



Financing Amid Uncertainty

Acquisitions and Capital Markets in the Security Industry

March 7, 2023

Introduction

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SIA Investment Trends Committee Overview

Mission: To increase availability of security industry related Capital Markets, M&A and Investment Information to participants in the industry.

Elements:

- Periodic Webinars on investor related topics
- Periodic Reports on investor related topics
- Registry of Investors interested in the industry
- Advocacy for an annual SIA report on the industry growth and key metrics in partnership with a world-class research organization
- Event(s) for CEOs and/or Investors at SIA conferences ISC and SNG
- Promotion of the industry to the financial media

Committee Members Targets:

 Executives including: CFO's, Corporate Development (M&A), Investor Relations, Investors (private or public), Investment Banking Research Analysts, Investment Banking Corporate Finance, Senior Lenders

Committee Members Speaking Today:

- John E. Mack III Chairperson Imperial Capital
- Alper Cetingok Raymond James
- John Robuck Capital One



Security Industry Capital Markets Overview and Select Industry Trends and Highlights

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Investment Insights

WALL STREET PERSPECTIVES

- Capital Markets and M&A Activity Normalized Since 2021 2022 deal volume for both debt capital markets and M&A have decreased since 2021 levels due to stock market volatility, global economic uncertainty, and higher cost of debt capital
- M&A Levels Decreased 2022 saw 34,941 deals representing \$4.2 trillion in M&A, a YoY decrease compared to 40,403 deals totaling \$5.5 trillion in 2021
 - There have been 5,487 deals representing \$454.6 billion in M&A year-to-date in 2023, compared to 8,285 deals representing \$842.3 billion in M&A in the same period in 2022⁽¹⁾
- Dow Recovering The Dow is up ~16% from its 52 week low but still remains ~9% from its all time high
 - Indexes have struggled this year on the backs of high global inflation and geopolitical conflict

PRIVATE EQUITY PERSPECTIVES

- Private Equity Deals Off Record Levels U.S. Private Equity dealmaking decreased, particularly in the second half of 2022, with 7,495 deals closed for an aggregate \$922 million, versus 9,120 deals in 2021 at an aggregate value of \$1.3 trillion
- Valuations Remain High Despite decreasing deal flow, the median PE EV/EBITDA multiples have increased to 11.4x in 2022, up from 11.0x in 2021, but these multiples have been declining in the second half of 2022 and into 2023
- **Growth Equity Increasing** Growth equity (minority investment) deal activity has decreased in 2022, returning to prepandemic levels as PE investors look to find alternative structures in a very competitive market

Investment Insights (Cont.)

CAPITAL MARKETS

- Uncertainty around global inflation and economic volatility made investors more cautious about deploying large amounts
 of capital into both equities and the debt markets
- Worldwide IPO deals and proceeds were down YoY with 1,671 deals totaling \$179.7 billion in 2022, compared to 3,260 deals totaling \$626.6 billion in 2021
 - There have been 422 IPOs totaling \$24.1 billion year-to-date in 2023, compared to 485 IPOs totaling \$41.1 billion in the same period in 2022⁽¹⁾
- 2022 Debt Capital Markets have deteriorated with less issuances and new issuance of leveraged loans and high-yield bonds effectively stopping in the back half of 2022

M&A

- Corporate M&A deals are down YoY with 22,514 deals totaling \$2.5 trillion in 2022, compared to 25,708 deals totaling \$3.2 trillion in 2021
 - There have been 3,687 corporate M&A deals representing \$300.2 billion in corporate M&A year-to-date in 2023, compared to 5,421 deals representing \$620.0 billion in M&A in the same period in 2022⁽¹⁾
- **Higher borrowing costs and equity markets volatility have made M&A more difficult**, but despite the challenges, buyers took advantage of cheaper prices, resulting in M&A value still being almost 20% higher than pre-pandemic levels
- The pipeline for Security Industry Private Equity investment remains strong, despite market volatility, with consistent activity expected over the next few years

