BDO & PITCHBOOK:

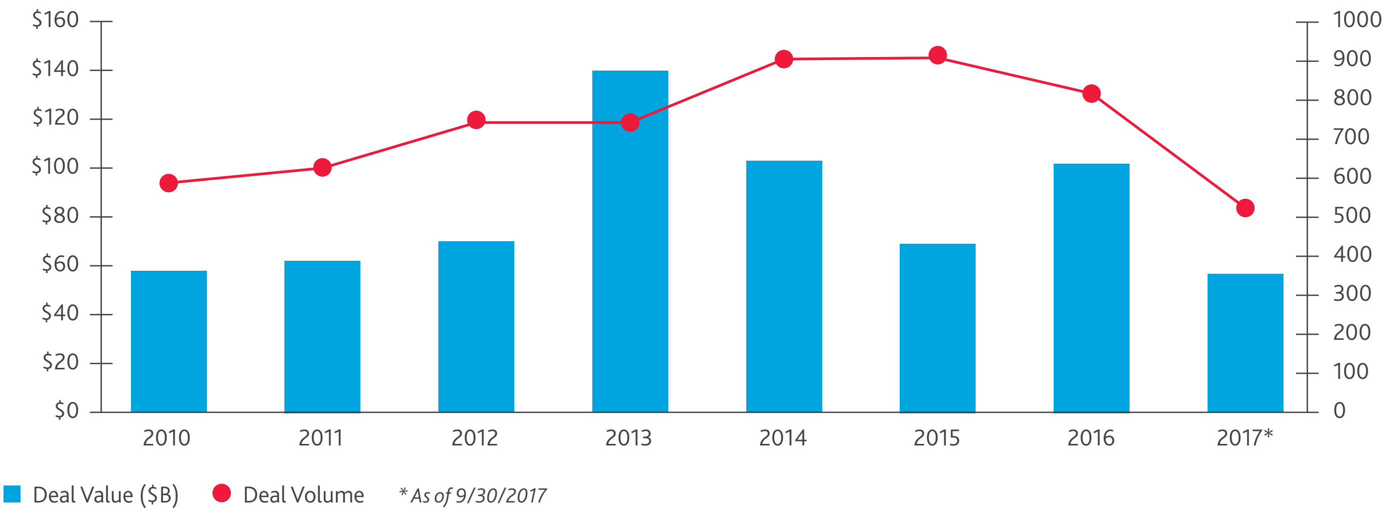
# INDUSTRY 4.0:

## A Win-Win for Manufacturers & Private Equity Alike

# Industry 4.0, the fourth industrial revolution in manufacturing, is driving companies to enhance their capabilities by harnessing digital innovation.

Private equity is poised to help. For today's manufacturing and distribution companies, Industry 4.0 means the use of emerging technologies and applications—think sensors, data analytics, the Internet of Things and artificial intelligence—to connect plants, processes, products and people. Middle market manufacturers looking to step up their Industry 4.0 efforts need a tailored action plan designed to create momentum. Enormous amounts of capital and resources are needed to advance transformation, and private equity presents unique resources and expertise to help manufacturing and distribution companies with capital investments, operational guidance and strategic bolt-on acquisitions.

### U.S. PE ACTIVITY IN MANUFACTURING BY YEAR




## Manufacturing On The Up And Up

Despite the tempered flow of investments this year, manufacturing is powering ahead. In October, factory orders across the nation reached levels not seen in years, according to the latest regional manufacturing indexes, while the latest PMI Manufacturing Index numbers indicate steady growth. In the broader deal space, the manufacturing and distribution sector still captures 16-18 percent of the entire U.S. deal market, according to **BDO Capital's Q2 2017 M&A Review**.

In the first three quarters of 2017, private equity has driven 526 deals in the manufacturing and distribution space, totaling $57.02 billion in total deal value. This is a dip compared to the 622 private equity-led deals in the first three quarters of 2016, which amounted to $70.22 billion of total deal value.

