The Nasdaq 100 and Russell 1000 growth historically have the lowest dividend yields at 1.0% and 1.4%, respectively. We further expand our scope from headline indexes in Exhibit 88 to the S&P 1500 industry groups that pay above index level dividend yields in Exhibit 89 . MLPs, Telecom, Real Estate, and Utilities historically have paid the highest dividend yields.

Exhibit 88: Dividend Yield by Index



Source: Bloomberg, Factset, Morgan Stanley Research

Exhibit 89: S&P 1500 Dividend Yield - High Dividend Industries

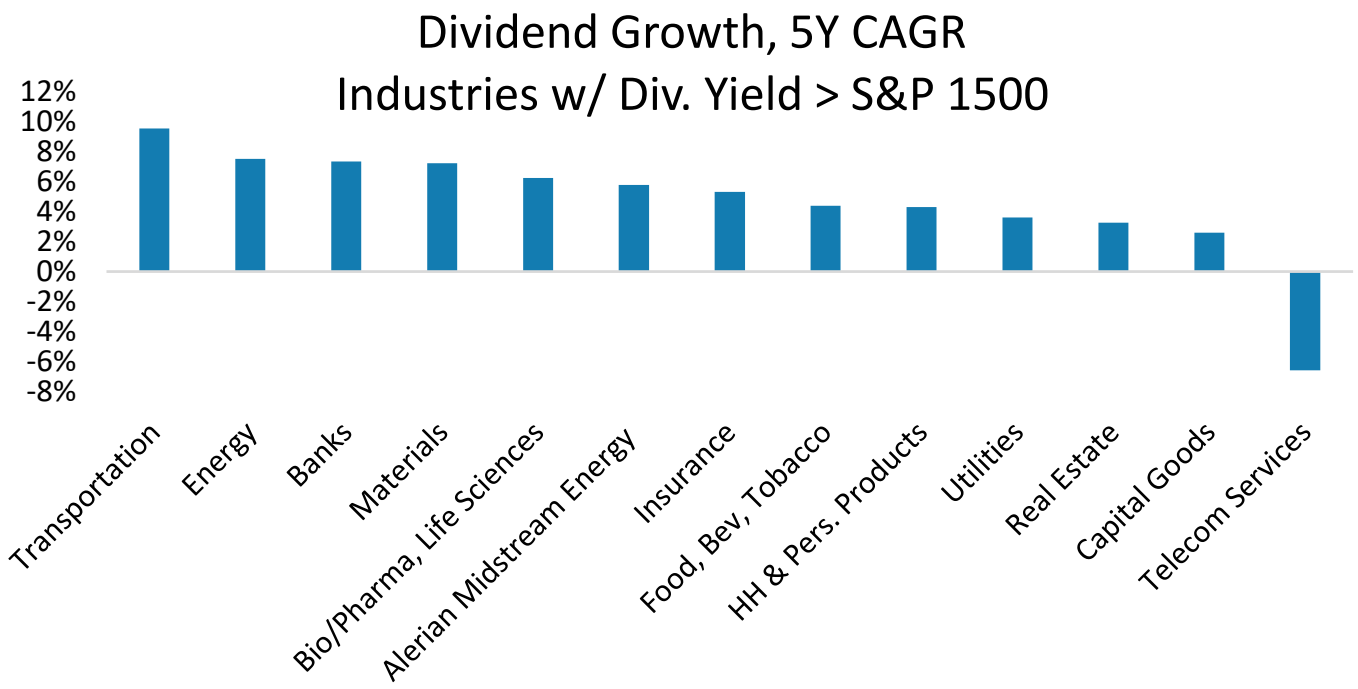


Source: Bloomberg, Morgan Stanley Research

Dividend Growth & Volatility

Consistent dividend growth is the sign of a quality dividend stock. Below we rank the S&P 1500 industry groups in focus by their 5-year dividend growth. We see that Transportation, Energy and Banks have provided high dividend growth since 2018 while Real Estate, Capital Goods, and Telecom Services have had low or negative growth. As a caveat, we use the S&P 1500 to get a broader sample size than the S&P 500 but some sectors (i.e. Telecom Services) are still highly concentrated among a few members.

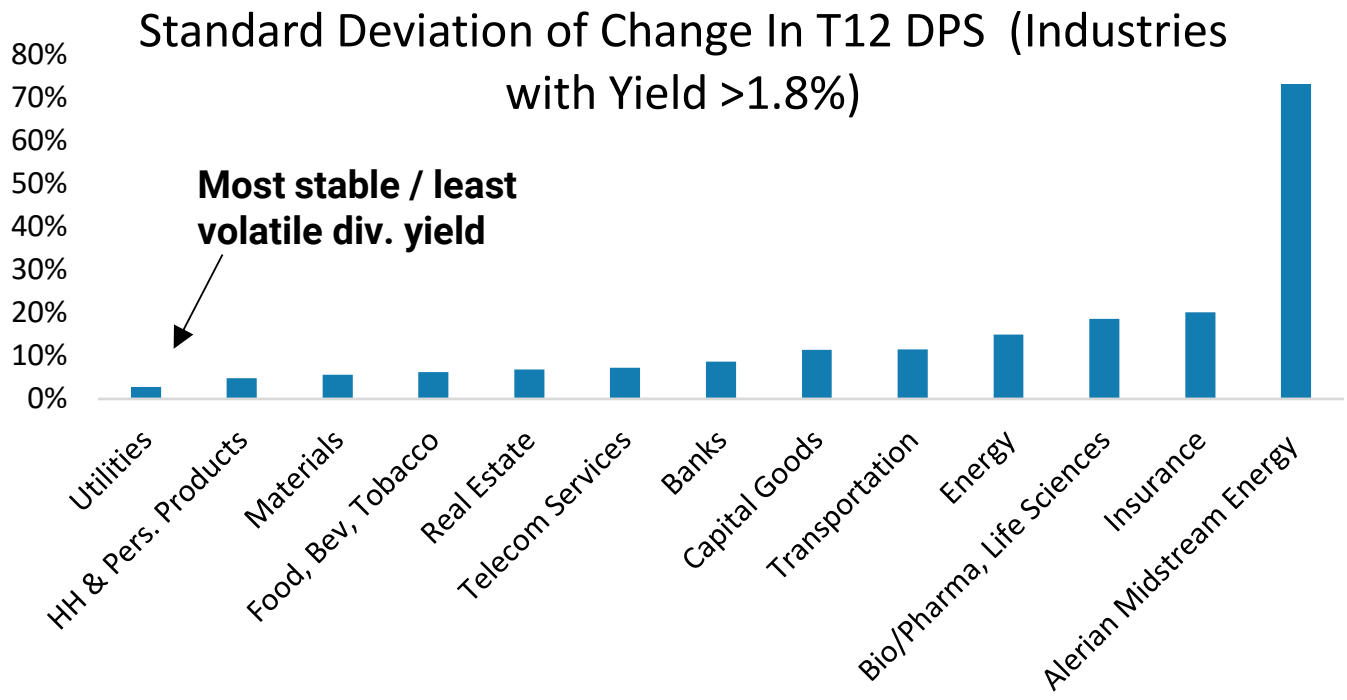
Exhibit 90: 5Y Dividend Growth



Source: Factset, Bloomberg, Morgan Stanley Research

The most stable industry groups in terms of actual dividend per share paid are Utilities, Household & Personal Products, and Materials. Dividend growth is important but is point-in-time. We looked at the volatility of trailing dividends paid since 2000 and found that the highest dividend growers on a 5-year growth are not necessarily the most stable historically. Combining both high dividend growth and lower DPS volatility, Materials and Food, Beverage & Tobacco stand out.

Exhibit 91: Volatility of Dividend Yield

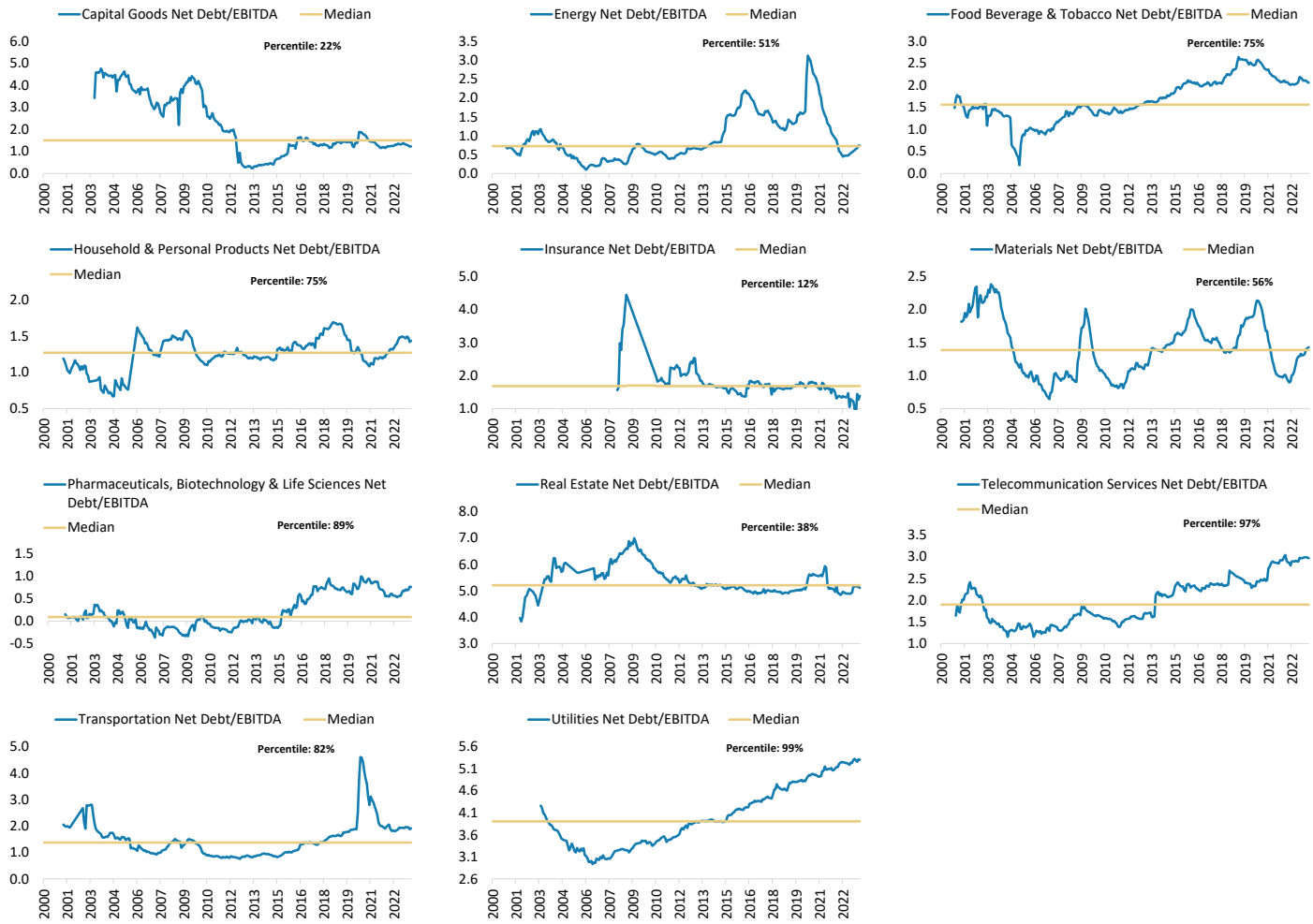


Source: Factset, Bloomberg, Morgan Stanley Research

Leverage & Valuation

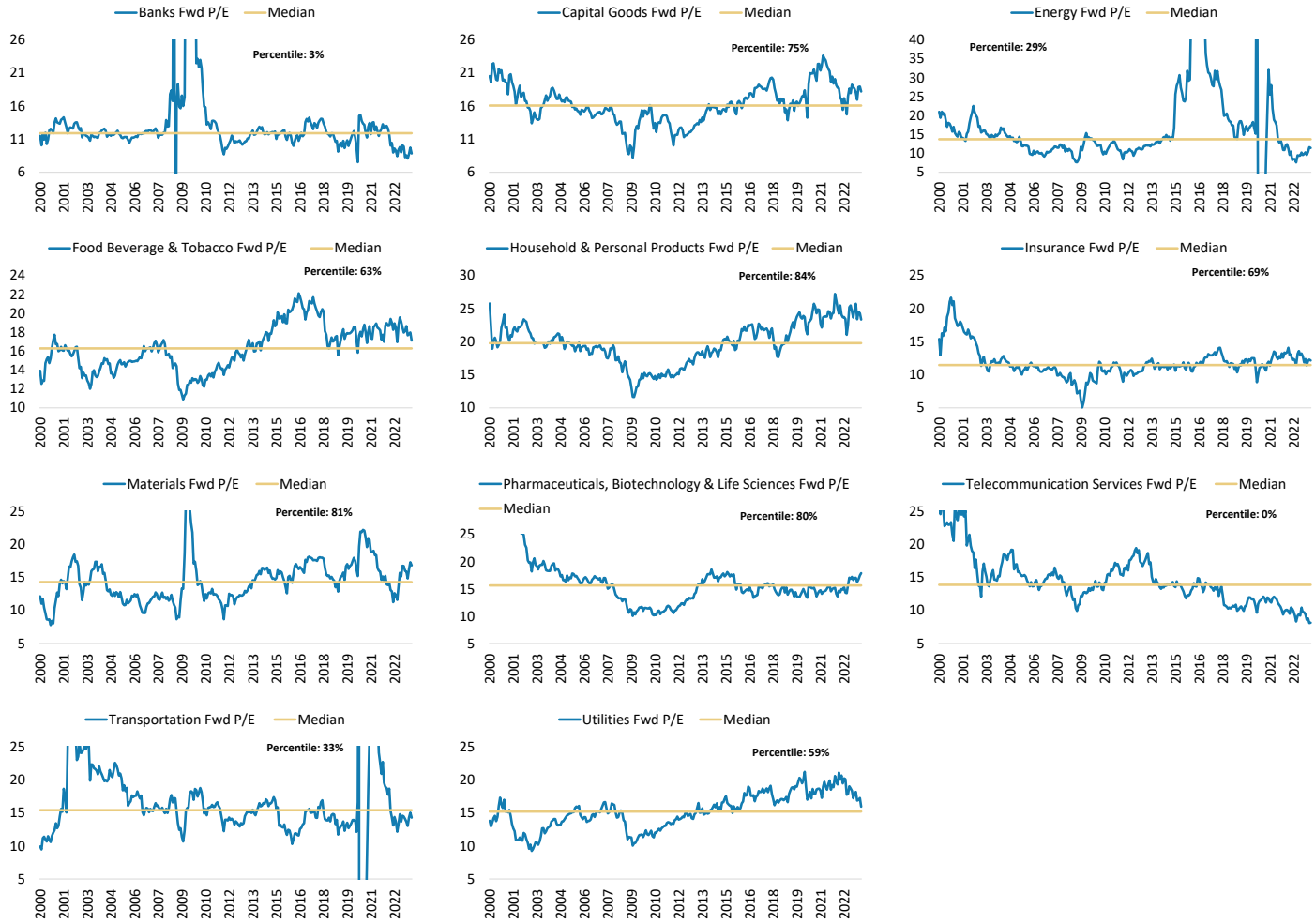
Below we place a repository of leverage and valuation stats across the industry groups covered in this note. Many of the industry groups covered have a preferred leverage or valuation statistic and some industry groups cannot use certain metrics given their business structure and have been removed. The goal is to provide a same-store view across leverage and valuation on the industry groups covered in this note but we encourage you to reach out to the coverage team for specifics on their industry group.

