



# LINCOLN M M M M M

**2017 Q4 RESULTS | 2018 OUTLOOK**

## LINCOLN MIDDLE MARKET INDEX



# THE LINCOLN MIDDLE MARKET INDEX SHOWS STRONG GROWTH GOING INTO 2018

Lincoln International's second issue of the Lincoln Middle Market Index (MMI) reveals that, in Q4 2017, middle market enterprise values increased 1.5% compared to 5.3% for enterprise values of S&P 500 companies.

## About the Lincoln Middle Market Index

### QUARTERLY OVERVIEW

- > Second Issue: Covers Q4 2017
- > Identifies value of privately held company marketplace
- > Measures quarterly changes in enterprise value of approximately 350 middle market companies
- > Analyzes the impact from the change in company earnings versus market valuation multiples
- > Values over 1,200 companies primarily owned by private equity groups

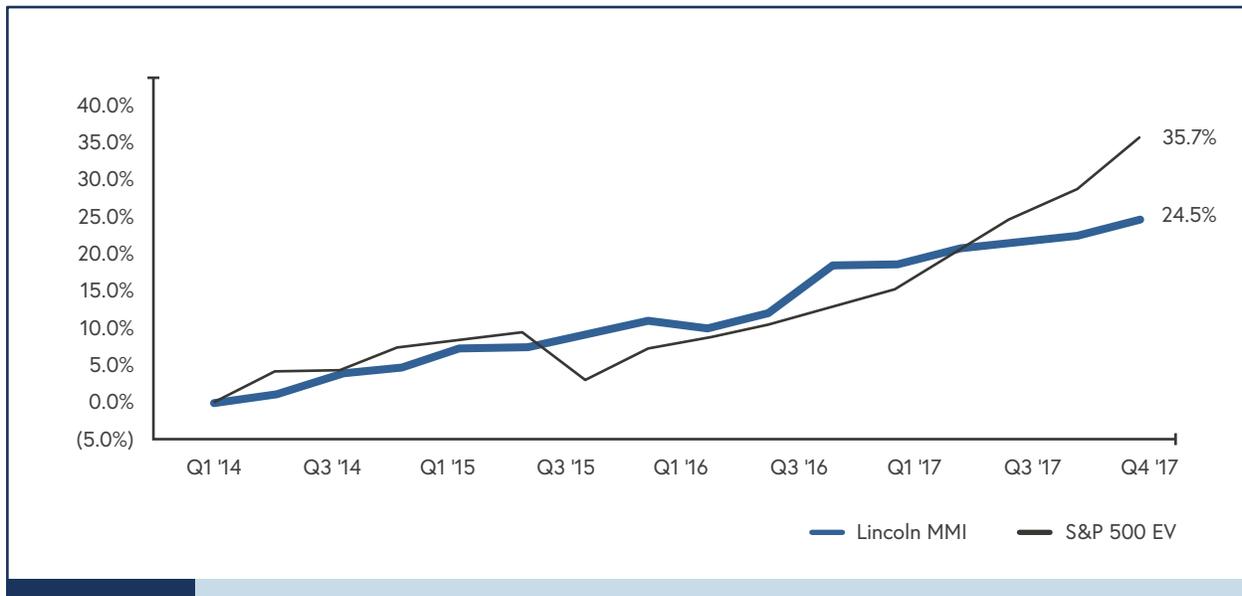
The Lincoln MMI is a first-of-its-kind index to offer a comprehensive, detailed and useful measurement of private middle-market company performance and values.

What has been missing from the privately held company marketplace is a means to identify how their value: (1) changes over time; and, (2) correlates to the public stock market. The Lincoln MMI is designed to solve this problem by measuring the quarterly change in enterprise value for closely held companies. Enterprise value ("EV") is the sum of a company's equity value and net debt.

A significant difference between the Lincoln MMI and S&P 500 is that the Lincoln MMI is comprised of smaller, private companies whereas the S&P 500 is comprised of public companies.

