

INSIDE THIS ISSUE

- Quarterly Overview
- Private Middle Market Company Value Results
- Performance by Industry: Sector Breakdown
- Examining the Lincoln MMI: EBITDA Multiples vs. Earnings
- Summary of the Lincoln MMI
- Methodology: Data Collection and Academic Advisors

LINCOLN

MMMI
LINCOLN MIDDLE MARKET INDEX



OVERALL GROWTH AMONG PRIVATE MIDDLE MARKET COMPANIES REMAINS ROBUST, BUT INDUSTRY RESULTS VARY SIGNIFICANTLY

Lincoln International's ninth edition of the Lincoln Middle Market Index (Lincoln MMI) reveals that in Q3 2019, middle market enterprise values increased 1.4%, compared to an 0.9% increase for enterprise values of S&P 500 companies, the slowest growth for each index in two years. Although earnings improved for both sets of companies, greater valuation multiples were a significant contributor to middle market enterprise value growth whereas S&P 500 multiples were relatively stable. Performance by industry has become increasingly varied as growing industries improved at greater rates while declining industries continued to struggle.

About the Lincoln Middle Market Index

The Lincoln MMI is a first-of-its-kind index measuring changes in the enterprise values of private middle market companies over time - and a barometer of the performance of private middle market companies generally. The Lincoln MMI enables private equity firms and other investors to benchmark how private company investments are performing against peers, and how this performance correlates to the S&P 500.

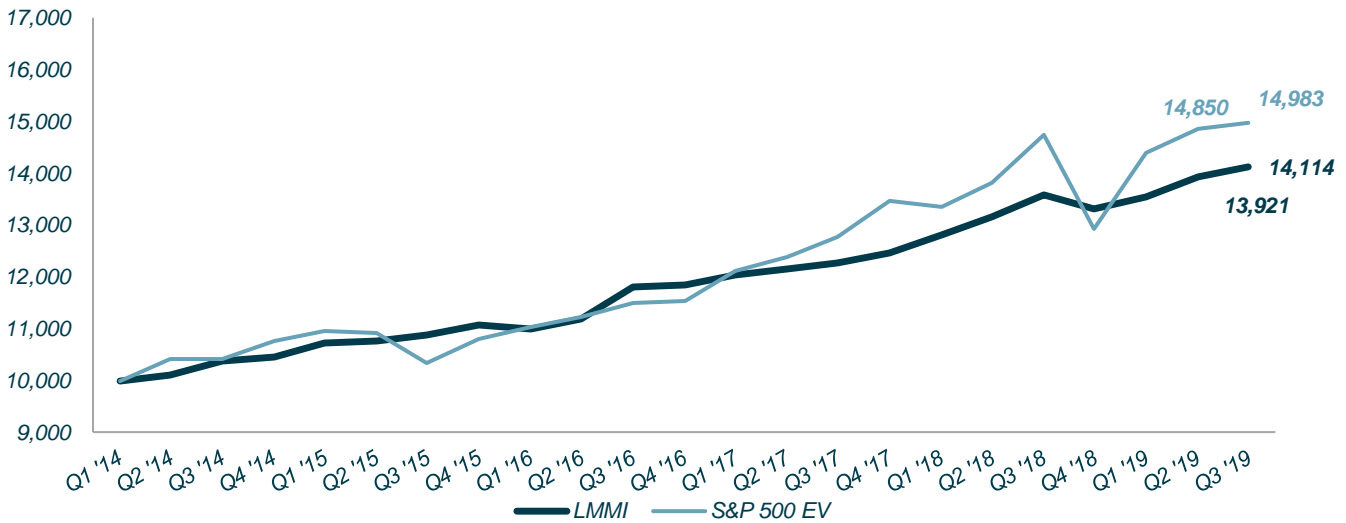
Lincoln designed the Lincoln MMI to solve this problem by measuring the quarterly change in enterprise values for private middle market companies primarily owned by private equity firms. Enterprise value ("EV") is the sum of a company's equity value and debt.