Exhibit 92: Leverage - Net Debt/EBITDA



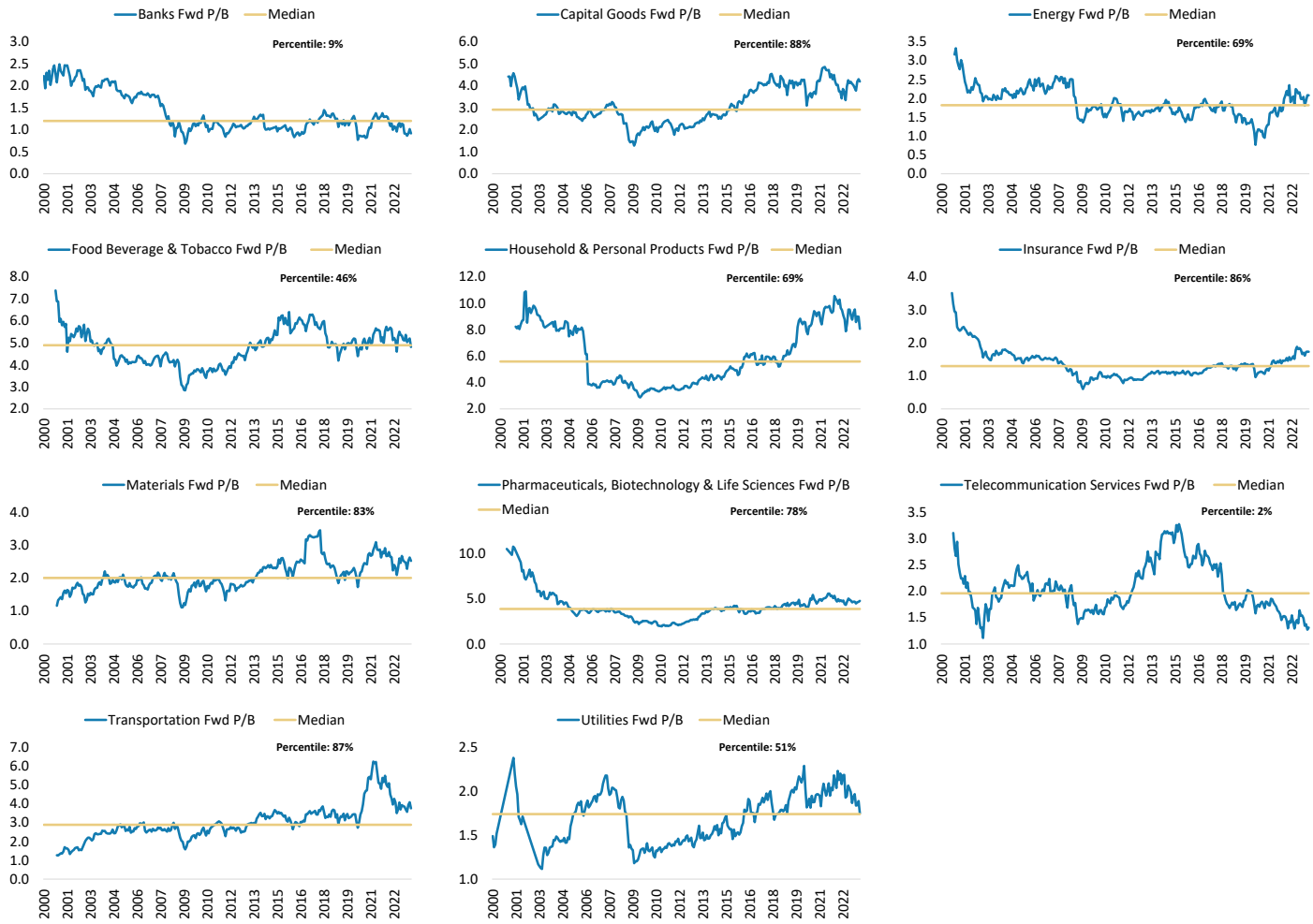
Source: Factset, Bloomberg, Morgan Stanley Research

Exhibit 93: Valuation - Price/Earnings



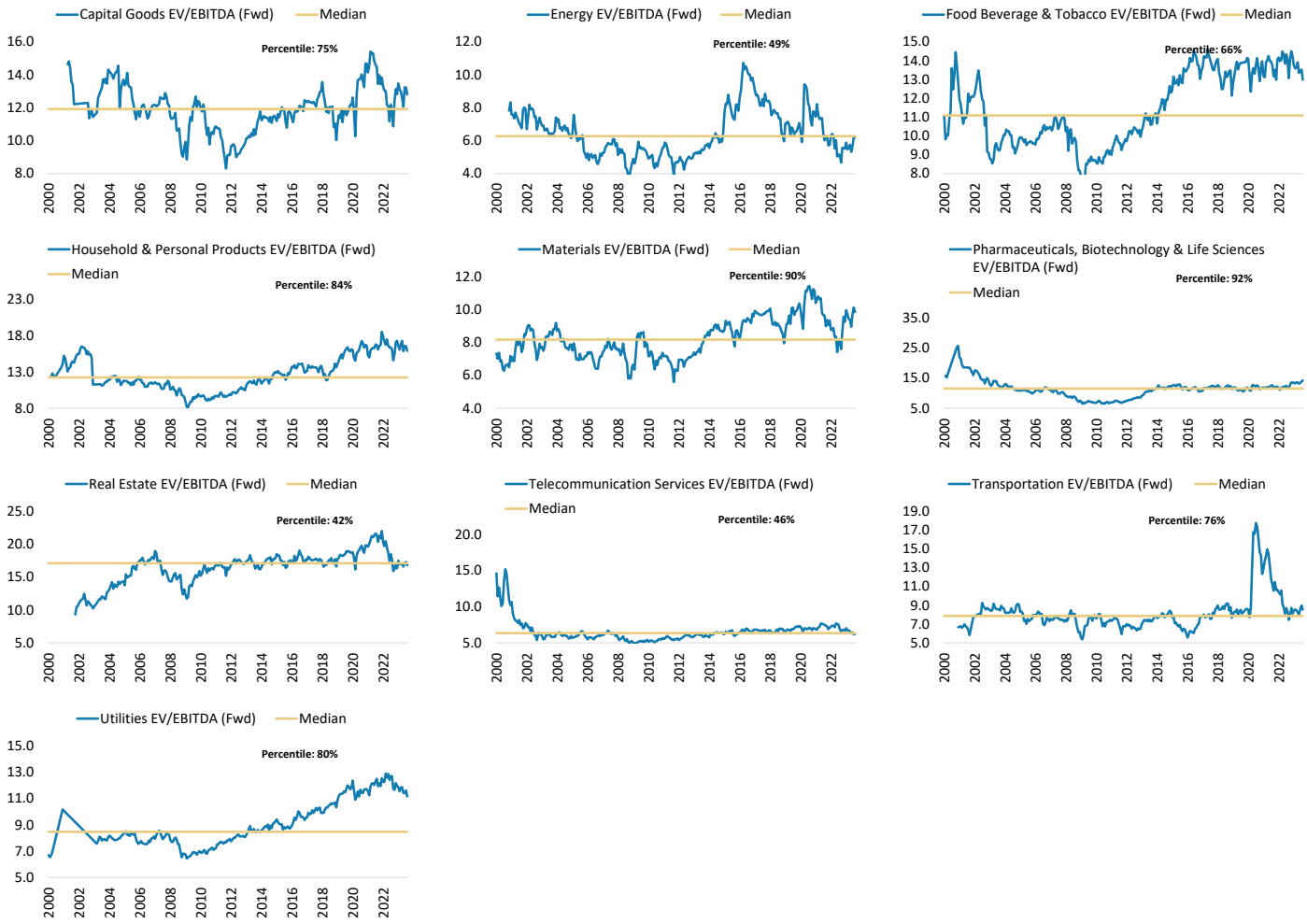
Source: Factset, Bloomberg, Morgan Stanley Research

Exhibit 94: Valuation - Price/Book



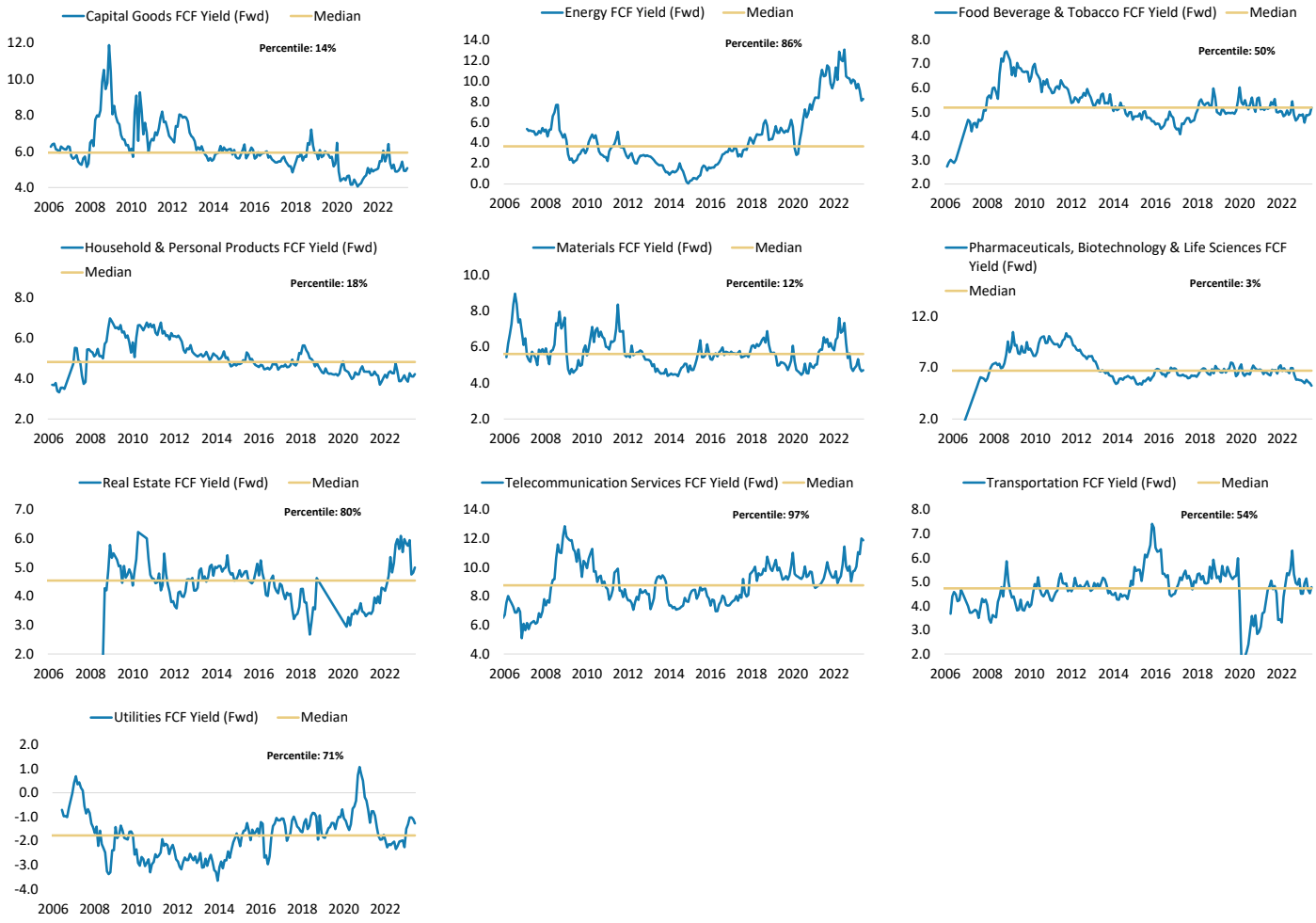
Source: Factset, Bloomberg, Morgan Stanley Research

Exhibit 95: Valuation - EV/EBITDA



Source: Factset, Bloomberg, Morgan Stanley Research

Exhibit 96: Valuation - FCF Yield



Source: Factset, Bloomberg, Morgan Stanley Research

Disclosure Section

The information and opinions in Morgan Stanley Research were prepared by Morgan Stanley & Co. LLC, and/or Morgan Stanley C.T.V.M. S.A., and/or Morgan Stanley Mexico, Casa de Bolsa, S.A. de C.V., and/or Morgan Stanley Canada Limited. As used in this disclosure section, "Morgan Stanley" includes Morgan Stanley & Co. LLC, Morgan Stanley C.T.V.M. S.A., Morgan Stanley Mexico, Casa de Bolsa, S.A. de C.V., Morgan Stanley Canada Limited and their affiliates as necessary.

For important disclosures, stock price charts and equity rating histories regarding companies that are the subject of this report, please see the Morgan Stanley Research Disclosure Website at www.morganstanley.com/researchdisclosures, or contact your investment representative or Morgan Stanley Research at 1585 Broadway, (Attention: Research Management), New York, NY, 10036 USA.

For valuation methodology and risks associated with any recommendation, rating or price target referenced in this research report, please contact the Client Support Team as follows: US/Canada +1 800 303-2495; Hong Kong +852 2848-5999; Latin America +1 718 754-5444 (U.S.); London +44 (0)20-7425-8169; Singapore +65 6834-6860; Sydney +61 (0)2-9770-1505; Tokyo +81 (0)3-6836-9000. Alternatively you may contact your investment representative or Morgan Stanley Research at 1585 Broadway, (Attention: Research Management), New York, NY 10036 USA.

Analyst Certification

The following analysts hereby certify that their views about the companies and their securities discussed in this report are accurately expressed and that they have not received and will not receive direct or indirect compensation in exchange for expressing specific recommendations or views in this report: David Arcaro, CFA; Diane Ding, Ph.D.; Simon Flannery; Manan Gosalia; Betsy L. Graseck, CFA; Robert S Kad; Ronald Kamdem, CFA; Pamela Kaufman, CFA; Adam Kramer; Nicholas Lentini, CFA; Devin McDermott; Snehaja Mogre; Dara Mohsenian, CFA; Andrew B Pauker; Michelle M. Weaver, CFA; Michael J Wilson.

.