Source: S&P Global, Pitchbook

(1) YTD as of 03/03/23



Economic Data

	2022A	Q1 2023E	Q2 2023E	Q3 2023E	Q4 2023E	2023E
Real Global GDP (% Y/Y annualized)	3.4*	-	-	-	-	2.6
Real U.S. GDP (% Q/Q Annualized)	2.1	1.0	0.5	-1.0	-2.0	1.0
CPI Inflation (% Y/Y)	8.0	5.8	4.4	3.7	3.2	4.3
Core CPI Inflation (% Y/Y)	6.1	5.5	4.9	4.0	3.3	4.4
Unemployment Rate, Period Average (%)	3.6	3.4	3.3	3.6	4.1	3.6
Fed Funds Rate, End Period (%)	4.33	4.88	5.38	5.38	5.38	5.38

GLOBAL ECONOMIC OUTLOOK

- The Global economy is projected to slow in 2023, growing 2.6% compared to 3.4% in 2022
- China and India are expected to account for 50% of global growth, and the slowdown will be more pronounced for advanced economies
- Global headline inflation is expected to fall from 8.8% in 2022 to 4.3% in 2023, with core inflation remaining elevated
- China's reopening and Russian Ukraine conflict are central themes in the global economy
- Central banks are expected to keep rates elevated until sustained declining inflation

Source: BAML Capital Market Outlook, January 31, 2023. Deloitte U.S. Economy Outlook 2023. IMF Global Economic Outlook 2023.

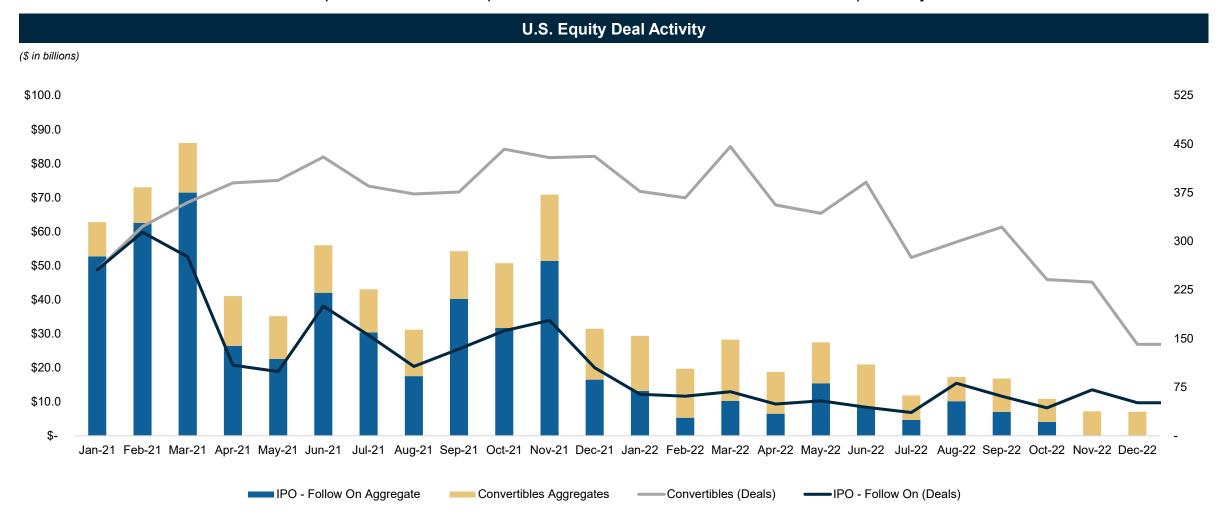
U.S. ECONOMIC OUTLOOK

- Consumer savings rate decreases as consumers normalize behavior post COVID-19
- The housing sector has cooled off as the Fed has raised interest rates and inflation have moved long term interest rates
- Businesses are reconsidering their supply chain structure as European demand for US exports have decreased due to the Russia supply chain conflict and US-China conflict remains high
- Fiscal stimulus has largely reversed as inflation remains high, though government deficits remain high
- Employment numbers have recovered while labor force participation remains lower than pre-pandemic levels



