

A panoramic view of the Chicago skyline at sunset. The sky is a clear, deep blue, transitioning to a warm orange and yellow glow near the horizon. The city's skyscrapers are silhouetted against the light, with some reflecting the golden light. The foreground shows a river and a bridge, with a red semi-transparent banner overlaid across the middle of the image.

DUFF & PHELPS

Protect, Restore and Maximize Value

Chicago Companies and Dow Jones Industrial Average Special Report — 2020 in Review

January 2021

Executive Summary

The **Chicago 30** (CHI30) represents the 30 largest public companies by market capitalization as of December 31, 2020 that are headquartered in the Chicagoland area.

CHI30 Summary

- The CHI30 price-weighted index **increased 9.9%** in the year-to-date (YTD) period through December 31, 2020, compared to the Dow Jones Industrial Average's (DJIA) **gain of 7.2%**.
- The CHI30 **declined 40.7%** from February 12 through March 23, 2020 while the DJIA **declined 37.1%**, as the outlook at the onset of the COVID-19 pandemic was bleak for industrials. During the final four months of 2020, the CHI30 **increased 16.1%**, compared to the DJIA **increase of 6.8%**, due to the recovery of the middle-market, which the CHI30 services.
- The CHI30 is more concentrated in industrials (**42.8%**) than the DJIA (**17.2%**), while the DJIA has more exposure to information technology (**20.2%**) than the CHI30 (**16.0%**).
- Since the beginning of the year, the DJIA “**Leaders**” averaged **gains of 53.8%**, while the CHI30 “**Leaders**” averaged **increases** of only **45.6%**. Similarly, DJIA “**Laggards**” averaged a **decline of 32.2%**, compared to the CHI30 “**Laggards**”, who averaged a decline of **39.2%**. However, the average **increase** in stock price for companies in the CHI30 index was **7.9%**, while the average **increase** in stock price for companies in the DJIA was only **2.7%**.
- The CHI30 performed worse on financial metrics in Q2 2020. The CHI30 had average revenue **declines** of **8.0%** compared to Q2 2019 while the DJIA had average **declines** of **6.9%**. The CHI30 had average EBITDA margin **declines** of **11.1%** while the DJIA had average **declines** of **4.7%**.
- The CHI30 had a stronger recovery in Q3 2020 than the DJIA. The CHI30 had average revenue **increases** of **13.2%** compared to Q2 2020 while the DJIA had average **increases** of **10.0%**. The CHI30 had average EBITDA margin **increases** of **7.9%** while the DJIA had average **increases** of **5.2%**.
- Oak Street Health was added to the CHI30 after its IPO in August 2020, posting a **52.9%** increase in stock price from IPO to year end.

Executive Summary (Cont'd)

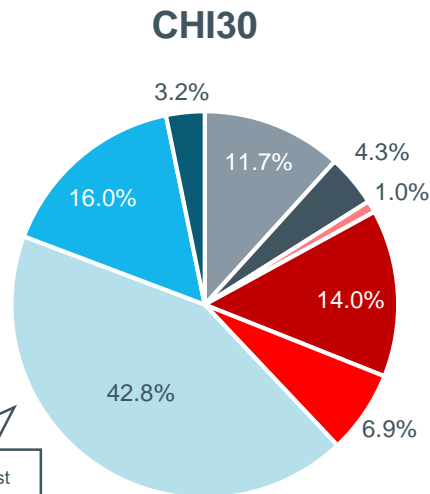
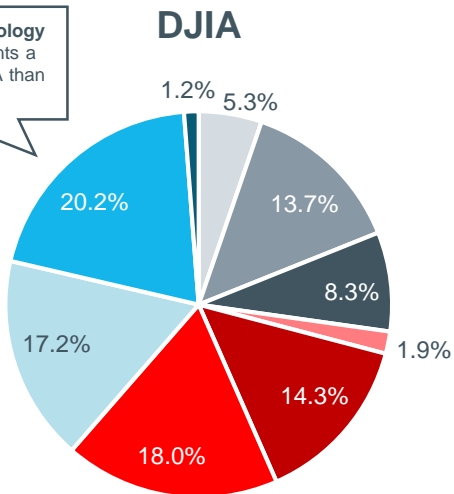
The CHI30 performed worse than the DJIA on most Q2 financial performance metrics, but CHI30 companies performed better than the DJIA in Q3.

	DJIA	CHI30
Stock Price Performance		
YTD index performance	▲ 7.2%	▲ 9.9%
Index performance since 3/23	▲ 64.6%	▲ 80.5%
Index performance since 9/1	▲ 6.8%	▲ 16.1%
Percentage of constituents with positive YTD stock price performance	50.0%	69.0%
Financial Performance		
Avg. Q3 2020 revenue change (QoQ)	▲ 10.0%	▲ 13.2%
Avg. Q3 2020 EBITDA margin change (QoQ)	▲ 5.2%	▲ 7.9%
Avg. Q3 2020 revenue change (YoY)	▼ 1.9%	▼ 1.4%
Avg. Q3 2020 EBITDA margin change (YoY)	▼ 1.1%	▼ 4.1%
Avg. Q2 2020 revenue change (YoY)	▼ 6.9%	▼ 8.0%
Avg. Q2 2020 EBITDA margin change (YoY)	▼ 4.7%	▼ 11.1%
Percentage of constituents that beat consensus Q3 2020 revenue estimates	76.7%	80.0%
Percentage of constituents that beat consensus Q2 2020 revenue estimates	63.3%	65.5%
Percentage of constituents that beat Q3 2020 EPS estimates	50.0%	60.0%
Percentage of constituents that beat Q2 2020 EPS estimates	70.0%	51.7%
Percentage of constituents that saw an increase in net debt/BEV YoY	50.0%	37.9%
Percentage of constituents that increased dividends per share YoY	83.3%	56.7%

Composition by Industry Sector

The CHI30 is overweight in industrials and underweight in information technology, healthcare and communication services.

The Information Technology industry sector represents a larger portion of the DJIA than the CHI30.



The list of Chicago's largest companies is dominated by the Industrial industry sector.

Industry Sector	DJIA	CHI30	Variance
Communication Services	5.3%	0.0%	-5.3%
Consumer Discretionary	13.7%	11.7%	-1.9%
Consumer Staples	8.3%	4.3%	-4.0%
Energy	1.9%	0.0%	-1.9%
Financials	14.3%	14.0%	-0.3%
Healthcare	18.0%	6.9%	-11.1%
Industrials	17.2%	42.8%	25.6%
Information Technology	20.2%	16.0%	-4.1%
Materials	1.2%	3.2%	2.0%
Utilities	0.0%	1.0%	1.0%

Constituents

The median market cap of the DJIA constituents is \$204 billion, compared to \$28 billion for the CHI30 constituents. Boeing, Caterpillar, McDonald's and Walgreens Boots are included in both indices.

DJIA Constituents

Company	Exchange	Ticker	Industry Sector	Market Cap (in millions)
3M	NYSE	MMM	Industrials	\$100,823
American Express	NYSE	AXP	Financials	97,357
Amgen	Nasdaq	AMGN	Health Care	133,852
Apple	Nasdaq	AAPL	Information Technology	2,255,969
Boeing*	NYSE	BA	Industrials	120,843
Caterpillar*	NYSE	CAT	Industrials	98,884
Chevron	NYSE	CVX	Energy	162,594
Cisco Systems	Nasdaq	CSCO	Information Technology	189,092
Coca-Cola	NYSE	KO	Consumer Staples	235,671
Dow	NYSE	DOW	Materials	41,167
Goldman Sachs Group	NYSE	GS	Financials	94,611
Home Depot	NYSE	HD	Consumer Discretionary	285,967
Honeywell	NYSE	HON	Industrials	149,249
IBM	NYSE	IBM	Information Technology	112,166
Intel	Nasdaq	INTC	Information Technology	204,162
Johnson & Johnson	NYSE	JNJ	Health Care	414,310
JPMorgan Chase	NYSE	JPM	Financials	387,335
McDonald's*	NYSE	MCD	Consumer Discretionary	159,886
Merck & Co.	NYSE	MRK	Health Care	206,957
Microsoft	Nasdaq	MSFT	Information Technology	1,681,606
Nike	NYSE	NKE	Consumer Discretionary	222,083
Procter & Gamble	NYSE	PG	Consumer Staples	345,012
Salesforce	NYSE	CRM	Information Technology	203,714
Travelers Companies	NYSE	TRV	Financials	35,557
UnitedHealth Group	NYSE	UNH	Health Care	332,732
Verizon	NYSE	VZ	Communication Services	243,113
Visa	NYSE	V	Information Technology	511,232
Walgreens Boots*	Nasdaq	WBA	Consumer Staples	34,533
Walmart	NYSE	WMT	Consumer Staples	407,842
Walt Disney Company	NYSE	DIS	Communication Services	328,024
Mean				\$326,545
Median				\$203,938
High				\$2,255,969
Low				\$34,533

