

Weekly Briefing

SKYView: Healthcare

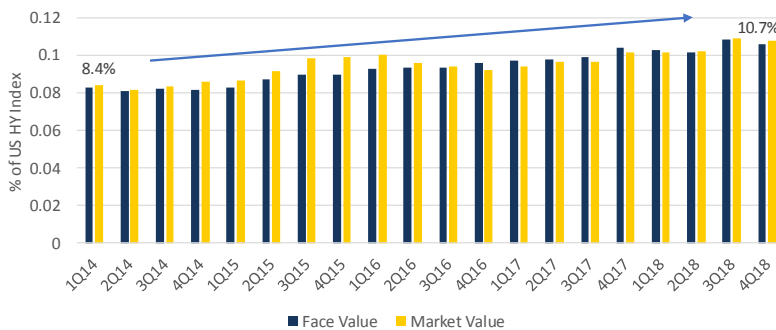
Political uncertainty, legal challenges, evolving population demographics and concerns over ever-increasing financial strain on the economy has pushed debate on the US healthcare system to the forefront. Increased attention over the last several years, exacerbated by deliberation, subsequent passage and continued scrutiny around the Affordable Care Act (ACA), has served to increase volatility in an otherwise defensive sector. As such, investing in the Healthcare space relies upon a macro view of the political and regulatory environment to inform bottom-up research efforts. While absolute clarity on the directionality of reimbursement rates and mechanisms to price pharmaceuticals remains elusive, a now-divided Congress is likely to skew near-term legislative actions toward only a handful of issues garnering bipartisan support. Therefore, we think Healthcare sector volatility should meaningfully decrease. In general, **we expect further credit metric improvement within the sector over the next twelve months, leading to increasingly attractive spread per turn of net leverage metrics.** Coupled with broad-based Healthcare sector outperformance in late expansionary cycles of the past, we have moved toward an increasingly overweight position relative to the high yield index. Within the Healthcare sector, our outlook leaves us favoring Health Services and Medical Products at the expense of Health Facilities and Pharmaceuticals, although idiosyncratic risks and opportunities exist in all sub-industry niches.

Sector Backdrop

A brief summary of the Healthcare sector in the current market cycle would include significant issuance in the decade following the last recession, a significant uptick in sector volatility in the years leading up to and subsequent passage of the Affordable Care Act (ACA), and consistent uncertainty surrounding reimbursement rate changes. As demonstrated below, Healthcare has steadily increased in size within the US high yield index (we use the ICE BofAML US High Yield Index, ticker HOAO, as a proxy), and ranks #4 by weighting (behind Energy, Basic Industry and Media). Since 2016, sub-industry weightings have been relatively consistent.

Healthcare Sector Weight Within US High Yield Index

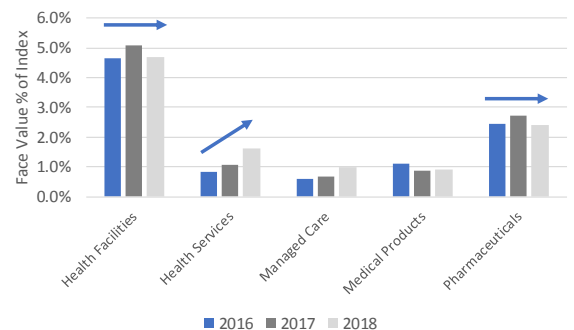
quarterly data, trailing 5 years



Source: SKY Harbor, ICE BofAML Indices

Healthcare Industry Weights Within US High Yield Index

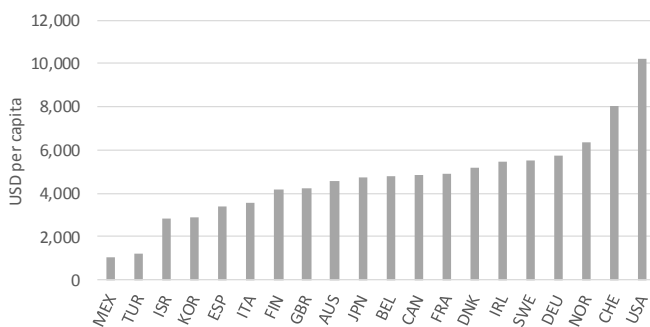
annual data, trailing 3 years



US healthcare spending per capita is elevated relative to other nations, and total spend relative to GDP is expected to reach 20% over the next decade. As such, the sector is constantly in the crosshairs of legislative reform, with projections of constituent-level profitability largely a function of anticipating rate proposals from the Centers for Medicare and Medicaid Services (CMS) and private health insurance providers.