Global Research Conflict Management Policy

Morgan Stanley Research has been published in accordance with our conflict management policy, which is available at www.morganstanley.com/institutional/research/conflictpolicies. A Portuguese version of the policy can be found at www.morganstanley.com.br

Important Regulatory Disclosures on Subject Companies

The analyst or strategist (or a household member) identified below owns the following securities (or related derivatives): David Arcaro, CFA - Altria Group, Inc.(common or preferred stock), AT&T, Inc.(common or preferred stock), Bank of America(common or preferred stock), VMware Inc(common or preferred stock), Walgreens Boots Alliance Inc(common or preferred stock), Wells Fargo & Co.(common or preferred stock); Diane Ding, Ph.D. - Citigroup Inc.(common or preferred stock), Simon Property Group Inc(common or preferred stock), Visa Inc.(common or preferred stock), Vornado Realty Trust(common or preferred stock); Betsy L. Graseck, CFA - Abbvie Inc.(common or preferred stock), Air Products and Chemicals Inc.(common or preferred stock), Bristol Myers Squibb Co(common or preferred stock), Chevron Corporation(common or preferred stock), Cisco Systems Inc(common or preferred stock), Exxon Mobil Corporation(common or preferred stock), FirstEnergy Corp(common or preferred stock), Gilead Sciences Inc.(common or preferred stock), Kellogg Co.(common or preferred stock), LyondellBasell Industries N.V.(common or preferred stock), MasterCard Inc(common or preferred stock), NextEra Energy Inc(common or preferred stock), NRG Energy Inc(common or preferred stock), Sempra(common or preferred stock), Verizon Communications(common or preferred stock), Visa Inc.(common or preferred stock); Pamela Kaufman, CFA - JPMorgan Chase & Co(common or preferred stock), Microsoft(common or preferred stock); Nicholas Lentini, CFA - Nike Inc.(common or preferred stock), Regions Financial Corp(common or preferred stock); Devin McDermott - Abbvie Inc.(common or preferred stock), American International Group Inc(common or preferred stock), Bank of America(common or preferred stock), Bristol Myers Squibb Co(common or preferred stock), Comcast Corporation(common or preferred stock), ConocoPhillips(common or preferred stock), MasterCard Inc(common or preferred stock), Microsoft(common or preferred stock), NextEra Energy Inc(common or preferred stock), Nike Inc.(common or preferred stock), PepsiCo Inc.(common or preferred stock), PG&E Corp(common or preferred stock), Philip Morris International Inc(common or preferred stock), RTX Corp(common or preferred stock); Dara Mohsenian, CFA - Philip Morris International Inc(common or preferred stock); Andrew B Pauker - Bank of America(common or preferred stock), RTX Corp(common or preferred stock).

As of August 31, 2023, Morgan Stanley beneficially owned 1% or more of a class of common equity securities of the following companies covered in Morgan Stanley Research: Abbvie Inc., AES Corp., Air Products and Chemicals Inc., Algonquin Power & Utilities Corp, Ally Financial Inc, Altria Group, Inc., American Assets Trust Inc., American Eagle Outfitters, Inc., American Electric Power Co, American Homes 4 Rent, American International Group Inc, American Tower Corp., Amgen Inc., Antero Midstream Corp, Antero Resources Corp, APA Corp, Aramark Holdings Corporation, AT&T, Inc., Atlantica Sustainable Infrastructure, Atmos Energy Corp., AvalonBay Communities Inc., Bank of America, Best Buy Co Inc, BNY Mellon, BorgWarner Inc., Boston Properties, Inc., Bristol Myers Squibb Co, Broadcom Inc., Cadence Bank, Caesars Entertainment Inc, Callon Petroleum Company, Campbell Soup Co, CDW Corporation, Cenovus Energy, CenterPoint Energy Inc, Chemours Co, Cheniere Energy Inc, Chevron Corporation, Choice Hotels International Inc, Church & Dwight Co., Inc., Cisco Systems Inc, Citigroup Inc., Citizens Financial Group, Inc, Clearway Energy Inc, Clorox Co, CMS Energy Corp, Coca-Cola Co., Colgate-Palmolive Co, Comcast Corporation, Comerica Inc, Commerce Bancshares Inc, Conagra Brands, ConocoPhillips, Consolidated Edison Inc, Constellation Brands Inc, Constellation Energy Corporation, Coterra Energy Inc., Crown Castle Corp., CVS Health Corp, Devon Energy Corp, Diamondback Energy Inc, Dick's Sporting Goods, Digital Realty Trust Inc., DraftKings Inc, DT Midstream, Inc., DTE Energy Co., Duke Energy Corp, EastGroup Properties Inc., Eastman Chemical Co, eBay Inc, Edison International, elf Beauty, Emerson Electric Co, Energy Transfer LP, EnLink Midstream LLC, EOG Resources Inc, EQT Corp., Equifax Inc, Equinix Inc., Equity Residential, Essex Property Trust, Inc., Estee Lauder Companies Inc, Eversource Energy, Exelon Corp, Exxon Mobil Corporation, FactSet Research Systems Inc., Fastenal Co., Ferrari NV, Fifth Third Bancorp, FirstEnergy Corp, Gaming and Leisure Properties Inc, General Mills Inc, Gilead Sciences Inc., Goldman Sachs Group Inc, Group 1 Automotive, Inc, Hannon Armstrong, Healthpeak Properties Inc, Hershey Co, Hess Midstream LP, Highwoods Properties, Host Hotels & Resorts Inc, Hostess Brands Inc, Hudson Pacific Properties, Huntington Bancshares, Hyatt Hotels Corp, IBM, Intel Corporation, Invitation Homes Inc, Iridium Communications Inc, J. M. Smucker Co, Johnson Controls International Plc, JPMorgan Chase & Co, Juniper Networks Inc, Kellogg Co., KeyCorp, Kimberly-Clark Corp, Kohl's, Lamar Advertising Co., Lazard Ltd, Linde PLC, Lithia Motors Inc., Lockheed Martin Corp, LUMEN TECHNOLOGIES INC, LyondellBasell Industries N.V., M&T Bank Corp., Macerich Co, Magellan Midstream Partners LP, Marathon Oil Corporation, Marriott International Inc, MasterCard Inc, Medtronic PLC, Merck & Co., Inc., MGM Resorts International, Microchip Technology Inc., Microsoft, Molson Coors Beverage Company, Mondelez International Inc, Monster Beverage Corp, National Storage Affiliates Trust, NetApp Inc, Newell Brands Inc., NextEra Energy Inc, NextEra Energy Partners LP, Nike Inc., NNN REIT Inc, NRG Energy Inc, Occidental Petroleum Corp, Office Properties Income Trust, ONE Gas Inc, Oneok Inc., Park Hotels & Resorts Inc, Pebblebrook Hotel Trust, PENN Entertainment Inc., PepsiCo Inc., Philip Morris International Inc, Pinnacle West Capital Corp, Plains All American Pipeline LP, Plains GP Holdings, L.P., PNC Financial Services, Procter & Gamble Co., Prologis, Inc., Prosperity Bancshares Inc, Prudential Financial, Public Service Enterprise Group Inc, Public Storage, Range Resources Corp., Realty Income Corp, Regions Financial Corp, Rogers Communications, Inc., Ross Stores Inc., Royalty Pharma Plc, RTX Corp, Safehold Inc, SBA Communications, SEI Investments Company, Sempra, Simon Property Group Inc, Simply Good Foods Co, SL Green Realty Corporation, Soho House & Co Inc, Spire Inc, State Street Corporation, Synovus Financial Corp., T-Mobile US, Inc., Targa Resources Corp., Teleflex Inc., Telephone & Data Systems, Textron Inc., TJX Companies Inc., Tradeweb Markets Inc, Truist Financial Corp, U.S. Bancorp, United Parcel Service, Uniti Group Inc, Urban Edge Properties, Ventas Inc, Verizon Communications, VICI Properties Inc, Visa Inc., Vistra Corp, Vita Coco Company Inc, Vital Farms Inc., Vornado Realty Trust, Walgreens Boots Alliance Inc, Wells Fargo & Co., Welltower Inc., Western Union Co, Williams Companies Inc, Wyndham Hotels & Resorts Inc, Wynn Resorts, Limited, Yum! Brands, Inc., Zimmer Biomet Holdings Inc, Zions Bancorporation NA, Zoetis Inc..

Within the last 12 months, Morgan Stanley managed or co-managed a public offering (or 144A offering) of securities of AES Corp., Agree Realty Corp., Ally Financial Inc, American Electric Power Co, American International Group Inc, American Tower Corp., AT&T, Inc., AvalonBay Communities Inc., AVANGRID, Inc, Bank of America, BNY Mellon, Boston Properties, Inc., CenterPoint Energy Inc, Cheniere Energy Inc, Cheniere Energy Partners LP, Citigroup Inc., Citizens Financial Group, Inc, CMS Energy Corp, Colgate-Palmolive Co, Comcast Corporation, ConocoPhillips, Constellation Energy Corporation, Coty Inc, Crown Castle Corp., CVS Health Corp, Diamondback Energy Inc, Digital Realty Trust Inc., DTE Energy Co., Duke Energy Corp, Eastman Chemical Co, eBay Inc, Edison International, Enbridge, Energy Transfer LP, Entergy Corp, Enterprise Products LP, Eversource Energy, Exelon Corp, Fifth Third Bancorp, FirstEnergy Corp, Frontier Communications Parent, Inc., General Mills Inc, Gilead Sciences Inc., Goldman Sachs Group Inc, Hannon Armstrong, Hess Midstream LP, Huntington Bancshares, Intel Corporation, Invitation Homes Inc, Johnson Controls International Plc, KeyCorp, Kimberly-Clark Corp, Kraft Heinz Co, Lockheed Martin Corp, M&T Bank Corp., MasterCard Inc, Merck & Co., Inc., MPLX LP, NextEra Energy Inc, NNN REIT Inc, NRG Energy Inc, Oddity, Ovintiv Inc, Pioneer Natural Resources Co., PNC Financial Services, PPL Corp, Procter & Gamble Co., Prologis, Inc., Prudential Financial, Public Service Enterprise Group Inc, Public Storage, Realty Income Corp, RTX Corp, Safehold Inc, Sempra, Southern Company, Spire Inc, State Street Corporation, Synovus Financial Corp., T-Mobile US, Inc., Tricon Residential Inc, Truist Financial Corp, U.S. Bancorp, United Parcel Service, Uniti Group Inc, Ventas Inc, Verizon Communications, VICI Properties Inc, Vistra Corp, Vita Coco Company Inc, Welltower Inc., Williams Companies Inc, Xcel Energy Inc.

Within the last 12 months, Morgan Stanley has received compensation for investment banking services from Abbvie Inc., AES Corp., Agree Realty Corp., Algonquin Power & Utilities Corp, Ally Financial Inc, Altria Group, Inc., Ameren Corp, American Electric Power Co, American International Group Inc, American Tower Corp., Amgen Inc., Aramark Holdings Corporation, AT&T, Inc., AvalonBay Communities Inc., AVANGRID, Inc, Baker Hughes Co, BNY Mellon, Boston Properties, Inc., Bristol Myers Squibb Co, CenterPoint Energy Inc, Cheniere Energy Inc, Cheniere Energy Partners LP, Chevron Corporation, Citizens Financial Group, Inc, Clearway Energy Inc, CMS Energy Corp, Coca-Cola Co., Colgate-Palmolive Co, Comcast Corporation, ConocoPhillips, Constellation Energy Corporation, Coty Inc, Crown Castle Corp., CVS Health Corp, Devon Energy Corp, Diamondback Energy Inc, DTE Energy Co., Duke Energy Corp, Eastman Chemical Co, eBay Inc, Edison International, Enbridge, Energy Transfer LP, Entergy Corp, Equity Residential, Eversource Energy, Excelerate Energy Inc, Exelon Corp, Fifth Third Bancorp, FirstEnergy Corp, Fortive Corp, Frontier Communications Parent, Inc., General Mills Inc, Gilead Sciences Inc., Gogo Inc, Goldman Sachs Group Inc, Hannon Armstrong, Host Hotels & Resorts Inc, Hostess Brands Inc, Huntington Bancshares, Intel Corporation, Invitation Homes Inc, Johnson Controls International Plc, JPMorgan Chase & Co, Kellogg Co., KeyCorp, Kimberly-Clark Corp, Kimco Realty Corp., Kinder Morgan Inc., Kinetik Holdings Inc, Kohl's, Lamar Advertising Co., Lockheed Martin Corp, LPL Financial Holdings Inc., LUMEN TECHNOLOGIES INC, LyondellBasell Industries N.V., M&T Bank Corp., Magellan Midstream Partners LP, Marathon Oil Corporation, MasterCard Inc, Merck & Co., Inc., MGM Resorts International, Molson Coors Beverage Company, Mondelez International Inc, MPLX LP, National Storage Affiliates Trust, New York Community Bancorp Inc, NextEra Energy Inc, Nike Inc., NNN REIT Inc, NRG Energy Inc, Oddity, Park Hotels & Resorts Inc, PepsiCo Inc., Pioneer Natural Resources Co., Plains All American Pipeline LP, PNC Financial Services, PPL Corp, Procter & Gamble Co., Prologis, Inc., Prudential Financial, Public Service Enterprise Group Inc, Public Storage, Realty Income Corp, Royalty Pharma Plc, RTX Corp, Safehold Inc, Sempra, Southern Company, Spire Inc, Spirit Realty Capital, State Street Corporation, Suncor Energy Inc, Synovus Financial Corp., T-Mobile US, Inc., Truist Financial Corp, U.S. Bancorp, United Parcel Service, Uniti Group Inc, Ventas Inc, Verizon Communications, VICI Properties Inc, Vistra Corp, Vita Coco Company Inc, Walgreens Boots Alliance Inc, Wells Fargo & Co., Williams Companies Inc, Xcel Energy Inc, Xenia Hotels & Resorts Inc, Zimmer Biomet Holdings Inc.