CHI30 Constituents

Company	Exchange	Ticker	Industry Sector	Market Cap (in millions)
Abbott Laboratories	NYSE	ABT	Health Care	\$187,600
AbbVie	NYSE	ABBV	Health Care	189,171
Allstate	NYSE	ALL	Financials	33,426
Archer-Daniels-Midland	NYSE	ADM	Consumer Staples	28,048
Arther J. Gallagher	NYSE	AJG	Financials	23,792
Baxter International	NYSE	BAX	Health Care	40,988
Boeing*	NYSE	BA	Industrials	120,843
Caterpillar*	NYSE	CAT	Industrials	98,884
CDW	Nasdaq	CDW	Information Technology	18,844
CME Group	Nasdaq	CME	Financials	65,354
Conagra Brands	NYSE	CAG	Consumer Staples	17,714
Deere & Company	NYSE	DE	Industrials	84,310
Discover	NYSE	DFS	Financials	27,747
Dover	NYSE	DOV	Industrials	18,193
Exelon	Nasdaq	EXC	Utilities	41,189
Fortune Brands	NYSE	FBHS	Industrials	11,909
IDEX	NYSE	IEX	Industrials	15,081
Illinois Tool Works	NYSE	ITW	Industrials	64,532
McDonald's*	NYSE	MCD	Consumer Discretionary	159,886
Mondelez International	Nasdaq	MDLZ	Consumer Staples	83,622
Motorola	NYSE	MSI	Information Technology	28,829
Northern Trust	Nasdaq	NTRS	Financials	19,384
Oak Street Health	NYSE	OSH	Health Care	14,729
Packaging Corp. of America	NYSE	PKG	Materials	12,986
TransUnion	NYSE	TRU	Industrials	18,882
Ulta Beauty	Nasdaq	ULTA	Consumer Discretionary	16,178
United Airlines	Nasdaq	UAL	Industrials	12,585
W.W. Grainger	NYSE	GWV	Industrials	21,915
Walgreens Boots*	Nasdaq	WBA	Consumer Staples	34,533
Zebra Technologies	Nasdaq	ZBRA	Information Technology	20,491
Mean				\$51,055
Median				\$27,897
High				\$189,171
Low				\$11,909

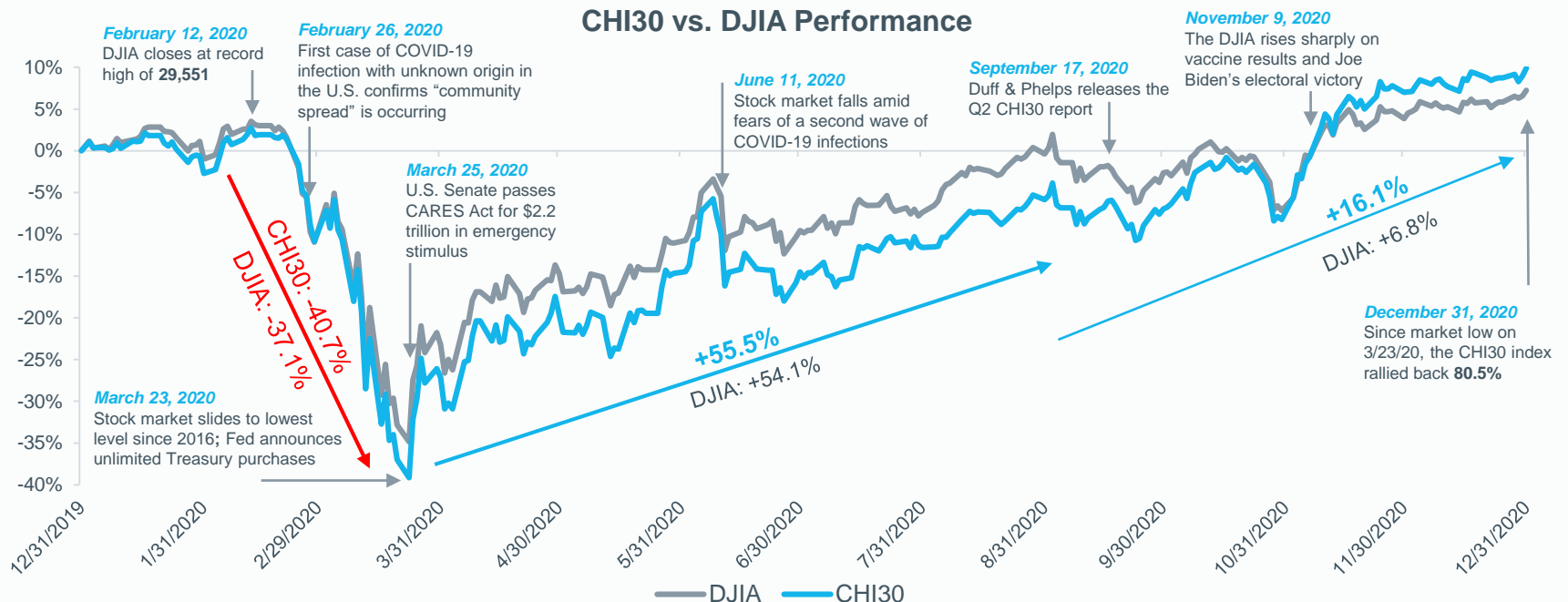
* Indicates that the company is a constituent of both the DJIA and the CHI30

CHI30 Recovery Outpaces DJIA

The CHI30 declined more than the DJIA at the onset of the pandemic, but its recovery has been greater, and it outperformed the DJIA through December 31, 2020.

CHI30 vs. DJIA Performance Observations

- Historically, the CHI30 has generally tracked the DJIA. However, at the onset of market volatility in late February, the CHI30 had a steeper decline than the DJIA, falling 40.7% from February 12 to March 23.
- Since September 1, the CHI30's increase of 16.1% has outpaced the DJIA, leading the CHI30 to overtake the DJIA for the first time since February. The CHI30 is **up 9.9%** from the start of the year compared to the DJIA's **gain of 7.2%**.



Year-to-Date Stock Price Performance

While the CHI30 has performed better than the DJIA overall, the DJIA leaders have outperformed the CHI30 leaders, and the CHI30 laggards have performed worse than the DJIA laggards.

Stock Price Performance Observations

- **20 of the 29 (69%)** CHI30 constituents and **17 of the 30 (57%)** DJIA constituents experienced an increase in their stock price in the YTD period through December 31, 2020.¹
- The CHI30 index was buoyed by strong performances from **John Deere, Zebra Technologies and Fortune Brands**.
- While **Boeing (-34.3%)** and **Walgreens Boots (-32.4%)** weighed on the YTD index performance of both the CHI30 and the DJIA, the DJIA lagged the CHI30 in YTD performance due to the negative stock performance in a greater proportion of companies, despite the strong performance of large tech companies in the DJIA such as **Apple (+80.7%)** and **Microsoft (+41.0%)**.
- The average **increase** in stock price for companies in the CHI30 index was **7.9%**, while the average **increase** in stock price for companies in the DJIA was only **2.7%**.
- Since the beginning of the year, the DJIA “**Leaders**” averaged **gains of 53.8%**, while the CHI30 “**Leaders**” averaged **increases of only 45.6%**.