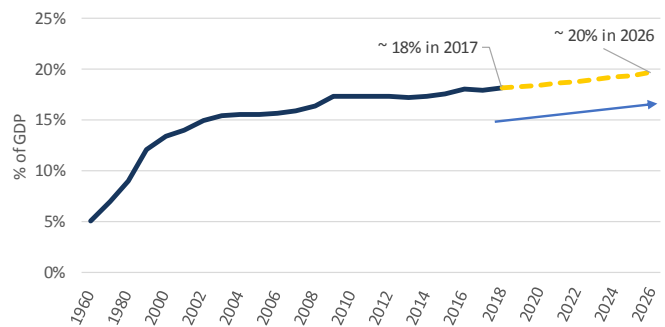
United States Health Spending Per Capital Far Surpasses Other Nations

2017 annual data



US Health Spending Expected to Approach 20% of GDP

annual data, projections in dotted lines



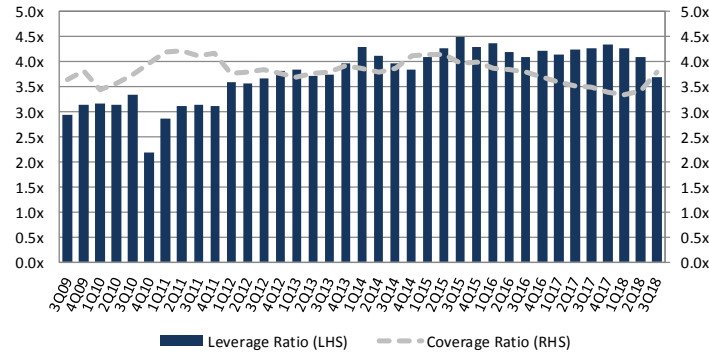
Source: SKY Harbor, Centers for Medicare & Medicaid, US Dept. of Commerce, Bureau of Economic Analysis, US Census Bureau, OECD data

Relative Value

Using Street consensus expectations and our internal estimates as a baseline, the outlook for healthcare sector earnings growth in 2019 is top quartile. Earnings growth is expected to be in the mid-to-high single-digit range, with a divided Congress and low unemployment rates limiting the likelihood of excessive pricing pressure (through sweeping reimbursement cuts or rising bad debt expense). Assuming debt on the balance sheets of index constituents remains stable (sector debt growth has been limited over the last eight quarters), we estimate high yield Healthcare sector net leverage will decrease to approximately 3.4x by Q4'19 (from approximately 3.7x at present), continuing the trend of consistent deleveraging since Q4'17. On a spread per turn of net leverage basis – which we believe to be the most useful gauge of relative value – Healthcare valuations appear cheap (spread per turn will be above trailing 5-year and trailing 3-year averages).