In the next 3 months, Morgan Stanley expects to receive or intends to seek compensation for investment banking services from Abbvie Inc., AES Corp., Agree Realty Corp., Algonquin Power & Utilities Corp, Ally Financial Inc, Altria Group, Inc., Ameren Corp, American Assets Trust Inc., American Eagle Outfitters, Inc., American Electric Power Co, American Homes 4 Rent, American International Group Inc, American Tower Corp., Amgen Inc., Anterix Inc, Antero Resources Corp, APA Corp, Aramark Holdings Corporation, AT&T, Inc., Atlantica Sustainable Infrastructure, Atmos Energy Corp., AvalonBay Communities Inc., AVANGRID, Inc, Baker Hughes Co, Bank of America, Bank Ozk, BellRing Brands Inc., Best Buy Co Inc, BNY Mellon, BorgWarner Inc., Boston Beer Company Inc, Boston Properties, Inc., Boyd Gaming Corp, Bristol Myers Squibb Co, Broadcom Inc., Broadstone Net Lease, Inc., Brown-Forman Corporation, Cadence Bank, Caesars Entertainment Inc, Callon Petroleum Company, Campbell Soup Co, CDW Corporation, Cenovus Energy, CenterPoint Energy Inc, Cheniere Energy Inc, Cheniere Energy Partners LP, Chevron Corporation, Choice Hotels International Inc, Church & Dwight Co., Inc., Cisco Systems Inc, Citigroup Inc., Citizens Financial Group, Inc, Clearway Energy Inc, Clorox Co, CMS Energy Corp, Coca-Cola Co., Colgate-Palmolive Co, Comcast Corporation, Comerica Inc, Commerce Bancshares Inc, Conagra Brands, ConocoPhillips, Consolidated Edison Inc, Constellation Brands Inc, Constellation Energy Corporation, Coterra Energy Inc., Coty Inc, Crown Castle Corp., Cullen/Frost Bankers, CVS Health Corp, Devon Energy Corp, Diamondback Energy Inc, DiamondRock Hospitality Co, Dick's Sporting Goods, Digital Realty Trust Inc., Dominion Energy Inc, DraftKings Inc, DT Midstream, Inc., DTE Energy Co., Duke Energy Corp, EastGroup Properties Inc., Eastman Chemical Co, eBay Inc, Edison International, elf Beauty, Emerson Electric Co, Enbridge, Energizer Holdings Inc., Energy Transfer LP, EnLink Midstream LLC, Entergy Corp, Enterprise Products LP, EOG Resources Inc, EQT Corp., Equifax Inc, Equinix Inc., Equity Residential, Essex Property Trust, Inc., Estee Lauder Companies Inc, Eversource Energy, Excelerate Energy Inc, Exelon Corp, Exxon Mobil Corporation, FactSet Research Systems Inc., Ferrari NV, Fifth Third Bancorp, FirstEnergy Corp, Fortive Corp, Frontier Communications Parent, Inc., Gaming and Leisure Properties Inc, General Dynamics Corp., General Mills Inc, Gilead Sciences Inc., Globalstar Inc, Gogo Inc, Goldman Sachs Group Inc, Hannon Armstrong, Healthpeak Properties Inc, Hershey Co, Hess Corp., Hilton Worldwide Holdings Inc, Honest Co Inc, Host Hotels & Resorts Inc, Hostess Brands Inc, Hudson Pacific Properties, Huntington Bancshares, Hyatt Hotels Corp, IBM, Intel Corporation, Invitation Homes Inc, J. M. Smucker Co, Johnson Controls International Plc, JPMorgan Chase & Co, Juniper Networks Inc, Kellogg Co., Keurig Dr Pepper Inc, KeyCorp, Kimberly-Clark Corp, Kimco Realty Corp., Kinder Morgan Inc., Kinetik Holdings Inc, Kohl's, Kraft Heinz Co, Lamar Advertising Co., Las Vegas Sands Corp, Lazard Ltd, Linde PLC, Lithia Motors Inc., Lockheed Martin Corp, LPL Financial Holdings Inc., LUMEN TECHNOLOGIES INC, LyondellBasell Industries N.V., M&T Bank Corp., Macerich Co, Magellan Midstream Partners LP, Marathon Oil Corporation, Marriott International Inc, Marvell Technology Group Ltd, MasterCard Inc, Medtronic PLC, Merck & Co., Inc., MGE Energy, Inc., MGM Resorts International, Microchip Technology Inc., Microsoft, Molson Coors Beverage Company, Mondelez International Inc, Monster Beverage Corp, MPLX LP, Murphy Oil Corporation, National Storage Affiliates Trust, NetApp Inc, New Fortress Energy Inc, New York Community Bancorp Inc, Newell Brands Inc., NextEra Energy Inc, NextEra Energy Partners LP, Nike Inc., NNN REIT Inc, Northern Trust Corp., NRG Energy Inc, Oatly Group AB, Occidental Petroleum Corp, Oddity, Office Properties Income Trust, Olaplex Holdings, Inc., Olin Corp., ONE Gas Inc, Oneok Inc., Ovintiv Inc, Paramount Group Inc., Park Hotels & Resorts Inc, Pebblebrook Hotel Trust, PENN Entertainment Inc., PepsiCo Inc., PG&E Corp, Phillips Edison & Company, Inc, Physicians Realty Trust, Pinnacle West Capital Corp, Pioneer Natural Resources Co., Plains All American Pipeline LP, PNC Financial Services, PPL Corp, Procter & Gamble Co., Prologis, Inc., Prosperity Bancshares Inc, Prudential Financial, Public Service Enterprise Group Inc, Public Storage, Range Resources Corp., Realty Income Corp, Regions Financial Corp, Royalty Pharma Plc, RTX Corp, Safehold Inc, SBA Communications, Sempra, Simon Property Group Inc, Site Centers Corp, Soho House & Co Inc, Southern Company, Southern Copper Corp., Southwestern Energy Co, Spire Inc, Spirit Realty Capital, Sportradar Group AG, State Street Corporation, Suncor Energy Inc, Sunstone Hotel Investors Inc, Synovus Financial Corp., T-Mobile US, Inc., Targa Resources Corp., TC Energy Corp, Teleflex Inc., Telephone & Data Systems, Tellurian Inc, TELUS Corp., Textron Inc., TJX Companies Inc., Tradeweb Markets Inc, Tricon Residential Inc, Truist Financial Corp, U.S. Bancorp, UDR, Inc., United Parcel Service, Uniti Group Inc, Urban Edge Properties, Valley National Bancorp, Ventas Inc, Verizon Communications, Viasat Inc, VICI Properties Inc, Visa Inc., Vistra Corp, Vita Coco Company Inc, Vital Farms Inc., Vornado Realty Trust, Walgreens Boots Alliance Inc, Watsco Inc., Webster Financial Corp, Wells Fargo & Co., Welltower Inc., Western Union Co, Williams Companies Inc, Wynn Resorts, Limited, Xcel Energy Inc, Xenia Hotels & Resorts Inc, Yum! Brands, Inc., Zevia PBC, Zimmer Biomet Holdings Inc, Zions Bancorporation NA, Zoetis Inc..

Within the last 12 months, Morgan Stanley has received compensation for products and services other than investment banking services from Abbvie Inc., AES Corp., Ally Financial Inc, Altria Group, Inc., Ameren Corp, American Electric Power Co, American International Group Inc, American Tower Corp., Amgen Inc., Antero Resources Corp, APA Corp, Aramark Holdings Corporation, AT&T, Inc., Atmos Energy Corp., AvalonBay Communities Inc., AVANGRID, Inc, Baker Hughes Co, Bank of America, BNY Mellon, BorgWarner Inc., Boston Properties, Inc., Bristol Myers Squibb Co, Broadcom Inc., Cadence Bank, Caesars Entertainment Inc, Callon Petroleum Company, Campbell Soup Co, CDW Corporation, CenterPoint Energy Inc, Chemours Co, Cheniere Energy Inc,

Cheniere Energy Partners LP, Chevron Corporation, Church & Dwight Co., Inc., Cisco Systems Inc, Citigroup Inc., Citizens Financial Group, Inc, Clorox Co, CMS Energy Corp, Coca-Cola Co., Colgate-Palmolive Co, Comcast Corporation, Comerica Inc, Commerce Bancshares Inc, Conagra Brands, ConocoPhillips, Consolidated Edison Inc, Constellation Brands Inc, Constellation Energy Corporation, Coterra Energy Inc., Coty Inc, Crown Castle Corp., Cullen/Frost Bankers, CVS Health Corp, Devon Energy Corp, Dominion Energy Inc, DTE Energy Co., Duke Energy Corp, East West Bancorp, Inc., Eastman Chemical Co, eBay Inc, Edgewell Personal Care, Edison International, Enbridge, Energy Transfer LP, Entergy Corp, Enterprise Products LP, EOG Resources Inc, EQT Corp., Equifax Inc, Equinix Inc., Equity Residential, Eversource Energy, Exelon Corp, Exxon Mobil Corporation, FactSet Research Systems Inc., Ferrari NV, Fifth Third Bancorp, FirstEnergy Corp, Fortive Corp, General Mills Inc, Gilead Sciences Inc., Goldman Sachs Group Inc, Hess Corp., Hilton Worldwide Holdings Inc, Host Hotels & Resorts Inc, Hostess Brands Inc, Huntington Bancshares, Hyatt Hotels Corp, IBM, Intel Corporation, Invitation Homes Inc, Iridium Communications Inc, Johnson Controls International Plc, JPMorgan Chase & Co, Kellogg Co., KeyCorp, Kimberly-Clark Corp, Kimco Realty Corp., Kinder Morgan Inc., Kohl's, Kraft Heinz Co, Lamar Advertising Co., Las Vegas Sands Corp, Lazard Ltd, Lockheed Martin Corp, LPL Financial Holdings Inc., LUMEN TECHNOLOGIES INC, LyondellBasell Industries N.V., M&T Bank Corp., Macerich Co, Magellan Midstream Partners LP, Marriott International Inc, Marvell Technology Group Ltd, MasterCard Inc, Medtronic PLC, Merck & Co., Inc., MGM Resorts International, Microsoft, Molson Coors Beverage Company, Mondelez International Inc, MPLX LP, National Storage Affiliates Trust, NetApp Inc, New York Community Bancorp Inc, Newell Brands Inc., NextEra Energy Inc, Nike Inc., Northern Trust Corp., NRG Energy Inc, Occidental Petroleum Corp, ONE Gas Inc, Oneok Inc., Ovintiv Inc, Park Hotels & Resorts Inc, PENN Entertainment Inc., PepsiCo Inc., PG&E Corp, Pinnacle West Capital Corp, Plains All American Pipeline LP, PNC Financial Services, PPL Corp, Procter & Gamble Co., Prologis, Inc., Prudential Financial, Public Service Enterprise Group Inc, Public Storage, Range Resources Corp., Realty Income Corp, Regions Financial Corp, Rogers Communications, Inc., RTX Corp, SEI Investments Company, Sempra, Simon Property Group Inc, Site Centers Corp, SL Green Realty Corporation, Soho House & Co Inc, Southern Company, Southwestern Energy Co, Spire Inc, Spirit Realty Capital, State Street Corporation, Suncor Energy Inc, T-Mobile US, Inc., Targa Resources Corp., TC Energy Corp, Teleflex Inc., TELUS Corp., Textron Inc., Truist Financial Corp, U.S. Bancorp, UDR, Inc., United Parcel Service, Valley National Bancorp, Ventas Inc, Verizon Communications, Viasat Inc, Visa Inc., Vistra Corp, Vornado Realty Trust, Walgreens Boots Alliance Inc, Wells Fargo & Co., Welltower Inc., Western Midstream Partners LP, Western Union Co, Williams Companies Inc, Wyndham Hotels & Resorts Inc, Wynn Resorts, Limited, Xcel Energy Inc, Yum! Brands, Inc., Zimmer Biomet Holdings Inc, Zions Bancorporation NA, Zoetis Inc..

Within the last 12 months, Morgan Stanley has provided or is providing investment banking services to, or has an investment banking client relationship with, the following company: Abbvie Inc., AES Corp., Agree Realty Corp., Algonquin Power & Utilities Corp, Ally Financial Inc, Altria Group, Inc., Ameren Corp, American Assets Trust Inc., American Eagle Outfitters, Inc., American Electric Power Co, American Homes 4 Rent, American International Group Inc, American Tower Corp., Amgen Inc., Anterix Inc, Antero Resources Corp, APA Corp, Aramark Holdings Corporation, AT&T, Inc., Atlantica Sustainable Infrastructure, Atmos Energy Corp., AvalonBay Communities Inc., AVANGRID, Inc, Baker Hughes Co, Bank of America, Bank Ozk, BellRing Brands Inc., Best Buy Co Inc, BNY Mellon, BorgWarner Inc., Boston Beer Company Inc, Boston Properties, Inc., Boyd Gaming Corp, Bristol Myers Squibb Co, Broadcom Inc., Broadstone Net Lease, Inc., Brown-Forman Corporation, Cadence Bank, Caesars Entertainment Inc, Callon Petroleum Company, Campbell Soup Co, CDW Corporation, Cenovus Energy, CenterPoint Energy Inc, Cheniere Energy Inc, Cheniere Energy Partners LP, Chevron Corporation, Choice Hotels International Inc, Church & Dwight Co., Inc., Cisco Systems Inc, Citigroup Inc., Citizens Financial Group, Inc, Clearway Energy Inc, Clorox Co, CMS Energy Corp, Coca-Cola Co., Colgate-Palmolive Co, Comcast Corporation, Comerica Inc, Commerce Bancshares Inc, Conagra Brands, ConocoPhillips, Consolidated Edison Inc, Constellation Brands Inc, Constellation Energy Corporation, Coterra Energy Inc., Coty Inc, Crown Castle Corp., Cullen/Frost Bankers, CVS Health Corp, Devon Energy Corp, Diamondback Energy Inc, DiamondRock Hospitality Co, Dick's Sporting Goods, Digital Realty Trust Inc., Dominion Energy Inc, DraftKings Inc, DT Midstream, Inc., DTE Energy Co., Duke Energy Corp, EastGroup Properties Inc., Eastman Chemical Co, eBay Inc, Edison International, elf Beauty, Emerson Electric Co, Enbridge, Energizer Holdings Inc., Energy Transfer LP, EnLink Midstream LLC, Entergy Corp, Enterprise Products LP, EOG Resources Inc, EQT Corp., Equifax Inc, Equinix Inc., Equity Residential, Essex Property Trust, Inc., Estee Lauder Companies Inc, Eversource Energy, Excelerate Energy Inc, Exelon Corp, Exxon Mobil Corporation, FactSet Research Systems Inc., Ferrari NV, Fifth Third Bancorp, FirstEnergy Corp, Fortive Corp, Frontier Communications Parent, Inc., Gaming and Leisure Properties Inc, General Dynamics Corp., General Mills Inc, Gilead Sciences Inc., Globalstar Inc, Gogo Inc, Goldman Sachs Group Inc, Hannon Armstrong, Healthpeak Properties Inc, Hershey Co, Hess Corp., Hess Midstream LP, Hilton Worldwide Holdings Inc, Honest Co Inc, Host Hotels & Resorts Inc, Hostess Brands Inc, Hudson Pacific Properties, Huntington Bancshares, Hyatt Hotels Corp, IBM, Intel Corporation, Invitation Homes Inc, J. M. Smucker Co, Johnson Controls International Plc, JPMorgan Chase & Co, Juniper Networks Inc, Kellogg Co., Keurig Dr Pepper Inc, KeyCorp, Kimberly-Clark Corp, Kimco Realty Corp., Kinder Morgan Inc., Kinetik Holdings Inc, Kohl's, Kraft Heinz Co, Lamar Advertising Co., Las Vegas Sands Corp, Lazard Ltd, Linde PLC, Lithia Motors Inc., Lockheed Martin Corp, LPL Financial Holdings Inc., LUMEN TECHNOLOGIES INC, LyondellBasell Industries N.V., M&T Bank Corp., Macerich Co, Magellan Midstream Partners LP, Marathon Oil Corporation, Marriott International Inc, Marvell Technology Group Ltd, MasterCard Inc, Medtronic PLC, Merck & Co., Inc., MGE Energy, Inc., MGM Resorts International, Microchip Technology Inc., Microsoft, Molson Coors Beverage Company, Mondelez International Inc, Monster Beverage Corp, MPLX LP, Murphy Oil Corporation, National Storage Affiliates Trust, NetApp Inc, New Fortress Energy Inc, New York Community Bancorp Inc, Newell Brands Inc., NextEra Energy Inc, NextEra Energy Partners LP, Nike Inc., NNN REIT Inc, Northern Trust Corp., NRG Energy Inc, Oatly Group AB, Occidental Petroleum Corp, Oddity, Office Properties Income Trust, Olaplex Holdings, Inc., Olin Corp., ONE Gas Inc, Oneok Inc., Ovintiv Inc, Paramount Group Inc., Park Hotels & Resorts Inc, Pebblebrook Hotel Trust, PENN Entertainment Inc., PepsiCo Inc., PG&E Corp, Phillips Edison & Company, Inc, Physicians Realty Trust, Pinnacle West Capital Corp, Pioneer Natural Resources Co., Plains All American Pipeline LP, PNC Financial Services, PPL Corp, Procter & Gamble Co., Prologis, Inc., Prosperity Bancshares Inc, Prudential Financial, Public Service Enterprise Group Inc, Public Storage, Range Resources Corp., Realty Income Corp, Regions Financial Corp, Royalty Pharma Plc, RTX Corp, Safehold Inc, SBA Communications, Sempra, Simon Property Group Inc, Site Centers Corp, Soho House & Co Inc, Southern Company, Southern Copper Corp., Southwestern Energy Co, Spire Inc, Spirit Realty Capital, Sportradar Group AG, State Street Corporation, Suncor Energy Inc, Sunstone Hotel Investors Inc, Synovus Financial Corp., T-Mobile US, Inc., Targa Resources Corp., TC Energy Corp, Teleflex Inc., Telephone & Data Systems, Tellurian Inc, TELUS Corp., Textron Inc., TJX Companies Inc., Tradeweb Markets Inc, Tricon Residential Inc, Truist Financial Corp, U.S. Bancorp, UDR, Inc., United Parcel Service, Uniti Group Inc, Urban Edge Properties, Valley National Bancorp, Ventas Inc, Verizon Communications, Viasat Inc, VICI Properties Inc, Visa Inc., Vistra Corp, Vita Coco Company Inc, Vital Farms Inc., Vornado Realty Trust, Walgreens Boots Alliance Inc, Watsco Inc., Webster Financial Corp, Wells Fargo & Co., Welltower Inc., Western Union Co, Williams Companies Inc, Wynn Resorts, Limited, Xcel Energy Inc, Xenia Hotels & Resorts Inc, Yum! Brands, Inc., Zevia PBC, Zimmer Biomet Holdings Inc, Zions Bancorporation NA, Zoetis Inc..

