

Test & Measurement and Industrial Automation

2021: Update

Primary influencers on the sector

Equity returns and valuations across the test & measurement and industrial automation (TM&IA) sector have continued to extend through 1H2021. As global economies are reopening and growth accelerates, demand for TM&IA solutions have rebounded from the 3Q2020 trough. A key area we are going to watch during 2Q earnings session is the impact of supply chain disruptions on converting growing order books and backlogs to revenue, and margin impact given rising input costs. The mission critical nature of the TM&IA solutions should allow many of the market leaders to pass price increases through to customers and maintain strong margin profiles.

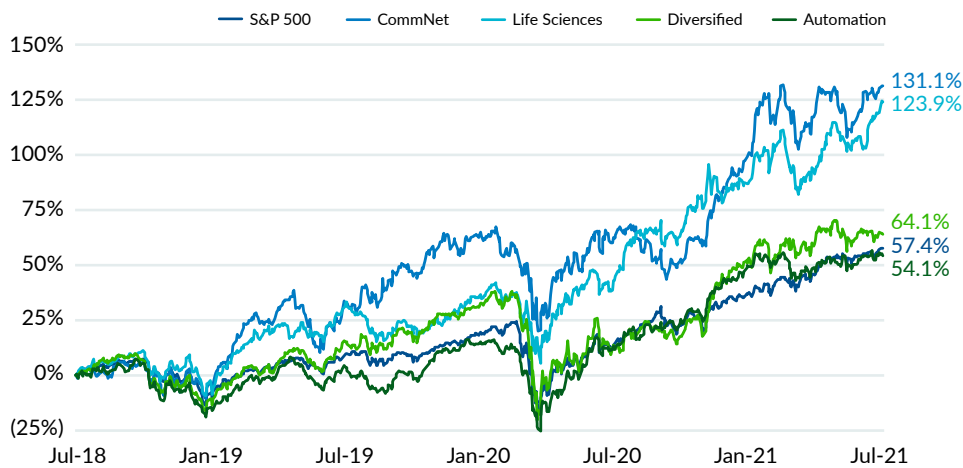


Jae Kim
Managing Director
Investment Banking



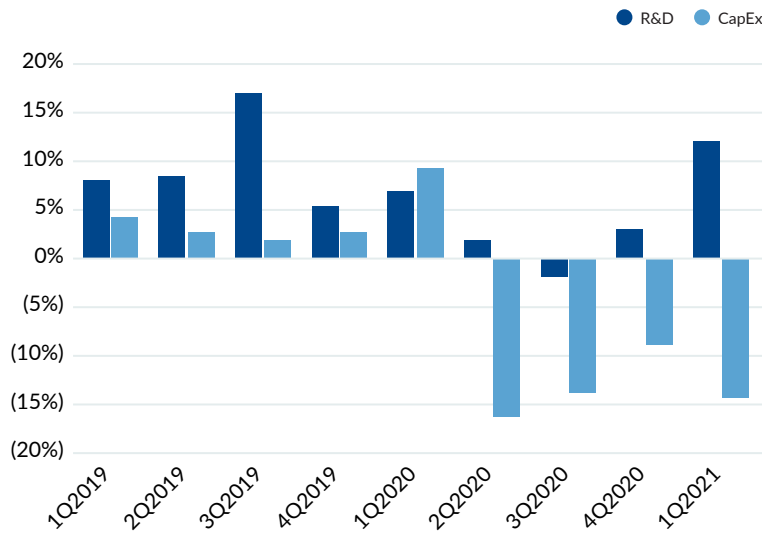
Nathan Moeri
Managing Director
Investment Banking

CHART 1: EQUITY PERFORMANCE (2018 - CURRENT)¹



Source: CapIQ, as of 7.1.21. Past performance is not indicative of future results. Please see page five for important information.

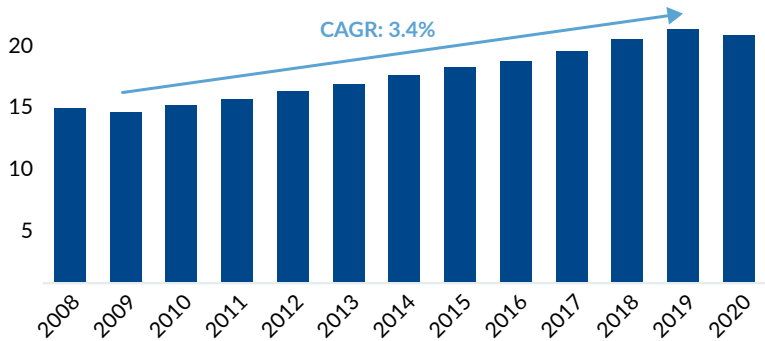
CHART 2: S&P 500 QOQ GROWTH (2019 – CURRENT)



Source: CapIQ.