## Investors Play The Waiting Game

The decrease in deal volume does not, however, indicate manufacturing is any less attractive of an investment, or has been performing poorly financially. Instead, lower deal volume reflects the overall suppressed deal environment and inflated valuations.

Manufacturing, industrial and distribution companies are not immune to the effects of skyrocketing multiples and private equity's record reserves of dry powder. In the first half of 2017, manufacturing companies' **multiples** averaged 8.9 times EBITDA, a minor dip compared to 9.0 in 2016. Across industries, middle market EBITDA multiples **averaged** 9.9 times EBITDA in the first half of 2017. Today, private investors approach deals with caution, an indication of the inherent risk of investing in companies with inflated valuations. This should not, however, discourage manufacturing companies hoping to partner with private equity firms to grow their digital capabilities.

## How Private Equity Can Help Power Industrial Innovation

In addition to the latest positive economic trends, there is ample reason for investment interest in manufacturing. The opportunity boils down to three areas of potential value creation: bottom-line impact, top-line growth and risk mitigation. Private equity firms can help manufacturers identify their high-level objective, whether it's higher EBITDA margins, better inventory turnover or a reduction in errors, and work backwards from there. The goal of adopting Industry 4.0 isn't, for example, for manufacturers to have predictive maintenance capabilities; it's for that predictive maintenance investment to reduce mean time between failures, optimize return on invested capital and ultimately preserve or enhance value. It can start with a single improvement initiative in one functional area. Even small, operational change has ripple effects throughout the entire enterprise. Investing in Industry 4.0-aspiring companies promises a long and sustainable investment for private equity companies looking to have a stake in the next industrial revolution.

## External Forces Stall Engines

If Industry 4.0 promises such a solid return on investment, why are private equity funds approaching M&D opportunities with caution? Besides a lack of understanding of Industry 4.0's full potential, the lull in deal volume can also be attributed to larger geopolitical issues. First, the extended NAFTA renegotiations are being closely followed by industries whose business crosses borders. The repercussions for trade volume and regulations of the new digital economy will be significant; regional trade facilitated by NAFTA agreements reached more than **$1.1 trillion** in 2016.

As manufacturers digitize their operations, increasingly relying on automated processes and data-driven decision-making, the issue of fair digital trading practices has risen to the forefront. The free flow of information across borders is critical for manufacturers with global supply chains and decentralized facilities, especially for those looking to boost their Industry 4.0 prowess. Private equity investors concerned for the future of their manufacturing portfolio companies are likely hesitant to continue investing in the space with no clear indication of where the international trade and regulatory environment is headed.