Healthcare Sector Credit Metrics Improving Since Q4'17

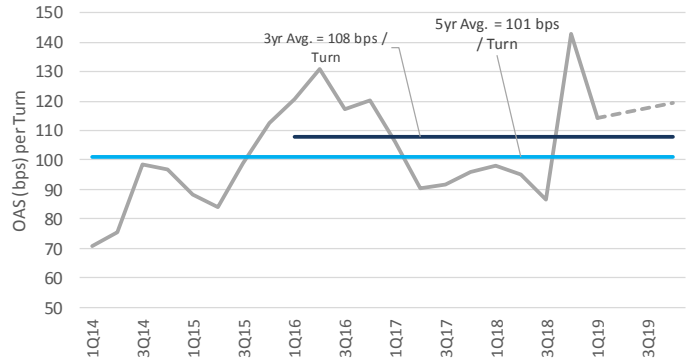
quarterly data, current cycle



Source: SKY Harbor, BofA Merrill Lynch, Bloomberg

Healthcare Sector Spread per Turn of Net Leverage

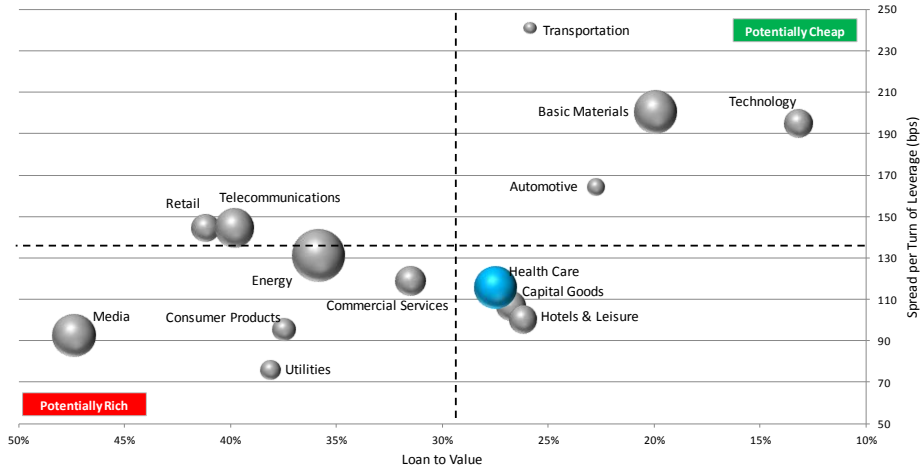
quarterly data, estimates on dotted line



Furthermore, loan-to-value metrics (which we define as sector net leverage as a percentage of sector enterprise value multiples) are likely to improve over the next four quarters given our expectation of both deleveraging and Healthcare equity outperformance (the sector has historically done well in late expansionary periods). As such, we view the Healthcare sector as modestly above-average in terms of relative attractiveness.

Sector Relative Value - Spread per Turn vs. LTV

Data as of 1/15/19



Source: SKY Harbor, BofA Merrill Lynch, ICE BofAML Indices, NYU Stern School of Business, Bloomberg

Key Risks & Opportunities

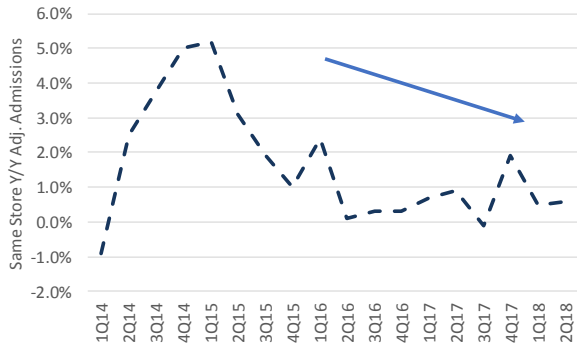
Falling Hospital Admits – Hospital inpatient admissions trends have appeared weak over the last several years, with most attributing this dynamic to efforts by payors to direct patients into lower-cost care alternatives. We would also note that volume growth rates have logically fallen off recent peaks brought on by implementation of the Affordable Care Act (via coverage expansion). In general, same-facility admissions trends have been muted for high yield hospitals, a concern for some of the most leveraged entities. As an offset, increases in outpatient volumes could bode well for hospital systems that also maintain robust outpatient and/or ambulatory service facilities (shifting volumes rather than lost volumes).

Shifting Payor Dynamics – Despite anticipated Medicare rate increases for hospitals in 2019, payor mix is expected to skew negatively for healthcare facilities over the next decade. Largely driven by an aging population, National Health Expenditure Projections imply a mix shift toward Medicare and Medicaid spending. The AHA estimates that these two sources typically pay only \$.87 to \$.88 for every dollar spent by hospitals for care, well below the \$1.30 to \$1.40 paid by commercial insurance plans. A combination of muted volumes and a negative mix shift, as denoted in the charts below, could pressure facility profitability in the near to intermediate term.

Additionally, as outpatient services chip away at inpatient volumes, and payors shift toward a value-based payment system, hospitals that offer superior services across the continuum of care stand to outperform those that are less integrated.

Hospital Admissions Have Been on the Decline...

