



Mergers & Acquisitions 2022 Year in Review

Defense, Government & Intelligence

Physical & Cybe Security Critical <u>Infrastru</u>cture Maritime Transport & Facilities

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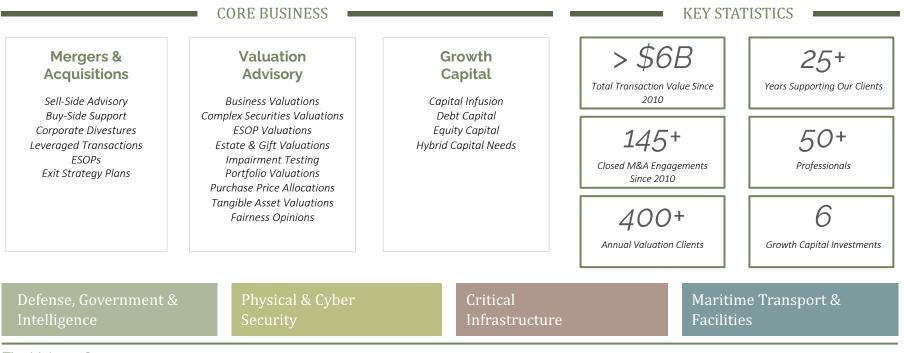
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The McLean Group is a 25-year-old boutique investment bank and financial services firm focused on the A) Defense, Government & Intelligence (DGI); B) Physical & Cyber Security; C) Critical Infrastructure; and D) Maritime Transport & Facilities markets. Our 60+ professionals bring deep industry experience and relentless execution to every client engagement. We provide solutions that blend financial creativity with operational expertise. Whether we are providing transaction advisory services, valuation opinions, or growth capital, our services are unmatched in these core markets.

Our clients are special, and their missions are often vital to national security. They are required to be excellent at all times, and they expect the same from their transaction advisor.

HIGHLY SPECIALIZED BOUTIQUE INVESTMENT BANK

Our trusted team of financial professionals provides middle-market clients with transaction advisory services, business valuation services, and growth capital to help them reach their short and long-term goals.



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Illustrative Transactions



March 29, 2022: cBEYONData, a portfolio company of Bluestone Investment Partners, acquired Alta Via Consulting, a premier provider of ERP consulting services centered around improving clients' operations by maximizing value from existing business processes and information

systems. The combined firm has over 240 employees delivering ERP architecture and design, business intelligence, financial management, cloud migration and robotic process automation solutions. The firm's clients include the U.S. Army, the Department of Justice, and the General Services Administration, among others.



June 1, 2022: CECO Environmental acquired Compass Water Solutions, a leading global supplier of membrane-based, industrial water and wastewater treatment systems that help customers achieve regulatory compliance of water discharge at the lowest lifecycle

cost. The transaction adds critical engineered solutions and an experienced leadership team to CECO's growing industrial water capabilities. CECO expects the Compass acquisition to unlock greater value by leveraging CECO's international sales resources, existing US Navy expertise, global engineering and production footprint.



July 8, 2022: Ovivo acquired Wastech Controls & Engineering ("Wastech"), a specialist in turn-key packaged systems for industrial wastewater treatment applications for numerous industrial markets. With over 1,500 installed systems, Wastech has specialized in turn-key

systems for industriplawkægedvater treatment applications for numerous industrial markets. The integration of Wastech will enhance Ovivo's systems offering in the US electronics market, as well as create cross-selling opportunities in other markets through Wastech's well established client base.



July 12, 2022: CollabraLink, a portfolio company of Washington Harbour Partners, acquired Groundswell Consulting Group ("Groundswell"), a leading provider of Appian development and integration services to US federal agencies. The integrated company

assumed the name Groundswell. The merger with Groundswell expands CollabraLink's footprint through federal civilian and defense agencies, and solidifies CollabraLink as the largest, most accomplished Appian integrator in the public sector.



October 24, 2022: SilverEdge Government Solutions ("SilverEdge"), a portfolio company of Godspeed Capital Management ("Godspeed"), acquired Counter Threat Solutions, LLC ("CTS"), a leading provider of all source and counterintelligence analysis, identity intelligence, and

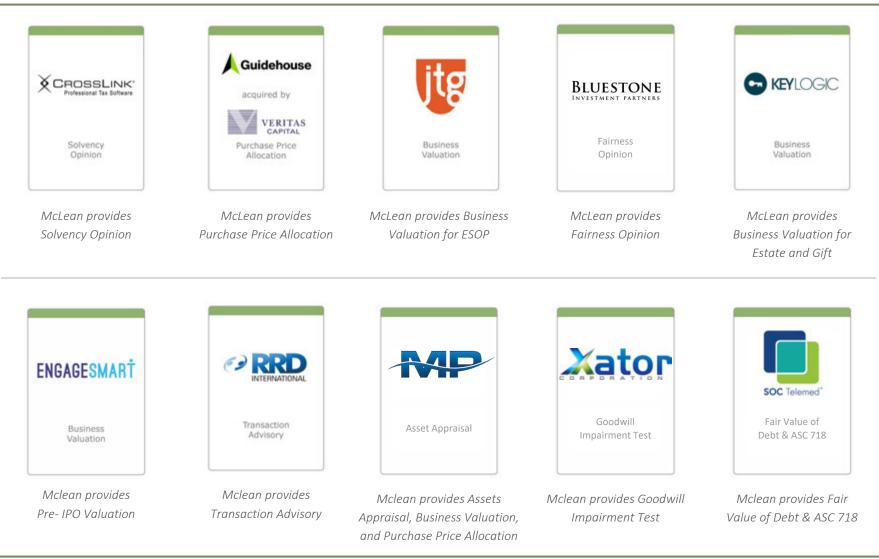
enterprise IT and data management solutions, which include sophisticated software development and engineering and niche ServiceNow capabilities. The transaction increases SilverEdge's cleared workforce to approximately 450 engineers and technical staff.



November 11, 2022: AquaPhoenix Scientific, a portfolio company of Incline Equity Partners, acquired CHEMetrics, a manufacturer of water analysis test kits and instrumentation using self-filling reagent ampoules for efficiency and safety. CHEMetrics has served the

industrial water, petroleum refining, chemical process, food and beverage, power generation and other water treatment industries since 1969. The acquisition of CHEMetrics marks a step in AquaPhoenix's growth strategy of acquiring businesses aligned with its core competencies to help the company best service its customers.

Illustrative Business Valuation Engagements



Defense, Government & Intelligence

Includes defense, intelligence, and federal civilian contractors as well as providers of diversified government services related to IT and consulting services that help support mission critical, core operational, and administrative functions of government agencies.

Physical & Cybe Security

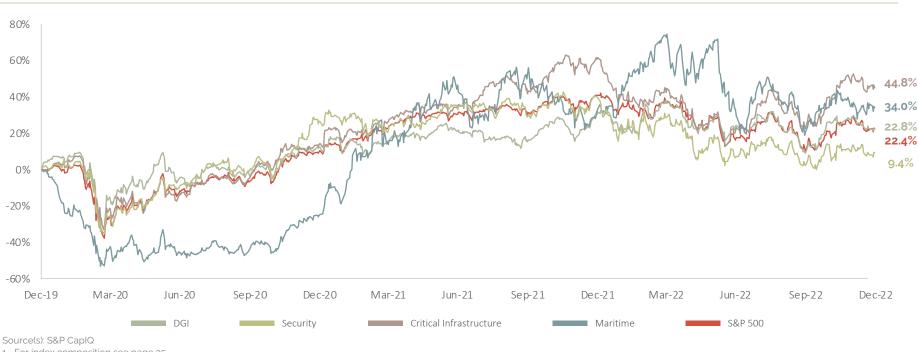
Encompasses firms that ensure physical security, digital security, and technology risk management. Areas such as security operations, threat intelligence, vulnerability analysis, and security data integration/visualization are of particular interest.

Critical Infrastructure

Comprised of firms that provide solutions, components, and services to the commercial, industrial, municipal, and agriculture markets. This sector is less volatile and will see fewer ebbs and flows as the market fluctuates.

Maritime Transport & Facilities

Includes maritime shipping and transportation firms as well as related facilities and vessels. This includes firms that are involved in both "blue water", which includes ocean trade, and "brown water," which includes rivers and coastal trade.