Within the last 12 months, Morgan Stanley has either provided or is providing non-investment banking, securities-related services to and/or in the past has entered into an agreement to provide services or has a client relationship with the following company: Abbvie Inc., AES Corp., Agree Realty Corp., Air Products and Chemicals Inc., Algonquin Power & Utilities Corp, Ally Financial Inc, Altria Group, Inc., Ameren Corp, American Electric Power Co, American Homes 4 Rent, American International Group Inc, American Tower Corp., Amgen Inc., Antero Resources Corp, APA Corp, Aramark Holdings Corporation, AT&T, Inc., Atmos Energy Corp., AvalonBay Communities Inc., AVANGRID, Inc, Baker Hughes Co, Bank of America, Bank Ozk, BCE Inc., BNY Mellon, BorgWarner Inc., Boston Properties, Inc., Bristol Myers Squibb Co, Broadcom Inc., Cadence Bank, Caesars Entertainment Inc, Callon Petroleum Company, Campbell Soup Co, Canadian Natural Resources Ltd, CDW Corporation, Cenovus Energy, CenterPoint Energy Inc, Chemours Co, Cheniere Energy Inc, Cheniere Energy Partners LP, Chevron Corporation, Church & Dwight Co., Inc., Cisco Systems Inc, Citigroup Inc., Citizens Financial Group, Inc, Clorox Co, CMS Energy Corp, Coca-Cola Co., Colgate-Palmolive Co, Comcast Corporation, Comerica Inc, Commerce Bancshares Inc, Conagra Brands, ConocoPhillips, Consolidated Edison Inc, Constellation Brands Inc, Constellation Energy Corporation, Coterra Energy Inc., Coty Inc, Crown Castle Corp., Cullen/Frost Bankers, CVS Health Corp, Devon Energy Corp, Dominion Energy Inc, DTE Energy Co., Duke Energy Corp, East West Bancorp, Inc., Eastman Chemical Co, eBay Inc, Edgewell Personal Care, Edison International, elf Beauty, Emerson Electric Co, Enbridge, Energy Transfer LP, Entergy Corp, Enterprise Products LP, EOG Resources Inc, EQT Corp., Equifax Inc, Equinix Inc., Equitrans Midstream Corp, Equity Residential, Eversource Energy, Exelon Corp, Exxon Mobil Corporation, FactSet Research Systems Inc., Ferrari NV, Fifth Third Bancorp, FirstEnergy Corp, Fortive Corp, Frontier Communications Parent, Inc., Garmin Ltd, General Mills Inc, Gilead Sciences Inc., Gogo Inc, Goldman Sachs Group Inc, Healthpeak Properties Inc, Hess Corp., Hilton Worldwide Holdings Inc, Host

Hotels & Resorts Inc, Hostess Brands Inc, Huntington Bancshares, Hyatt Hotels Corp, IBM, Intel Corporation, Invitation Homes Inc, Iridium Communications Inc, J. M. Smucker Co, Johnson Controls International Plc, JPMorgan Chase & Co, Juniper Networks Inc, Kellogg Co., KeyCorp, Kimberly-Clark Corp, Kimco Realty Corp., Kinder Morgan Inc., Kohl's, Kraft Heinz Co, Lamar Advertising Co., Las Vegas Sands Corp, Lazard Ltd, Linde PLC, Lockheed Martin Corp, LPL Financial Holdings Inc., LUMEN TECHNOLOGIES INC, LyondellBasell Industries N.V., M&T Bank Corp., Macerich Co, Magellan Midstream Partners LP, Marathon Oil Corporation, Marriott International Inc, Marvell Technology Group Ltd, MasterCard Inc, Medtronic PLC, Merck & Co., Inc., MGM Resorts International, Microsoft, Molson Coors Beverage Company, Mondelez International Inc, MPLX LP, National Storage Affiliates Trust, NetApp Inc, New York Community Bancorp Inc, Newell Brands Inc., NextEra Energy Inc, Nike Inc., Northern Trust Corp., NRG Energy Inc, Occidental Petroleum Corp, ONE Gas Inc, Oneok Inc., Ovintiv Inc, Park Hotels & Resorts Inc, PENN Entertainment Inc., PepsiCo Inc., PG&E Corp, Phillips Edison & Company, Inc, Pinnacle West Capital Corp, Pioneer Natural Resources Co., Plains All American Pipeline LP, PNC Financial Services, PPL Corp, Procter & Gamble Co., Prologis, Inc., Prudential Financial, Public Service Enterprise Group Inc, Public Storage, Range Resources Corp., Realty Income Corp, Regions Financial Corp, Rogers Communications, Inc., Royalty Pharma Plc, RTX Corp, SEI Investments Company, Sempra, Simon Property Group Inc, Site Centers Corp, SL Green Realty Corporation, Soho House & Co Inc, Southern Company, Southern Copper Corp., Southwestern Energy Co, Spire Inc, Spirit Realty Capital, State Street Corporation, Suncor Energy Inc, Synovus Financial Corp., T-Mobile US, Inc., Targa Resources Corp., TC Energy Corp, Teleflex Inc., TELUS Corp., Textron Inc., TJX Companies Inc., Tradeweb Markets Inc, Truist Financial Corp, U.S. Bancorp, UDR, Inc., United Parcel Service, Valley National Bancorp, Ventas Inc, Verizon Communications, Viasat Inc, VICI Properties Inc, Visa Inc., Vistra Corp, VMware Inc, Vornado Realty Trust, Walgreens Boots Alliance Inc, Webster Financial Corp, Wells Fargo & Co., Welltower Inc., Western Midstream Partners LP, Western Union Co, Williams Companies Inc, Wyndham Hotels & Resorts Inc, Wynn Resorts, Limited, Xcel Energy Inc, Xenia Hotels & Resorts Inc, Yum! Brands, Inc., Zimmer Biomet Holdings Inc, Zions Bancorporation NA, Zoetis Inc..

An employee, director or consultant of Morgan Stanley is a director of AT&T, Inc., CVS Health Corp, eBay Inc, Estee Lauder Companies Inc, Merck & Co., Inc.. This person is not a research analyst or a member of a research analyst's household.

Morgan Stanley & Co. LLC makes a market in the securities of Abbvie Inc., AES Corp., Agree Realty Corp., Air Products and Chemicals Inc., Ally Financial Inc, Altria Group, Inc., Ameren Corp, American Assets Trust Inc., American Eagle Outfitters, Inc., American Electric Power Co, American Homes 4 Rent, American International Group Inc, American Tower Corp., Amgen Inc., Anterix Inc, Antero Resources Corp, APA Corp, Aramark Holdings Corporation, AT&T, Inc., Atlantica Sustainable Infrastructure, Atmos Energy Corp., AvalonBay Communities Inc., Baker Hughes Co, Bank of America, Bank Ozk, BCE Inc., BellRing Brands Inc., Best Buy Co Inc, BNY Mellon, BorgWarner Inc., Boston Properties, Inc., Boyd Gaming Corp, Bristol Myers Squibb Co, Broadcom Inc., Broadstone Net Lease, Inc., Brown-Forman Corporation, Cadence Bank, Caesars Entertainment Inc, Callon Petroleum Company, Campbell Soup Co, Canadian Natural Resources Ltd, CDW Corporation, Cenovus Energy, CenterPoint Energy Inc, Chemours Co, Cheniere Energy Inc, Cheniere Energy Partners LP, Chevron Corporation, Choice Hotels International Inc, Church & Dwight Co., Inc., Cisco Systems Inc, Citigroup Inc., Citizens Financial Group, Inc, Clearway Energy Inc, Clorox Co, CMS Energy Corp, Coca-Cola Co., Coca-Cola Europacific Partners, Colgate-Palmolive Co, Comcast Corporation, Comerica Inc, Commerce Bancshares Inc, Conagra Brands, ConocoPhillips, Consolidated Edison Inc, Constellation Brands Inc, Coterra Energy Inc., Coty Inc, Crown Castle Corp., Cullen/Frost Bankers, CVS Health Corp, Devon Energy Corp, Diamondback Energy Inc, DiamondRock Hospitality Co, Dick's Sporting Goods, Digital Realty Trust Inc., Dominion Energy Inc, DT Midstream, Inc., DTE Energy Co., Duke Energy Corp, East West Bancorp, Inc., EastGroup Properties Inc., Eastman Chemical Co, eBay Inc, Edgewell Personal Care, Edison International, elf Beauty, Emerson Electric Co, Enbridge, Energizer Holdings Inc., Energy Transfer LP, EnLink Midstream LLC, Entergy Corp, Enterprise Products LP, EOG Resources Inc, EQT Corp., Equifax Inc, Equity Residential, Essex Property Trust, Inc., Estee Lauder Companies Inc, Eversource Energy, Excelerate Energy Inc, Exelon Corp, Extra Space Storage Inc., Exxon Mobil Corporation, FactSet Research Systems Inc., Fastenal Co., Fifth Third Bancorp, FirstEnergy Corp, Fortive Corp, Gaming and Leisure Properties Inc, Garmin Ltd, General Dynamics Corp., General Mills Inc, Gilead Sciences Inc., Globalstar Inc, Gogo Inc, Goldman Sachs Group Inc, Group 1 Automotive, Inc, Hannon Armstrong, Healthpeak Properties Inc, Hershey Co, Hess Corp., Highwoods Properties, Hilton Worldwide Holdings Inc, Honest Co Inc, Host Hotels & Resorts Inc, Hudson Pacific Properties, Huntington Bancshares, Hyatt Hotels Corp, IBM, Imperial Oil Ltd, Intel Corporation, Iridium Communications Inc, J. M. Smucker Co, Johnson Controls International Plc, JPMorgan Chase & Co, Juniper Networks Inc, Kellogg Co., Keurig Dr Pepper Inc, KeyCorp, Kimberly-Clark Corp, Kimco Realty Corp., Kinder Morgan Inc., Kinetik Holdings Inc, Kohl's, Kraft Heinz Co, Lamar Advertising Co., Las Vegas Sands Corp, Lazard Ltd, Lithia Motors Inc., Lockheed Martin Corp, LPL Financial Holdings Inc., LUMEN TECHNOLOGIES INC, LyondellBasell Industries N.V., M&T Bank Corp., Macerich Co, Marathon Oil Corporation, Marriott International Inc, Marvell Technology Group Ltd, MasterCard Inc, Medtronic PLC, Merck & Co., Inc., MGE Energy, Inc., MGM Resorts International, Microchip Technology Inc., Microsoft, Molson Coors Beverage Company, Mondelez International Inc, Monster Beverage Corp, MPLX LP, Murphy Oil Corporation, National Storage Affiliates Trust, NetApp Inc, New Fortress Energy Inc, New York Community Bancorp Inc, Newell Brands Inc., NextDecade Corporation, NextEra Energy Inc, NextEra Energy Partners LP, Nike Inc., NNN REIT Inc, Northern Trust Corp., NRG Energy Inc, Oatly Group AB, Occidental Petroleum Corp, Office Properties Income Trust, Olin Corp., ONE Gas Inc, Oneok Inc., Ovintiv Inc, Paramount Group Inc., Pebblebrook Hotel Trust, PENN Entertainment Inc., Penske Automotive Group, Inc, PepsiCo Inc., PG&E Corp, Philip Morris International Inc, Phillips Edison & Company, Inc, Physicians Realty Trust, Pinnacle West Capital Corp, Pioneer Natural Resources Co., Plains All American Pipeline LP, Plains GP Holdings, L.P., PNC Financial Services, PPL Corp, Procter & Gamble Co., Prologis, Inc., Prosperity Bancshares Inc, Prudential Financial, Public Service Enterprise Group Inc, Public Storage, Range Resources Corp., Realty Income Corp, Regency Centers Corp, Regions Financial Corp, Rogers Communications, Inc., Ross Stores Inc., Royalty Pharma Plc, RTX Corp, SBA Communications, SEI Investments Company, Sempra, Simon Property Group Inc, Simply Good Foods Co, Site Centers Corp, SL Green Realty Corporation, Soho House & Co Inc, Sonic Automotive Inc, Southern Company, Southern Copper Corp., Southwestern Energy Co, Spire Inc, Spirit Realty Capital, Sportradar Group AG, State Street Corporation, Suncor Energy Inc, Sunstone Hotel Investors Inc, Synovus Financial Corp., T-Mobile US, Inc., Targa Resources Corp., TC Energy Corp, Teleflex Inc., Telephone & Data Systems, TELUS Corp., Textron Inc., TJX Companies Inc., Tradeweb Markets Inc, Truist Financial Corp, UDR, Inc., United Parcel Service, Uniti Group Inc, Urban Edge Properties, US Cellular Corporation, Valley National Bancorp, Ventas Inc, Verizon Communications, Viasat Inc, Visa Inc., Vita Coco Company Inc, Vital Farms Inc., VMware Inc, Vornado Realty Trust, Walgreens Boots Alliance Inc, Watsco Inc., Webster Financial Corp, Wells Fargo & Co., Welltower Inc., Western Midstream Partners LP, Western Union Co, Williams Companies Inc, Wyndham Hotels & Resorts Inc, Wynn Resorts, Limited, Xcel Energy Inc, Xenia Hotels & Resorts Inc, Yum! Brands, Inc., Zevia PBC, Zimmer Biomet Holdings Inc, Zions Bancorporation NA, Zoetis Inc..

The equity research analysts or strategists principally responsible for the preparation of Morgan Stanley Research have received compensation based upon various factors, including quality of research, investor client feedback, stock picking, competitive factors, firm revenues and overall investment banking revenues. Equity Research analysts' or strategists' compensation is not linked to investment banking or capital markets transactions performed by Morgan Stanley or the profitability or revenues of particular trading desks.

Morgan Stanley and its affiliates do business that relates to companies/instruments covered in Morgan Stanley Research, including market making, providing liquidity, fund management, commercial banking, extension of credit, investment services and investment banking. Morgan Stanley sells to and buys from customers the securities/instruments of companies covered in Morgan Stanley Research on a principal basis. Morgan Stanley may have a position in the debt of the Company or instruments discussed in this report. Morgan Stanley trades or may trade as principal in the debt securities (or in related derivatives) that are the subject of the debt research report.

Certain disclosures listed above are also for compliance with applicable regulations in non-US jurisdictions.