Company	Industry Sector	Stock Price on 12/31/20	% of 52-Week High	YTD Performance	Company	Industry Sector	Stock Price on 12/31/20	% of 52-Week High	YTD Performance
<u>CHI30 Leaders</u>					<u>DJIA Leaders</u>				
Deere & Company	Industrials	\$269.05	98.4%	▲ 55.3%	Apple	Information Technology	\$132.69	95.6%	▲ 80.7%
Zebra Technologies	Information Technology	\$384.33	98.8%	▲ 50.5%	Microsoft	Information Technology	\$222.42	95.5%	▲ 41.0%
Fortune Brands	Industrials	\$85.72	92.6%	▲ 31.2%	Nike	Consumer Discretionary	\$141.47	95.6%	▲ 39.6%
<u>CHI30 Laggards</u>					<u>DJIA Laggards</u>				
United Airlines	Industrials	\$43.25	47.8%	▼ 50.9%	Boeing	Industrials	\$214.06	61.2%	▼ 34.3%
Boeing	Industrials	\$214.06	61.2%	▼ 34.3%	Walgreens Boots	Consumer Staples	\$39.88	66.7%	▼ 32.4%
Walgreens Boots	Consumer Staples	\$39.88	66.7%	▼ 32.4%	Chevron	Energy	\$84.45	68.8%	▼ 29.9%

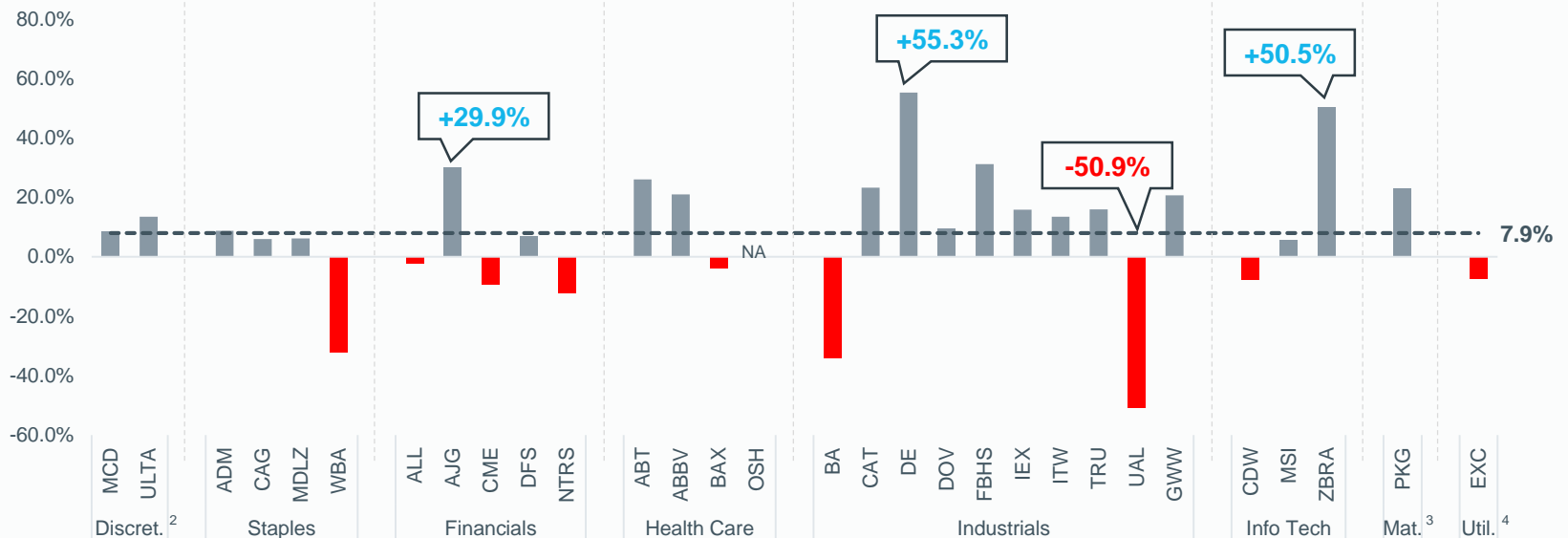
¹ Oak Street Health not included in year-long performance metrics due to their IPO in August 2020
Source: S&P Capital IQ

CHI30 Stock Price Performance

Stock Price Performance Observations

- **20 of the 29 (69%)** CHI30 constituents saw an increase in their stock price in 2020 compared to **17 of the 30 (57%)** DJIA constituents over the same period.¹
- With a strong price recovery since March lows, the CHI30 outperformed the DJIA in the YTD period with strong positive performances from **Arthur J. Gallagher, John Deere** and **Zebra Technologies**, offsetting negative performances from **Walgreens Boots, Boeing** and **United Airlines**.

2020 Stock Price Performance



¹ Oak Street Health not included in year-long performance metrics due to IPO in August 2020

² Discretionary

³ Materials

⁴ Utilities

Source: S&P Capital IQ and SEC filings

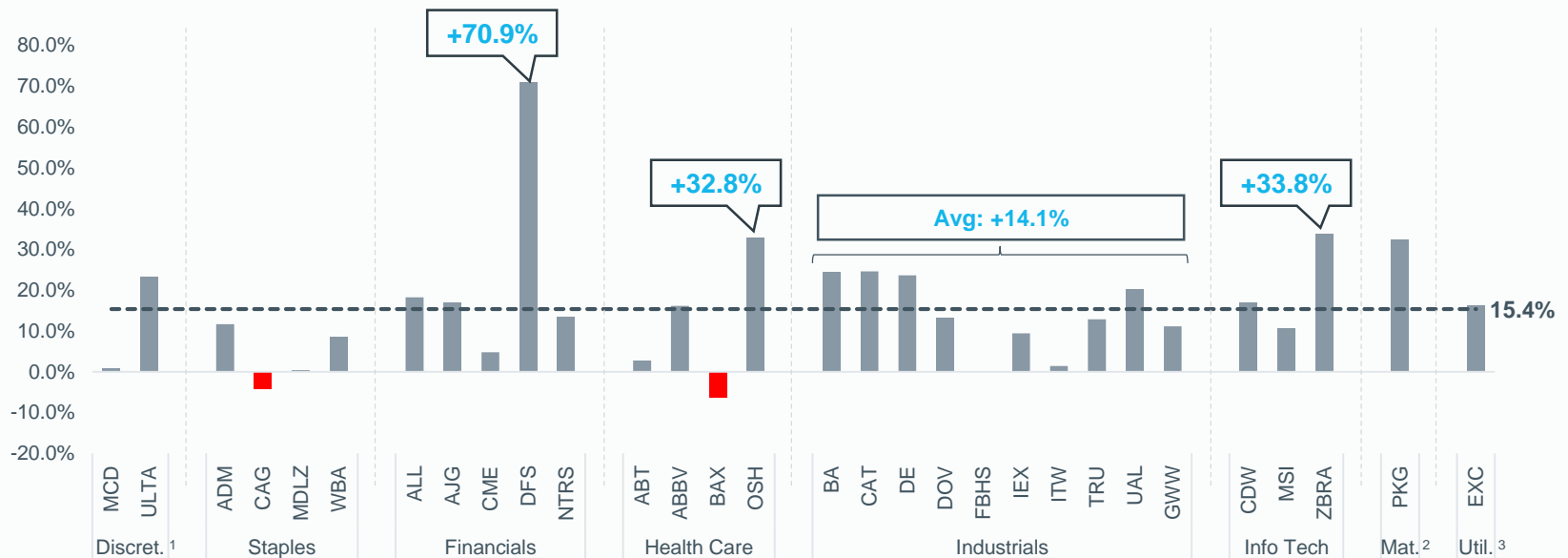
CHI30 Stock Price Performance since September 1, 2020

Nearly all of the CHI30 constituents have seen stock price increases since September 1, 2020, as the middle market recovered in Q3 2020.

Stock Price Performance Observations

- **27 of the 30 (80%)** CHI30 constituents saw an increase in their stock price since September 1, 2020 and December 31, 2020, compared to **21 of the 30 (70%)** DJIA constituents over the same period.
- Nearly all CHI30 constituents saw an increase in stock price during this period, with particularly strong performances from **Discover**, **Oak Street Health** and **Zebra Technologies**.