Historical Indexed Equity Performance¹

1. For index composition see page 35

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Premier middle market investment bank

Key Trends / Takeaways

- The long-awaited JWCC contract decision is in. The DoD's cloud services contract debacle has finally come to an end after over four years of deliberation. In mid-December, the Pentagon announced it has chosen four cloud providers including Microsoft, Google, Oracle, and Amazon Web Services. The contract is expected to provide the DoD with "enterprise wide, globally available cloud services across all security domains and classification levels, from the strategic level to the tactical edge." JWCC is expected to run through June 2028 and has an estimated ceiling of \$9 billion.
- The Taiwan Policy Act of 2022 was passed by the Senate Foreign Relations Committee on September 14th. If signed, the bill would allocate \$6.5B in foreign military assistance to Taiwan with the U.S. promising to provide resources for both land and sea-based attacks.
- On August 16th, President Biden signed the Inflation Reduction Act into law which was a major accomplishment for the administration and Democrat party. The bill marks the single largest investment in – combating climate change in U.S. history, lowers the costs of prescription drugs, and raises corporate taxes. A few of the law's key provisions include the enactment of a 15% minimum corporate tax rate, prescription drug price reform, IRS funding, Affordable Care Act (ACA) extension, and investments in climate change / clean energy.

Source(s): Wall Street Journal, New York Times, Womble Bond Dickinson, Defense.gov, U.S Army

- The U.S. Army has released its Army Climate Strategy Implementation Plan which provides the blueprint for an enterprise-wide adaption and mitigation measures through FY27. The plan is set to reduce gas emissions from Army property by 10% by the end of FY23, and by 40% by the end of FY27.
- **On February 24th, Russia launched a military invasion of Ukraine** in a steep escalation of the Russo-Ukrainian war. Shortly after the invasion, President Biden signed the bipartisan Ukraine Supplement Appropriations Act to provide an additional \$13.6B in military, humanitarian, and economic assistance to Ukraine. As of the end of 2022, it is estimated that the U.S. has directed nearly \$50B in assistance to Ukraine, with approximately \$23B being military related. The U.S and its allies have imposed a wide range of sanctions on Russia including imports of items such as semiconductors and exports on certain goods and services.
- The FTC sues to block Lockheed Martin's \$4.4B acquisition of Aerojet Rocketdyne. The agency was concerned that Lockheed would use its control of Aerojet to harm rival defense contractors and further consolidate multiple markets critical to national security and defense. Lockheed subsequently terminated its attempt to acquire the Company. As a result, L3Harris is currently under LOI to purchase Aerojet and will seek to gain regulatory approval in early 2023.



Commentary

- Over the past twelve months, the TMG custom DGI indices have largely outperformed the S&P 500 due to various events including the Russia /
 Ukraine conflict, continued interest rate hikes from the Federal Reserve to curb inflation, and ongoing North Korean nuclear missile testing
- The S&P 500 recorded one of the worst years in history with 2022 being only the 5th calendar year of negative returns in the last 40+ years
- Despite the tough year for the broader equity market, 2022 remained quite strong for DGI equities, specifically "Defense Primes" who saw a substantial spike in contract awards given the geopolitical landscape, and finished the calendar year up 17.9%

Source(s): S&P CapIQ

1. For index composition, please see page 35

2. Northrop Grumman excluded from index for "Defense Primes"



Top Acquirers in 2022¹



Commentary -

Despite the 2022 M&A regression on the broader level, the DGI industry remained quite strong. There were several landmark transactions in the industry including Carlyle's purchase of ManTech, the combination of Vectrus and Vertex forming V2X, and the announcement of L3Harris' acquisition of Aerojet Rocketdyne. The middle market platform companies continued to be quite active as private equity firms looked to acquire unique capability sets and deploy newly raised funds.

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Select Precedent Transactions



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acquired by

BYLIGHT

Date: 8/1/2022

Size: N/A

EBITDA

Transaction Details _____

PAE delivers agile and steadfast solutions to the U.S. government with a global workforce of approximately 20,000 people. They focus on supporting military readiness, peacekeeping missions, nation building activities, personnel recruitment and training, and disaster relief services. The acquisition of PAE complements Amentum's growth into the intelligence and technology market.

Fransaction Details

Veraxx provides immersive, highfidelity flight simulation training technologies primarily for the U.S. Department of Defense. By Light, a portfolio company of Sagewind Capital, provides secure, turn-key systems by incorporating exceptional engineering, cyber, and modeling & simulation capabilities. The combination will broaden its capabilities within modeling & simulation.



Date: 5/31/22 **Size:** \$400.0M **EBITDA Multiple:** N/A

MENA-based strategy consulting business of Booz | Allen | Hamilton acquired by OliverWyman

Date: 9/1/22 Size: N/A EBITDA Multiple: N/A

Transaction Deta

Xator provides mission-focused solutions addressing Critical Infrastructure Protection, Enterprise Technology and Cybersecurity, Mission and Training, and National Security requirements for U.S. Government clients. The acquisition expands Parsons' presence within the U.S. Special Operations Command. the Intelligence Federal Civilian Community, customers, and global critical infrastructure markets.

ransaction Detail

Booz Allen Hamilton provides global management consulting services with specific expertise in analytics, digital solutions, engineering, and cyber. The combination will add to Oliver Wyman's 5,500 employees worldwide gaining a practice that is fully dedicated to the MENA region, expanding the combined firms' strategic capabilities and its growth position in the Middle East and beyond.



Date: 7/5/22 Size: \$860.0M EBITDA Multiple: N/A



Date: 9/14/22 Size: \$4,337.5M EBITDA Multiple: 13.7x

Transaction Details

provides facility Vectrus and logistics services. information technology, and network communications services to U.S. government customers worldwide. The Vertex Company provides verticallv integrated turnkev lifecycle support and integrated solutions for defense and commercial customers. The combined entity. V2X. provides a comprehensive suite of integrated solutions to defense clients globally.

Transaction Details

ManTech is a defense contracting firm that offers technological services to government and industry clients. ManTech's strengths lie across the defense, intelligence, federal civilian, and innovation and capabilities sectors. The acquisition will allow Carlyle to leverage their sector expertise and resources to accelerate growth and innovation within the Company.

Source(s): CapIQ

Multiple: N/A

advisorv

government

management,

information

DEFENSE, GOVERNMENT & INTELLIGENCE

Transaction Details ——

The Grant Thornton public sector

practice

solutions to enhance their financial,

performance management. This

acquisition will allow Guidehouse to

expand its expertise and capabilities

in support of its clients most

pressing challenges and drive lasting

Octo, a portfolio company of

Arlington Capital Partners, provides

digital modernization solutions to

acquisition will establish one of the

partners to the federal government,

adding 1,500 employees to IBM

Consulting's U.S. public and federal

market organization. The acquisition

will further complement IBM's

existing strengths across IT and

digital

digital transformation.

government. The

transformation

value for all stakeholders.

the federal

largest

employees

human

technology,

provides

capital,

with

and

Select Precedent Transactions



Date: 10/3/2022 Size: N/A EBITDA Multiple: N/A



Date: 12/7/2022* Size: N/A EBITDA Multiple: N/A

Source(s): CapIQ * announcement date



acquired by Booz | Allen | Hamilton

Date: 10/14/22 Size: \$440.0M EBITDA Multiple: N/A



Transaction Detail

EverWatch a portfolio company of Enlightenment Capital, provides mission-critical support and expertise in software development, cyber, and analytics. Specifically, Everwatch's expertise in software development and architecture, cloud, analytics, AI and machine learning, and TechSIGINT will align with Booz Allen's mission insights and portfolio of cyber operations, mission analytics, AI, and 5G offerings.

ransaction Detail

Aeroiet Rocketdvne manufacturers rocket, hypersonic, and electric propulsion systems for space, defense, civil and commercial applications. They are a proven provider of world-class propulsion systems and energetics to the DoD, NASA. and other customers worldwide. The acquisition by 13Harris will ensure the defense industrial base and its customers will have a strengthened merchant supplier to address both current and emerging threats.

Avantus

acquired by

Date: 11/23/22 Size: \$590.0M EBITDA Multiple: 14.6x



Date: 12/19/22 **Size:** \$6,400.0M

EBITDA Multiple: N/A

Transaction Details

Avantus, a portfolio company of NewSpring Holdings, provides mission-focused cyber, data analytics. and software development solutions to the Department of Defense, Intelligence Community. Department of Homeland Security, and other law enforcement and civilian agencies. The combination will strengthen QinetiQ's backlog and create a strong platform for growth.

Transaction Details

Maxar is a leading space technology company that provides satellite imagery, expert intelligence, and spacecraft and robotics for space exploration. They are currently partnered with more than 50 governments and are one of three satellite imaging companies used by the NRO. The acquisition will allow Advent to supplement Maxar with its operational expertise and capital to accelerate investments in new technology and strategic M&A.