Equity Markets Overview

 2022 equity deal volumes were down versus prior year levels in aggregate, with \$108.0 billion of common stock proceeds and \$130.6 billion of convertibles proceeds. This compares to \$465.4 billion and \$169.9 billion, respectively, in 2021

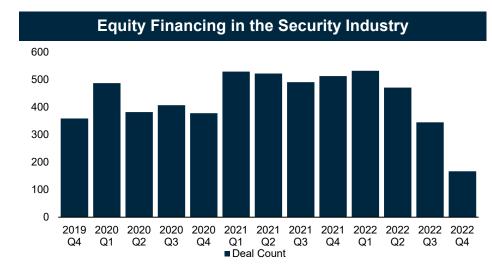




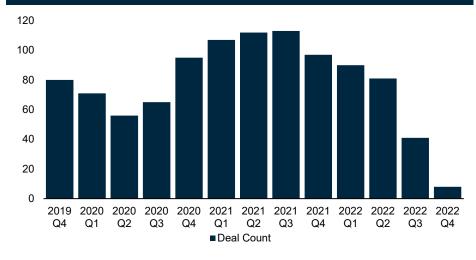
Security Industry Investment Trends

Capital Markets Activity in the Security Industry

- Private Placements Private placements and registered direct offerings have decreased in 2022
 vs. 2021. Notable transactions include:
- Brivo received \$75 million of debt financing in the form of a senior secured credit facility from Runway Growth Capital. Brivo develops and supplies SaaS building access management services and connected devices
- Verkada completed its Series D funding with a \$205 million investment led by Linse Capital.
 Verkada develops and offers a cloud-based video management software that enables users to manage physical security
- Stairwell completed its Series B funding with a \$45 million investment led by Section 32. The
 Company develops Software as a Service (SaaS) based cybersecurity solutions
- Arctic Wolf completed its 8th round of funding with a \$401 million investment led by Owl Rock Capital Group. The Company is a developer of a cybersecurity platform designed to keep valuable business data safe
- Kneron completed its Series B round of funding with a \$48 million investment led by Horizons Venture Limited. Kneron engages in the design and development of integrated software and hardware edge AI solutions for AIoT, smart home, smart surveillance, security, mobile devices, robotics, and industrial control applications
- ADT completed a \$1.2 billion PIPE transaction with State Farm Fire and Casualty Company acquiring 15% stake in ADT. ADT provides security, automation, and smart home solutions to consumer and business customers in the United States
- Fortanix completed its Series C funding with a \$90 million investment led by West Street Capital
 Partners. The Company develops security solutions for mobile, cloud, and enterprise platforms