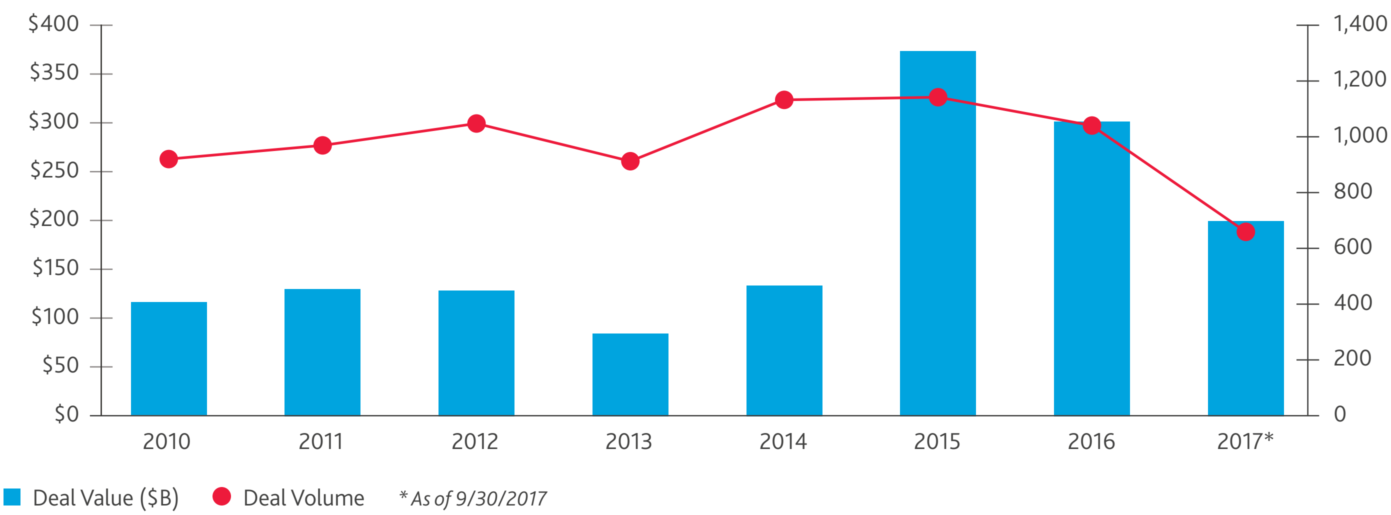
The second economic issue contributing to tempered deal-making is U.S. tax reform. Private equity firms are monitoring how reform will impact deductibility for corporate debt interest payments, while the manufacturing and distribution industry eagerly awaits changes to pass-through tax rates, repatriation and lowering tax rates overall. While the GOP-controlled Congress and the Trump administration work to formally pass tax reform by the end of 2017, dealmakers move slowly to await changes that could benefit their businesses. Deal slowdown, however, has yet to damper manufacturers' perspectives. The **National Association of Manufacturers' Outlook Survey** in Q3 reported that 89.5 percent of manufacturers felt optimistic about their own company's future, citing lifts to regulations, tax reform and infrastructure investments as major mood boosters.

## Strategic Buyers' Sustained Interest Moves Dealmaking Forward

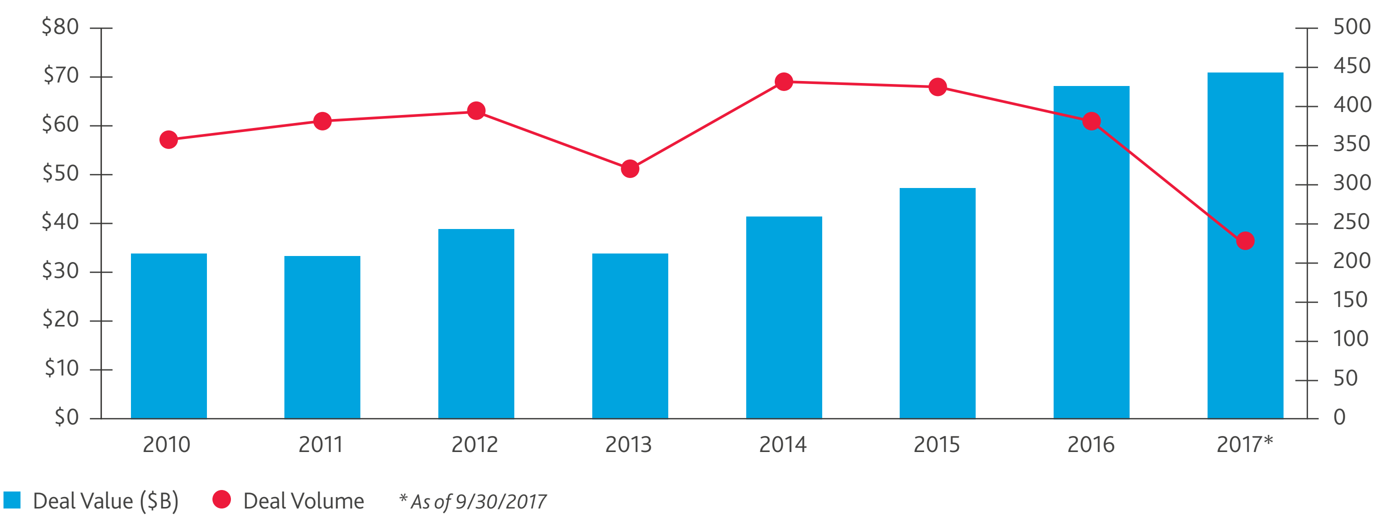
Private equity investors might have embraced a 'wait and see' approach to manufacturing and distribution investments, but strategic buyers' interest has waned at a far slower rate. So far in 2017, 659 M&A deals totaling $200.12 billion have been completed. Although the latest numbers do indicate a decrease compared to the 1,072 deals completed in 2016 for $302.88 billion, NAFTA renegotiations and tax reform's impact have yet to dramatically slow down deal volume.