	Stock Price	Enterprise		CY2022A			CY2023E		TEV /2	022A	TEV/2	023E
	12/31/22	Value	Revenue	EBTIDA	Margin	Revenue	EBITDA	Margin	Revenue	EBITDA	Revenue	EBITDA
Defense Primes												
Lockheed Martin	486.49	136,546.4	65,241.3	9,679.2	14.8%	65,777.6	9,880.9	15.0%	2.09x	14.11x	2.08x	13.82>
Northrop Grumman	545.61	96,558.0	36,229.0	4,851.5	13.4%	37,838.3	5,132.6	13.6%	2.67x	19.90x	2.55x	18.81>
General Dynamics	248.11	78,612.3	39,275.6	5,130.3	13.1%	42,037.2	5,681.7	13.5%	2.00x	15.32x	1.87x	13.84×
L3Harris	208.21	46,993.8	16,824.9	3,228.9	19.2%	17,420.5	3,548.4	20.4%	2.79x	14.55x	2.70x	13.24×
Average	\$372.11	\$89,677.6	\$39,392.7	\$5,722.5	15.1%	\$40,768.4	\$6,060.9	15.6%	2.39x	15.97x	2.30x	14.93>
Government Contractors												
Leidos	105.19	19,217.4	14,316.4	1,471.0	10.3%	15,053.0	1,562.6	10.4%	1.34x	13.06x	1.28x	12.30x
Jacobs	120.07	18,903.9	15,205.8	1,395.2	9.2%	15,998.9	1,516.5	9.5%	1.24x	13.55x	1.18x	12.47×
Booz Allen Hamilton	104.52	16,164.2	9,000.9	988.4	11.0%	9,655.7	1,039.6	10.8%	1.80x	16.35x	1.67x	15.55×
CACI	300.59	8,859.6	6,436.2	659.5	10.2%	6,760.2	733.3	10.8%	1.38x	13.43x	1.31x	12.08×
SAIC	110.93	8,519.0	7,593.2	674.6	8.9%	7,718.7	695.7	9.0%	1.12x	12.63x	1.10x	12.25×
Parsons Corporation	46.25	5,570.3	4,169.0	351.8	8.4%	4,471.3	396.7	8.9%	1.34x	15.83x	1.25x	14.04x
ICF International	99.05	2,780.8	1,776.6	189.3	10.7%	1,976.7	213.2	10.8%	1.57x	14.69x	1.41x	13.04×
V2X	41.29	2,468.3	2,885.6	191.8	6.6%	3,881.3	312.3	8.0%	0.86x	12.87x	0.64x	7.90x
VSE Corporation	46.88	920.6	953.7	92.0	9.6%	1,018.9	105.5	10.4%	0.97x	10.01x	0.90x	8.73
Average	\$108.31	\$9,267.1	\$6,926.4	\$668.2	9.4%	\$7,392.7	\$730.6	9.8%	1.29x	13.60x	1.19x	12.04>

Source(s): S&P CapIQ \$USD, Millions besides Stock Price

	Stock Price	Enterprise		CY2022A			CY2023E		TEV /2		TEV/2	
	12/31/22	Value	Revenue	EBTIDA	Margin	Revenue	EBITDA	Margin	Revenue	EBITDA	Revenue	EBITDA
Defense Systems												
Teledyne	399.91	22,319.9	5,452.8	1,292.1	23.7%	5,697.0	1,380.9	24.2%	4.09x	17.27x	3.92x	16.16x
HEICO	153.64	18,831.2	2,303.2	623.4	27.1%	2,602.8	703.9	27.0%	8.18x	30.21x	7.24x	26.75x
Elbit Systems	164.09	8,460.3	5,554.8	551.6	9.9%	5,890.1	642.1	10.9%	1.52x	15.34x	1.44x	13.18x
Mercury Systems	44.74	3,135.3	1,003.4	195.3	19.5%	1,054.0	220.9	21.0%	3.12x	16.05x	2.97x	14.19x
Kratos Defense & Security	10.32	1,578.1	891.9	73.2	8.2%	985.2	94.5	9.6%	1.77x	21.55x	1.60x	16.70x
Average	\$154.54	\$10,864.9	\$3,041.2	\$547.1	17.7%	\$3,245.8	\$608.5	18.5%	3.74x	20.08x	3.43x	17.40x
Low	\$10.32	\$920.6	\$891.9	\$73.2	6.6%	\$985.2	\$94.5	8.0%	0.86x	10.01x	0.64x	7.90x
Mean	\$179.77	\$27,580.0	\$13,061.9	\$1,757.7	13.0%	\$13,657.6	\$1,881.2	13.5%	2.21x	15.93x	2.06x	14.17x
Median	\$115.50	\$12,511.9	\$5,995.5	\$667.0	10.5%	\$6,325.2	\$718.6	10.8%	1.67x	15.01x	1.52x	13.53x
High	\$545.61	\$136,546.4	\$65,241.3	\$9,679.2	27.1%	\$65,777.6	\$9,880.9	27.0%	8.18x	30.21x	7.24x	26.75x

Key Trends / Takeaways

- Healthcare continued to be a prime target for cyber attacks in 2022 –
 90% of the ten largest healthcare data breaches reported in 2022 were caused by third-party vendors. Notable breaches include:
 - OneTouchPoint: 4.11 million patients in what is considered to have been the most major breach of 2022 over 4.11 million patient records were affected by a ransomware attack on printing and mailing vendor OneTouchPoint on April 28. The largest affected third-party vendor was Aetna with over 326,000 patients impacted.
 - Eye Care Leaders: Roughly 3.6 million patients Eye Care Leaders' reported ransomware attack and the drama that ensued is the second-largest breach reported in 2022.
 - Advocate Aurora Health: 3 million patients was the second major U.S. health system to report unauthorized disclosure due to the use of Pixel which continues to defend itself through multiple class-action lawsuits. The breach was reported in late October as Advocate Aurora informed patients that their health information was shared with Facebook and Google as a result of its usage of Pixel.
 - Connexin Software: 2.2 million patients a major pediatric electronic medical records company, indicated over 119 provider offices and over 2.2 million patients were impacted

- Cyber insurance rates skyrocketed to high levels While many kinds of insurance lines saw premium increases in 2022 the increases of cyber insurance rates were unprecedented. Cyber insurance rates increased by an average of 28% in the first quarter of 2022 compared with the fourth quarter of 2021. One of the leading reasons for this increase is a decreased appetite for risk on the carrier side for cyber risks. On the flip side, high demand is sparked by the greater awareness companies have for cyber risks today more so than ever before. One of the ways underwriters have begun mitigating risks is by requiring multi-factor authentication. Regarding a specific sector, insurers became weary of insuring the energy & critical infrastructure sectors' cyber risks in 2022 due to the vulnerability associated with non-robust cyber protocols in the industry.
- The growing work-from home population continues to pose a major challenge to the cybersecurity industry. Despite the noise around employers requiring employee presence at the office in 2022, data suggests remote workers are here to stay at ~27 million people. This has drastically increased the attack surface with widespread use of operational technology outside work environments. When enterprises were less dispersed the attack surface was smaller and posed less of a concern than it does in today's remote world.

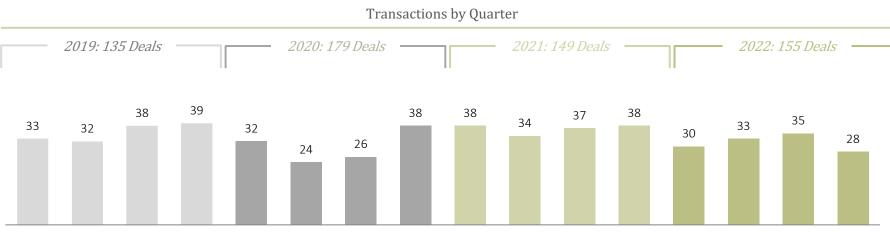
Source(s): SC Magazine, CNBC, InfoSecurity



Commentary

- All indices have finished negative in the last twelve months due to market volatility, declining company earnings potentially driven by higher interest rates
- The Security Solutions index declined the least, beating out the S&P 500 due to its defensive nature
- The Cyber Security index declined more than the S&P 500 largely driven by the technology exposure of these companies with valuations declining across the NASDAQ

Source(s): S&P CapIQ 1. For index composition, please see page 35



Q1 2019 Q2 2019 Q3 2019 Q4 2019 Q1 2020 Q2 2020 Q3 2020 Q4 2020 Q1 2021 Q2 2021 Q3 2021 Q4 2021 Q1 2022 Q2 2022 Q3 2022 Q4 2022



Commentary

2022 saw a large number of M&A transactions with many companies, particularly private equity firms and their portfolio companies such as Warburg Pincus – Allied, expanding their cybersecurity offerings to meet the increasing threat of cybersecurity attacks. Strategic buyers, have focused their M&A activity on cybersecurity and security technology targets to develop a full suite of security offerings.

Select Precedent Transactions



VMware is a leading provider of software solutions in the areas of modern applications, cloud management and infrastructure, networking, security, and digital workspaces. The acquisition of VMware would help make Broadcom become a leader in infrastructure software and have the richest portfolio of software in infrastructure and management.