Stock Price Performance since 9/1/20



¹ Discretionary

² Materials

³ Utilities

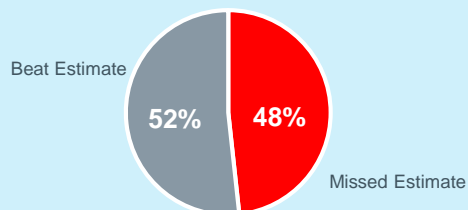
Source: S&P Capital IQ and SEC filings

CHI30 vs. DJIA Q2 2020 Performance

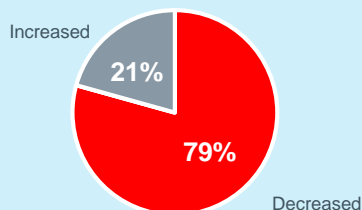
DJIA constituents outperformed CHI30 constituents on earnings and dividend metrics through Q2 2020.

CHI30 Financial Performance (Percentage of Constituents)

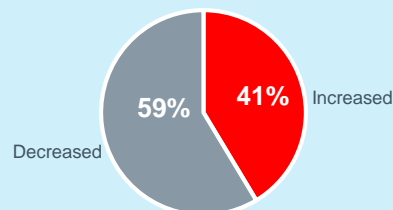
Q2 EPS Performance Against Consensus Estimates¹



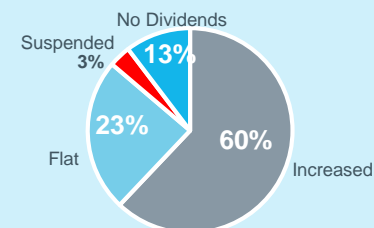
Q2 EPS Performance YoY



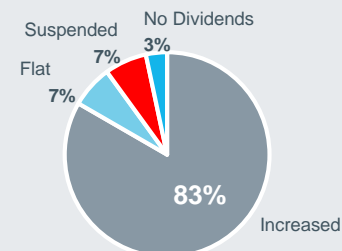
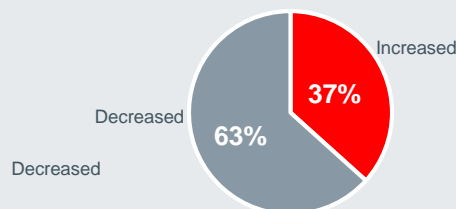
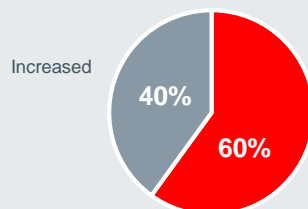
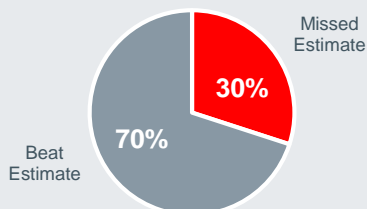
Net Debt/BEV YoY



Dividend per Share YoY



DJIA Financial Performance (Percentage of Constituents)



¹ Consensus estimates as of June 30, 2020

Note: CHI30 metrics represent 29 companies, excluding OSH metrics

BEV = Business Enterprise Value = Market Cap + Total Debt – Cash and Cash Equivalents

EPS = Earnings per Share (GAAP basis)

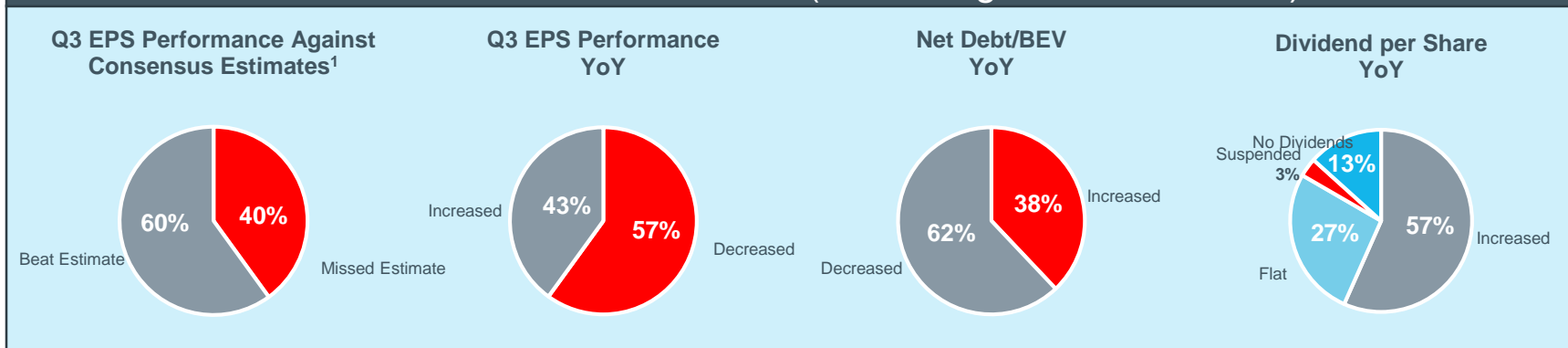
Net Debt = Total Debt – Cash and Cash Equivalents

Source: S&P Capital IQ, Thomson and SEC filings

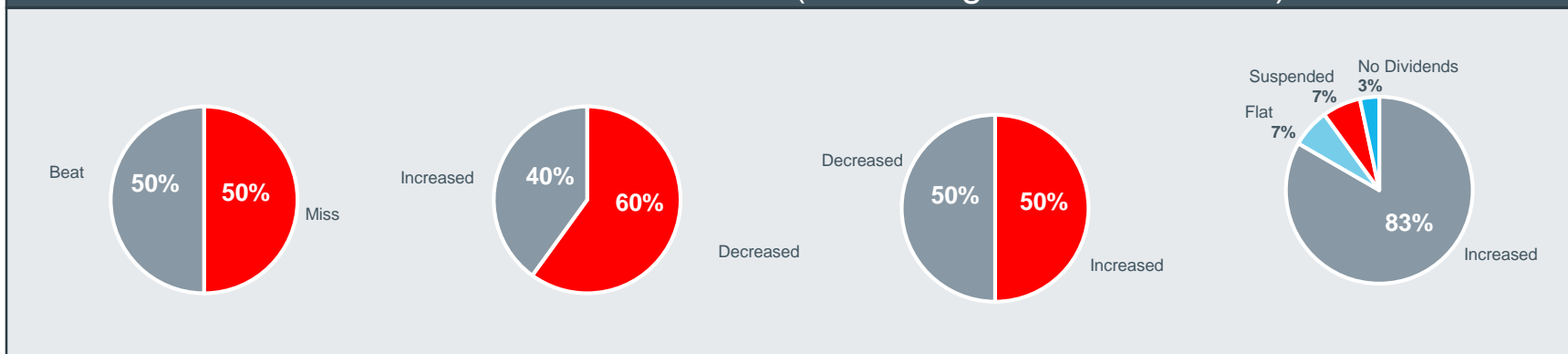
CHI30 vs. DJIA Q3 2020 Performance

The CHI30 constituents outperformed the DJIA constituents on earnings metrics through Q3 2020, while the DJIA constituents performed better on dividend metrics.

CHI30 Financial Performance (Percentage of Constituents)



DJIA Financial Performance (Percentage of Constituents)



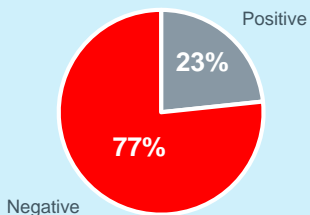
¹ Consensus estimates as of September 30, 2020
 BEV = Business Enterprise Value = Market Cap + Total Debt – Cash and Cash Equivalents
 EPS = Earnings per Share (GAAP basis)
 Net Debt = Total Debt – Cash and Cash Equivalents
 Source: S&P Capital IQ, Thomson and SEC filings

Q2 2020 Financial Performance

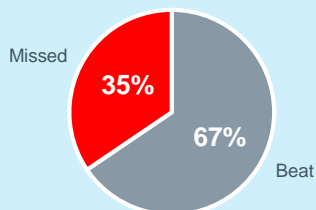
While the DJIA constituents outperformed CHI30 constituents on all revenue and EBITDA metrics through Q2 2020, more CHI30 companies beat revenue estimates.