STOCK RATINGS

Morgan Stanley uses a relative rating system using terms such as Overweight, Equal-weight, Not-Rated or Underweight (see definitions below). Morgan Stanley does not assign ratings of Buy, Hold or Sell to the stocks we cover. Overweight, Equal-weight, Not-Rated and Underweight are not the equivalent of buy, hold and sell. Investors should carefully read the definitions of all ratings used in Morgan Stanley Research. In addition, since Morgan Stanley Research contains more complete information concerning the analyst's views, investors should carefully read Morgan

Stanley Research, in its entirety, and not infer the contents from the rating alone. In any case, ratings (or research) should not be used or relied upon as investment advice. An investor's decision to buy or sell a stock should depend on individual circumstances (such as the investor's existing holdings) and other considerations.

Global Stock Ratings Distribution

(as of August 31, 2023)

The Stock Ratings described below apply to Morgan Stanley's Fundamental Equity Research and do not apply to Debt Research produced by the Firm.

For disclosure purposes only (in accordance with FINRA requirements), we include the category headings of Buy, Hold, and Sell alongside our ratings of Overweight, Equal-weight, Not-Rated and Underweight. Morgan Stanley does not assign ratings of Buy, Hold or Sell to the stocks we cover. Overweight, Equal-weight, Not-Rated and Underweight are not the equivalent of buy, hold, and sell but represent recommended relative weightings (see definitions below). To satisfy regulatory requirements, we correspond Overweight, our most positive stock rating, with a buy recommendation; we correspond Equal-weight and Not-Rated to hold and Underweight to sell recommendations, respectively.

	Coverage Universe		Investment Banking Clients (IBC)			Other Material Investment Services Clients (MISC)	
Stock Rating Category	Count	% of Total	Count	% of Total IBC	% of Rating Category	Count	% of Total Other MISC
Overweight/Buy	1345	37%	273	43%	20%	606	39%
Equal-weight/Hold	1686	46%	301	47%	18%	719	47%
Not-Rated/Hold	3	0%	0	0%	0%	1	0%
Underweight/Sell	594	16%	67	10%	11%	218	14%
Total	3,628		641			1544	

Data include common stock and ADRs currently assigned ratings. Investment Banking Clients are companies from whom Morgan Stanley received investment banking compensation in the last 12 months. Due to rounding off of decimals, the percentages provided in the "% of total" column may not add up to exactly 100 percent.

Analyst Stock Ratings

Overweight (O). The stock's total return is expected to exceed the average total return of the analyst's industry (or industry team's) coverage universe, on a risk-adjusted basis, over the next 12-18 months.

Equal-weight (E). The stock's total return is expected to be in line with the average total return of the analyst's industry (or industry team's) coverage universe, on a risk-adjusted basis, over the next 12-18 months.

Not-Rated (NR). Currently the analyst does not have adequate conviction about the stock's total return relative to the average total return of the analyst's industry (or industry team's) coverage universe, on a risk-adjusted basis, over the next 12-18 months.

Underweight (U). The stock's total return is expected to be below the average total return of the analyst's industry (or industry team's) coverage universe, on a risk-adjusted basis, over the next 12-18 months.

Unless otherwise specified, the time frame for price targets included in Morgan Stanley Research is 12 to 18 months.

Analyst Industry Views

Attractive (A): The analyst expects the performance of his or her industry coverage universe over the next 12-18 months to be attractive vs. the relevant broad market benchmark, as indicated below.

In-Line (I): The analyst expects the performance of his or her industry coverage universe over the next 12-18 months to be in line with the relevant broad market benchmark, as indicated below.

Cautious (C): The analyst views the performance of his or her industry coverage universe over the next 12-18 months with caution vs. the relevant broad market benchmark, as indicated below.

Benchmarks for each region are as follows: North America - S&P 500; Latin America - relevant MSCI country index or MSCI Latin America Index; Europe - MSCI Europe; Japan - TOPIX; Asia - relevant MSCI country index or MSCI sub-regional index or MSCI AC Asia Pacific ex Japan Index.

Important Disclosures for Morgan Stanley Smith Barney LLC & E*TRADE Securities LLC Customers

Important disclosures regarding the relationship between the companies that are the subject of Morgan Stanley Research and Morgan Stanley Smith Barney LLC or Morgan Stanley or any of their affiliates, are available on the Morgan Stanley Wealth Management disclosure website at www.morganstanley.com/online/researchdisclosures. For Morgan Stanley specific disclosures, you may refer to www.morganstanley.com/researchdisclosures.

Each Morgan Stanley research report is reviewed and approved on behalf of Morgan Stanley Smith Barney LLC and E*TRADE Securities LLC. This review and approval is conducted by the same person who reviews the research report on behalf of Morgan Stanley. This could create a conflict of interest.

Other Important Disclosures

Morgan Stanley & Co. International PLC and its affiliates have a significant financial interest in the debt securities of Abbvie Inc., AES Corp., Air Products and Chemicals Inc., Ally Financial Inc, Altria Group, Inc., Ameren Corp, American Electric Power Co, American International Group Inc, American Tower Corp., Amgen Inc., Antero Resources Corp, APA Corp, AT&T, Inc., AvalonBay Communities Inc., AVANGRID, Inc, Baker Hughes Co, Bank of America, BCE Inc., Best Buy Co Inc, BNY Mellon, BorgWarner Inc., Boyd Gaming Corp, Bristol Myers Squibb Co, Broadcom Inc., Caesars Entertainment Inc, Callon Petroleum Company, Campbell Soup Co, CenterPoint Energy Inc, Cheniere Energy Inc, Cheniere Energy Partners LP, Chevron Corporation, Choice Hotels International Inc, Church & Dwight Co., Inc., Cisco Systems Inc, Citigroup Inc., Citizens Financial Group, Inc, Clorox Co, CMS Energy Corp, Coca-Cola Co., Colgate-Palmolive Co, Comcast Corporation, Conagra Brands, ConocoPhillips, Constellation Brands Inc, Constellation Energy Corporation, Coty Inc, Crown Castle Corp., CVS Health Corp, Devon Energy Corp, Diamondback Energy Inc, Dick's Sporting Goods, Dominion Energy Inc, DT Midstream, Inc., DTE Energy Co., Duke Energy Corp, Eastman Chemical Co, eBay Inc, Edgewell Personal Care, Edison International, Emerson Electric Co, Enbridge, Energy Transfer LP, EnLink Midstream LLC, Entergy Corp, EOG Resources Inc, EQT Corp., Equifax Inc, Equinix Inc., Estee Lauder Companies Inc, Eversource Energy, Exelon Corp, Extra Space Storage Inc., Exxon Mobil Corporation, Fifth Third Bancorp, FirstEnergy Corp, Fortive Corp, Frontier Communications Parent, Inc., General Dynamics Corp., General Mills Inc, Gilead Sciences Inc., Goldman Sachs Group Inc, Healthpeak Properties Inc, Hershey Co, Hess Corp., Hess Midstream LP, Huntington Bancshares, Hyatt Hotels Corp, IBM, Intel Corporation, Johnson Controls

International Plc, JPMorgan Chase & Co, Juniper Networks Inc, Kellogg Co., KeyCorp, Kimberly-Clark Corp, Kimco Realty Corp., Kinder Morgan Inc., Kohl's, Lithia Motors Inc., Lockheed Martin Corp, LUMEN TECHNOLOGIES INC, LyondellBasell Industries N.V., Magellan Midstream Partners LP, Marathon Oil Corporation, Marriott International Inc, MasterCard Inc, Merck & Co., Inc., MGM Resorts International, Microsoft, Molson Coors Beverage Company, Mondelez International Inc, MPLX LP, Murphy Oil Corporation, NetApp Inc, New Fortress Energy Inc, Newell Brands Inc., NextEra Energy Inc, NextEra Energy Partners LP, Nike Inc., NNN REIT Inc, Northern Trust Corp., NRG Energy Inc, Occidental Petroleum Corp, Office Properties Income Trust, Olin Corp., Oneok Inc., Ovintiv Inc, PENN Entertainment Inc., Penske Automotive Group, Inc, PepsiCo Inc., PG&E Corp, Philip Morris International Inc, Pioneer Natural Resources Co., Plains All American Pipeline LP, PNC Financial Services, Procter & Gamble Co., Prudential Financial, Public Storage, Range Resources Corp., Realty Income Corp, Regions Financial Corp, Rogers Communications, Inc., Ross Stores Inc., RTX Corp, SBA Communications, Sempra, Site Centers Corp, Southern Company, Southern Copper Corp., Southwestern Energy Co, Spire Inc, State Street Corporation, Suncor Energy Inc, Targa Resources Corp., Textron Inc., TJX Companies Inc., Truist Financial Corp, U.S. Bancorp, UDR, Inc., United Parcel Service, Uniti Group Inc, Verizon Communications, Viasat Inc, Visa Inc., VMware Inc, Walgreens Boots Alliance Inc, Wells Fargo & Co., Welltower Inc., Western Midstream Partners LP, Western Union Co, Williams Companies Inc, Xcel Energy Inc, Yum! Brands, Inc., Zimmer Biomet Holdings Inc, Zions Bancorporation NA, Zoetis Inc..

As of September 26, 2023, State Street Corporation beneficially owned 5% or more of a class of common equity securities of Morgan Stanley.

A member of Research who had or could have had access to the research prior to completion owns securities (or related derivatives) in the American International Group Inc, Cisco Systems Inc, Citigroup Inc., LUMEN TECHNOLOGIES INC, Microsoft, T-Mobile US, Inc.. This person is not a research analyst or a member of research analyst's household.

Morgan Stanley Research policy is to update research reports as and when the Research Analyst and Research Management deem appropriate, based on developments with the issuer, the sector, or the market that may have a material impact on the research views or opinions stated therein. In addition, certain Research publications are intended to be updated on a regular periodic basis (weekly/monthly/quarterly/annual) and will ordinarily be updated with that frequency, unless the Research Analyst and Research Management determine that a different publication schedule is appropriate based on current conditions.

Morgan Stanley is not acting as a municipal advisor and the opinions or views contained herein are not intended to be, and do not constitute, advice within the meaning of Section 975 of the Dodd-Frank Wall Street Reform and Consumer Protection Act.

Morgan Stanley produces an equity research product called a "Tactical Idea." Views contained in a "Tactical Idea" on a particular stock may be contrary to the recommendations or views expressed in research on the same stock. This may be the result of differing time horizons, methodologies, market events, or other factors. For all research available on a particular stock, please contact your sales representative or go to Matrix at http://www.morganstanley.com/matrix.

Morgan Stanley Research is provided to our clients through our proprietary research portal on Matrix and also distributed electronically by Morgan Stanley to clients. Certain, but not all, Morgan Stanley Research products are also made available to clients through third-party vendors or redistributed to clients through alternate electronic means as a convenience. For access to all available Morgan Stanley Research, please contact your sales representative or go to Matrix at http://www.morganstanley.com/matrix.

Any access and/or use of Morgan Stanley Research is subject to Morgan Stanley's Terms of Use (http://www.morganstanley.com/terms.html). By accessing and/or using Morgan Stanley Research, you are indicating that you have read and agree to be bound by our Terms of Use (http://www.morganstanley.com/terms.html). In addition you consent to Morgan Stanley processing your personal data and using cookies in accordance with our Privacy Policy and our Global Cookies Policy (http://www.morganstanley.com/privacy_pledge.html), including for the purposes of setting your preferences and to collect readership data so that we can deliver better and more personalized service and products to you. To find out more information about how Morgan Stanley processes personal data, how we use cookies and how to reject cookies see our Privacy Policy and our Global Cookies Policy (http://www.morganstanley.com/privacy_pledge.html).

If you do not agree to our Terms of Use and/or if you do not wish to provide your consent to Morgan Stanley processing your personal data or using cookies please do not access our research.

Morgan Stanley Research does not provide individually tailored investment advice. Morgan Stanley Research has been prepared without regard to the circumstances and objectives of those who receive it. Morgan Stanley recommends that investors independently evaluate particular investments and strategies, and encourages investors to seek the advice of a financial adviser. The appropriateness of an investment or strategy will depend on an investor's circumstances and objectives. The securities, instruments, or strategies discussed in Morgan Stanley Research may not be suitable for all investors, and certain investors may not be eligible to purchase or participate in some or all of them. Morgan Stanley Research is not an offer to buy or sell or the solicitation of an offer to buy or sell any security/instrument or to participate in any particular trading strategy. The value of and income from your investments may vary because of changes in interest rates, foreign exchange rates, default rates, prepayment rates, securities/instruments prices, market indexes, operational or financial conditions of companies or other factors. There may be time limitations on the exercise of options or other rights in securities/instruments transactions. Past performance is not necessarily a guide to future performance. Estimates of future performance are based on assumptions that may not be realized. If provided, and unless otherwise stated, the closing price on the cover page is that of the primary exchange for the subject company's securities/instruments.

The fixed income research analysts, strategists or economists principally responsible for the preparation of Morgan Stanley Research have received compensation based upon various factors, including quality, accuracy and value of research, firm profitability or revenues (which include fixed income trading and capital markets profitability or revenues), client feedback and competitive factors. Fixed Income Research analysts', strategists' or economists' compensation is not linked to investment banking or capital markets transactions performed by Morgan Stanley or the profitability or revenues of particular trading desks.

The "Important Regulatory Disclosures on Subject Companies" section in Morgan Stanley Research lists all companies mentioned where Morgan Stanley owns 1% or more of a class of common equity securities of the companies. For all other companies mentioned in Morgan Stanley Research, Morgan Stanley may have an investment of less than 1% in securities/instruments or derivatives of securities/instruments of companies and may trade them in ways different from those discussed in Morgan Stanley Research. Employees of Morgan Stanley not involved in the preparation of Morgan Stanley Research may have investments in securities/instruments or derivatives of securities/instruments of companies mentioned and may trade them in ways different from those discussed in Morgan Stanley Research. Derivatives may be issued by Morgan Stanley or associated persons.

With the exception of information regarding Morgan Stanley, Morgan Stanley Research is based on public information. Morgan Stanley makes every effort to use reliable, comprehensive information, but we make no representation that it is accurate or complete. We have no obligation to tell you when opinions or information in Morgan Stanley Research change apart from when we intend to discontinue equity research coverage of a subject company. Facts and views presented in Morgan Stanley Research have not been reviewed by, and may not reflect information known to, professionals in other Morgan Stanley business areas, including investment banking personnel.

Morgan Stanley Research personnel may participate in company events such as site visits and are generally prohibited from accepting payment by the company of associated expenses unless pre-approved by authorized members of Research management.

Morgan Stanley may make investment decisions that are inconsistent with the recommendations or views in this report.

To our readers based in Taiwan or trading in Taiwan securities/instruments: Information on securities/instruments that trade in Taiwan is distributed by Morgan Stanley Taiwan Limited ("MSTL"). Such information is for your reference only. The reader should independently evaluate the investment risks and is solely responsible for their investment decisions. Morgan Stanley Research may not be distributed to the public media or quoted or used by the public media without the express written consent of Morgan Stanley. Any non-customer reader within the scope of Article 7-1 of the Taiwan Stock Exchange Recommendation Regulations accessing and/or receiving Morgan Stanley Research is not permitted to provide Morgan Stanley Research to any third party (including but not limited to related parties, affiliated companies and any other third parties) or engage in any activities regarding Morgan Stanley Research which may create or give the

appearance of creating a conflict of interest. Information on securities/instruments that do not trade in Taiwan is for informational purposes only and is not to be construed as a recommendation or a solicitation to trade in such securities/instruments. MSTL may not execute transactions for clients in these securities/instruments.