Date: 6/23/22 Size: \$6.219.6M Revenue Multiple: 9.4x

Datto is a provider of cloud-based software and technology solutions for delivery through the managed service provider (MSP) channel to small and medium businesses. The acquisition will increase Kaseya's international presence with a greater array of solutions available to MSPs around the globe to tackle their most pressing challenges.

DSailPoint acquired by

THOMABRAVO

Date: 8/16/22 Size: \$7.051.2M Revenue Multiple: 15.2x

Transaction Details ——

SailPoint is a leading provider of enterprise identitv security solutions in the United States, Europe, the Middle East, Africa, and internationally. With its sale to Thoma Bravo, SailPoint will benefit from the strategic and operational support of Thoma Bravo as a privately held company to continue to scale its footprint in enterprise identity security.

MANDIANT acquired by Google

Date: 9/12/22 Size: \$5.357.1M Revenue Multiple: 11.1x

developer of a cyber security SaaS platform that offers threat intelligence, security validation, attack surface management and security automation, as well as managed and consulting services. The acquisition will complement Google Cloud's existing strengths in security adding onto existing capabilities such as BeyondCorp Enterprise for Zero Trust and VirusTotal amongst others.

Mandiant is a designer and



Date: 9/19/22* Size: \$4.589.8M Revenue Multiple: 15.1x

KnowBe4 is a provider of the world's largest security awareness training and simulated phishing platform offering a range of programs spanning videos, games, interactive modules and more. With its sale to Vista Equity Partners, KnowBe4 will benefit from being a privately held company as well as from the operational expertise and strategic input from Vista Equity Partners.



Date: 9/30/22 **Size:** \$16.654.9M

Revenue Multiple: 5.2x

Citrix Systems is an enterprise software company and provider of workspace, app delivery and security, and professional services worldwide. The acquisition will allow Citrix's secure digital workspace and application delivery platform with Tibco's data management and analytics capabilities creating a new global leader in enterprise software.

Source(s): S&P CapIQ * announcement date

			1			
Closed	Acquirer(s)	Target(s)	Target Description	EV	Enterprise	,
Date			rangee 2 even point	(\$M)	Revenue	EBITDA
1/20/2022	DattO	Infocyte	Develops proactive cyber security solutions focusing on breach discovery and response	\$43.5	NA	NA
2/22/2022	HelpSystems	Tripwire	Develops and provides threat, security, and compliance solutions	\$350.0	3.28x	87.72x
3/1/2022	Advent International Corporation	McAfee	Provides various integrated security, privacy, and trust solutions to consumers	\$20,014.2	10.96x	30.10x
3/29/2022	Arista Networks	Untangle	Provides cybersecurity software solutions and appliances for small-to-medium businesses	NA	NA	NA
3/30/2022	Sciens Building Solutions	LV Solutions	Provides low voltage and life safety system services in Florida	NA	NA	NA
3/31/2022	Resideo Technologies	First Alert	Manufactures battery-operated smoke and carbon monoxide alarms	\$613.0	1.55x	11.15x
4/1/2022	Cloudflare	Area 1 Security	Develops cloud-native email security software solutions	\$158.1	NA	NA
4/6/2022	Guardian Security Services	Sievers Security Systems	Sells, installs, monitors, and maintains home and business systems for security, fire alarms	NA	NA	NA
5/17/2022	Liberty Strategic Capital	Zimperium	Develops Mobile Intrusion Prevention Systems	NA	NA	NA
5/26/2022*	Broadcom	VMware	Provides software solutions in modern applications, cloud management	\$69,248.5	5.35x	22.35x
6/1/2022	SSC Security Services	Logixx Security	Provides security guard services in Toronto, Ottawa, Hamilton, and Winnipeg	\$19.2	NA	NA
6/6/2022	Crisis24	Patriot Global	Provides boutique security services	\$69.0	NA	NA
6/7/2022	Blancco Technology Group	WipeDrive	Designs and develops security software solutions	\$10.0	2.78x	NA

Source(s): S&P CapIQ * announcement date

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Classed				EV	Enterpris	o Valuo /
Closed Date	Acquirer(s)	Target(s)	Target Description	EV (\$M)	Revenue	EBITDA
6/22/2022	Synopsys	NTT Security AppSec Solutions	Develops and operates a Software-as-a-Service (SaaS) platform	\$307.3	NA	NA
6/23/2022	Kaseya Limited	Datto	Provides cloud-based software and technology solutions	\$6,028.4	9.35x	48.14x
6/24/2022	Nucor Corporation	C.H.I. Overhead Doors	Manufactures garage and commercial doors for residential and business applications	\$2,840.9	NA	NA
7/1/2022	Cerberus Cyber Sentinel Corporation	Cyberviking	Offers cybersecurity, application security services, incident response and threat hunting	\$1.9	NA	NA
7/22/2022	Securitas	Electronic Security and Healthcare Divisions of Stanley Black & Decker	Provides integrated security, health, and safety solutions and service	\$3,200.0	NA	16.00x
8/16/2022	Thoma Bravo	SailPoint Technologies	Provides enterprise identity security solutions	\$7,051.2	15.21x	NM
8/25/2022	Turn/River Management	Tufin Software Technologies	Develops, markets, and sells software-based solutions	\$488.8	4.23x	NM
9/12/2022	Google	Mandiant	Designs and develops a cyber security SaaS platform	\$5,357.1	11.08x	NM
9/14/2022	New Relic	K2 Cyber Security	Develops enterprise security software	\$15.0	NA	NA
9/19/2022*	Vista Equity Partners	KnowBe4	Designs and develops a cyber security SaaS platform	\$4,380.4	15.15x	210.34x
9/30/2022	TIBCO Software	Citrix Systems	Provides workspace, app delivery and security, and professional services worldwide	\$16,654.9	5.18x	26.06x
10/3/2022	CrowdStrike Holdings	Reposify	Develops and delivers external surface management solution	\$19.4	NA	NA
10/18/2022	Thoma Bravo	Ping Identity	Offers intelligent identity solutions for the enterprise	\$2,796.3	9.07x	NM

Source(s): S&P CapIQ

* announcement date

	Stock Price	Enterprise		CY2022A			CY2023E		TEV/2	2022A	TEV/2	2023E
	12/31/22	Value	Revenue	EBTIDA	Margin	Revenue	EBITDA	Margin	Revenue	EBITDA	Revenue	EBITDA
Security Services												
Securitas	8.34	9,931.1	12,774.9	1,018.7	8.0%	14,362.7	1,201.9	8.4%	0.78x	9.75x	0.69x	8.26x
The Brink's Company	53.71	5,196.9	4,533.8	771.2	17.0%	4,922.5	860.5	17.5%	1.15x	6.74x	1.06x	6.04x
Prosegur	1.89	2,638.1	4,455.8	501.0	11.2%	4,537.1	553.6	12.2%	0.59x	5.27x	0.58x	4.77x
Loomis	27.44	2,416.8	2,432.7	477.3	19.6%	2,623.2	527.7	20.1%	0.99x	5.06x	0.92x	4.58x
Average	\$22.85	\$5,045.7	\$6,049.3	\$692.1	14.0%	\$6,611.4	\$785.9	14.5%	0.88x	6.70x	0.81x	5.91x
Security Solutions												
Honeywell International	214.30	154,690.7	35,547.0	8,949.1	25.2%	36,964.5	9,528.0	25.8%	4.35x	17.29x	4.18x	16.24x
Johnson Controls	64.00	53,279.0	25,682.7	3,797.9	14.8%	27,087.9	4,073.8	15.0%	2.07x	14.03x	1.97x	13.08x
Motorola Solutions	257.71	48,673.9	8,941.6	2,595.0	29.0%	9,539.7	2,866.5	30.0%	5.44x	18.76x	5.10x	16.98x
ADT	9.07	18,044.4	6,368.7	2,420.9	38.0%	6,863.2	2,585.8	37.7%	2.83x	7.45x	2.63x	6.98x
Allegion	105.26	11,296.2	3,256.5	725.1	22.3%	3,500.0	809.5	23.1%	3.47x	15.58x	3.23x	13.95x
Vivint Smart Home	11.90	4,994.2	1,665.5	740.0	44.4%	1,741.9	776.8	44.6%	3.00x	6.75x	2.87x	6.43x
Alarm.com Holdings	49.48	2,403.0	838.6	142.6	17.0%	877.2	129.2	14.7%	2.87x	16.85x	2.74x	18.60x
Napco Security Technologies	27.48	971.4	157.8	30.6	19.4%	182.9	45.4	24.8%	6.16x	31.74x	5.31x	21.41x
Arlo Technologies	3.51	210.0	480.9	(6.5)	-1.3%	485.6	1.3	0.3%	0.44x	NA	0.43x	NA
Average	\$82.52	\$32,729.2	\$9,215.5	\$2,155.0	23.2%	\$9,693.7	\$2,312.9	24.0%	3.40x	16.06x	3.16x	14.21x