QUARTERLY OVERVIEW

- Ninth Edition: Covers Q3 2019
- Measures quarterly changes in the enterprise values of approximately 460 middle market companies, based on a population of over 1,600 companies primarily owned by private equity firms
- Analyzes the impact from the change in company earnings versus market valuation multiples
- Assess the change in value for six industry sectors

RESULTS:

Lincoln MMI Outperformed S&P 500 in Q3, Though Growth Slowed



NOTE: Both the Lincoln MMI and S&P 500 EV returns above reflect enterprise values (S&P 500 EV excludes financial companies for which enterprise value is generally not meaningful; including such companies produces qualitatively similar results)

	QoQ	YoY
Lincoln MMI	1.4%	3.8%
S&P 500 EV	0.9%	1.6%

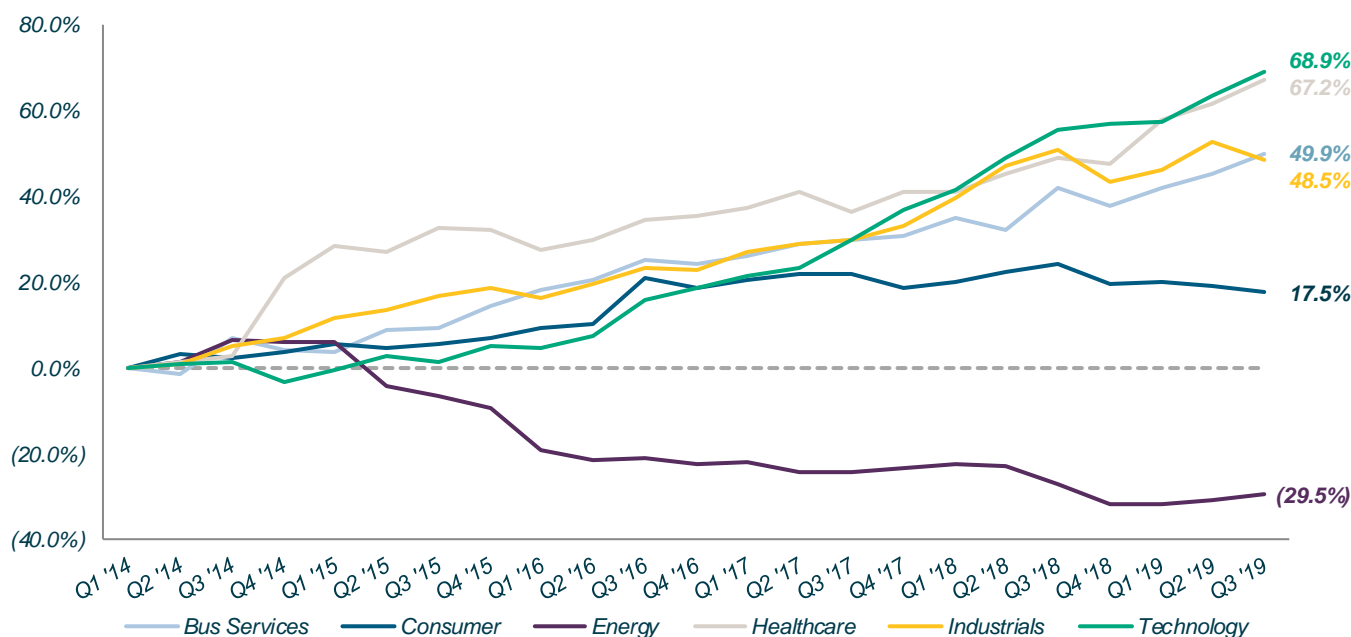
- Starting at a value of 10,000 as of March 31, 2014, the Lincoln MMI increased by 41.1% cumulatively to 14,114, as of September 30, 2019.
- The Lincoln MMI grew at a compound annual growth rate of 6.5% since inception as compared to 9.2% for the enterprise values of the S&P 500.
- Over the past year, the Lincoln MMI increased by 3.8% whereas enterprise values of the S&P 500 increased by 1.6% as the Lincoln MMI outpaced the S&P 500 EV this quarter. Although both indices increased this quarter, the growth rate slowed from that of the past two years.
- The Lincoln MMI shows that middle market enterprise values remain less volatile than those of the S&P 500; the Lincoln MMI's volatility is less than half that of the S&P 500 EV index as multiples have tended to be more stable than public company multiples. As a result, the Sharpe Ratio, which measures excess return per unit of risk, of the Lincoln MMI is superior to that of the S&P 500 EV index.
- While both indexes since inception show relatively comparable growth in enterprise values, private equity owned companies traditionally have more leverage than public companies and, therefore, generate relatively greater equity gains.

