

3D PRINTING

Investing News

The Future of
3D Printing
Companies

The Best 3D
Printing Stocks
to Buy Now

A collection of articles from 3D Printing Investing News to
help new investors in this market

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Why Consider Investing in 3D Printing Companies?

Most people are familiar with the saying “[technology](#) is the future,” and indeed, developments in the tech space are rapidly revolutionizing the world. That’s why so many people are considering investing in 3D printing companies.



3D printing, also known as additive manufacturing, came about in the 1980s. At that time, it was mostly used for industrial manufacturing, but it has since evolved and spread into different areas — even the [medical](#) space. A variety of materials can now be used in 3D printing, including plastic, wood, metal, nylon and hundreds of other materials like human cells. And while there are many different 3D printer types, all create 3D objects by building layer by layer until the entire object is complete.

Various companies have been using 3D printing technology to design prototypes and even print their own parts, cutting down costs and saving on the time it would take for the products to be made elsewhere. 3D printers are also becoming increasingly common in homes as hobbyists and inventors look to bring their designs to life. Stratasys (NASDAQ:[SSYS](#)) is one company that sells a variety of 3D printing equipment and materials, providing innovative options for a plethora of industries, including aerospace, architecture, dental, medical and education.

The case for investing in 3D printing companies

For years people have been skeptical about 3D printers, likely because only a handful of noteworthy companies were producing them. However, that has changed in recent years, with the technology moving into ["mainstream" status](#).

In particular, the introduction of 3D printers to the medical space has drawn attention to the technology's life-changing potential. One of the most recent breakthroughs [saves the lives of children with pediatric tracheobronchomalacia](#), a disease in which the windpipe is softened, leading to airway collapse and causing breathing failure. 3D printers are used to create flexible, custom airway splints for babies, a development that came out of the CS Mott Children’s Hospital in Michigan.

3D Systems (NYSE:[DDD](#)), which developed its stereolithography printer in 1989, is one company that offers “healthcare-centric 3D printing and 3D visualization technology.” That includes surgical tools, systems that assist in training medical staff and virtual surgical planning. The company also assisted in the design of Invisalign's (NASDAQ:[ALGN](#)) clear braces, a popular alternative to metal braces, and has worked with researchers at Children’s Hospital Oakland to develop a new kind of spinal brace for young adults with scoliosis. 3D Systems also supplies 3D printing technology to a company called ConforMIS (NASDAQ:[CFMS](#)), which prints customizable knee implants for surgery.

Another company, Organovo (NYSEMKT:[ONVO](#)), specializes in bioprinting, otherwise known as printing human tissue, and has just released its first commercial product, the exVive 3D human liver tissue.

Investor takeaway

The potential of 3D printing, particularly in the medical space, makes it clear why many people are considering investing in 3D printing companies. All in all, the [outlook for the market](#) appears bright in the long term, and those interested in the space may want to look at jumping in now.

Top 3D Printing Companies in the World

The 3D printing industry is rapidly growing, with more and more companies entering this increasingly competitive market.

However, there are a handful of companies that come up time and time again in discussions of 3D printing. Here's a brief overview of the three major players in the 3D printing industry.



Stratasys (NASDAQ:SSYS)

Stratasys is one of the top 3D printing companies in the world. One of the early entrants into this disruptive [technology](#) market, the company specializes in 3D printing and additive manufacturing solutions. The company has a market cap of 1.52 billion, and as of September 2015, its share price had traded between \$25.31 and \$125 in the last year.

Stratasys is headquartered in Minnesota and Israel; it has over 2,800 employees and holds 600 granted or pending additive manufacturing patents. Some of its key patents are the FDM®, PolyJet™ and WDM™ 3D printing technologies, which create prototypes and manufactured goods directly from 3D CAD files and other 3D content. The company's subsidiaries include MakerBot and Solidscape.

3D Systems (NYSE:DDD)

3D Systems is another of the top 3D printing companies in the world, and is often discussed in conjunction with Stratasys. The company has a market cap of \$1.36 billion, and as of September 2015, its 52-week share price range was \$11 to \$50.55.

Based out of Delaware, the company has subsidiaries in the Americas, Asia Pacific, Europe and the Middle East. According to its [2014 annual report](#), the company recently acquired 70 percent of Robtec's outstanding shares to create 3D Systems Latin America.

Additionally, in January 2015, 3D Systems announced the acquisition of botObjects, and launched the full-color Cube Pro C at CES. Furthermore, the company acquired Cimatron (NASDAQ:[CIMT](#)), a provider of integrated 3D CAD/CAM software products and solutions for manufacturing, in February 2015. These moves illustrate 3D Systems' importance within the international 3D printing market.

Hewlett-Packard (NYSE:HPQ)

Unlike the other two companies listed, Hewlett-Packard is not strictly a 3D printing company. With a market cap of \$45.71 billion, the company is making inroads into the 3D printing market with its Multi Jet Fusion technology.