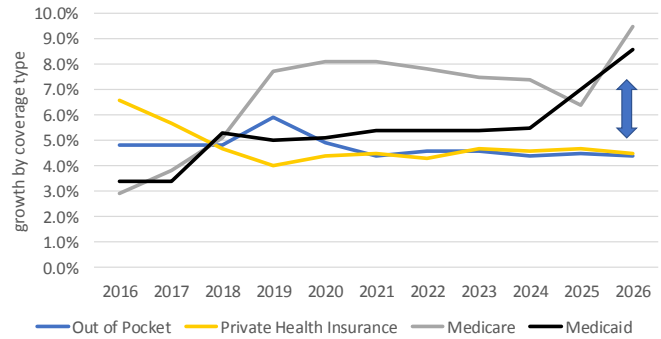
quarterly data, acute care averages



Source: SKY Harbor, CMS, National Health Expenditures Data, Bloomberg Intelligence, Barclays Capital, company filings

...While Spending Growth Shifts Unfavorably

annual data, NHE Projections



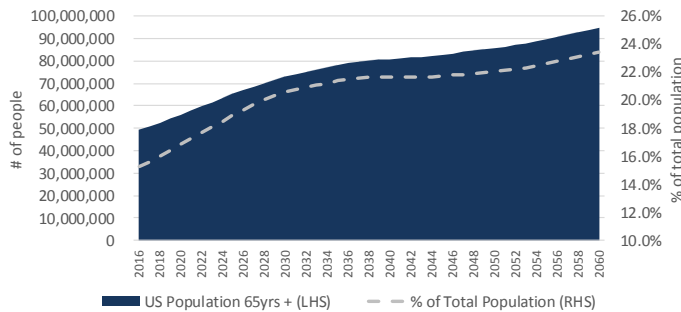
Risk of ACA Being Overturned – In December '19, a Federal District Court Judge in Texas ruled that the Affordable Care Act is unconstitutional separate from the Individual Mandate. While the consensus view is that the ruling will be overturned on appeal, the action has introduced a modicum of concern that the ACA could be invalidated. While unlikely, an ACA reversal would be problematic for both insurers and hospitals.

Rising Labor Costs – With upward pressure on wages beginning to emerge, we remain concerned about the most labor-intensive industries within the US economy. Of note, compensation makes up greater than 50% of costs for most hospital systems, with the majority going to nurses (an area of employment historically fraught with excess demand relative to supply). According to a recent UBS survey of hospital executives, wage growth is expected to accelerate but will likely remain manageable (most expect a 2% to 3% increase).

Aging Population – Increased life expectancy coupled with an uptick in baby boomers reaching retirement age are expected to contribute to an aging US population over the coming decades. In particular, the 65-and-older population is expected to grow from ~ 50 billion (~ 16% of the population) at present to ~ 95 billion (~23% of the population) by the year 2060. This shift is expected to not only increase overall costs to the healthcare system but may also erode provider margins.

An Aging US Population...

population 65yrs and older



Source: SKY Harbor, AHA, US Census Bureau

...May Lead to Increased Demands on the Healthcare System

- * The American Hospital Association (AHA) believes age is positively correlated to the number of chronic health conditions
- * The number of chronic health conditions is positively correlated to annual healthcare costs per person
- * An aging population is likely to put increased financial strain on the US healthcare system

Sector M&A – A shift toward scale and vertical integration is currently underway, with health insurance and regional health systems at the forefront in order to improve diversity, resiliency and negotiating power within the industry. Smaller healthcare companies, as a result, may find themselves unable to effectively compete on a standalone basis, and may screen well as acquisition candidates by larger and more highly rated entities. As such, acquisitions in the sector may bode well for high yield issuers.

Outsourcing – In order to cut costs and focus on areas of core competency, many healthcare companies have turned to outsourcing. As such, demand for outsourced medical IT, research and manufacturing services has grown over the last several years. As outsourcing firms aim to be cost savers (in an industry in need of cost saving) and, in most cases, are bad debt and reimbursement risk remote, their attractiveness in the space continues to grow.

Drug Pricing / Opioid Epidemic – While a divided Congress is expected to keep the passage of controversial pieces of legislation at bay, President Trump has been supportive of allowing Medicare & Medicaid to negotiate more competitive drug pricing with manufacturers, sentiment more closely aligned with House Democrats. Additionally, growing focus on the domestic opioid crisis has garnered bipartisan support, which doesn't bode well for certain high yield pharmaceutical makers. A Bloomberg Intelligence piece, using 1998 tobacco settlements as a template, forecast the potential for \$5-\$50 billion in litigation payments for opioid makers. The table below highlights the magnitude of a hypothetical \$25 billion industry settlement on key issuers. Although a potentially adverse outcome and timing thereof are uncertain, we view trading levels of certain pharma credits insufficient to compensate investors for such risks.