CHI30 Financial Performance (Percentage of Constituents)

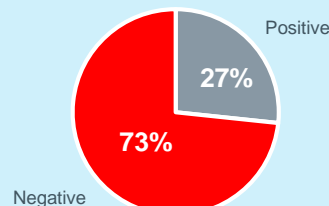
Q2 Revenue Growth YoY



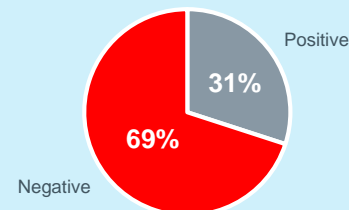
Q2 Revenue Beat/Miss¹



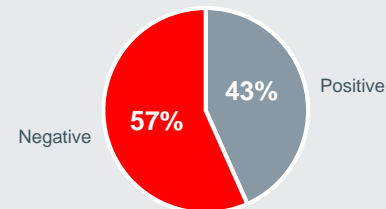
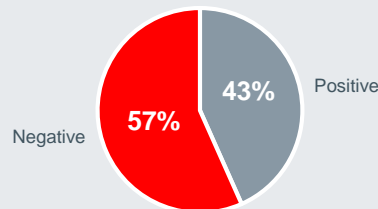
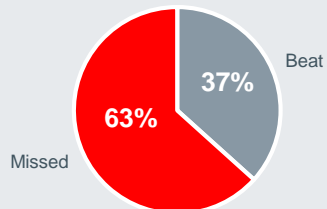
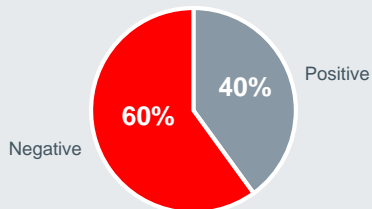
Q2 EBITDA Margin Change YoY



Q2 EBITDA Margin Change QoQ



DJIA Financial Performance (Percentage of Constituents)



¹ Consensus estimates as of June 30, 2020

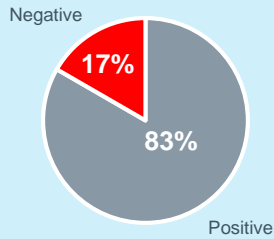
Note: CHI30 metrics for revenue growth YoY and EBITDA margin change QoQ represent 29 companies, excluding OSH metrics
Source: S&P Capital IQ, Thomson and SEC filings

Q3 2020 Financial Performance

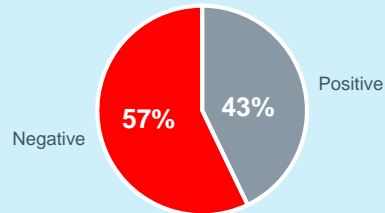
The CHI30 constituents outperformed on QoQ revenue growth, revenue beats and QoQ EBITDA margin change.

CHI30 Financial Performance (Percentage of Constituents)

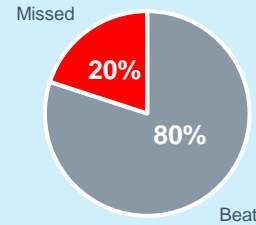
Q3 Revenue Growth QoQ



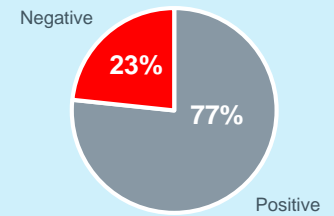
Q3 Revenue Growth YoY



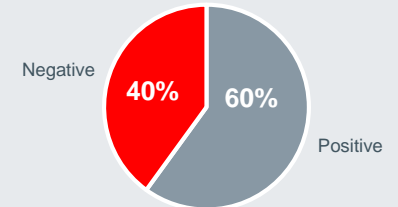
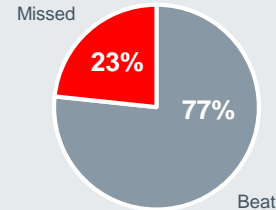
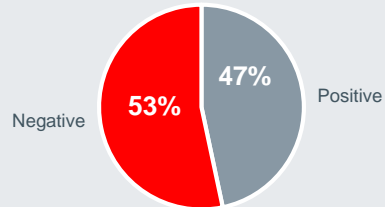
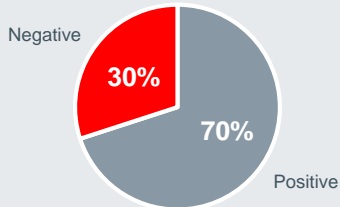
Q3 Revenue Beat/Miss¹



Q3 EBITDA Margin Change QoQ



DJIA Financial Performance (Percentage of Constituents)



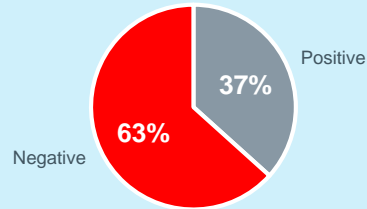
¹ Consensus estimates as of September 30, 2020
Source: S&P Capital IQ, Thomson and SEC filings

Q2 + Q3 2020 Financial Performance

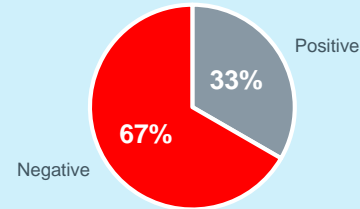
The DJIA constituents outperformed the CHI30 constituents on EBITDA and revenue metrics for Q2 + Q3.

CHI30 Financial Performance (Percentage of Constituents)

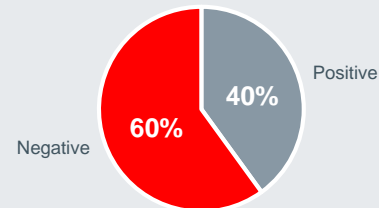
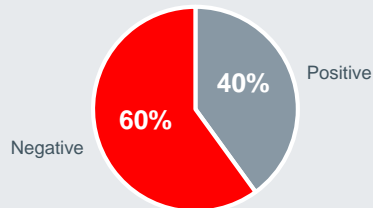
Q2 + Q3 Revenue Growth
YoY



Q2 + Q3 EBITDA Margin Change
YoY



DJIA Financial Performance (Percentage of Constituents)



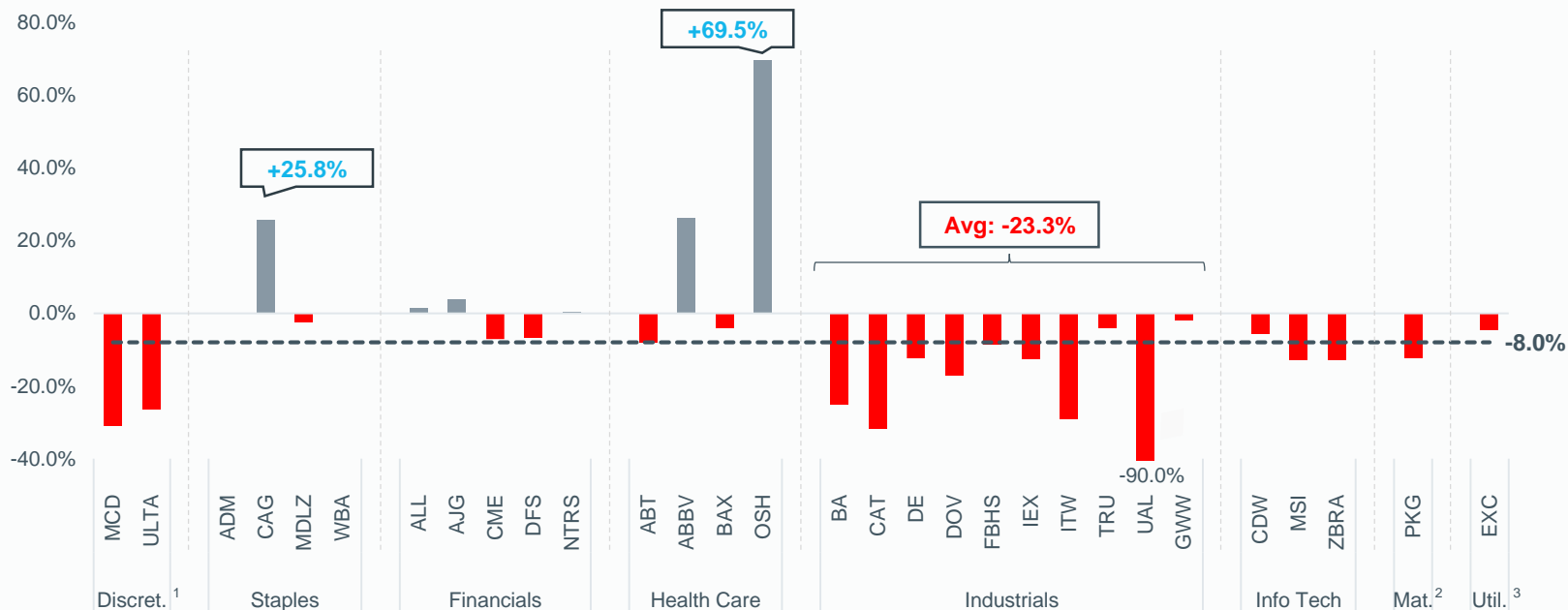
CHI30 Q2 2020 Revenue Growth

The CHI30 experienced more widespread revenue declines in Q2 2020 compared to the DJIA.