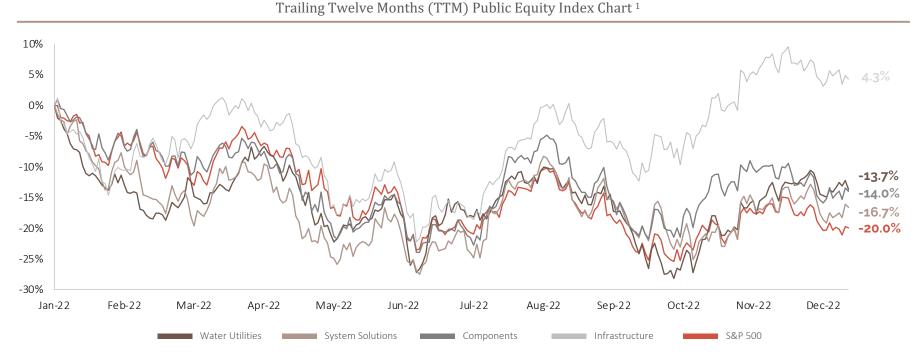
Source(s): S&P CapIQ \$USD, Millions besides Stock Price

	Stock Price	Enterprise		CY2022A			CY2023E		TEV/2	022A	TEV/2	2023E
	12/31/22	Value	Revenue	EBTIDA	Margin	Revenue	EBITDA	Margin	Revenue	EBITDA	Revenue	EBITDA
Cyber Security												
Fortinet	48.89	37,466.0	4,430.3	1,262.0	28.5%	5,372.0	1,548.8	28.8%	8.46x	29.69x	6.97x	24.19x
Check Point	126.16	12,274.6	2,327.6	1,058.9	45.5%	2,444.0	1,097.8	44.9%	5.27x	11.59x	5.02x	11.18x
Tenable	9.36	2,682.0	712.8	275.5	38.6%	735.8	299.0	40.6%	3.76x	9.74x	3.65x	8.97x
Varonis Systems	23.94	2,165.5	471.5	38.9	8.3%	527.1	51.8	9.8%	4.59x	55.64x	4.11x	41.80x
SolarWinds	38.15	4,169.1	680.0	82.8	12.2%	817.6	108.0	13.2%	6.13x	50.36x	5.10x	38.60x
NetScout Systems	32.51	2,240.9	869.7	NA	NA	920.0	207.5	NA	2.58x	NA	2.44x	10.80x
SecureWorks	6.39	415.0	457.1	(62.3)	-13.6%	436.0	(76.5)	-17.5%	0.91x	NA	0.95x	NA
Average	\$40.77	\$8,773.3	\$1,421.3	\$442.6	19.9%	\$1,607.5	\$462.3	20.0%	4.53x	31.40x	4.03x	22.59x
Low	\$1.89	\$210.0	\$157.8	-\$62.3	-13.6%	\$182.9	-\$76.5	-17.5%	0.44x	5.06x	0.43x	4.58x
Mean		\$18,807.9	\$5,854.3	\$1,306.3	20.2%	\$6,247.0		20.7%	3.29x	18.37x	3.00x	15.16x
	\$30.00	\$4,581.6	\$2,380.1		19.4%			20.1%		14.03x	2.80x	12.13x
High	\$257.71	\$154,690.7	\$35,547.0	\$8,949.1	45.5%	\$36,964.5	\$9,528.0	44.9%	8.46x	55.64x	6.97x	41.80x

Key Trends / Takeaways

- Price hikes caused by inflation are taking a toll on infrastructure projects in America due to the decrease in real value of the \$1 trillion infrastructure plan President Biden signed in 2021. The Infrastructure Investment and Jobs Law, among other initiatives, will deliver clean water and eliminate lead service lines, provide increased access to high-speed internet, repair roads and bridges, invest in public transit, build a national EV charging network, and upgrade energy and cybersecurity infrastructure.
- Russia's invasion of Ukraine had significant impact on global supply chains, most notably on the production and export of oil. As the 3rd largest global oil producer (12% of global supply in 2021), Russia's invasion of Ukraine and the subsequent sanctions by Western Nations greatly disrupted global oil supply causing oil prices to spike to almost \$130/barrel in March of 2022. Public outcry in the U.S. over record high gas prices which passed a national average of \$5/gallon, paired with existing inflation fears caused political leaders to take dramatic steps to curb rising gas prices including releasing strategic oil reserves, reissuing production licenses for U.S. oil companies in Venezuela, and temporarily suspending gas taxes (a large source of funding for transportation infrastructure). These steps, in addition to recession concerns reducing demand led to a decrease in oil prices to \$75/barrel by December.
- In an effort to sanction Russia for its invasion of Ukraine and reduce the Nation's ability to finance its military efforts, the United States and its Western Allies have dramatically reduced their consumption of Russia oil with the U.S. banning imports entirely. Sanctions have been harder to implement for European nations which in 2021 consumed over half of all Russia crude oil imports. The reduction in oil supply has caused wholesale energy prices to increase 15-fold from early 2021 across parts of Europe, causing public outcry and political instability.
- The EU has increased security measures on its energy infrastructure following the sabotage of two subsea Russia to EU pipelines in September. A perpetrator remains undetermined but most European nations suspect the incident was a result of an attack given the bitter energy standoff between the EU and Russia.
- On August 16, 2022, President Biden signed into law the **"Inflation Reduction Act," intended to fight growing inflation which reached over 7% YoY in November of 2022.** The law also provides mechanisms to invest in domestic energy production and manufacturing, reduce carbon emission by roughly 40% by 2030, and allow Medicare to negotiate prescription drug prices.

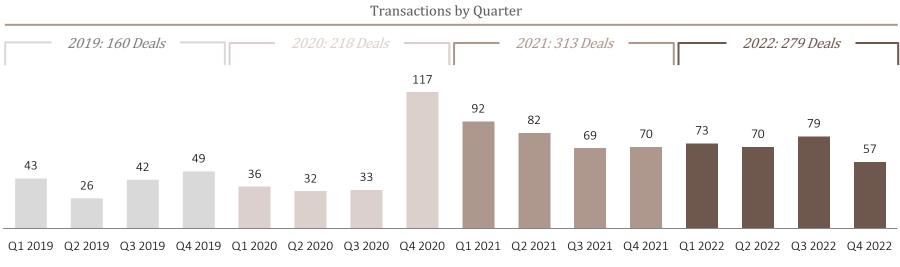
Source(s): IMF, CNBC, WhiteHouse.gov, CNN, U.S. Energy Information Administration



Commentary

- TMG's indices have very closely tracked the ups and down of the S&P 500 throughout 2022 while slightly outperforming the benchmark
- The critical nature of the infrastructure industry as well as its reliance on steady government funding is a reason investors largely consider the industry "defensive" and rotate into the sector during times of economic uncertainty
- Rising interest rates and recession fears buoyed the critical infrastructure industry with the most defensive subsectors such as the utilities outperforming the most. TMG's infrastructure index was aided by anticipated government funding

Source(s): S&P CapIQ 1. For index composition, please see page 35



Top Acquirers



Commentary —

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After a record-breaking year, 2022 witnessed a relatively minor reduction in acquisitions as strategic and financial investors alike continued to invest in a defensive industry with growing government investments. Both strategic and financial sponsors pursued large acquisitions in developing sectors with significant growth opportunities including data centers and renewable energy.

The McLean Group Premier middle market investment bank

Select Precedent Transactions



Date: 1/7/22

EBITDA

Size: \$27.862.6M

Multiple: 13.19x

France's largest

treatment companies completed their much anticipate merger at the beginning of 2022 after an extended legal battle. Veolia completed the acquisition of and additional ~56% stake in Suez, resulting in an ~88% stake in the new \$27.9B entity. As part of the agreement some of Suez's assets will be spun off into a new entity with €7B in revenue.

wastewater

Transaction Details ———



Date: 3/25/22 Size: \$15,182.8M EBITDA Multiple: 26.83x

Transaction Details ______ Cyrus One is a global REIT specializing in the construction and operation of over 50 data centers worldwide. KKR and GIP are leading infrastructure investors that will look to capitalize on growing global data consumption and increasing need for best-in-class data center developer/operators.



Date: 5/2/22 Size: \$2,262.4M EBITDA Multiple: 13.57x



Republic Services acquisition of environmental service provide US Ecology expands the Company's footprint in the U.S. and Canada and provides synergistic opportunities for its environmental solution business unit. The combined entity will provide customers a single partner for multiple waste streams and realize an estimated \$75-100M in cross-selling revenue.

Transaction Details _____

Archaea Energy operates as a renewable gas and renewable electricity producer in the U.S. including 29 landfill gas recovery facilities. BP's acquisition expands it presence in the growing U.S. RNG market and furthers the Company's net zero ambitions. BP expects the acquisition to be accretive to earnings and to deliver double digit returns.