LINCOLN  
MMI

## RESULTS: Middle Market Investments Keep Pace with S&P 500



(Note: Both the Lincoln MMI and S&P 500 EV returns above reflect enterprise values)

LINCOLN MMI  
COMPOUND ANNUAL  
GROWTH RATE OF

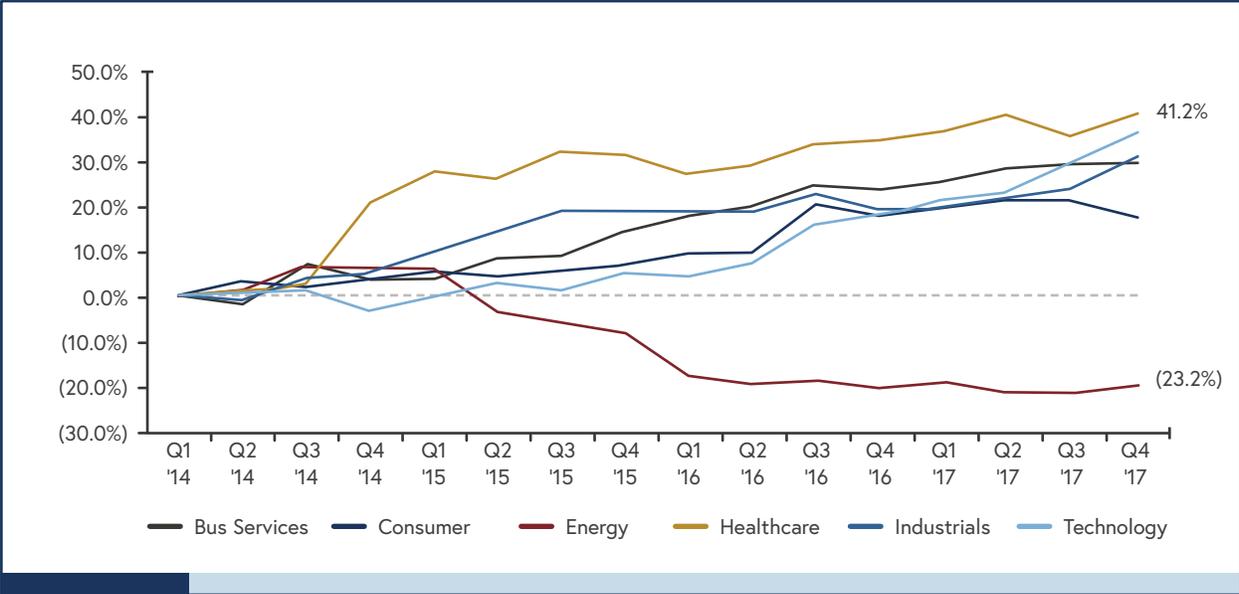
6%

Starting at a value of 10,000 as of March 31, 2014, the Lincoln MMI has increased to 12,455, or 24.5%, as of December 31, 2017.

- > The Lincoln MMI has grown at a compound annual growth rate of 6.0% since inception as compared to 8.5% for the enterprise values of the S&P 500.
- > The Lincoln MMI has grown 5.2% and 1.5% over the past year and quarter, respectively as compared to 17.6% and 5.3%, respectively, for the enterprise values of the S&P 500.

