MTS Systems Corporation
NASDAQ: MTSC

Overview

Recommendation	**BUY**
Last Close (4/17/20)	18.4
Market Capitalization	320M
Shares Outstanding	19.5M
52-week Range	13.15 / 60.86
Beta	1.92
Price Target	29.50

Price Chart (with S&P 500)

Selected Financial Data

In Millions	**2019**	**2018**	**2017**
Revenue	892	778	789
% Growth	14.7%	-1.3%	21.2%
Net Income	43	61	25
EBITDA	117	100	90

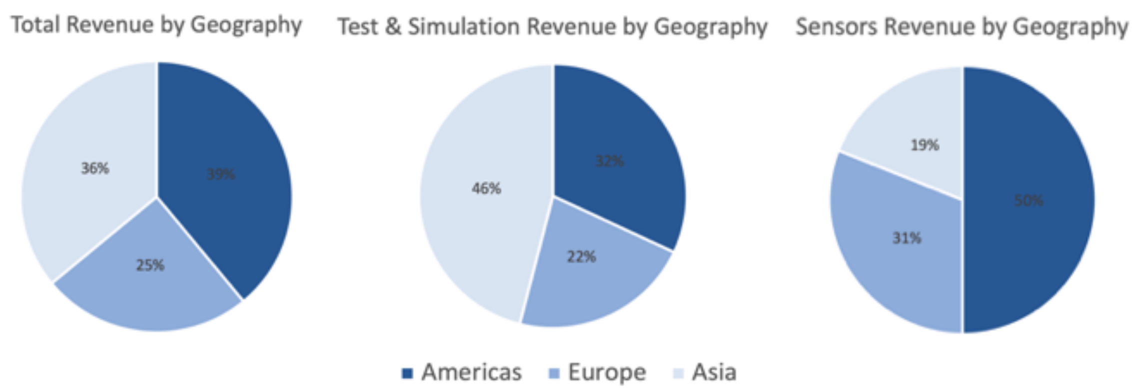
Company Background

MTS Systems Corp (MTSC) is a scientific equipment supplier that offers testing and sensing solutions. The company develops performance measurement tools and processes to test the reliability of various industrial and scientific products across different sectors. Among its diverse product and services line, some examples include extensive tire testing services for automotive, development of an artificial spine for scoliosis research, and a complex test system for real-world seismic testing (earthquake simulation for structural integrity) of full-scale civil structures.

MTSC's business can be segmented into Test & Simulation and Sensors, which represent 63% and 37% of revenue, and 46% and 54% adj. EBITDA respectively (FY 2019). Test & Simulation systems are largely engineered and assembled at their headquarters in Eden Prairie, Minnesota, but there are also six smaller manufacturing and assembly facilities, half of which are in Europe and the other half are in Asia. Sensors are engineered and assembled regionally in seven facilities in the United States and one in Lüdenscheid, Germany. Across both sectors, MTSC has a strong international customer presence.

Industry Overview

MTSC's success is driven by innovation and regulation. With increased competition and regulatory concerns, companies are incentivized to invest in solutions that require new sensors and testing & simulation. Further, consumer demand for faster and more efficient land and air transportation systems entails more R&D that requires MTS System's products. Although there is some overlap in the end markets of MTSC's segments, as well as between sensors and tests and simulations, each segment also has their own markets with different drivers, competitors and outlooks. MTSC also divides their segments into smaller business sectors based on their products' applications, demonstrating the company's diversity with competitors and markets and markets specific to each sector.

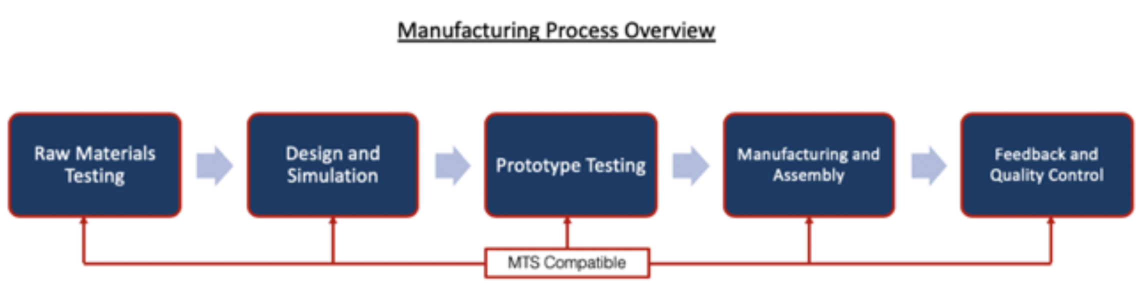


MTS total and sector revenue breakdown by customer location

Investment Thesis

We recommend a BUY in MTSC for the following reasons:

1. **Mission Critical Products with Strong End Markets**
   MTSC provides products and services to several end markets that are hard-hit right now, but permanently require testing and simulation technologies and sensors in order to comply with quality standards. MTSC products are focused on the quality control portion of product development and manufacturing cycles in their end markets. This process tends to be lengthy and necessary because most components are produced at other sites. As a result, companies need to conduct several stages of rigorous testing and inspection audits similar to those used by assembly plants. Regardless of demand fluctuations quality assurance is a built-in step in any product development process that will always need to be completed. This leads to a unique opportunity where MTSC is undervalued because it suffers from capital expenditure reductions from companies in cyclical industries experiencing a trough in the cycle. These capital expenditures are simply delayed and companies in MTSC's end markets will always require these products in order to streamline and complete testing of products.