Transaction Details —

Renewable acquired by Chevron Date: 6/13/22

Size: \$2,777.8M **EBITDA Multiple:** 8.59x Renewable Energy Group, an international provider of lower carbon transportation fuels was acquired by Chevron as part of its goal to increase it renewable fuels production capacity to over 100,000 barrels/day by 2030. The new entity's combined capabilities, customer relationships, and assets make it a leading renewable fuel Company in the U.S.



Date: 11/9/22* Size: \$20,510.5M EBITDA Multiple: 21.96x

Transaction Details _____

Vantage Towers engages in the construction and leasing of passive network infrastructure for mobile communications across Europe.

The consortium of KKR and GIP acquired an 82% stake in the Company and plans to use available capital to reduce the debt burden of Vantage Towers, creating a nimbler organization to capitalize on the roll-out of 5G networks.



Date: 12/28/22

Size: \$4.848.1M

Multiple: 78.59x

EBITDA

Source(s): S&P CapIQ *announcement date

Closed	Acquirer(s)	Target(s)	Target Description	EV	Enterpris	e Value /
Date	Acquirer(s)	Target(s)	Target Description	(\$M)	Revenue	EBITDA
1/1/2022	Liberty Utilities	New York American Water	Provides water and wastewater services in New York State	\$608.0	NA	NA
1/31/2022	Ardian; CNP Assurances; Global Infrastructure Management	SUEZ	Comprised of water recycling and recovery businesses	\$12,382.4	1.14x	6.12x
2/1/2022	Crestwood Equity	Oasis Midstream Partners	Provides oil, gas, ans water-related midstream services in North America	\$1,807.8	4.62x	8.08x
2/7/2022	Brookfield Renewable Corporation	Urban Grid Solar Projects	Develops and operates utility scale solar projects	\$650.0	NA	NA
3/18/2022	Quikrete Holdings	Forterra	Manufactures and sells piping products in North America	\$2,791.6	1.75x	10.21x
3/25/2022	KKR; Global Infrastructure Management	CyrusOne	REIT specializing in the construction and operation of data centers	\$15,182.8	13.14x	26.83x
4/15/2022	ALLETE	New Energy Equity	Engages in the development and engineering of solar projects	\$161.6	NA	8.08x
5/1/2022	KKR	Cordia Energy	Develops and operates combined heat, power and microgrid plants	\$1,900.0	NA	NA
5/2/2022	Republic Services	US Ecology	Provides environmental services to commercial and government clients	\$2,262.4	2.29x	13.57x
5/24/2022	D.R. Horton	Vidler Water Resources	Supplies potable water resources to communities in the southwestern U.S.	\$263.1	9.66x	20.69x
5/25/2022	PPL Energy	The Narragansett Electric Company	Retail distribution of electricity and gas in Rhode Island	\$5,116.4	3.29x	18.81x
6/13/2022	Chevron Corporation	Renewable Energy Group	Provides low carbon distribution fuels internationaly	\$2,777.8	0.86x	8.59x
7/6/2022	Argo Infrastructure Partners	Corning Natural Gas Holding Corporation	Distributes natural gas and electricity	\$171.9	5.28x	17.20x

Source(s): S&P CapIQ *announcement date

		1				
Closed	Acquirer(s)	Target(s)	Target Description	EV	Enterpris	,
Date				(\$M)	Revenue	EBITDA
7/20/2022	BlackRock	Vanguard Renewables	Operates farm-based anaerobic digestion plants in the U.S.	\$700.0	NA	NA
8/1/2022	Primoris Services Corporation	PLH Group	Provides construction services to the power, pipeline, and industrial markets	\$438.3	0.60x	8.12x
8/4/2022	Siemens Smart Infrastructure	Brightly Software	Provided cloud-based operation management software	\$1,875.0	NA	NA
8/11/2022	Kinder Morgan, Inc.	North American Natural Resources/Biofuels/Central	Engages in renewable energy generation	\$132.0	NA	NA
8/31/2022	Hearthstone Utilities	Hope Gas	Distributes natural gas to homes and businesses in West Virginia	\$690.0	NA	NA
9/9/2022	XL Fleet Corp	Solar Service Experts	Owns and operates residential energy resources in North America	\$600.0	7.23x	11.76x
9/23/2022	Manulife Investment Management	Midland Cogeneration Venture	Operates a combined electrical and steam generating plant in Michigan	\$894.0	NA	NA
9/27/2022	Enbridge Inc.	Tri Global Energy, LLC	Develops and operates wind, solar, and power projects	\$268.0	NA	NA
9/28/2022	Brookfield	Standard Solar	Develops and operates solar projects in the U.S.	\$700.0	NA	NA
10/3/2022	Aquarion Water Company, Inc.	The Torrington Water Company	Operates a regulated public water utility	\$91.3	11.65x	26.18x
11/9/22*	KKR; Global Infrastructure Management; Tower Bridge	Vantage Towers AG	Engages in construction and maintenance of infrastructure for mobile communication	\$20,510.5	19.30x	21.96x
12/4/2022	ВР	EDF Energy Services	Operates an electric utilities company	\$505.4	NA	NA
12/28/2022	ВР	Archaea Energy	Operates as a renewable natural gas and electricity producer	\$4,848.1	16.95x	78.59x

Source(s): S&P CapIQ *announcement date

	Stock Price	Enterprise		CY2022A			CY2023E		TEV/2	022A	TEV/2	023E
	12/31/22	Value	Revenue	EBTIDA	Margin	Revenue	EBITDA	Margin	Revenue	EBITDA	Revenue	EBITDA
Water Utilities												
American Water Works	152.42	39,537.2	3,767.8	2,004.8	53.2%	4,069.7	2,254.6	55.4%	10.49x	19.72x	9.72x	17.54x
Essential Utilities, Inc.	47.73	19,089.6	2,082.9	1,016.6	48.8%	2,173.1	1,118.3	51.5%	9.17x	18.78x	8.78x	17.07x
California Water Service Group	60.64	4,368.7	836.5	260.4	31.1%	878.0	296.5	33.8%	5.22x	16.77x	4.98x	14.73x
American States Water	92.55	4,116.8	511.0	187.2	36.6%	527.3	202.5	38.4%	8.06x	21.99x	7.81x	20.33x
SJW Group	81.19	4,105.7	607.8	237.6	39.1%	630.4	253.4	40.2%	6.75x	17.28x	6.51x	16.20x
California Water Service Group	60.64	4,368.7	836.5	260.4	31.1%	878.0	296.5	33.8%	5.22x	16.77x	4.98x	14.73x
Consolidated Water Co. Ltd.	14.80	185.4	91.9	14.3	15.6%	118.1	21.0	17.8%	2.02x	12.97x	1.57x	8.83x
Average	\$72.85	\$10,824.6	\$1,247.8	\$568.8	36.5%	\$1,324.9	\$634.7	38.7%	6.70x	17.75x	6.33x	15.63x
System Solutions												
Danaher Corporation	265.42	209,988.9	30,805.8	10,608.4	34.4%	30,721.2	10,550.5	34.3%	6.82x	19.79x	6.84x	19.90x
Dover Corporation	135.41	22,330.8	8,489.1	1,770.8	20.9%	8,598.4	1,850.2	21.5%	2.63x	12.61x	2.60x	12.07x
Xylem Inc.	110.57	21,174.1	5,424.2	905.9	16.7%	5,638.5	1,001.3	17.8%	3.90x	23.37x	3.76x	21.15x
IDEX Corporation	228.33	17,793.8	3,129.6	876.7	28.0%	3,336.0	927.4	27.8%	5.69x	20.30x	5.33x	19.19x
Pentair plc	44.98	9,757.3	4,113.6	816.3	19.8%	4,199.7	856.7	20.4%	2.37x	11.95x	2.32x	11.39x
A. O. Smith Corporation	57.24	8,648.5	3,750.8	718.4	19.2%	3,714.4	737.5	19.9%	2.31x	12.04x	2.33x	11.73x
Watts Water Technologies, Inc.	146.23	4,828.4	1,966.1	364.8	18.6%	1,963.5	353.2	18.0%	2.46x	13.23x	2.46x	13.67x
Evoqua Water Technologies	39.60	5,652.6	1,797.5	309.6	17.2%	1,874.0	325.8	17.4%	3.14x	18.26x	3.02x	17.35x
Average	\$128.47	\$37,521.8	\$7,434.6	\$2,046.4	21.8%	\$7,505.7	\$2,075.3	22.1%	3.66x	16.45x	3.58x	15.81x