SECTOR BREAKDOWN:

Market Sentiment and Macroeconomic Factors Drive Disparate Industry Performance

Q3

2019



	QoQ	YoY
Bus Services	3.3%	5.6%
Consumer	(1.5%)	(5.6%)
Energy	1.8%	(3.2%)
Healthcare	3.4%	12.2%
Industrials	(2.6%)	(1.5%)
Technology	3.3%	8.5%

Technology remains the top performing segment within the Lincoln MMI. The industry experienced both strong revenue and EBITDA growth which drove the industry's 14th consecutive quarter of enterprise value growth. However, Healthcare actually bettered Technology's growth over the last year.

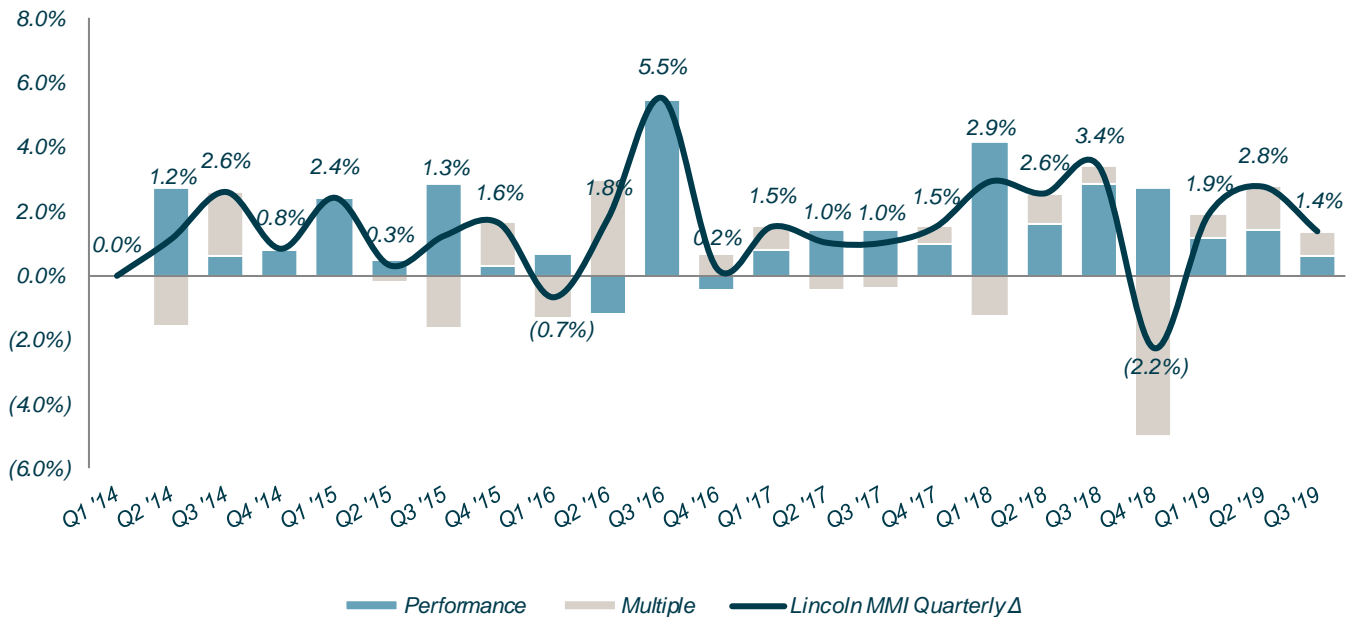
An analysis of fundamental performance illustrates the average EBITDA of all middle market companies in the database increased by 2.6% in Q3 2019 compared to Q3 2018, with stronger performance in non-cyclical and high free cash flow generating industries such as Healthcare, Business Services and Technology. Conversely, the average EBITDA over the same period for the Consumer and Energy industries, which are prone to cyclicity, declined by 0.7% and 2.6%, respectively.