CHART 3: UNITED STATES OF AMERICA ANNUAL GDP – NOMINAL (2008 – CURRENT)

(\$ in trillions)



Source: IHS Global Insight.

CHART 4: DXY PERFORMANCE (2008 – CURRENT)



Source: MarketWatch. Past performance is not indicative of future results.

TM&IA demand is largely tied to R&D and capital expenditure spend across served end markets and customers. Customers typically maintain their R&D spending, particularly those projects that contribute to organic growth, which positions them to benefit both as demand normalizes and for the long-term. Quarter-over-quarter R&D spend for the broader market as measured by the S&P 500 Index remained stable through 2020 (with the exception of 3Q2020) with an acceleration of R&D spend through early 2021. Equipment purchases, on the other hand, were pushed off as mission critical operating expenses were prioritized. Capital expenditures through 2020 and 1Q2021 have lagged. More broadly, US capacity utilization for May was 75%, which allows for additional growth before additional spend is required to meet demand—utilization rates at 80–85% indicate constraints and drives incremental capex spend.

Indicators to watch

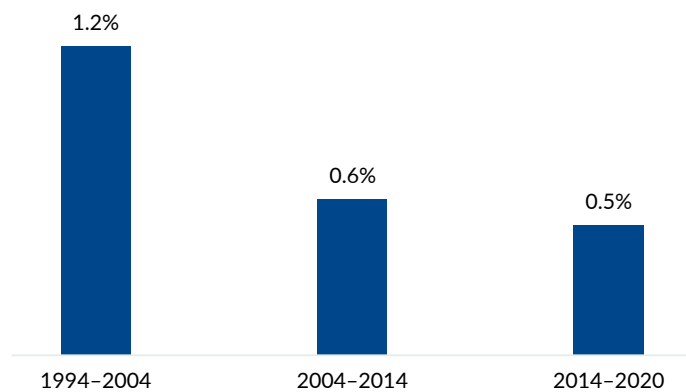
The concept of a US manufacturing renaissance, onshoring and step-function investment in US automation has been around for a decade. A number of factors have slowed the large-scale investment in the US capital equipment base:

- **Slow and steady economic expansion since the Great Recession:** US GDP grew at an annual rate of 3.4% since 2009. Over that time, US manufacturers were reluctant to deploy capital to upgrade existing equipment and facilities without clear evidence of higher economic growth.
- **Strong USD:** The US dollar maintained favorable purchasing power dynamics to leverage offshore manufacturing capabilities and import goods.
- **Relative labor costs:** The US wage gap compared to developing economies remained elevated, keeping overall cost of manufacturing low in those regions.

We believe the next US economic recovery will be different, in that US manufacturing companies will shift production back to the US, increasing investment in capital equipment and TM&IA solutions. There are few key structural issues that need to be addressed for the US to achieve productivity gains and long term sustainable economic momentum:

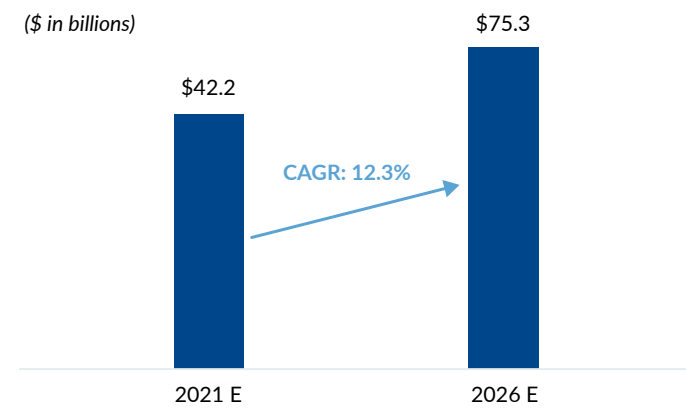
- Due to the combination of tariffs levied on imported goods and supply chain disruptions brought on by COVID-19, US manufacturers have an increased sense of urgency over supply-chain resilience, including bringing manufacturing back to the US.
- The US government is looking to secure supply chains for national and health security, providing a boost to a range of industries, including medical devices, defense, semiconductor, pharma, among others. The US Innovation and Competition Act totaling \$250B was passed by Senate on June 9th. \$52 billion has been set aside to bolster domestic semiconductor manufacturing.
- In more advanced economies, labor force growth has been weakening. In the US, labor force gains managed only 0.5% growth / annum in 2020 (vs. the peak 2.6% in the 1970s).
- Labor force shortages risk limiting long term sustainable economic momentum and creating wage pressures in skilled labor positions; productivity must now pick up the slack.
- It is estimated that \$8 trillion dollars of additional investment could be spent on automation technologies for US companies to achieve productivity gains through 2030.