Source(s): S&P CapIQ \$USD, Millions besides Stock Price

	Stock Price	Enterprise		CY2022A			CY2023E		TEV/2	022A	TEV/2	2023E
	12/31/22	Value	Revenue	EBTIDA	Margin	Revenue	EBITDA	Margin	Revenue	EBITDA	Revenue	EBITDA
Components												
Graco Inc.	67.26	11,069.4	2,144.4	634.5	29.6%	2,197.0	659.8	30.0%	5.16x	17.44x	5.04x	16.78>
Flowserve Corporation	30.68	5,158.8	3,572.8	293.5	8.2%	3,902.9	433.5	11.1%	1.44x	17.58x	1.32x	11.90>
Franklin Electric Co., Inc.	79.75	3,973.9	2,037.9	311.0	15.3%	2,058.4	308.9	15.0%	1.95x	12.78x	1.93x	12.86>
Mueller Water Products, Inc.	10.76	2,007.9	1,264.8	185.3	14.6%	1,335.9	218.3	16.3%	1.59x	10.84x	1.50x	9.20x
The Gorman-Rupp Company	25.62	1,087.1	520.2	71.7	13.8%	617.0	98.0	15.9%	2.09x	15.16x	1.76x	11.09>
Energy Recovery, Inc.	20.49	1,076.1	124.2	27.9	22.5%	137.4	24.6	17.9%	8.67x	38.60x	7.83x	43.81x
Average	\$39.09	\$4,062.2	\$1,610.7	\$254.0	17.3%	\$1,708.1	\$290.5	17.7%	3.48x	18.73x	3.23x	17.61x
Infrastructure												
AECOM	84.93	13,678.3	13,259.0	915.9	6.9%	14,166.9	988.6	7.0%	1.03x	14.93x	0.97x	13.84x
Tetra Tech, Inc.	145.19	7,979.6	2,874.0	366.2	12.7%	3,087.1	405.6	13.1%	2.78x	21.79x	2.58x	19.67x
Clean Harbors, Inc.	114.12	8,425.5	5,133.1	1,017.0	19.8%	5,241.6	1,014.4	19.4%	1.64x	8.28x	1.61x	8.31x
EMCOR Group, Inc.	148.11	7,368.0	10,994.3	653.0	5.9%	11,728.2	729.5	6.2%	0.67x	11.28x	0.63x	10.10x
Arcosa, Inc.	54.34	3,258.3	2,220.2	325.6	14.7%	2,154.6	305.1	14.2%	1.47x	10.01x	1.51x	10.68×
Primoris Services Corporation	21.94	2,417.0	4,416.1	283.7	6.4%	5,244.7	361.2	6.9%	0.55x	8.52x	0.46x	6.69x
Average	\$94.77	\$7,187.8	\$6,482.8	\$593.6	11.1%	\$6,937.2	\$634.1	11.1%	1.36x	12.47x	1.29x	11.55x
Low	\$10.76	\$185.4	\$91.9	\$14.3	5.9%	\$118.1	\$21.0	6.2%	0.55x	8.28x	0.46x	6.69x
Mean	\$86.70	\$16,423.9	\$4,324.9	\$942.1	22.3%	\$4,488.6	\$984.9	23.0%	3.90x	16.41x	3.71x	15.22>
Median	\$67.26	\$5,652.6	\$2,220.2	\$364.8	19.2%	\$2,197.0	\$405.6	18.0%	2.63x	16.77x	2.58x	13.84×
High	\$265.42	\$209,988.9	\$30,805.8	\$10,608.4	53.2%	\$30,721.2	\$10,550.5	55.4%	10.49x	38.60x	9.72x	43.81x
Source(s): S&P CapIQ												

\$USD, Millions besides Stock Price

The McLean Group Premier middle market investment bank

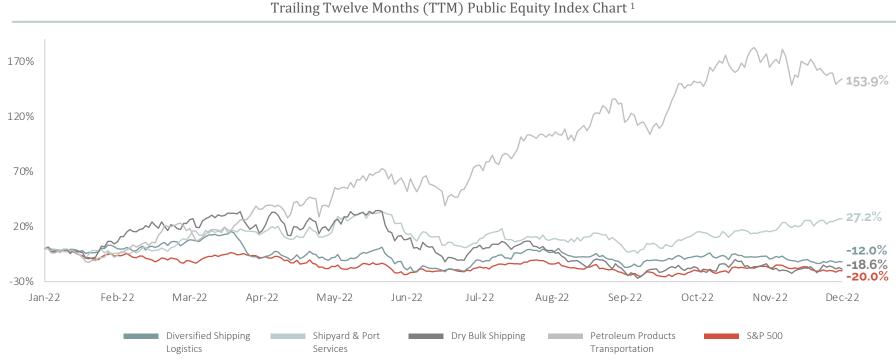
Key Trends / Takeaways

- Container spot rates have risen and fallen dramatically in the last three years. The especially steep increase in 2021 due to COVID-related supply chain disruptions caused shipping rates to reach a historical high of nearly \$10,400 USD in September of 2021. By November of 2022, the global fright rate index stood at \$2,400 USD, a decrease of over 75% from just one year earlier.
- The dramatic decrease in spot rates (which are used to determine the freight rates in just 10% of ocean cargo) has had little impact on the bottom lines of container shipping companies whose terms are governed by contracts negotiated directly between carrier and cargo shipper which have increased rates in 2022. The dual impact of falling oil prices and rising contract rates have resulted in record high profits for container shipping companies which is expected to reach \$256 billion for 2022.
- The container shipping industry's record-breaking profits in 2022 have drawn criticism from both workers and politicians considering the industry's outsized impact on inflation – the International Monetary Fund estimates that the increase in shipping costs observed in 2021 alone increased 2022 inflation by 1.5%.

In the UK, dock workers upset that inflation is outpacing wage gains have gone on strike at some of the nation's largest ports and caused further supply chain disruptions. In and effort to address public outrage and control global inflation, political leaders have introduced legislature targeting the shipping industry. In July of 2022, France's National Assembly narrowly rejected a tax on windfall profits by energy and transportation companies while in the U.S. President Biden signed the Ocean Reform Act which empowers the Federal Maritime Commission to prevent carriers from unreasonably denying unused cargo space to U.S. exports and to investigate late fees charge by container lines.

Marine Money hosted a successful finance forum in November 2022. A theme running through the many speeches, presentations and panel discussions was the strong recovery in offshore oil and marine petroleum transport markets. As oil prices have risen and demand has firmed up, offshore service vessel day rates and utilization factors have elevated rapidly. American marine industry CEO's and analysts predict robust growth through 2023, despite warnings of a global economic slowdown. There was also a great deal of discussion surrounding the development of offshore wind projects, which could boost maritime shipyards and operators in the U.S. in the next few decades.

Source(s): Statisa, Bloomberg, IMF, NPR



Commentary

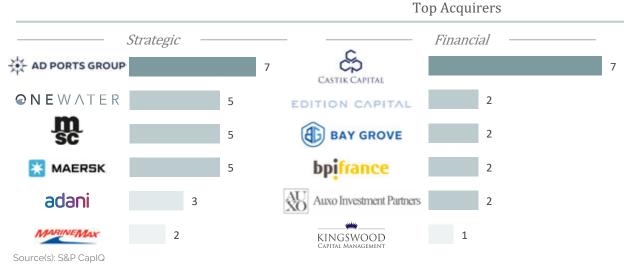
- The petroleum products transportation industry massively outperformed TMG's other indices on account of historically high charter rates as
 geopolitical tensions associated with the Russia/Ukraine war caused higher insurance premiums and longer shipping routes for oil cargo
- Both TMG's shipping logistics and dry bulk shipping indices largely tracked the S&P 500 in 2022 ending down 12.0% and 18.6% respectively on account of global macro economic pressures including increased interest rates and an anticipated recession dragging down global shipping
- The Shipyard and Port Services industry outperformed the S&P in H2-2022 as rates and utilization remained high across the industry

Source(s): S&P CapIQ 1. For index composition, please see page 35

The McLean Group Premier middle market investment bank



Q1 2019 Q2 2019 Q3 2019 Q4 2019 Q1 2020 Q2 2020 Q3 2020 Q4 2020 Q1 2021 Q2 2021 Q3 2021 Q4 2021 Q1 2022 Q2 2022 Q3 2022 Q4 2022



Commentary -

Throughout 2022, many strategic buyers focused their acquisition efforts on shoring up their supply chain resiliency and flexibility. Large shipping companies such as Maersk and MSC continued their vertical integration strategy by acquiring logistics companies to support their endto-end offering.

The McLean Group

Premier middle market investment bank

Select Precedent Transactions



Date: 3/23/22 Size: \$1,757.3M EBITDA Multiple: N/A

J.F. Hillerand is a market leader in the ocean forwarding industry with a focus on the food & beverage and non-hazardous bulk liquids markets. The combined entity will benefit from Hillebrand's know-how in the growing bulk liquids market and provide DHL customers access to specialized services in addition to its global air, ocean, and freight network.