Although the Industrial industry was the second-best performing industry from inception through Q3 2018, the last twelve months have told a different story. With two quarters of material declines, the industry has actually declined (by 1.5%) in enterprise value over a twelve-month span for the first time. This potentially reflects Industrials' lower margin and lower historical growth rate relative to the middle market as a whole as growth slows.

EXAMINING THE LINCOLN MMI: Examining the Lincoln MMI - EBITDA Multiples versus Earnings

Q3

2019



20%+

Expansion of
Lincoln MMI valuation
multiples since Q1 2014

The grey line in Graph 3 indicates the quarterly change in Lincoln MMI enterprise values; this change is based on changes in performance (i.e., EBITDA) combined with the change in EBITDA multiples.

Despite notable multiple contraction in Q4 2018, middle market valuation multiples have increased by 20%+ since the inception of the Lincoln MMI in Q1 2014. Through the first half of 2019, enterprise value growth has been driven relatively equally by multiple expansion and EBITDA growth.

However, this quarter, valuation multiples expanded in the middle market whereas they were relatively stable in the public markets.

Professor Steve Kaplan, Neubauer Distinguished Service Professor of Entrepreneurship and Finance at the University of Chicago Booth School of Business, who assists and advises Lincoln on the Lincoln MMI stated, "While earnings improvement drove all of the growth in the S&P 500 in the third quarter, earnings improvement was aided by increases in market multiples for the middle market."

SUMMARY: The Lincoln MMI

Q3
2019

INDUSTRY BREAKDOWN ON AN ENTERPRISE VALUE BASIS:

- A material bifurcation has developed between the performance of non-cyclical, high cash flow businesses in Technology, Healthcare, and Business Services which have grown by 8.8% over the last year compared to the performance of cyclical, lower-margin businesses in Consumer, Energy, and Industrials which have shrunk over the last year.
- The Consumer industry remains the largest drag on overall middle market performance given it constitutes ~20% of the Lincoln MMI and has declined in enterprise value in three of the last four quarters demonstrating the negative impacts of higher tariffs and lower retail traffic

OBSERVATIONS:

- Since its inception in Q1 2014, the Lincoln MMI has shown that middle market enterprise value multiples have been less volatile than public company multiples and that earnings, which have grown for both public and private companies in every quarter since early 2017, are the primary factor driving long term value creation
- Despite volatility in public markets, the middle market remains highly correlated as both indices increased in value in lockstep in Q3 2019

ENTERPRISE VALUE RESULTS :

- Q3 2019 reflected the slowest enterprise value growth for both the Lincoln MMI and the S&P 500 EV in over two years, primarily as a result of lower earnings growth.
- The Lincoln MMI enterprise value index increased 1.4% for Q3 2019 versus 0.9% for the S&P 500. Over the last year, the Lincoln MMI outperformed the S&P 500 EV, increased by 3.8% whereas the S&P 500 EV increased by 1.6%.
- Although earnings improved for both middle market and public companies, middle market enterprise value multiples expanded in Q3 2019 whereas S&P 500 EV multiples were flat

THE LINCOLN MMI:

- Enables investors in private companies, including private equity firms, to benchmark their investments against their peers and the S&P 500 on both enterprise value and equity value bases;
- Demonstrates that middle market private companies generate returns comparable to major public stock market indices with less volatility;
- Offers many unique valuation insights into the fair value of private companies for a wide array of stakeholders and investors; and
- Represents a significant enhancement to the information available to investors in private companies.

METHODOLOGY: Data Collection

Q3

2019

SOURCE OF DATA AND SAMPLE SIZE

On a quarterly basis, Lincoln determines the enterprise fair value of over 1,600 portfolio companies for approximately 100 sponsors (i.e., private equity groups and lenders to private equity groups). These portfolio companies report quarterly financial results to the sponsor or lender. Lincoln obtains this information and determines the appropriate enterprise value multiple so as to compute the enterprise value in accordance with the fair value measurement principles of generally accepted accounting principles. In assessing enterprise value, Lincoln relies on well accepted valuation methodologies such as the market approach and income approach considering each company's historical and projected performance and other qualitative and quantitative factors. Finally, each valuation is then vetted by auditors, company management, boards of directors and regulators. Upon concluding each quarterly valuation cycle, Lincoln aggregates the underlying financial performance and enterprise value data for analysis.