Morgan Stanley is not incorporated under PRC law and the research in relation to this report is conducted outside the PRC. Morgan Stanley Research does not constitute an offer to sell or the solicitation of an offer to buy any securities in the PRC. PRC investors shall have the relevant qualifications to invest in such securities and shall be responsible for obtaining all relevant approvals, licenses, verifications and/or registrations from the relevant governmental authorities themselves. Neither this report nor any part of it is intended as, or shall constitute, provision of any consultancy or advisory service of securities investment as defined under PRC law. Such information is provided for your reference only.

Morgan Stanley Research is disseminated in Brazil by Morgan Stanley C.T.V.M. S.A. located at Av. Brigadeiro Faria Lima, 3600, 6th floor, São Paulo - SP, Brazil; and is regulated by the Comissão de Valores Mobiliários; in Mexico by Morgan Stanley México, Casa de Bolsa, S.A. de C.V which is regulated by Comision Nacional Bancaria y de Valores. Paseo de los Tamarindos 90, Torre 1, Col. Bosques de las Lomas Floor 29, 05120 Mexico City; in Japan by Morgan Stanley MUFG Securities Co., Ltd. and, for Commodities related research reports only, Morgan Stanley Capital Group Japan Co., Ltd; in Hong Kong by Morgan Stanley Asia Limited (which accepts responsibility for its contents) and by Morgan Stanley Bank Asia Limited; in Singapore by Morgan Stanley Asia (Singapore) Pte. (Registration number 199206298Z) and/or Morgan Stanley Asia (Singapore) Securities Pte Ltd (Registration number 200008434H), regulated by the Monetary Authority of Singapore (which accepts legal responsibility for its contents and should be contacted with respect to any matters arising from, or in connection with, Morgan Stanley Research) and by Morgan Stanley Bank Asia Limited, Singapore Branch (Registration number T14FC0118J); in Australia to "wholesale clients" within the meaning of the Australian Corporations Act by Morgan Stanley Australia Limited A.B.N. 67 003 734 576, holder of Australian financial services license No. 233742, which accepts responsibility for its contents; in Australia to "wholesale clients" and "retail clients" within the meaning of the Australian Corporations Act by Morgan Stanley Wealth Management Australia Pty Ltd (A.B.N. 19 009 145 555, holder of Australian financial services license No. 240813, which accepts responsibility for its contents; in Korea by Morgan Stanley & Co International plc, Seoul Branch; in India by Morgan Stanley India Company Private Limited having Corporate Identification No (CIN) U22990MH1998PTC115305, regulated by the Securities and Exchange Board of India ("SEBI") and holder of licenses as a Research Analyst (SEBI Registration No. INH000001105); Stock Broker (SEBI Stock Broker Registration No. INZ000244438), Merchant Banker (SEBI Registration No. INM000011203), and depository participant with National Securities Depository Limited (SEBI Registration No. IN-DP-NSDL-567-2021) having registered office at 18th Floor, Tower 2, One World Center, Plot- 841, Jupiter Textile Mill Compound, Senapati Bapat Marg, Lower Parel, Mumbai 400013, India Telephone no. +91-22-61181000; Compliance Officer Details: Mr. Anil Shenoy, Tel. No.: +91-22-61181000 or Email: Anil.Shenoy@morganstanley.com; Grievance officer details: Mr. Anil Shenoy, Tel. No.: +91-22-61181000 or Email: msic-compliance@morganstanley.com; in Canada by Morgan Stanley Canada Limited; in Germany and the European Economic Area where required by Morgan Stanley Europe S.E., authorised and regulated by Bundesanstalt fuer Finanzdienstleistungsaufsicht (BaFin) under the reference number 149169; in the US by Morgan Stanley & Co. LLC, which accepts responsibility for its contents. Morgan Stanley & Co. International plc, authorized by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and the Prudential Regulation Authority, disseminates in the UK research that it has prepared, and research which has been prepared by any of its affiliates, only to persons who (i) are investment professionals falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (as amended, the "Order"); (ii) are persons who are high net worth entities falling within Article 49(2)(a) to (d) of the Order; or (iii) are persons to whom an invitation or inducement to engage in investment activity (within the meaning of section 21 of the Financial Services and Markets Act 2000, as amended) may otherwise lawfully be communicated or caused to be communicated. RMB Morgan Stanley Proprietary Limited is a member of the JSE Limited and A2X (Pty) Ltd. RMB Morgan Stanley Proprietary Limited is a joint venture owned equally by Morgan Stanley International Holdings Inc. and RMB Investment Advisory (Proprietary) Limited, which is wholly owned by FirstRand Limited. The information in Morgan Stanley Research is being disseminated by Morgan Stanley Saudi Arabia, regulated by the Capital Market Authority in the Kingdom of Saudi Arabia, and is directed at Sophisticated investors only.

Morgan Stanley Hong Kong Securities Limited is the liquidity provider/market maker for securities of Las Vegas Sands Corp, Wynn Resorts, Limited listed on the Stock Exchange of Hong Kong Limited. An updated list can be found on HKEx website: http://www.hkex.com.hk.

The information in Morgan Stanley Research is being communicated by Morgan Stanley & Co. International plc (DIFC Branch), regulated by the Dubai Financial Services Authority (the DFSA), and is directed at Professional Clients only, as defined by the DFSA. The financial products or financial services to which this research relates will only be made available to a customer who we are satisfied meets the regulatory criteria to be a Professional Client. A distribution of the different MS Research ratings or recommendations, in percentage terms for Investments in each sector covered, is available upon request from your sales representative.

The information in Morgan Stanley Research is being communicated by Morgan Stanley & Co. International plc (QFC Branch), regulated by the Qatar Financial Centre Regulatory Authority (the QFCRA), and is directed at business customers and market counterparties only and is not intended for Retail Customers as defined by the QFCRA.

As required by the Capital Markets Board of Turkey, investment information, comments and recommendations stated here, are not within the scope of investment advisory activity. Investment advisory service is provided exclusively to persons based on their risk and income preferences by the authorized firms. Comments and recommendations stated here are general in nature. These opinions may not fit to your financial status, risk and return preferences. For this reason, to make an investment decision by relying solely to this information stated here may not bring about outcomes that fit your expectations.

The following companies do business in countries which are generally subject to comprehensive sanctions programs administered or enforced by the U.S. Department of the Treasury's Office of Foreign Assets Control ("OFAC") and by other countries and multi-national bodies: MasterCard Inc.

The trademarks and service marks contained in Morgan Stanley Research are the property of their respective owners. Third-party data providers make no warranties or representations relating to the accuracy, completeness, or timeliness of the data they provide and shall not have liability for any damages relating to such data. The Global Industry Classification Standard (GICS) was developed by and is the exclusive property of MSCI and S&P.

Morgan Stanley Research, or any portion thereof may not be reprinted, sold or redistributed without the written consent of Morgan Stanley.

Indicators and trackers referenced in Morgan Stanley Research may not be used as, or treated as, a benchmark under Regulation EU 2016/1011, or any other similar framework.

The issuers and/or fixed income products recommended or discussed in certain fixed income research reports may not be continuously followed. Accordingly, investors should regard those fixed income research reports as providing stand-alone analysis and should not expect continuing analysis or additional reports relating to such issuers and/or individual fixed income products.

Morgan Stanley may hold, from time to time, material financial and commercial interests regarding the company subject to the Research report.

Registration granted by SEBI and certification from the National Institute of Securities Markets (NISM) in no way guarantee performance of the intermediary or provide any assurance of returns to investors. Investment in securities market are subject to market risks. Read all the related documents carefully before investing.

The following authors are neither Equity Research Analysts/Strategists nor Fixed Income Research Analysts/Strategists and are not opining on or expressing recommendations on equity or fixed income securities: Snehaja Mogre.

INDUSTRY COVERAGE: Midstream & Renewable Energy Infrastructure

COMPANY (TICKER)	RATING (AS OF)	PRICE* (09/26/2023)

Robert S Kad		
Antero Midstream Corp (AM.N)	U (03/19/2021)	$11.82
Atlantica Sustainable Infrastructure (AY.O)	E (01/13/2022)	$20.43
Clearway Energy Inc (CWEN.N)	E (02/15/2017)	$23.26
DT Midstream, Inc. (DTM.N)	U (01/07/2022)	$52.68
Enbridge (ENB.TO)	++	C$45.55
Energy Transfer LP (ET.N)	O (01/07/2022)	$13.86
EnLink Midstream LLC (ENLC.N)	O (10/19/2022)	$12.32
Enterprise Products LP (EPD.N)	E (01/07/2022)	$27.21
Equitrans Midstream Corp (ETRN.N)	O (06/04/2023)	$9.29
Hannon Armstrong (HASI.N)	E (02/03/2016)	$22.32
Hess Midstream LP (HESM.N)	E (01/07/2022)	$29.65
Kinder Morgan Inc. (KMI.N)	U (05/26/2021)	$16.47
Kinetik Holdings Inc (KNTK.N)	E (08/25/2022)	$33.83
Magellan Midstream Partners LP (MMP.N)	++	$69.00
MPLX LP (MPLX.N)	E (03/19/2021)	$35.10
NextEra Energy Partners LP (NEP.N)	E (07/16/2018)	$46.90
Oneok Inc. (OKE.N)	++	$64.48
Plains All American Pipeline LP (PAA.O)	O (07/16/2021)	$15.19
Plains GP Holdings, L.P. (PAGP.O)	O (07/16/2021)	$15.96
Targa Resources Corp. (TRGP.N)	O (03/19/2021)	$84.35
TC Energy Corp (TRP.TO)	U (04/26/2022)	C$48.23
Western Midstream Partners LP (WES.N)	O (07/20/2021)	$26.33
Williams Companies Inc (WMB.N)	E (03/19/2021)	$33.58

Stock Ratings are subject to change. Please see latest research for each company.
* Historical prices are not split adjusted.

INDUSTRY COVERAGE: Integrated Energy

COMPANY (TICKER)	RATING (AS OF)	PRICE* (09/26/2023)
Devin McDermott		
Canadian Natural Resources Ltd (CNQ.TO)	E (10/07/2021)	C$87.11
Cenovus Energy (CVE.TO)	O (10/07/2021)	C$27.51
Chevron Corporation (CVX.N)	E (03/14/2022)	$167.80
Exxon Mobil Corporation (XOM.N)	O (01/11/2021)	$116.41
Imperial Oil Ltd (IMO.TO)	E (10/07/2021)	C$81.63
Suncor Energy Inc (SU.TO)	O (10/07/2021)	C$46.18

Stock Ratings are subject to change. Please see latest research for each company.
* Historical prices are not split adjusted.

INDUSTRY COVERAGE: Telecom Services

COMPANY (TICKER)	RATING (AS OF)	PRICE* (09/26/2023)
Simon Flannery		
Anterix Inc (ATEX.O)	E (11/11/2019)	$31.94
AT&T, Inc. (T.N)	E (12/15/2022)	$15.02
BCE Inc. (BCE.TO)	E (03/05/2021)	C$52.08
Frontier Communications Parent, Inc. (FYBR.O)	U (03/27/2023)	$14.67
Globalstar Inc (GSAT.A)	E (05/03/2023)	$1.24
Gogo Inc (GOGO.O)	E (11/01/2022)	$11.62
Iridium Communications Inc (IRDM.O)	O (08/03/2021)	$46.65
LUMEN TECHNOLOGIES INC (LUMN.N)	U (01/28/2021)	$1.30
Rogers Communications, Inc. (RCIb.TO)	E (12/17/2015)	C$53.03
Telephone & Data Systems (TDS.N)	E (04/19/2022)	$17.71
TELUS Corp. (T.TO)	E (07/16/2021)	C$22.43

T-Mobile US, Inc. (TMUS.O)	O (04/17/2020)	$140.46
US Cellular Corporation (USM.N)	E (04/19/2022)	$40.81
Verizon Communications (VZ.N)	O (12/15/2022)	$32.99
Viasat Inc (VSAT.O)	E (12/15/2017)	$18.01

Stock Ratings are subject to change. Please see latest research for each company.
* Historical prices are not split adjusted.

INDUSTRY COVERAGE: Real Estate Investment Trusts

COMPANY (TICKER)	RATING (AS OF)	PRICE* (09/26/2023)
Adam Kramer		
American Homes 4 Rent (AMH.N)	E (11/15/2018)	$34.02
AvalonBay Communities Inc. (AVB.N)	E (12/02/2022)	$174.97
Equity Residential (EQR.N)	E (12/12/2016)	$58.63
Essex Property Trust, Inc. (ESS.N)	E (04/01/2020)	$213.67
Invitation Homes Inc (INVH.N)	O (08/11/2020)	$32.00
Tricon Residential Inc (TCN.N)	E (11/01/2021)	$7.60
UDR, Inc. (UDR.N)	O (12/02/2022)	$35.71
Ronald Kamdem, CFA		
Agree Realty Corp. (ADC.N)	O (04/01/2022)	$55.18
American Assets Trust Inc. (AAT.N)	E (05/18/2020)	$18.87
Boston Properties, Inc. (BXP.N)	E (09/10/2019)	$57.72
Broadstone Net Lease, Inc. (BNL.N)	E (04/15/2021)	$14.28
EastGroup Properties Inc. (EGP.N)	E (04/12/2017)	$166.77
Extra Space Storage Inc. (EXR.N)	U (09/16/2019)	$120.77
Healthpeak Properties Inc (PEAK.N)	E (03/20/2017)	$18.41
Highwoods Properties (HIW.N)	E (03/09/2023)	$20.24
Hudson Pacific Properties (HPP.N)	E (09/09/2022)	$6.74
Kimco Realty Corp. (KIM.N)	E (03/30/2022)	$17.44
Macerich Co (MAC.N)	U (09/14/2020)	$10.97
National Storage Affiliates Trust (NSA.N)	E (08/07/2018)	$32.53
NNN REIT Inc (NNN.N)	E (07/12/2022)	$35.13
Office Properties Income Trust (OPI.O)	U (12/13/2019)	$4.65
Paramount Group Inc. (PGRE.N)	E (11/23/2022)	$4.55
Phillips Edison & Company, Inc (PECO.O)	E (03/09/2022)	$33.57
Physicians Realty Trust (DOC.N)	E (09/13/2021)	$12.02
Prologis, Inc. (PLD.N)	O (10/17/2022)	$111.50
Public Storage (PSA.N)	E (09/21/2023)	$263.92
Realty Income Corp (O.N)	O (05/04/2020)	$50.26
Regency Centers Corp (REG.O)	E (12/17/2019)	$59.26
Safehold Inc (SAFE.N)		$18.05
Simon Property Group Inc (SPG.N)	O (02/11/2021)	$109.15
Site Centers Corp (SITC.N)	E (04/27/2020)	$12.32
SL Green Realty Corporation (SLG.N)	E (05/28/2020)	$35.06
Spirit Realty Capital (SRC.N)	E (05/04/2020)	$33.99
Urban Edge Properties (UE.N)	U (12/17/2019)	$15.59
Ventas Inc (VTR.N)	E (10/04/2021)	$41.70
Vornado Realty Trust (VNO.N)	U (05/28/2020)	$21.61
Welltower Inc. (WELL.N)	O (08/31/2022)	$81.09

Stock Ratings are subject to change. Please see latest research for each company.
* Historical prices are not split adjusted.