Transaction Details ———



Date: 4/7/22* Size: \$4,418.5M EBITDA Multiple: 60.2x

Transaction Details ______ The proposed merger between two of Europe's largest crude oil shipping companies has been approved by their respective board, but delayed until 2023 pending legal approval. The combined entity will create a leading independent oil tanker owner/operator and synergies totaling over \$60M annually.



Date: 5/2/22 Size: \$1,800.0M EBITDA Multiple: N/A

Transaction Details _____

Pilot is a leading U.S.-based supply chain provider with cross-boarder solutions in Canada and Mexico. Maersk's acquisition strengthens its position as an end-to-end distributor in North America. The combined entity will offer B2B and B2C customers over 150 distribution facilities with limited customer handoffs for origin to end-customer.

clipper acquired by

Date: 5/24/22 Size: \$1,561.0M EBITDA Multiple: 13.3x Transaction Details _____

Clipper provides value-added logistics service to the retail sector in Europe including return management, warehousing, and transportation. Clipper adds a highly complementary customer base to the GXO platform including a geographic presence in Germany and Poland as well as additional competencies in life sciences and return management.



Date: 8/31/22 Size: \$3,760.0M EBITDA Multiple: 16.0x

Transaction Details ———

LF Logistics is a Hong Kong-based logistics company with capabilities including e-commerce, fulfilment services, and inland transportation in the Asia Pacific region. Maersk's acquisition adds 223 warehouses and over 10,000 employees furthering the Company's goal to support customers needs as an endto-end partner in the control of assets.



Date: 12/21/22 **Size:** \$6,442.1M **EBITDA Multiple:** N/A

Transaction Details ———

MSC's wholly owned subsidiary, SAS Shipping Agencies Services, completed its acquisition of Bolloré Africa Logistics, one of Africa's largest logistic and shipping companies. MSC intends to enhance the continents connectivity with the rest of the world and reiterated their commitment to the regions economic development including ships and shipyards.

Source(s): S&P CapIQ * announcement date

Closed				EV	Enterpris	e Value /
Date	Acquirer(s)	Target(s)	Target Description	(\$M)	Revenue	EBITDA
1/3/2022	Garmin	Vesper Marine	Designs and manufactures marine safety products	NA	NA	NA
1/25/2022	West Indies Petroleum; Port Hamilton Refining and Transport	Limetree Bay Terminals	Operates a terminal that stores, blends, and disctributes oil	\$62.1	NA	NA
1/27/2022	Hafnia Limited	Chemical Tankers	Shipping Company focused on the transportation of chemicals	NA	NA	NA
3/16/2022	MML Capital Partners; Bpifrance Investissement	L.V. Overseas	Offers international freight forwarding services	\$248.2	NA	NA
3/23/2022	DHL Global Forwarding	J.F. Hillebrand Group	Freight forwarder focused on transporation of food/beverage products and bulk liquids	\$1,757.3	1.07x	NA
4/5/2022	Suntex Marina Investors	Westrec Marina Management	Manages marina facilities in fresh and salt- water environments	NA	NA	NA
4/7/22*	Frontline	Euronav	Engages in the transportation and storage of crude oil	\$4,418.5	10.39x	60.20x
5/2/2022	A.P. Møller - Mærsk	Pilot Freight Services	Provides transportation and logistics services internationally	\$1,800.0	NA	NA
5/23/2022	Resolve Marine Group	MAC Enterprises	Offers welding, diving, and chartering services in Alaska	NA	NA	NA
5/24/2022	GXO Logistics	Clipper Logistics	Provides value-added logistics services to the European retail sector	\$1,561.0	1.44x	13.34x
6/2/2022	A.P. Møller - Mærsk	SENATOR INTERNATIONAL	Provides freight, shipping, distribution, and warehousing services internationally	\$644.0	NA	NA
7/15/2022	Gadot Chemical Tankers and Terminals	Haifa Port Company	Owns and operates the Port of Haifa in Insrael	\$562.7	2.33x	8.03x
8/4/22*	Fairfax Financial Holdings; Ocean Network Express	Atlas Corp	Asset manager and operator of containerships	\$10,683.5	7.00x	9.20x

Source(s): S&P CapIQ

Closed	Acquirer(s)	Target(s)	Target Description	EV	Enterpris	e Value /
Date	Acquirer(s)	Target(s)	Taiget Description	(\$M)	Revenue	EBITDA
8/31/2022	A.P. Møller - Mærsk A/S	LF Logistics	Offers logistics services internationally	\$3,760.0	2.89x	16.00x
8/31/2022	Alfa Laval Corporate	Scanjet	Manufactures tank cleaning equipment and marine protection systems	NA	NA	NA
9/1/2022	Kotug International	Seaways International	Operates offshore support vessels for the oil and gas industry	NA	NA	NA
9/13/2022	StormGeo Holding	BunkerMetric	Offers a SaaS solution for bunker procurement optimization	NA	NA	NA
10/1/2022	MarineMax	Island Global Yachting	Owns and manages luxury-yacht marinas	\$580.0	NA	NA
10/3/2022	Marlink	Satellite communications business of Hellenic Radio Services	Comprised of satellite and terrestrial network solutions	NA	NA	NA
10/4/22*	Hapag-Lloyd Aktiengesellschaft	SAAM Ports S.A./SAAM Logistics	Offers port services including shipping, loading, and warehousing	\$1,137.0	NA	NA
11/14/2022	Bollinger Shipyards	VT Halter Marine	Provides shipbuilding services	\$15.0	NA	NA
12/21/2022	Mediterranean Shipping	Bollore Africa Logistics	Offers transportation and logistics services in Africa	\$6,442.1	NA	NA
12/29/2022	SalMar	NTS ASA	Integrated aquaculture Company engaged in the Norwegian fishing industry	\$3,801.1	4.99x	17.59x

Defense, Government & Intelligence

Defense Primes	
Lockheed Martin	LMT
Northrop Grumman	NOC
General Dynamics	GD
L3Harris Technologies	LHX
Government Contractors	
Leidos	LDOS
Jacobs Engineering	J
Booz Allen Hamilton	BAH
SAIC	SAIC
CACI International	CACI
Parsons	PSN
ICF International	ICFI
V2X	VVX
VSE	VSEC
Defense Systems	
HEICO	HEI
Teledyne Technologies	TDY
Elbit Systems	ESLT
Mercury Systems	MRCY
Kratos Defense & Security	KTOS

Security Services		
Securitas AB	SECU B	
The Brink's Company	BCO	
Prosegur	PSG	
Loomis AB	LOOMIS	
Security Solutions		
Honeywell International	HON	
Johnson Controls International	JCI	
Motorola Solutions	MSI	
ADT	ADT	
Allegion	ALLE	
Vivint Smart Home	VVNT	
Alarm.com Holdings	ALRM	
Napco Security Technologies	NSSC	
Arlo Technologies	ARLO	
Cyber Security		
Fortinet	FTNT	
Check Point Software Tech.	SHKP	
SolarWinds	SWI	
Varonis Systems	VRNS	
Tenable Holdings	TENB	
NetScout System	NTCT	
SecureWorks	SCWX	

Critical Infrastructure		
Water Utilities		
American Water Works	AWK	
Essential Utilities	WTRG	
California Water Service	CWT	
American States Water	AWR	
SJW Group	SJW	
California Water Service Group	CWT	
Consolidated Water	CWCO	
System Solutions		
Danaher	DHR	
Dover	DOV	
Xylem	XYL	
IDEX	IEX	
Pentair	PNR	
A. O. Smith	AOS	
Watts Water Technologies	WTS	
Evoqua	AQUA	
Components		
Graco	GGG	
Flowserve	FLS	
Franklin Electric	FELE	
Badger Meter	BMI	
SPX FLOW	FLOW	
Mueller Water Products	MWA	
The Gorman-Rupp	GRC	
Energy Recovery	ERII	
Infrastructure		
AECOM	ACM	
Tetra Tech	TTEK	
Clean Harbors	CLH	
EMCOR Group	EME	
Arcosa	ACA	

Maritime Transport & Facilities

Diversified Maritime Logistics	
Atlas	ATCO
Matson	MATX
Kirby	KEX
ArcBest	ARCB
Diana Shipping	DSX
Shipyard & Port Services	
FTAI Infrastructure	FIP
Great Lakes Dredge & Dock	GLDD
Tidewater	TDW
Orion Group	ORN
DEME Group NV	DEME
Dry Bulk Shipping	
Costamare	CMRE
Star Bulk Carriers	SBLK
Golden Ocean Group	GOGL
Danaos	DAC
Global Ship Lease	GSL
Safe Bulkers	SB
Eagle Bulk Shipping	EGLE
Genco Shipping & Trading	GNK
Petroleum Products Transport	ation
Scorpio Tankers	STNG
International Seaways	INSW
Teekay Tankers	TNK
Overseas Shipholding Group	OSG
Nordic American Tankers	NAT
Ardmore Shipping	ASC







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