To construct the Lincoln MMI, Lincoln selects a subsection of the companies valued each quarter, including companies each generating earnings before interest, taxes, depreciation and amortization of less than \$100.0 million, disregarding venture-stage businesses and non-operating entities, such as special purpose entities that own real estate and specialty finance assets.

For more information, visit www.lincolninternational.com/services/valuations-and-opinions/lincolnmmi

1,600+

Portfolio Companies are evaluated by Lincoln on a quarterly basis to determine their Enterprise Fair Value

~100

Sponsors participate in Lincoln MMI i.e. Private Equity Groups & lenders to Private Equity Groups

METHODOLOGY: **Academic Advisors**

Q3

2019

PROFESSOR STEVEN KAPLAN

Professor Steven Kaplan is the Neubauer Distinguished Service Professor of Entrepreneurship and Finance at the University of Chicago Booth School of Business. Professor Kaplan conducts research on issues in private equity, venture capital, entrepreneurial finance, corporate governance and corporate finance. He has published papers in a number of academic and business journals. Kaplan is a research associate at the National Bureau of Economic Research and an associate editor of the Journal of Financial Economics. Kaplan teaches advanced MBA and executive courses in entrepreneurial finance and private equity, corporate finance, corporate governance, and wealth management. BusinessWeek named him one of the top 12 business school teachers in the country. Kaplan serves on the boards of Morningstar, Zayo Group and the Illinois Venture Capital Association. He has been a member of the faculty since 1988.

Professor Kaplan received his A.B., summa cum laude, in Applied Mathematics and Economics from Harvard College and earned a Ph.D. in Business Economics from Harvard University.

PROFESSOR MICHAEL MINNIS

Professor Michael Minnis is an Associate Professor of Accounting at the University of Chicago Booth School of Business. Professor Minnis studies the role of accounting information in allocating investment efficiently by both management and capital providers, the use of financial reporting in mitigating information opacity issues of privately-held firms, and the interplay within management in the production and use of financial information. His research includes identifying unique data and methods to empirically examine issues in a novel way.

Professor Minnis received his Ph.D. from the University of Michigan and his B.S. from the University of Illinois, where he graduated with Highest Honors.

GLOBAL INDUSTRY GROUPS

Business Services

Consumer

Energy, Power & Infrastructure

Healthcare

Industrials

Technology, Media & Telecom

ADVISORY SERVICES

Mergers & Acquisitions

Capital Advisory

Joint Ventures & Partnering

Valuations & Opinions

ABOUT LINCOLN INTERNATIONAL

We are trusted investment banking advisors to business owners and senior executives of leading private equity firms and public and privately held companies around the world. Our advisory services include mergers and acquisitions and capital markets advisory for the mid-market. We also provide valuations and fairness opinions and joint ventures advisory services. As one tightly integrated team of more than 500 professionals across 16 countries, we offer an unobstructed perspective, backed by superb execution and a deep commitment to client success. With extensive industry knowledge and relationships, timely market intelligence and strategic insights, we forge deep, productive client relationships that endure for decades. Connect with us to learn more at www.lincolninternational.com.

VOG is a leading independent valuation advisor to managers of illiquid assets and lenders to alternative assets funds. VOG specializes in the valuation of illiquid debt, equity and derivative securities. Additionally, they provide independent fairness and other transaction opinions for a variety of corporate transactions for both public and private companies.

VOG is widely recognized for leveraging Lincoln International's "real world" transaction experience from its M&A and debt advisory practices to assist its clients in the determination of fair value. Lincoln International's highly skilled professionals have extensive experience in determining and supporting fair value measurements for traditional and complex securities.



IMPORTANT DISCLOSURE: The Lincoln Middle Market Index is an informational indicator only, and does not constitute investment advice or an offer to sell or a solicitation to buy any security. It is not possible to directly invest in the Lincoln Middle Market Index. Some of the statements above contain opinions based upon certain assumptions regarding the data used to create the Lincoln Middle Market Index, and these opinions and assumptions may prove incorrect. Actual results could vary materially from those implied or expressed in such statements for any reason. The Lincoln Middle Market Index has been created on the basis of information provided by third-party sources that are believed to be reliable, but Lincoln International has not conducted an independent verification of such information. Lincoln International makes no warranty or representation as to the accuracy or completeness of such third-party information.