Drug Maker	% of Branded Opioid Pain Market (Est.)	HY Constituent?	Liability Under a \$5 - \$50bn Settlement	Approx. Settlement Midpoint (\$mm)	Midpoint Settlement as a % of EV
Purdue	60%		\$3 to \$30bn	15,000	n/a
Endo	20%	Yes	\$1 to \$10bn	5,000	54%
Johnson & Johnson	8%		\$400mm to \$4bn	2,000	1%
Teva	6%	Yes	\$300mm to \$3bn	1,500	5%
Insys	3%		\$150mm to \$1.5bn	750	n/a
Mallinkrodt	2%	Yes	\$100mm to \$1bn	500	7%
Allergan	1%		\$35mm to \$350mm	250	0%

Source: SKY Harbor, Symphony Health Solutions, Bloomberg Intelligence, company filings

In general, our macro thesis is less supportive of Health Facilities and Pharmaceuticals (rising labor costs, ACA repeal risk, weak admit trends, an aging population, momentum for reduced drug prices and opioid litigation), and more supportive of Health Services and Medical Products (sector M&A, increased outsourcing). Our bottom-up selection and ultimate sector and industry positioning, further articulated below, is in line with these themes.

Total Return History

Despite illustrating a relatively bullish Healthcare outlook, we are mindful that Healthcare Index returns have exceeded returns on the full High Yield Index in only five of the last ten years, and trailing 3-year returns in the sector trail the full index by nearly 300 bps. Taking a deeper look at outperformance patterns, we find that Healthcare tends to outperform when full index returns are below 7.5% (nearing long-term annual averages), which is congruent with our most recent return forecast for 2019 (we forecasted 2019 high yield index returns of 6.5% to 7.0% in our most recent monthly research note publication on January 9, 2019).

Healthcare Outperformed the US High Yield Index in 5 of the Last 10 Years

annual data, best result highlighted grey

ICE BofAML US High Yield Index (proxy for broad HY)

Year	Periodic High Yield Total Returns		
	Ex Healthcare	Healthcare	Full Index
2009	58.76	42.65	57.51
2010	15.47	11.65	15.19
2011	4.18	7.16	4.38
2012	15.68	14.52	15.58
2013	7.45	7.03	7.42
2014	2.11	6.88	2.50
2015	(5.22)	0.99	(4.64)
2016	19.03	4.08	17.49
2017	7.38	8.54	7.48
2018	(2.70)	1.53	(2.27)
3mo	(4.79)	(3.64)	(4.67)
6mo	(2.58)	(0.32)	(2.34)
1yr	(2.70)	1.53	(2.27)
3yr	7.54	4.68	7.27
5yr	3.77	4.36	3.82
7yr	5.92	6.14	5.94
10yr	11.07	9.98	10.99

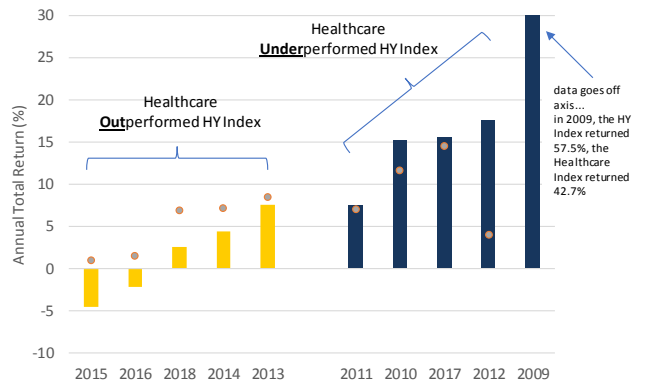
Source: SKY Harbor, ICE BofAML Indices

ICE BofAML 1-5yr BB-B US High Yield Constrained Index (proxy for short duration HY)

Year	Periodic High Yield Total Returns		
	Ex Healthcare	Healthcare	Full Index
2009	42.91	36.16	42.78
2010	12.86	9.88	12.71
2011	4.13	6.72	4.29
2012	12.44	12.49	12.45
2013	7.46	7.11	7.44
2014	1.60	3.63	1.75
2015	(3.57)	2.65	(3.00)
2016	13.25	3.47	12.23
2017	5.27	6.44	5.38
2018	0.46	2.65	0.67
3mo	(2.68)	(2.17)	(2.63)
6mo	(0.73)	0.49	(0.61)
1yr	0.46	2.65	0.67
3yr	6.20	4.17	5.99
5yr	3.25	3.76	3.28
7yr	5.11	5.44	5.13
10yr	9.06	8.75	9.06