Revenue Observations

- **83%** of the CHI30 constituents experienced **revenue declines** in Q2 2020 compared to Q2 2019, while **60%** of the DJIA constituents experienced **revenue declines** over the same period.
- Due to the CHI30's outsized exposure to Industrial companies, the average Q2 2020 **revenue decline** for the CHI30 was **8.0%**, compared to the DJIA's average **decline** of **6.9%**.

Q2 YoY Quarterly Revenue Growth



¹ Discretionary

² Materials

³ Utilities

Source: S&P Capital IQ and SEC filings

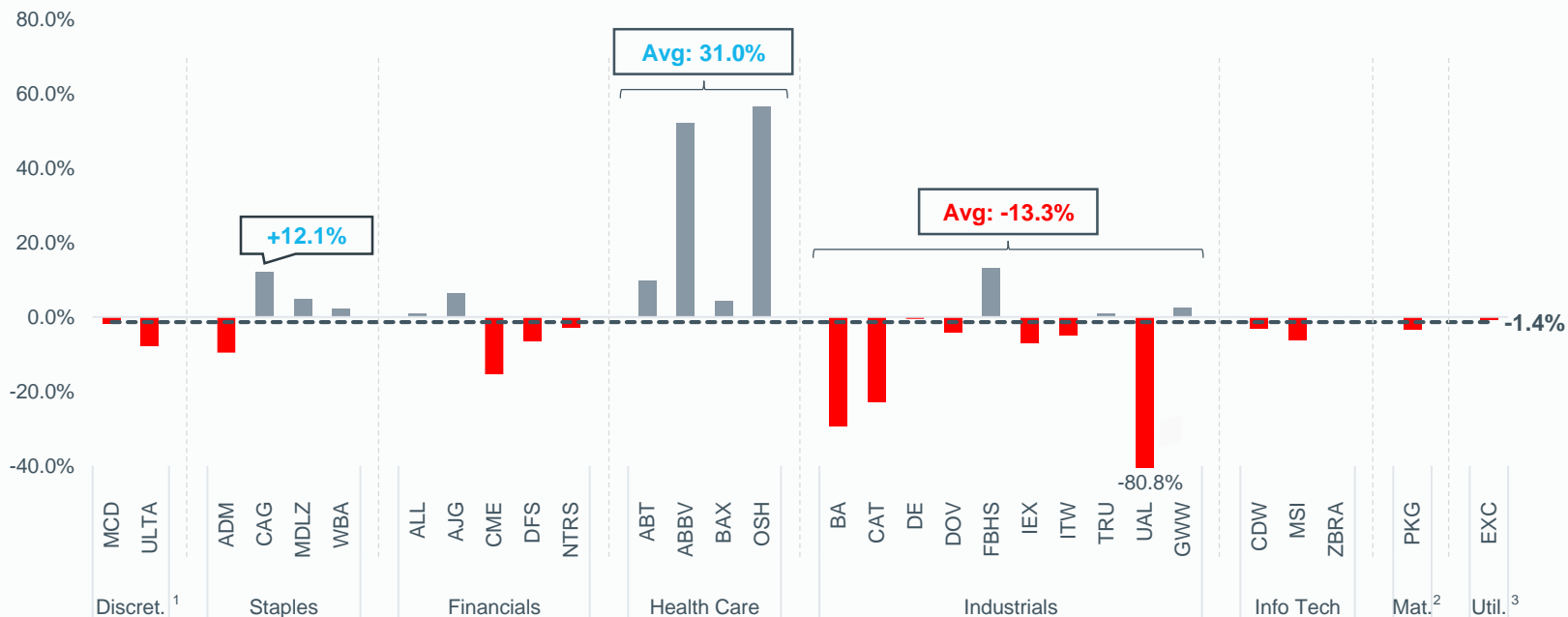
CHI30 Q3 2020 Revenue Growth

The CHI30 recovered in Q3 2020 but still performed worse, on average, than during the same quarter of the prior year.

Revenue Observations

- **57%** of the CHI30 constituents experienced **revenue declines** in Q3 2020 compared to Q3 2019, while **50%** of the DJIA constituents experienced **revenue declines** over the same period.
- Despite a greater number of companies experiencing revenue declines in Q3 2020 than the DJIA, the average Q3 2020 **revenue decline** for the CHI30 was **1.4%**, compared to the DJIA's **decline** of **1.9%**.

Q3 YoY Quarterly Revenue Growth



¹ Discretionary

² Materials

³ Utilities

Source: S&P Capital IQ and SEC filings

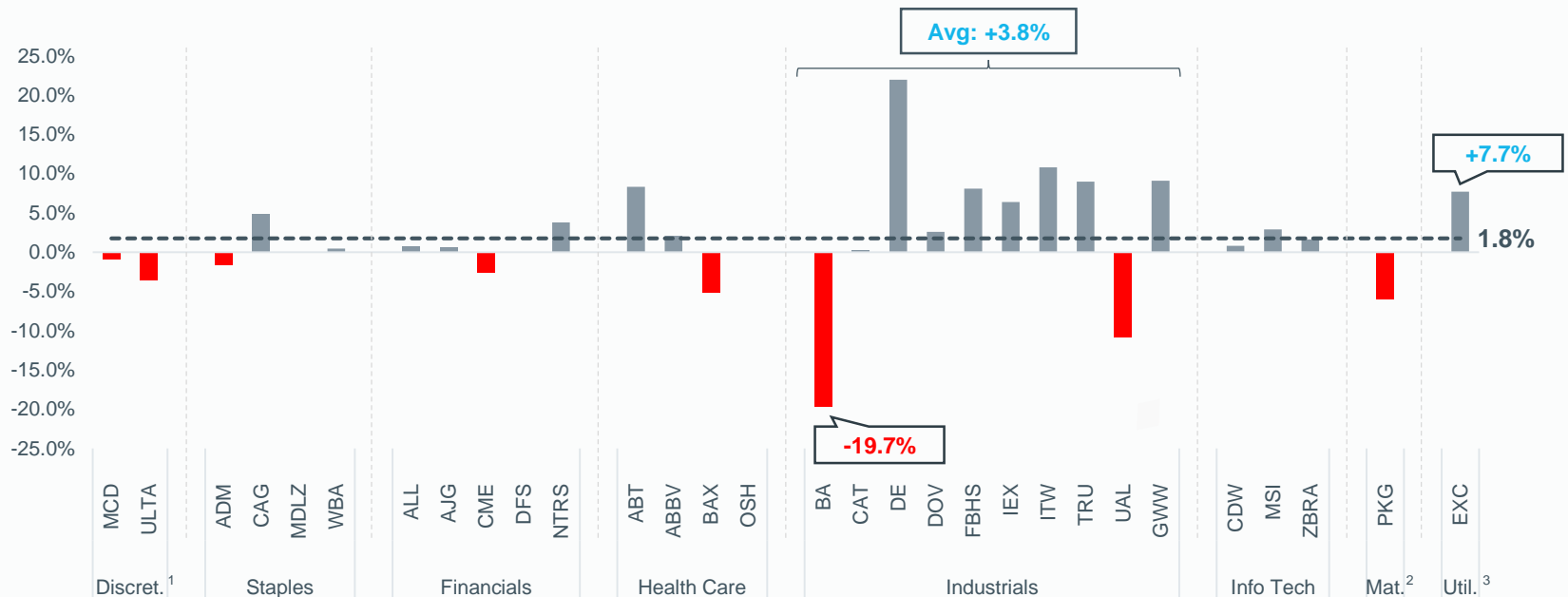
CHI30 Q2 2020 Revenue Beat/Miss

In Q2 2020, the CHI30 underperformed compared to the DJIA but outperformed consensus estimates.