CHART 5: US LABOR FORCE ANNUAL GROWTH RATE (1994 – CURRENT)



Source: US Bureau of Labor Statistics.

CHART 6: INDUSTRIAL ROBOTICS INSTALLMENTS (2021 – 2026)



Source: Markets and Markets.

“We believe the next US economic recovery will be different, in that US manufacturing companies will shift production back to the US, increasing investment in capital equipment and TM&IA solutions.”

M&A Overview and Outlook

The overall M&A market has been incredibly active in 1H2021 and across the TM&IA sector. Key drivers for heightened M&A activity include

- “carry over” transactions from 2020 as businesses’ financial performance rebounds
- opportunistic exits to capitalize on M&A momentum and strong valuations
- looming tax changes that could meaningfully impact seller’s net proceeds if the current administration’s proposed tax plan passes

This supply of assets contemplating a potential sale will be met by strong demand from strategic buyers that view M&A as a core component of growth and financial buyers that are executing an investment thesis within the TM&IA sector. There have been several large-scale TM&IA transactions announced and closed in the first half of 2021. The acquisition rationales for these transactions include complementing product offerings, providing access to new attractive end markets and filling technology gaps within existing portfolios. We expect M&A activity to remain high throughout the balance of 2021.

	Transaction date	Target description	Strategic rationale	Valuation metrics
Amphenol acquisition of MTS Systems	April 2021	A leading global supplier of advanced test systems, motion simulators and precision sensors	Highly complementary sensor product portfolios will allow an expanded array of innovative technologies across multiple end markets to further capitalize on the long-term growth potential of the electronics revolution	Purchase price: \$1.2B EV / EBITDA: 16x
MSA Safety Incorporated acquisition of Bacharach a portfolio company of FFL Partners	July 2021	Provides gas detection technologies used in the heating, ventilation, air conditioning and refrigeration markets	Bacharach provides MSA with access to new, attractive end markets that align with regulatory tailwinds to support growth through various economic cycles	Purchase price: \$337M EV / revenue: 4.8x (EBITDA metric not available)
Spectris acquisition of Concurrent Real-time a portfolio company of Battery Ventures	April 2021	Developer and supplier of real-time operating systems (‘RTOS’) for hardware-in-the-loop (‘HiL’) simulation applications for aerospace, defense and automotive applications	Strengthens Spectris’ simulation offerings to meet a currently unmet market need by combining HiL features with driver-in-the-loop systems – a turnkey solution customers are increasingly demanding and are unable to source today	Purchase price: \$166.7M EV / EBITDA: 16x
ITW acquisition of the MTS Systems Test and Simulation from Amphenol	Announced Jan 2021 Closing Mid-2021	Provides testing and simulation solutions including hardware, software and services used by customers in product development across structures, materials, and ground vehicles	Highly complementary to ITW’s existing Test & Measurement and Electronics business and provides access to new and attractive industry verticals	Purchase price: \$750M EV / revenue: 1.34x (EBITDA metric not available)
Teledyne acquisition of FLIR	May 2021	Focused on intelligent sensing solutions for defense and industrial applications that allow professionals make more informed decisions that save lives and livelihoods	Technologies and products are uniquely complementary with minimal overlap. the combined company will offer an end-to-end portfolio of sensory technologies across a well-balanced, global customer base	Purchase price: \$8.2B EV / EBITDA: 17.1x

Sources: CapIQ, company press releases and investor presentations. | Note: Mesirow did not represent any of the acquirers or targets in connection with the transactions noted on this page and is not currently representing any of the listed acquirers or targets.