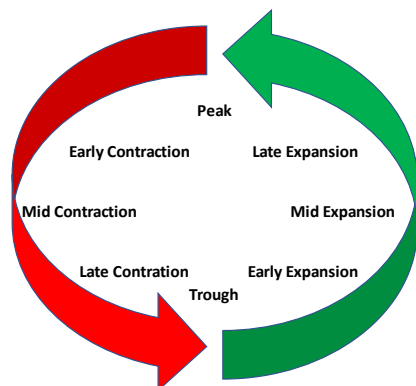
Healthcare Tends to Outperform When Index Returns are Below 7.5%

US High Yield Index Total Returns = Bars; Healthcare Index Total Returns = Dots



These outperformance patterns seem to make sense intuitively, given the market's perception that Healthcare is a defensive / non-cyclical sector. Taking this analysis a step further, we generated average monthly returns for both the Healthcare Index and the High Yield Index ex Healthcare over a 22-year data set (our max look-back given the inception date of various indices). While average monthly returns in all periods are nearly identical (~ 0.6% for both Healthcare and Index ex Healthcare), results begin to differ leading up to and during recessions. As demonstrated below, average monthly returns, beginning 24 months before the start of a recession, are superior for the Healthcare Index. Outperformance extends through recessionary periods. Exiting a recession and through the early to mid expansion phases, the Healthcare Index tends to underperform. Given these results and our thoughts around the current economic cycle (we believe we are in the late expansion phase), an overweight bias to the sector appears justified.

Healthcare Typically Performs Well from Late Expansion Through Contraction



Source: SKY Harbor, ICE BofAML Indices, NBER

Average Monthly Returns: Late Expansion / Recession

monthly data since 1997

Grouping	Months Before Recession				
	30	24	18	12	6
Healthcare Index	0.32	0.40	0.62	0.96	0.97
Index ex Healthcare	0.43	0.39	0.36	0.21	(0.10)

Grouping	Months Into Recession				
	2	4	6	8	Full
Healthcare Index	1.05	0.98	1.37	1.22	0.97
Index ex Healthcare	(1.25)	(1.01)	(0.10)	(0.62)	(0.18)

Conclusion

Political uncertainty, legal challenges, evolving population demographics and concerns over ever-increasing financial strain on the economy has pushed debate on the US healthcare system to the forefront. Increased attention over the last several years, exacerbated by deliberation, subsequent passage and continued scrutiny around the Affordable Care Act (ACA), has served to increase volatility in an otherwise defensive sector. As such, investing in the Healthcare space relies upon a macro view of the political and regulatory environment to inform bottom-up research efforts. While absolute clarity on the directionality of reimbursement rates and mechanisms to price pharmaceuticals remains elusive, a now-divided Congress is likely to skew near-term legislative actions toward only a handful of issues garnering bipartisan support. Therefore, we think Healthcare sector volatility should meaningfully decrease. In general, **we expect further credit metric improvement within the sector over the next twelve months, leading to increasingly attractive spread per turn of net leverage metrics.** Coupled with broad-based Healthcare sector outperformance in late expansionary cycles of the past, we have moved toward an increasingly overweight position relative to the high yield index. Within the Healthcare sector, our outlook leaves us favoring Health Services and Medical Products at the expense of Health Facilities and Pharmaceuticals, although idiosyncratic risks and opportunities exist in all sub-industry niches.

On the Calendar

Due to the US government shutdown, data releases have been postponed.

Source: SKY Harbor, Bloomberg

Recommended Reading

Timiraos, Nick (2019, January 25). Fed Officials Weigh Earlier-Than-Expected End to Bond Portfolio Runoff. *The Wall Street Journal* (subs. req.), Retrieved from https://www.wsj.com/articles/fed-officials-weigh-earlier-than-expected-end-to-bond-portfolio-runoff-11548412201?mod=hp_lead_pos1

House, Billy, Pettypiece, Shannon, and Whitelaw, Kevin (2019, January 25). Trump's Risk Deepens After Mueller Arrests Longtime Ally Stone. *Bloomberg*, Retrieved from <https://www.bloomberg.com/news/articles/2019-01-25/trump-faces-new-risks-as-mueller-arrests-longtime-ally-stone?srd=premium>

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