Despite lower deal volume, the median M&A deal size for U.S. manufacturing companies has increased every year since 2013, meaning strategic buyers are less intimidated by hefty valuations than private equity investors. This year, the median M&A manufacturing deal size reached $71 million. Strategic investors' healthy appetite for big manufacturing deals might prompt private equity investors to ramp up their investments to stay competitive, and manufacturers in need of funding for innovation can satisfy this demand.

### U.S. MANUFACTURING M&A BY YEAR




### MEDIAN M&A DEAL SIZE OF U.S. MANUFACTURING COMPANIES BY YEAR



# Why Private Equity & Manufacturing Make Ideal Partners in Industry 4.0

**In October, PitchBook senior analyst Garrett Black and BDO Capital's Managing Director Dan Shea discussed how private equity and manufacturers can make ideal Industry 4.0 partners. Below are highlights from their conversation.**

**Garrett:** Could you tell us where we are in the evolution towards Industry 4.0?

**Dan:** I think we are really in the early days of Industry 4.0 right now, where companies are gearing up to collect, organize and track their data and then capitalize on what added production and other data can do for their businesses, customers and suppliers. Manufacturers are now adding more sophisticated production equipment and upgrading their information systems so useful data on quality, capacity, maintenance and other areas can be captured and used in automated fashion. It may surprise some to note that many companies big and small don't even have systems that can talk to each other. Often, the gathering and sharing of data is still manual and ad hoc in nature.

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**Garrett:** For PE buyers and strategic buyers interested in this space, what are some of the challenges they face after acquiring manufacturing and distribution companies?

**Dan:** I see three, maybe four, major areas of challenge. One is cybersecurity. It's not a question of if but when you experience a breach. As such, a business's confidential information is more at risk in the Industry 4.0 era. Required investment is another area of concern. Many are asking, "What are the one-time and annual expenditures needed to implement Industry 4.0, and what is the likely impact from these investments?" This can be hard to ascertain and it's requiring business execs to consult outside experts to determine the right approach. And lastly, human capital needs may likely change too, with a greater emphasis placed on professionals with tech backgrounds. The silver lining is that manufacturing may actually become more attractive to young professionals as a result. What has historically been a humdrum sector of our economy is becoming much more interesting.