Revenue Observations

- **22 of the 29 (76%)** CHI30 constituents **beat consensus revenue estimates** in Q3 2020 compared to **19 of the 30 (63%)** DJIA constituents.
- Despite a higher percentage of CHI30 constituents experiencing revenue declines, more CHI30 constituents outperformed revenue expectations than the DJIA.

Q2 Revenue Performance Against Consensus Estimates



Note: Consensus estimates as of June 30, 2020; No consensus estimates available for Oak Street in Q2 2020

¹ Discretionary

² Materials

³ Utilities

Source: S&P Capital IQ and SEC filings

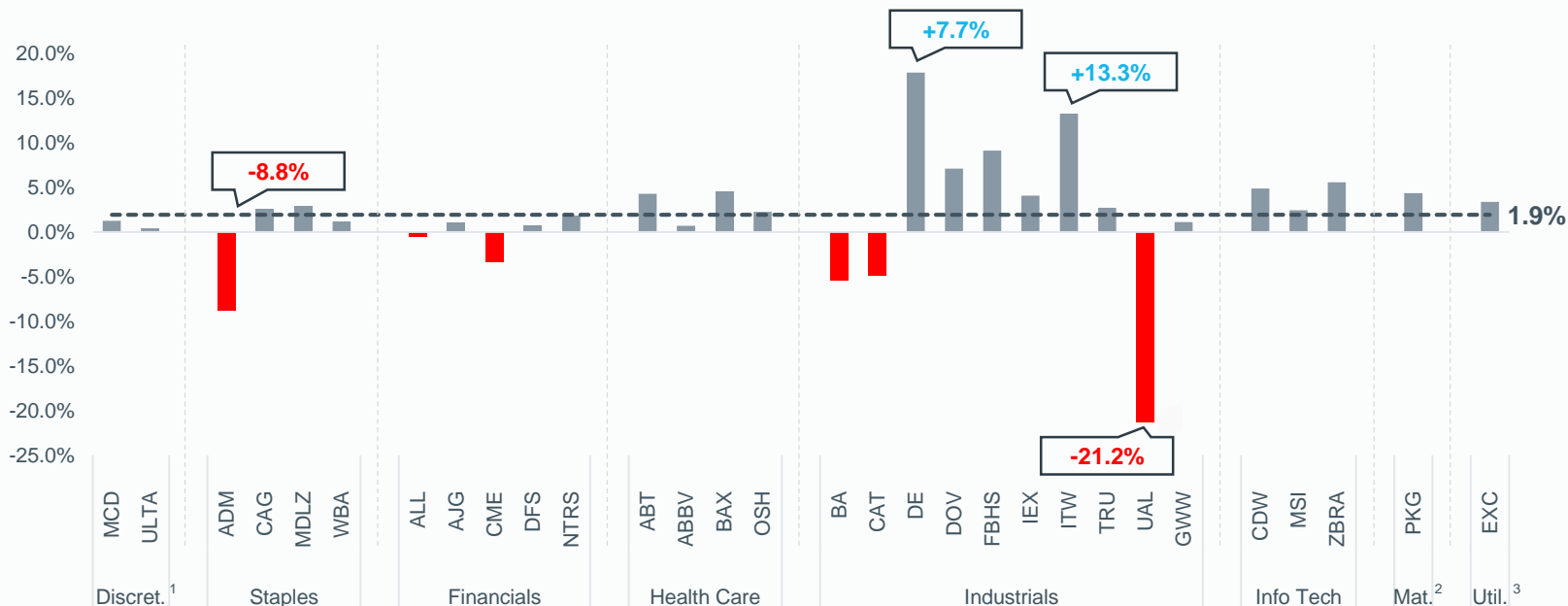
CHI30 Q3 2020 Revenue Beat/Miss

The CHI30 continued to outperform consensus estimates in Q3 2020.

Revenue Observations

- **24 of the 30 (80%)** CHI30 constituents **beat consensus revenue estimates** in Q3 2020 compared to **22 of the 30 (73%)** DJIA constituents.
- Many CHI30 industrial companies significantly outperformed consensus estimates in Q3 2020. On average, CHI30 constituents beat consensus revenue estimates by 1.9%, compared to an average of 0.1% in the DJIA.

Q3 Revenue Performance Against Consensus Estimates



Note: Consensus estimates as of September 30, 2020

¹ Discretionary

² Materials

³ Utilities

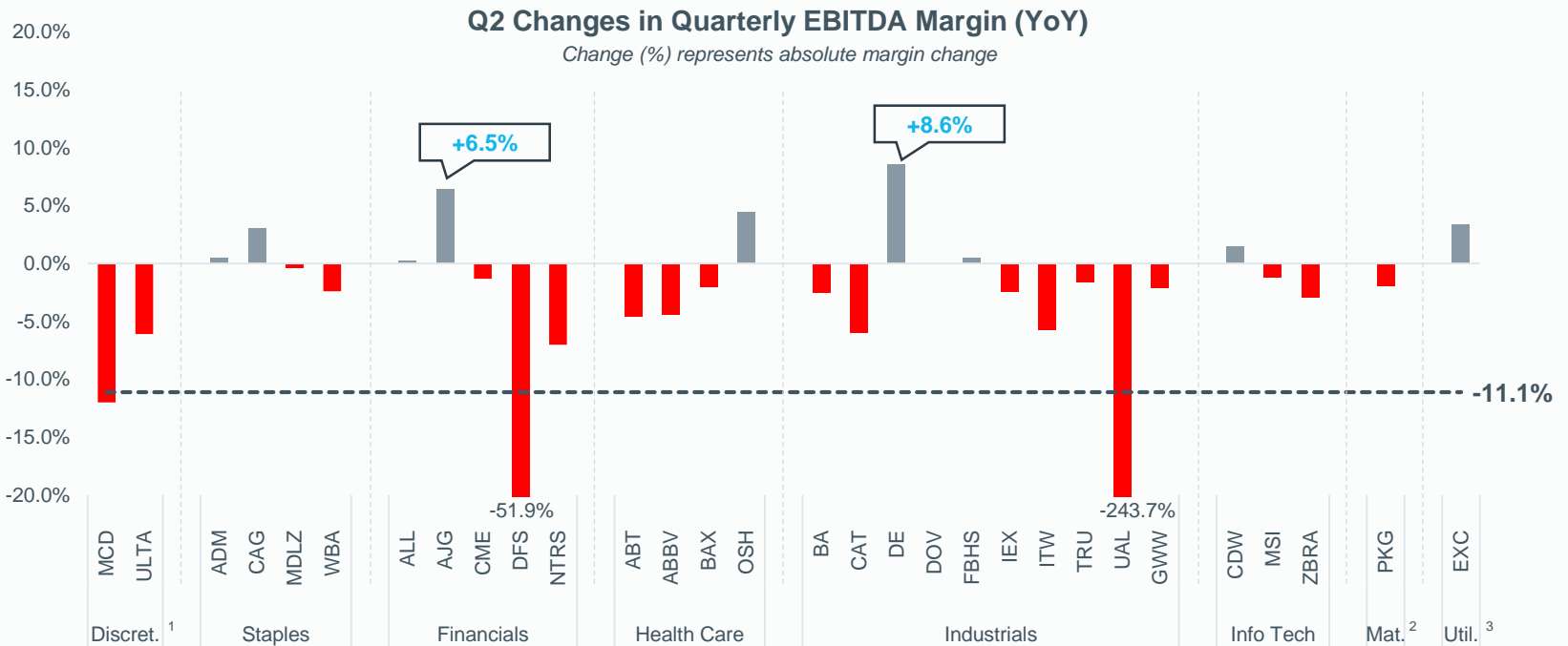
Source: S&P Capital IQ and SEC filings

CHI30 Q2 2020 EBITDA % Margins

CHI30 constituents experienced greater declines in margin, on average, compared to DJIA constituents.