Featured Mesirow transactions

<p>SELL-SIDE ADVISOR</p>  <p>a division of</p>  <p>HAS BEEN ACQUIRED BY</p> 	<p>SELL-SIDE ADVISOR</p>  <p>a portfolio company of</p> <p>ARTEMIS</p> <p>HAS BEEN ACQUIRED BY</p> 	<p>SELL-SIDE ADVISOR</p>  <p>a portfolio company of</p> <p>B·C·P <small>Berford Capital Partners</small></p> <p>HAS BEEN ACQUIRED BY</p> 	<p>SELL-SIDE ADVISOR</p> <p>Endevco</p> <p>assets of</p> <p>MEGGITT</p> <p>HAVE BEEN ACQUIRED BY</p> 	<p>SELL-SIDE ADVISOR</p>  <p>a portfolio company of</p>  <p>HAS BEEN ACQUIRED BY</p> <p>PRIVATE INVESTORS</p>	<p>SELL-SIDE ADVISOR</p>  <p>Cyber Security Solutions Business</p> <p>HAS BEEN ACQUIRED BY</p> 
---	---	---	--	---	---

Dedicated advisor to the industrial technology sector

Mesirow Investment Banking is consistently focused on elevating the experience for our clients. With extensive sector-specific expertise and deep long-standing relationships, our dedicated Industrial Technology team has a proven track record of completing highly tailored and successful transactions. Our highest priority is helping individuals and organizations achieve their financial and strategic goals.

Contact us

Jae Kim

312.595.6549

jae.kim@mesirow.com

Nathan Moeri

312.595.6502

nathan.moeri@mesirow.com

1. Diversified T&M Index: AMETEK, Inc. (NYSE:AME), ESCO Technologies Inc. (NYSE:ESE), FARO Technologies, Inc. (NASDAQ:FARO), Fortive Corp. (NYSE:FTV), Hexagon AB Class B (STO:HEXA-B), Itron, Inc. (NASDAQ:ITRI), Landis+Gyr Group AG (SIX:LAND), MKS Instruments, Inc. (NASDAQ:MKSI), National Instruments Corporation (NASDAQ:NATI), Oxford Instruments plc (LSE:OXIG), Sensata Technologies Holding PLC (NYSE:ST), Spectris plc (LSE:SXS), TE Connectivity Ltd. (NYSE:TEL), Teledyne Technologies Inc. (NYSE:TDY), Teradyne, Inc. (NASDAQ:TER), Xylem Inc. (NYSE:XYL).

Life Sciences T&M Index: Agilent Technologies, Inc. (NYSE:A), Becton, Dickinson and Company (NYSE:BDX), Bio-Rad Laboratories, Inc. (NYSE:BIO), Bio-Techne Corporation (NASDAQ:TECH), Bruker Corporation (NASDAQ:BRKR), Danaher Corporation (NYSE:DHR), Mesa Laboratories, Inc. (NASDAQ:MLAB), Mettler-Toledo International Inc. (NYSE:MTD), PerkinElmer, Inc. (NYSE:PKI), Sartorius AG (FWB:SRT), Thermo Fisher Scientific Inc. (NYSE:TMO), Waters Corporation (NYSE:WAT).

Communications / Network T&M Index: Advantest Corp. (TSE:6857), Anritsu Corporation (TSE:6754), EXFO Inc. (NASDAQ:EXFO), Keysight Technologies Inc. (NYSE:KEYS), NetScout Systems, Inc. (NASDAQ:NTCT), Spirent Communications plc (LSE:SPT), Viavi Solutions Inc. (NASDAQ:VIAV).

Industrial Automation Index: ABB Ltd. (SIX:ABBN), ATS Automation Tooling Systems Inc. (TSX:ATA), Cognex Corporation (NASDAQ:CGNX), Emerson Electric Co. (NYSE:EMR), FANUC (TSE:6954), Honeywell International Inc. (NYSE:HON), Keyence Corporation (TSE:6861), KION GROUP AG (FWB:KGX), Lincoln Electric Holdings, Inc. (NASDAQ:LECO), OMRON Corporation (TSE:6645), Rockwell Automation, Inc. (NYSE:ROK), Schneider Electric SE (Euronext:SU), Siemens AG (FWB:SIE), Yaskawa Electric Corporation (TSE:6506), Yokogawa Electric Corp. (TSE:6841).

Mesirow refers to Mesirow Financial Holdings, Inc. and its divisions, subsidiaries and affiliates. The Mesirow name and logo are registered service marks of Mesirow Financial Holdings, Inc., © 2021, Mesirow Financial Holdings, Inc. All rights reserved. Mesirow does not provide legal or tax advice. Securities offered by Mesirow Financial, Inc. member FINRA, SIPC. Some information contained herein has been obtained from sources believed to be reliable, but is not necessarily complete and its accuracy cannot be guaranteed. Any opinions expressed are subject to change without notice. It should not be assumed that any historical market performance information discussed herein will equal such future performance. This report is for information purposes only, and should not be considered a solicitation to buy or sell any security.