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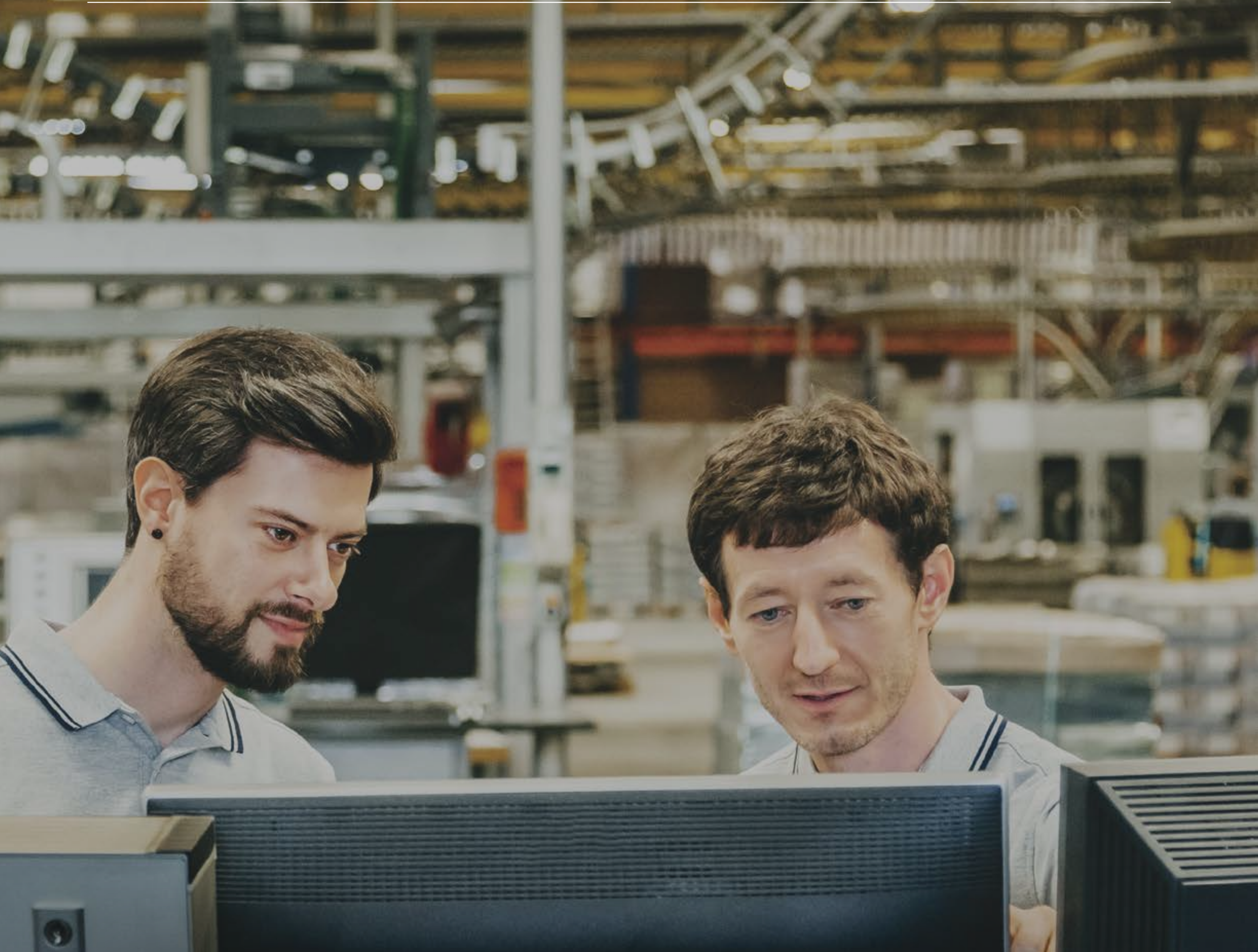
**Garrett:** How does M&A factor into Industry 4.0?

**Dan:** Most middle market manufacturing companies were started by and are still owned by individuals, partnerships or families who have a lot of blood, sweat and tears tied up in their businesses. They have advanced these businesses with their own wallet and have made many important and difficult strategic decisions along the way. Now they are faced with potentially dramatic change due to Industry 4.0, and the heightened competition it may create. We are starting to see some business owners say, "It's time to monetize my life's work and hand my company off to someone who can make the necessary decisions and investments to ensure success in this new era." Operations-focused PE buyers can be compelling in this landscape given their portfolio of businesses facing these same issues. They have been fast students on Industry 4.0 and may be best positioned to capitalize on it. In doing so, the seller rollover may truly be a great investment.



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