# SECTOR BREAKDOWN:

## Middle Market Performance by Industry

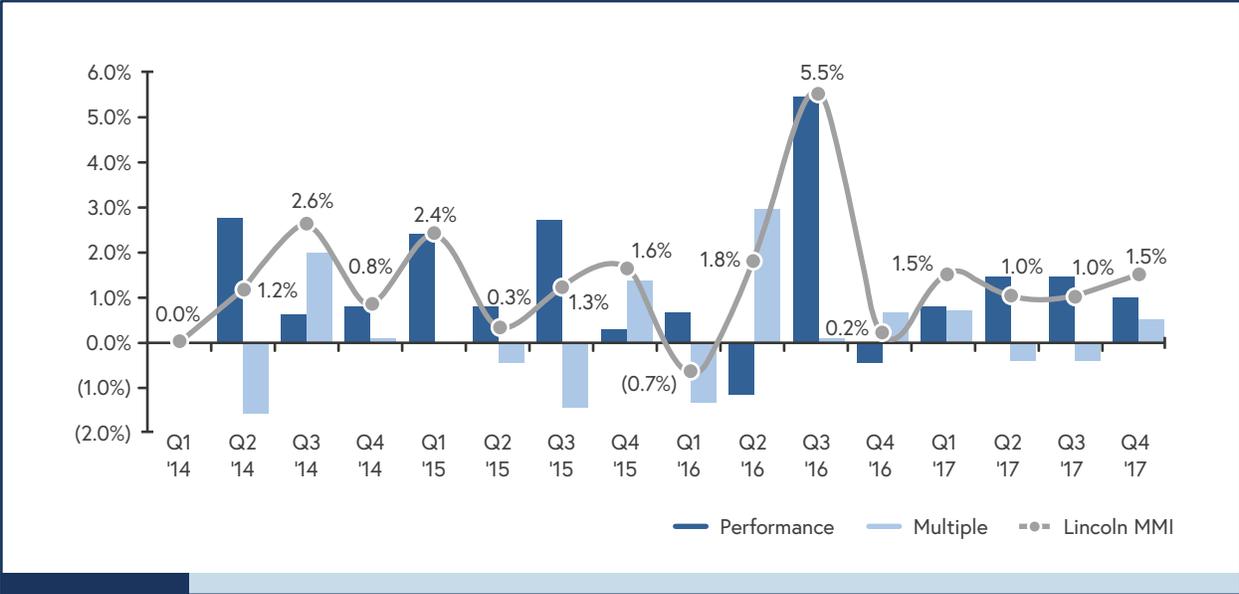


LINCOLN MMI  
HEALTHCARE  
INCREASED BY  
**41.2%**  
SINCE Q1 2014

Since Q1 2014, the healthcare segment of the Lincoln MMI has performed better than any other industry, increasing by 41.2%. Conversely, the energy segment has underperformed all other industries, declining by 23.2% since Q1 2014.

During 2017, the technology segment was the top performer, increasing by 15.5%. Despite improving on its prior year performance, the energy segment declined by 0.9% in 2017.

# DECONSTRUCTING THE LINCOLN MMI: EBITDA Multiples versus Earnings



**10%**  
EXPANSION OF  
LINCOLN MMI  
VALUATION MULTIPLES

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

- > Since the inception of the Lincoln MMI on March 31, 2014, middle market valuation multiples have expanded approximately 10%, which suggests the majority of growth in value of the middle market is earnings driven.

# SUMMARY: THE LINCOLN MMI

## MARKET OBSERVATIONS:

- > The Lincoln MMI has historically performed similarly to returns in the public markets; however, beginning in the second half of 2017, enterprise values of the public equity markets have increased at greater rates than the private middle market.
- > As indicated by the graph on page 3, the Lincoln MMI continues to demonstrate that the U.S. middle market is less volatile than the enterprise values of the S&P 500.
- > Confirming empirical studies and despite multiple expansion in Q4 2017, earnings growth remained the largest driver of enterprise value change in the Lincoln MMI.

## INDUSTRY OBSERVATIONS:

- > The Consumer sector was the only industry to experience wide spread enterprise value declines during Q4 2017, reflecting pressures in the retail and restaurant segments.
- > Since Q1 2014, Healthcare has been the strongest performing industry in the Lincoln MMI driven primarily by outsized returns in late 2014 and early 2015.
- > Although middle market Technology companies performed in line with other Lincoln MMI industries prior to 2017, over the last year, middle market Technology companies have outperformed all other industries.
- > The decline in middle market Energy enterprise values in 2015-2016 reflects the decline of oil and gas commodity prices; however, Energy company valuations have stabilized since mid-2016.

## IN SUMMARY, WE BELIEVE THE LINCOLN MMI:

- > Enables investors in private companies and private equity firms the ability to compare or benchmark their investments against an index comprised of hundreds of privately held companies.
- > Demonstrates middle market private companies generate returns comparable to major public stock market indices while also being reflective of the United States private equity backed middle market.
- > 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

## SOURCE OF DATA AND SAMPLE SIZE

On a quarterly basis, Lincoln determines the enterprise fair value of over 1,200 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 computes 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](http://www.lincolninternational.com/services/valuations-and-opinions/lincolnmmi)

LINCOLN DETERMINES  
ENTERPRISE FAIR VALUE FOR

**1,200+**

PORTFOLIO COMPANIES  
ON A QUARTERLY BASIS

NEARLY **100**

SPONSORS PARTICIPATE  
IN LINCOLN MMI

I.E. PRIVATE EQUITY GROUPS &  
LENDERS TO PRIVATE EQUITY GROUPS

# METHODOLOGY: ACADEMIC ADVISORS

## 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.

# LINCOLN INTERNATIONAL'S GLOBAL VALUATIONS & OPINIONS GROUP

Lincoln's Valuations & Opinions Group ("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.

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# ABOUT LINCOLN INTERNATIONAL

Lincoln International specializes in merger and acquisition advisory services, debt advisory services, private capital raising and restructuring advice on mid-market transactions. Lincoln International also provides fairness opinions, valuations and joint ventures and advisory services on a wide range of transaction sizes. With nineteen offices in the Americas, Asia and Europe, Lincoln International has strong local knowledge and contacts in key global economies. The firm provides clients with senior-level attention, in-depth industry expertise and integrated resources. By being focused and independent, Lincoln International serves its clients without conflicts of interest.

More information about Lincoln International can be obtained at [www.lincolninternational.com](http://www.lincolninternational.com).

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## ADVISORY SERVICES

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