A global information technology company, [its Q3 net revenue](#) was \$25.3 billion. Hewlett-Packard's non-GAAP diluted net earnings per share were \$0.88 compared to a previously provided outlook of \$0.83 to \$0.87. The company also returned \$670 million to shareholders in the form of share repurchases and dividends in the third quarter.

More companies to come

Together, these companies represent some of the top 3D printing companies in the world. However, the sector is diverse and ever expanding, which means that investors need to keep an eye on the space to see which companies will join (and which will fall from) this ever-changing list.

The Market Today: When to Invest in 3D Printing Stock

2015 is turning out to be a divided year in terms of [3D printing investing](#). Though many companies are starting to integrate the [technology](#) into their manufacturing processes, even major 3D printing stocks have seen declines.



Many thus believe 3D printing is at a turning point, and see its future as dependent on major companies continuing to integrate it into their production models. The overall hope from those in the industry is that 3D printers will become a mainstay of personal technology systems. However, if and how that may happen remains to be seen.

Plummeting share prices

2015 got off to a difficult start for the 3D printing industry, with Stratasys (NASDAQ:[SSYS](#)) and 3D Systems (NYSE:[DDD](#)), the only two stocks expected to be profitable this year, experiencing poor share price action in Q1.

Unfortunately, little improvement has been seen since then. As of September, Stratasys was trading around the \$29 level, very near its 52-week low of \$25.31. Meanwhile, 3D Systems was around \$12, close to its annual low of \$11.

Morgan Stanley (NYSE:[MS](#)) has [identified](#) capital spending constraints, currency, new product introductions and a slower channel ramp in Asia as reasons Stratasys has fared so poorly. However, the firm has also said that “most concerning reason is the consolidation within the channel. The 3D printing industry is believed to be in the early stages of adoption which is inconsistent with go-to-market consolidation trends.”

Divided market

Despite those poor results, a recent PwC report titled [“3D Printing and the New Shape of Industrial Manufacturing”](#) states that the global 3D printer market is expected to reach \$6 billion by 2017 — a vast increase from its value of \$2.2 billion in 2012. Much of this increase is expected to stem from the willingness of major companies to adopt 3D printing technology into their manufacturing processes.

The report states that 66.7 percent of manufacturers are currently adopting 3D printing technology in some way. A further 28.9 percent of companies surveyed are in an experimentation phase to determine how the new technology may best apply to their production, while another 24.6 percent have moved on to prototyping with it.

However, one-third of companies (the largest single group) responded to the PwC survey by claiming that they are not implementing these technologies. Indeed, 8.6 percent of manufacturers do not ever plan to adopt 3D printing.

Is now a good time to invest in 3D printing stock?

This divided market could be seen as either a prime time to invest in 3D printing stock, or an ideal juncture to abandon the industry. A Globe and Mail [article](#) on the subject quotes Kenneth Wong of Citigroup Global Markets as stating, “investors have been searching for a bottom to [3D] printer sentiment and we have likely hit bedrock.” But as David Milstead, the author of the article, points out, the market could keep getting worse.

One event that may push the space to a positive outcome is the launch of Hewlett-Packard’s (NYSE:[HPQ](#)) Multi Jet Fusion technology in 2016. With better quality, a faster operating speed and a cheaper price than existing 3D printing technologies on the market, this 3D printer will radically transform how we think about 3D printing investing. Read on for an overview of this innovative product.

Which 3D Printing Company to Invest in?

How HP's Multi Jet Fusion Technology is Changing the Market

One of the biggest shifts anticipated to occur in the 3D printing market is the introduction of Hewlett-Packard's (NYSE:[HPO](#)) Multi Jet Fusion [technology](#).

Since this new technology was [announced](#) in October 2014, [there has been buzz](#) about the effect that HP's entry into the 3D printing market will have upon other stocks. This new technology could shift how investors determine which 3D printing company to invest in.



Industry-wide anticipation

All major 3D printing stocks have experienced significant declines in value over the past year and a half, and in recent months the market has reached a particularly dire state. That is making it difficult for investors to decide which 3D printing company to invest in.

As mentioned, Stratasys' (NASDAQ:[SSYS](#)) share price, which peaked at \$136.46 at the beginning of 2014, is currently trading around \$29. Meanwhile, 3D Systems (NYSE:[DDD](#)), whose share price peaked at \$96.42, is trading near its year-to-date low at about \$12. Some analysts, such as Dougherty & Co.'s Andrea James, attribute this recent slowdown to anticipation concerning HP's entry into the market. [James has written that](#) "corporate buying managers are delaying purchases while they anticipate HP's multi-jet fusion product in 2016."

This delay may just make sense if it turns out that the Multi Jet Fusion technology lives up to the hype. Jerry Wohlers of Wohlers Associates has [said](#), "[HP] is going to rewrite the rules of 3D printing. I can envision companies purchasing expensive equipment and then putting it in moth balls when the new HP equipment becomes available."