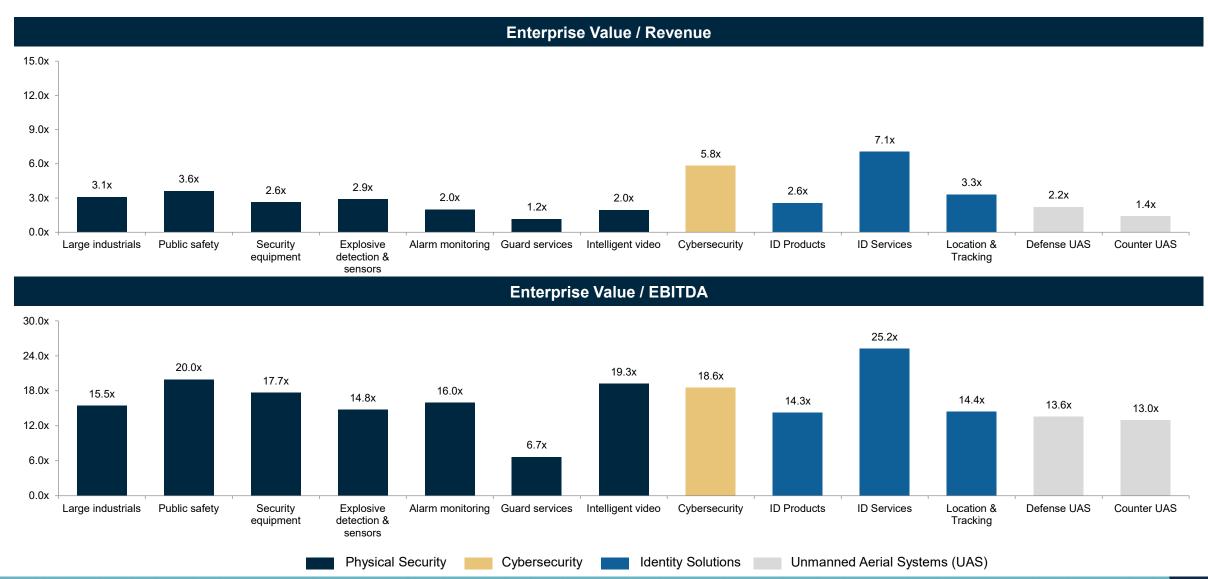






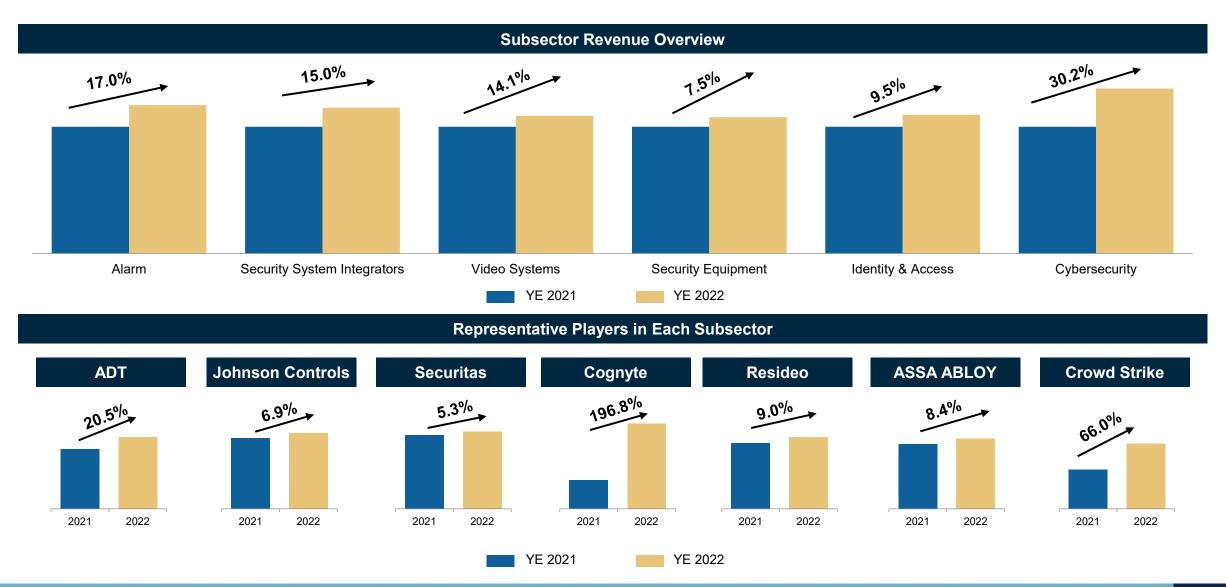


Security Industry Valuations





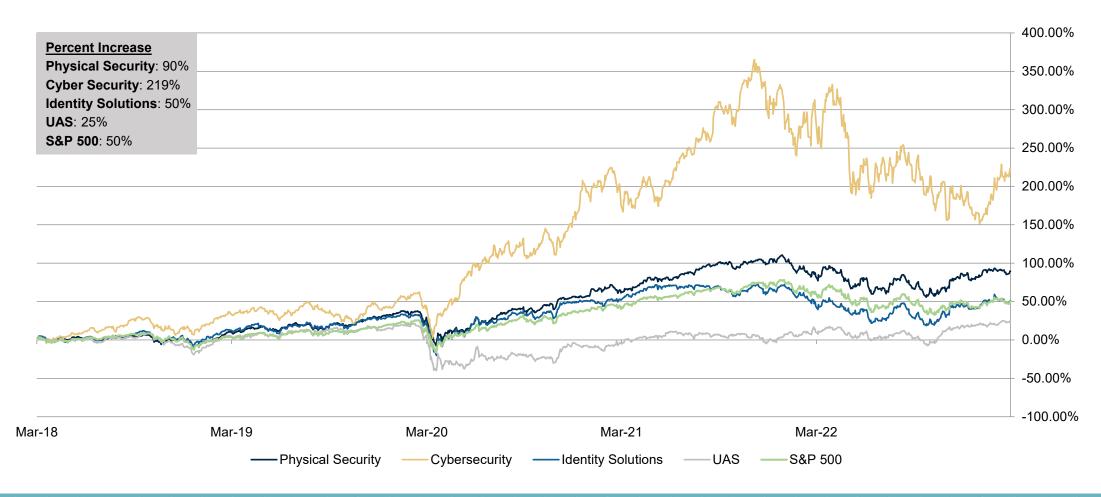
Security Industry Revenue Overview





Security Industry Trading Data

• In the last five years, Cybersecurity and Physical Security have outperformed the S&P while Identity Solutions tracks it and UAS has underperformed the broader market





Select Industry Trends and Highlights

2023 Megatrends in the Global Security Industry

Cybersecurity of Physical Security

Cybersecurity risk on Physical Security reflects "real world" impact from cyber attacks, such as critical infrastructure

2 Artificial Intelligence

Artificial intelligence becoming vital to produce actionable intelligence produced by data from modern security solutions

Workforce
Development

Workforce development and training of talent with technical skillsets is increasing as shortages continue to be for integrators (competent installers and technicians), networking/IT and cybersecurity

Changing Economic Conditions

Changing economic conditions have already limited the number of investments and acquisitions taking place in the market

Ethical/Safe Use of Data and Technology

Ethical/Safe use of data and technology has increased in importance as frameworks are being created to ensure that the powerful technologies (like Al-enabled systems) and the data lakes created are used for good

2023 Megatrends in the Global Security Industry (Cont.)

Elimination of Industry's Boundaries

Elimination of industry's boundaries adoption is increasing as solutions become multi-purpose and customers demand business operational insights and efficiencies

7 Security as a Service

Security as a service has expanded with the increase of cloud-based technology and is becoming more normalized as a business model for recurring revenue that will prove extremely valuable during periods of economic downturn when new installations could diminish

8 Supply Chain Assurance