2. **Long Term Potential of Simulation and Sensors Markets**
   Another point of strength in MTS Corporation's business includes its positioning in markets with long term potential. Exposure to sectors with heavy government spending drove record orders in Testing & Simulation delivered of $176 million in Q2, up 33.6% compared to FY19 Q2. R&D Group brought with them a strong backlog of projects in excess of $35 million, with contract duration stretching into 2021. In addition, academic entities also provide an attractive end market less impacted by the recession. Recently, MTSC received its biggest contract in company history with Tianjin University in China for seismic simulation devices. While the conversion rate between government research funding and contracts with MTSC may not be one-to-one, aggregate increase due to recovery efforts from COVID-19 effect may translate to a more resilient source of demand for MTSC's products and services.
   - Consideration: How acquisitive is this space? How much room is there for growth?
     Much of MTSC's growth in the recent past has been derived from acquiring their main competitors. While these competitors have brought with them backlogs and clients, naturally, questions may arise about MTS's long term growth potential. In terms of sensors and the sensors industry, we have seen some acquisitive activity from TE Connectivity, a large company that designs sensor and connectivity products, which has acquired five smaller sensor suppliers in the past five years. Fuhrer, Balluff GmbH has acquired two in the past five years, Heidenhain GmbH with one acquisition, and Meggitt, a competitor of MTS's in multiple sensors segments, has acquired three smaller sensors companies within the past five years. Going forward, the increasing consolidation of the sensors market as well as a potential increase in demand for highly specialized sensor equipment position MTSC well for stable growth in future revenues and that the market is not realizing this potential, due to its small analyst following and Covid-19 overreaction.

3. **Market Mispricing in Pandemic Headwinds**
   Having just completed a major series of acquisitions that drew upon their revolving credit facility for funding the firm was in a delicate credit position prior to COVID-19. When the disease accelerated worldwide MTS was caught in the panic, with the departure of their long-term CEO Jeffrey Graves further shocking the market and depressing prices. This is not to say that coronavirus did not affect operations, per their 2020 Q2 earnings transcript, "the safety procedures adopted for the protection of our employees did impact our operational efficiencies, decreasing our production capacity by an estimated 10 to 20%." However, they are not seeing a decrease in demand for their products as they report record order levels, a near-record backlog and continuing strength in the end markets they serve which bodes well for the future. Order placement delays increased from the prior year and on a consecutive quarter basis providing a clear measure of the dramatic turn in short term sentiment brought by the virus during the quarter. Fortunately, in spite of these headwinds, their market diversification efforts from the last few years were still highly effective in delivering record orders performance fueled by strong growth in several of the markets comprising their structures category.

Risks and Considerations

1. **Leverage**
   MTSC currently maintains a maximum leverage ratio covenant of 5 times with their creditors declining to 4.75 at the end of the fiscal year. This is dangerously close to their current ratio of 4.5x gross debt with upcoming repayment due including a $171 million term

loan and $91 million revolving credit facility due July 2023. Despite the expectation of increased revenues from their Envesco acquisition and margin growth from restructuring, they are likely to violate their covenants and trigger a default. However, given the low interest rate environment as well as the equity's cheap price it seems unlikely that this will result in significant downside risk as the firm's reliable revenues and ingrained relationships are unlikely to drive creditors to put the company into default and wipe out equity holders.

2. **Industry Segregation**
   Historically, the firm has predominantly driven revenue growth via acquisition and macro growth in their end markets. As a result, they are unlikely to be able to utilize channels for organic growth to improve operating revenues. The firm will likely see success as sectors it is exposed to such as green energy or structures recover from the virus. However, given the firm is essentially trading at revenues this risk seems overstated as end market exposure has been shifting towards higher growth sectors where academic and government spending drive revenue outside of market demand.

Catalysts

On a macroeconomic level, the recovery of the manufacturing industry will help rebalance MTSC (and competitor's) valuations. The pandemic-related downturn has significantly impacted the automotive manufacturing industry, with an estimated sales decrease of ~23% in 2020. Many automotive manufacturers have capped R&D and discretionary spending and delaying product rollouts due to low demand and stagnant sales during this quarter. While we affirm that MTSC's products are mission-critical, manufacturing plants are only now considering reopening and it is likely that development and testing of new products will recover slowly with demand over the next few quarters. This decline in automotive demand has also influenced the materials industry, which accounts for ~30% of test and simulation revenue. Furthermore, MTSC reported a decline in revenue months after a "slower orders profile" late last year. Given the multi-step and long-term nature of their test and simulation contracts, it's likely an increase in revenue (and share price) will occur slightly slower than the return of broader automotive and testing end-markets. Ultimately, stronger earnings reports will boost the valuation of this company--their most recent downturn coincided with a year to date revenue decline of 4% along with heavy acquisition costs. Furthermore, MTSC's acquisitions already have crucial regulatory approvals in their respective end markets and strong, recurring revenue, which will boost MTSC's future earnings and share price. Finally, regarding an expected timeline for this earnings report, we expect the valuation capitalization to occur around the end of 2021 to the beginning of 2022; however, we do not think it is prudent to provide a specific quarter estimation as MTSC's earnings report will largely depend on the recovery of its end markets and the broader economy. While we are confident the company will recover with its end markets and margin growth from restructuring, the exact timing of that recovery is nearly impossible to predict.