Niche product to fill niche needs

However, Oppenheimer Managing Director and Senior Partner Holden Lewis adamantly opposes this perspective, and has argued that the new HP technology "can have value in a specific niche, but it's not going to dominate the industry."

He told the Investing News Network that there are seven different types of 3D printing technologies, and each of those seven has its own benefits and drawbacks. To suggest that HP's Multi Jet Fusion technology will sweep in and fulfill all 3D printing needs is naive, in his view. "I would be very very surprised," Lewis stated, if HP "walk[ed] in and dominate[d] the industry."

Which 3D printing company to invest in: the competition question

That said, even if HP's new 3D printing technology fails to dominate the market, it will still introduce new competition. And as, Lewis is fond of saying, "competition is a question that has no answer." It is possible that the new HP technology will affect only its niche market, but it is more likely that it will further weaken the state of struggling industry heavyweights like Stratasys and 3D Systems.

Lewis said, "I think that these stocks reflect a fear that the companies that are public today aren't going to win." While he concluded by stating that "this overstates the risk," it remains a central concern for investors. Only time will tell what role the new HP technology will ultimately play in the 3D printing market. For now, it's the job of investors to take bets on its future.

Long-term Outlook: Oppenheimer Analyst Holden Lewis on the Future of 3D Printing Stock

Previously lauded by analysts as the next big thing, the 3D printing market has seen a spectacular nosedive since its peak in late 2013.

This rapid decline has left market participants wary of the once-promising market. Should current investors stick it out and wait for the market to recover, or move on to the next big trend in [tech](#)? And should prospective investors brave this market, adhering to the age-old advice to buy low, or should they steer clear of an imploding industry?



The Investing News Network turned to Oppenheimer Managing Director and Senior Analyst Holden Lewis to answer those questions about the future of 3D printing stock. Throughout a discussion about what went wrong with 3D printing, where there may still be investment opportunities and how the market will look long term, Lewis' message remained constant: "there is no lack of ultimate demand for this type of technology. Of that I'm convinced."

The future of 3D printing stock

The 3D printing market is in an obvious period of decline. [Time reported](#) that the major public 3D printing companies, such as Stratasys (NASDAQ:[SSYS](#)), 3D Systems (NYSE:[DDD](#)), ExOne (NASDAQ:[XONE](#)) and VoxelJet (NTSE:[VJET](#)), have declined in market value by 71 to 80 percent in the past year and a half. Lewis attributed this market slowdown to a combination of factors, both macro and industry specific. However, there is one challenge that only time can overcome: companies' reluctance to become early adopters of this relatively new technology.

A [report published by PwC](#) identifies the two main barriers to full-scale 3D printing adoption as uncertainty concerning the quality of the final product and a shortage of individuals equipped to exploit the technology's full benefits. Stratasys CEO Jon Cobb is quoted in the report as stating, "companies that get into 3DP may only have one

engineer or one champion who is the prime mover ... If you don't have that champion, the technology is simply not taken up."

Lewis echoed this perspective, commenting that "unless people really dig in, and figure out how they're going to [use 3D printing], the path of least resistance in some cases is simply to put off the effort." Therefore, one of the primary impediments to the 3D printing market appears to be the sheer newness of this industry. For investors, this obstacle might just be a major advantage.

Putting technology first

Despite the dismal state of 3D printing stocks, the technology itself is rapidly advancing. Beijing University recently [made news](#) for the creation of 50 large titanium alloy parts for aircraft carriers and rockets, all printed with titanium-based laser sintering 3D printing technology. Meanwhile, a Chinese toddler [successfully underwent the world's first skull reconstruction](#) surgery using 3D printing technology. These dramatic headlines illustrate the innovation occurring in the field of 3D printing — innovation that companies are slowly, but surely, adopting.

In the long term, Lewis believes "there's not going to be a manufacturing plant in the world that doesn't have a 3D printer." The PwC report affirms this outlook: 66.7 percent of manufacturers are currently adopting 3D printing, and 24.7 percent plan to adopt the technology in the future. Market forecasts are similarly optimistic about the future need for 3D printing technology. [Analyst firm Canalys predicts](#) that the market will reach \$20.2 billion by 2019, representing an expected CAGR of 44 percent from 2014 to 2020. A recent [report published by Techanvio](#) is even more confident, predicting a CAGR of 48.6 percent in the same period.

And so, how can this growing demand for 3D printing technology continue to coexist with the market's plummeting stock prices? The short answer is that it can't. As Lewis explained, "that is a dynamic that cannot continue forever. At some point, either the industry has to fall in on itself, justifying the stock movements, or the stocks of these companies have to begin doing better."

The widespread demand for 3D printing technology suggests that the first option is unlikely. And so, for Lewis, that leaves only one viable alternative: in the long term, the quality of the technology will drive the market forward, making the future of 3D printing stock a positive one.