INDUSTRY COVERAGE: Large Cap Banks

COMPANY (TICKER)	RATING (AS OF)	PRICE* (09/26/2023)

Betsy L. Graseck, CFA		
Bank of America (BAC.N)	E (03/28/2022)	$27.17
BNY Mellon (BK.N)	U (12/06/2022)	$42.25
Citigroup Inc. (C.N)	U (03/28/2022)	$40.22
Goldman Sachs Group Inc (GS.N)	E (12/06/2021)	$323.82
JPMorgan Chase & Co (JPM.N)	O (12/06/2022)	$144.93
Northern Trust Corp. (NTRS.O)	E (06/08/2020)	$68.96
PNC Financial Services (PNC.N)	U (12/06/2021)	$121.59
Regions Financial Corp (RF.N)	O (11/30/2020)	$16.87
State Street Corporation (STT.N)	E (12/06/2022)	$66.83
Truist Financial Corp (TFC.N)	E (01/07/2018)	$28.25
U.S. Bancorp (USB.N)	E (11/30/2020)	$33.02
Wells Fargo & Co. (WFC.N)	O (12/06/2021)	$40.65
Ryan Kenny, CFA		
SEI Investments Company (SEIC.O)	U (07/12/2022)	$60.22

Stock Ratings are subject to change. Please see latest research for each company.
* Historical prices are not split adjusted.

INDUSTRY COVERAGE: Tobacco

COMPANY (TICKER)	RATING (AS OF)	PRICE* (09/26/2023)
Pamela Kaufman, CFA		
Altria Group, Inc. (MO.N)	E (06/24/2022)	$41.90
Philip Morris International Inc (PM.N)	O (03/31/2008)	$91.07

Stock Ratings are subject to change. Please see latest research for each company.
* Historical prices are not split adjusted.

INDUSTRY COVERAGE: Food

COMPANY (TICKER)	RATING (AS OF)	PRICE* (09/26/2023)
Pamela Kaufman, CFA		
BellRing Brands Inc. (BRBR.N)	O (11/11/2019)	$40.54
Campbell Soup Co (CPB.N)	E (04/20/2020)	$41.76
Conagra Brands (CAG.N)	E (07/17/2023)	$28.01
General Mills Inc (GIS.N)	U (09/21/2021)	$65.22
Hershey Co (HSY.N)	E (04/20/2020)	$205.20
Hostess Brands Inc (TWNK.O)	++	$33.54
J. M. Smucker Co (SJM.N)	++	$128.41
Kellogg Co. (K.N)	E (09/17/2018)	$59.18
Kraft Heinz Co (KHC.O)	E (03/03/2019)	$34.50
Mondelez International Inc (MDLZ.O)	O (08/07/2019)	$70.57
Simply Good Foods Co (SMPL.O)	O (09/18/2023)	$35.00
Vital Farms Inc. (VITL.O)	O (07/20/2022)	$11.59

Stock Ratings are subject to change. Please see latest research for each company.
* Historical prices are not split adjusted.

INDUSTRY COVERAGE: Beverages

COMPANY (TICKER)	RATING (AS OF)	PRICE* (09/26/2023)
Dara Mohsenian, CFA		
Coca-Cola Co. (KO.N)	O (07/22/2020)	$56.53
Constellation Brands Inc (STZ.N)	O (11/02/2020)	$253.40
Keurig Dr Pepper Inc (KDP.O)	O (07/06/2023)	$32.16
Monster Beverage Corp (MNST.O)	O (11/02/2020)	$54.29
Oatly Group AB (OTLY.O)		$0.88

PepsiCo Inc. (PEP.O)	E (07/16/2023)	$172.52
Zevia PBC (ZVIA.N)	E (08/16/2021)	$2.24
Eric A Serotta, CFA		
Boston Beer Company Inc (SAM.N)	U (11/07/2022)	$378.25
Brown-Forman Corporation (BFb.N)	O (08/23/2023)	$58.29
Coca-Cola Europacific Partners (CCEPC.AS)	E (06/12/2019)	€59.10
Molson Coors Beverage Company (TAP.N)	E (01/09/2018)	$63.04
Vita Coco Company Inc (COCO.O)	E (09/19/2023)	$25.30

Stock Ratings are subject to change. Please see latest research for each company.
* Historical prices are not split adjusted.

INDUSTRY COVERAGE: Household & Personal Care

COMPANY (TICKER)	RATING (AS OF)	PRICE* (09/26/2023)
Dara Mohsenian, CFA		
Church & Dwight Co., Inc. (CHD.N)	O (01/16/2023)	$93.08
Clorox Co (CLX.N)	E (10/17/2022)	$130.41
Colgate-Palmolive Co (CL.N)	O (01/29/2023)	$72.00
Coty Inc (COTY.N)	E (11/07/2018)	$11.58
Edgewell Personal Care (EPC.N)	U (10/17/2022)	$36.84
elf Beauty (ELF.N)	O (12/16/2019)	$109.29
Energizer Holdings Inc. (ENR.N)	E (08/09/2022)	$32.37
Estee Lauder Companies Inc (EL.N)	O (08/21/2020)	$139.62
Honest Co Inc (HNST.O)	E (08/16/2021)	$1.29
Kimberly-Clark Corp (KMB.N)	E (01/24/2019)	$123.53
Newell Brands Inc. (NWL.O)	E (01/25/2018)	$8.61
Oddity (ODD.O)	E (08/14/2023)	$27.12
Olaplex Holdings, Inc. (OLPX.O)	E (10/19/2022)	$2.01
Procter & Gamble Co. (PG.N)	O (12/13/2018)	$149.32

Stock Ratings are subject to change. Please see latest research for each company.
* Historical prices are not split adjusted.

INDUSTRY COVERAGE: Regulated Utilities

COMPANY (TICKER)	RATING (AS OF)	PRICE* (09/26/2023)
David Arcaro, CFA		
Algonquin Power & Utilities Corp (AQN.N)		$6.61
Ameren Corp (AEE.N)	E (04/14/2020)	$76.85
Atmos Energy Corp. (ATO.N)	O (12/15/2020)	$106.98
AVANGRID, Inc (AGR.N)	++	$31.73
CenterPoint Energy Inc (CNP.N)	O (02/17/2022)	$27.29
CMS Energy Corp (CMS.N)	E (07/31/2017)	$54.00
Consolidated Edison Inc (ED.N)	U (07/02/2020)	$87.83
Dominion Energy Inc (D.N)	++	$46.06
DTE Energy Co. (DTE.N)	O (01/06/2022)	$102.16
Duke Energy Corp (DUK.N)	E (08/25/2014)	$91.12
Edison International (EIX.N)	U (09/06/2022)	$65.80
Entergy Corp (ETR.N)	U (01/06/2022)	$93.20
Eversource Energy (ES.N)	E (10/19/2021)	$59.71
Exelon Corp (EXC.O)	O (08/27/2019)	$39.15
FirstEnergy Corp (FE.N)	O (03/23/2020)	$35.31
ONE Gas Inc (OGS.N)	E (01/06/2022)	$70.81
PG&E Corp (PCG.N)	E (11/15/2018)	$16.60
Pinnacle West Capital Corp (PNW.N)	E (03/23/2020)	$74.84
PPL Corp (PPL.N)	O (12/15/2022)	$24.27

Sempra (SRE.N)	E (08/10/2018)	$69.22
Southern Company (SO.N)	E (08/10/2023)	$67.11
Spire Inc (SR.N)	E (09/01/2020)	$57.24
Xcel Energy Inc (XEL.O)	E (10/19/2021)	$57.72

Stock Ratings are subject to change. Please see latest research for each company.
* Historical prices are not split adjusted.

INDUSTRY COVERAGE: Diversified Utilities / IPPs

COMPANY (TICKER)	RATING (AS OF)	PRICE* (09/26/2023)
David Arcaro, CFA		
AES Corp. (AES.N)	O (03/23/2020)	$15.86
American Electric Power Co (AEP.O)	O (03/10/2020)	$76.34
Constellation Energy Corporation (CEG.O)	O (03/16/2022)	$108.49
MGE Energy, Inc. (MGEE.O)	U (11/17/2021)	$70.76
NextEra Energy Inc (NEE.N)	O (09/06/2022)	$65.34
NRG Energy Inc (NRG.N)	E (12/09/2022)	$38.30
Public Service Enterprise Group Inc (PEG.N)	O (07/02/2020)	$58.47
Vistra Corp (VST.N)	O (03/25/2019)	$32.99

Stock Ratings are subject to change. Please see latest research for each company.
* Historical prices are not split adjusted.

INDUSTRY COVERAGE: Exploration & Production

COMPANY (TICKER)	RATING (AS OF)	PRICE* (09/26/2023)
Devin McDermott		
Antero Resources Corp (AR.N)	E (03/11/2021)	$24.27
APA Corp (APA.O)	E (01/24/2023)	$41.05
Callon Petroleum Company (CPE.N)	E (12/09/2019)	$37.85
ConocoPhillips (COP.N)	O (07/12/2018)	$120.14
Coterra Energy Inc. (CTRA.N)	E (04/30/2020)	$26.34
Devon Energy Corp (DVN.N)	E (06/18/2021)	$46.95
Diamondback Energy Inc (FANG.O)	O (12/11/2020)	$153.06
EOG Resources Inc (EOG.N)	O (10/19/2022)	$126.88
EQT Corp. (EQT.N)	O (11/18/2021)	$38.96
Hess Corp. (HES.N)	O (07/12/2018)	$152.04
Marathon Oil Corporation (MRO.N)	O (01/24/2023)	$26.29
Murphy Oil Corporation (MUR.N)	E (12/11/2020)	$45.22
Occidental Petroleum Corp (OXY.N)	E (03/14/2022)	$63.15
Ovintiv Inc (OVV.N)	E (07/18/2023)	$46.55
Pioneer Natural Resources Co. (PXD.N)	U (10/19/2022)	$227.87
Range Resources Corp. (RRC.N)	U (11/18/2021)	$30.87
Southwestern Energy Co (SWN.N)	E (10/09/2020)	$6.18

Stock Ratings are subject to change. Please see latest research for each company.
* Historical prices are not split adjusted.

INDUSTRY COVERAGE: Diversified Natural Gas

COMPANY (TICKER)	RATING (AS OF)	PRICE* (09/26/2023)
Devin McDermott		
Cheniere Energy Inc (LNG.A)	O (05/19/2020)	$162.01
Cheniere Energy Partners LP (CQP.A)	E (09/20/2019)	$56.45
Excelerate Energy Inc (EE.N)	E (05/09/2022)	$17.46
New Fortress Energy Inc (NFE.O)	O (05/12/2021)	$30.49
NextDecade Corporation (NEXT.O)	O (06/07/2021)	$5.22

Tellurian Inc (TELL.A)	E (06/07/2021)	$1.12

Stock Ratings are subject to change. Please see latest research for each company.
* Historical prices are not split adjusted.

INDUSTRY COVERAGE: Gaming & Lodging

COMPANY (TICKER)	RATING (AS OF)	PRICE* (09/26/2023)
Ronald Kamdem, CFA		
Gaming and Leisure Properties Inc (GLPI.O)	O (07/24/2018)	$45.26
VICI Properties Inc (VICI.N)	E (12/15/2021)	$29.19
Stephen W Grambling		
Boyd Gaming Corp (BYD.N)	E (07/13/2023)	$60.24
Caesars Entertainment Inc (CZR.O)	E (11/21/2022)	$45.82
Choice Hotels International Inc (CHH.N)	E (12/05/2022)	$119.97
DiamondRock Hospitality Co (DRH.N)	E (12/05/2022)	$7.73
DraftKings Inc (DKNG.O)	O (01/26/2022)	$27.92
Hilton Worldwide Holdings Inc (HLT.N)	O (12/05/2022)	$147.34
Host Hotels & Resorts Inc (HST.O)	U (06/27/2023)	$15.84
Hyatt Hotels Corp (H.N)	O (12/05/2022)	$102.44
Las Vegas Sands Corp (LVS.N)	O (11/21/2022)	$45.28
Marriott International Inc (MAR.O)	O (12/05/2022)	$191.76
MGM Resorts International (MGM.N)	E (11/21/2022)	$36.85
Park Hotels & Resorts Inc (PK.N)	E (12/05/2022)	$11.84
Pebblebrook Hotel Trust (PEB.N)	U (12/05/2022)	$13.24
PENN Entertainment Inc. (PENN.O)	E (11/21/2022)	$22.22
Red Rock Resorts Inc (RRR.O)	O (11/21/2022)	$40.23
Soho House & Co Inc (SHCO.N)	E (12/05/2022)	$6.71
Sportradar Group AG (SRAD.O)	E (11/21/2022)	$9.75
Sunstone Hotel Investors Inc (SHO.N)	E (06/27/2023)	$9.06
Wyndham Hotels & Resorts Inc (WH.N)	O (12/05/2022)	$69.84
Wynn Resorts, Limited (WYNN.O)	E (11/21/2022)	$90.68
Xenia Hotels & Resorts Inc (XHR.N)	U (12/05/2022)	$11.41

Stock Ratings are subject to change. Please see latest research for each company.
* Historical prices are not split adjusted.

INDUSTRY COVERAGE: Communications Infrastructure

COMPANY (TICKER)	RATING (AS OF)	PRICE* (09/26/2023)
Simon Flannery		
American Tower Corp. (AMT.N)	E (12/12/2018)	$162.91
Crown Castle Corp. (CCI.N)	O (11/11/2009)	$91.08
Digital Realty Trust Inc. (DLR.N)	E (06/24/2020)	$119.81
Equinix Inc. (EQIX.O)	E (05/13/2009)	$711.03
SBA Communications (SBAC.O)	O (06/02/2021)	$200.10
Uniti Group Inc (UNIT.O)	U (12/12/2018)	$4.44

Stock Ratings are subject to change. Please see latest research for each company.
* Historical prices are not split adjusted.

INDUSTRY COVERAGE: Midcap Banks

COMPANY (TICKER)	RATING (AS OF)	PRICE* (09/26/2023)
Manan Gosalia		
Bank Ozk (OZK.O)	E (12/05/2022)	$36.30
Cadence Bank (CADE.N)	E (12/05/2022)	$21.35
Citizens Financial Group, Inc (CFG.N)	O (11/24/2021)	$25.99

Comerica Inc (CMA.N)	E (12/05/2022)	$39.99
Commerce Bancshares Inc (CBSH.O)	U (05/16/2023)	$46.98
Cullen/Frost Bankers (CFR.N)	E (05/16/2023)	$89.71
East West Bancorp, Inc. (EWBC.O)	E (12/05/2022)	$52.22
Fifth Third Bancorp (FITB.O)	E (03/28/2022)	$25.28
Huntington Bancshares (HBAN.O)	O (12/05/2022)	$10.22
KeyCorp (KEY.N)	E (04/07/2020)	$10.43
M&T Bank Corp. (MTB.N)	O (04/21/2022)	$123.27
New York Community Bancorp Inc (NYCB.N)	E (12/05/2022)	$11.26
Prosperity Bancshares Inc (PB.N)	U (05/16/2023)	$53.56
Synovus Financial Corp. (SNV.N)	E (12/05/2022)	$27.48
Valley National Bancorp (VLY.O)	E (12/05/2022)	$8.48
Webster Financial Corp (WBS.N)	O (12/05/2022)	$39.86
Zions Bancorporation NA (ZION.O)	E (12/05/2022)	$33.99

Stock Ratings are subject to change. Please see latest research for each company.
* Historical prices are not split adjusted.

© 2023 Morgan Stanley