EBITDA Margin Observations

- **21 of the 30 (70%)** CHI30 constituents experienced a **decline in EBITDA margins** in Q2 2020 compared to Q2 2019, while **18 of the 30 (60%)** DJIA constituents experienced a decline over the same period.
- Due to several CHI30 constituents experiencing significant margin declines, the average Q3 2020 EBITDA margin **decline** for the CHI30 was **11.1%**, compared to the DJIA's **decline** of **4.7%**.



Note: Margins calculated from pre-tax earnings for financial companies
¹ Discretionary
² Materials
³ Utilities
 Source: S&P Capital IQ and SEC filings

CHI30 Q3 2020 EBITDA % Margins

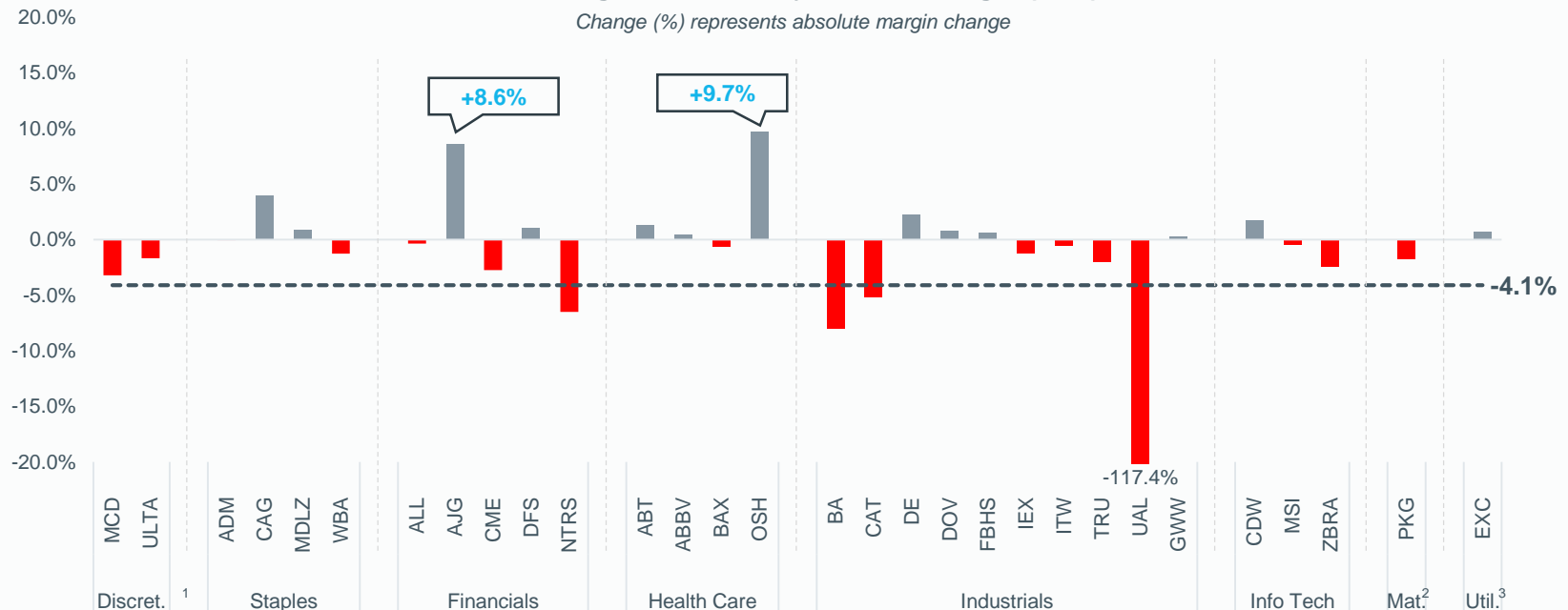
The CHI30 constituents' financial performance improved in Q3 but several companies still experienced significant margin impacts.

EBITDA Margin Observations

- **17 of the 30 (57%)** constituents in each index experienced a **decline** in **EBITDA margins** in Q3 2020 compared to Q3 2019.
- Despite the CHI30's outsized exposure to Industrial companies, the average Q3 2020 EBITDA margin **decline** for the CHI30 was only **4.1%**, compared to the DJIA's **decline** of **1.1%**.

Q3 Changes in Quarterly EBITDA Margin (YoY)

Change (%) represents absolute margin change



Note: Margins calculated from pre-tax earnings for financial companies

¹ Discretionary

² Materials

³ Utilities

Source: S&P Capital IQ and SEC filings

Contacts and Authored by

Bob Bartell, CFA

Global Head of Corporate Finance
Chicago
+1 312 697 4654
bob.bartell@duffandphelps.com

Atit Sheth

Vice President, Corporate Finance
Chicago
+1 312 697 4533
atit.sheth@duffandphelps.com

Eric Vanderpoel

Vice President, Corporate Finance
Chicago
+1 312 697 4574
eric.vanderpoel@duffandphelps.com

Matthew Talbot

Analyst, Corporate Finance
Chicago
+1 312 697 4552
matthew.talbot@duffandphelps.com

Nicholas Russo

Analyst, Corporate Finance
Chicago
+1 312 697 4541
nicholas.russo@duffandphelps.com

About Duff & Phelps

Duff & Phelps is the world's premier provider of governance, risk and transparency solutions. We work with clients across diverse sectors in the areas of valuation, corporate finance, disputes and investigations, cyber security, claims administration and regulatory compliance. With Kroll, the leading global provider of risk solutions, and Prime Clerk, the leader in complex business services and claims administration, our firm has nearly 4,000 professionals in 25 countries around the world. For more information, visit www.duffandphelps.com.

M&A advisory, capital raising and secondary market advisory services in the United States are provided by Duff & Phelps Securities, LLC. Member FINRA/SIPC. Pagemill Partners is a Division of Duff & Phelps Securities, LLC. M&A advisory, capital raising and secondary market advisory services in the United Kingdom are provided by Duff & Phelps Securities Ltd. (DPSL), which is authorized and regulated by the Financial Conduct Authority. Valuation Advisory Services in India are provided by Duff & Phelps India Private Limited under a category 1 merchant banker license issued by the Securities and Exchange Board of India.

Additional Contacts

Chris Janssen

Global Head of Transaction Opinions
Chicago
+1 312 697 4643
chris.janssen@duffandphelps.com

Jeff Schiedemeyer

Head of EMEA Transaction Opinions
Chicago
+1 312 697 4655
jeff.schiedemeyer@duffandphelps.com

Jacco Brouwer

Head of European Debt Advisory
London
+44 20 7089 4905
jacco.brouwer@duffandphelps.com

Steve Burt

Global Head of M&A Advisory
Chicago
+1 312 697 4620
steve.burt@duffandphelps.com

Andreas Stoecklin

Head of EMEA Corporate Finance
Frankfurt
+49 69 7191 8466
andreas.stoecklin@duffandphelps.com

David Lu

Head of China M&A Advisory
Shanghai
+86 21 6032 0608
david.lu@duffandphelps.com

Joshua Benn

Head of U.S. M&A Advisory and Special Situations
New York
+1 212 450 2840
joshua.benn@duffandphelps.com

Brian Cullen

U.S. Restructuring Advisory and Special Situations
Los Angeles
+1 424 249 1645
brian.cullen@duffandphelps.com

Geoffrey Frankel

U.S. Restructuring Advisory and Special Situations
New York/Cleveland
+1 216 310 3464
geoffrey.frankel@duffandphelps.com

About Duff & Phelps

Duff & Phelps is the world's premier provider of governance, risk and transparency solutions. We work with clients across diverse sectors in the areas of valuation, corporate finance, disputes and investigations, cyber security, claims administration and regulatory compliance. With Kroll, the leading global provider of risk solutions, and Prime Clerk, the leader in complex business services and claims administration, our firm has nearly 4,000 professionals in 25 countries around the world. For more information, visit www.duffandphelps.com.

M&A advisory, capital raising and secondary market advisory services in the United States are provided by Duff & Phelps Securities, LLC. Member FINRA/SIPC. Pagemill Partners is a Division of Duff & Phelps Securities, LLC. M&A advisory, capital raising and secondary market advisory services in the United Kingdom are provided by Duff & Phelps Securities Ltd. (DPSL), which is authorized and regulated by the Financial Conduct Authority. Valuation Advisory Services in India are provided by Duff & Phelps India Private Limited under a category 1 merchant banker license issued by the Securities and Exchange Board of India.