Supply chain assurance consists of several concerns: (1) The capability to obtain components, raw materials and finished products; (2) The ability for customers to be able to fully trust the source code used on devices installed (3) Loss of exclusive purchasing arrangements with longstanding customers

9 Autonomous Devices **Autonomous devices** are advancing to connect improved robotics with Al-embedded intelligence, removing the need for remote-controlled solutions and better interact with the built environment

Proliferation of Sensors

Proliferation of sensors across all industries has resulted from the proliferation of IoT and has led to rapid "sensorization" of the built environment to support smart building/smart city projects

Security M&A Drivers

Continued
Expansion of
Cloud & Hybrid
Cloud

Growth of AI & Machine Learning

Security Alarm & Adjacent Industries Convergence

Security as PropTech







Physical Security & Cybersecurity Convergence





Growth of AI and Machine Learning

- By utilizing Artificial Intelligence (AI) and Machine learning (ML) in the cloud, enterprises are able to enhance performance and efficiency, and drive digital transformation
- All and ML assist automating routine activities within IT infrastructure, increasing its productivity and enhancing the performance and efficiency
 of organizations. Enterprises are able to fill skill gaps and labor shortages through increased automation and the adoption of Al & ML
- In the Security Industry, integration of AI & ML will help drive automation and threat detection solutions. Primary use cases of AI and ML in security include:
 - Video Surveillance / Analytics: More powerful, reliable and accurate video surveillance coupled with enhanced facial recognition and crowd monitoring
 - Access Control: Enhanced monitoring of sites, ability to alert human personnel rapidly and the protection sensitive data and diagnose issues
 - Robot / Drone Patrols: Automatic patrolling, detection of strangers and objects, and transmitting data to monitoring guards







Security Alarm & Adjacent Industries Convergence



Physical Security & Cybersecurity Convergence





Source: IBM, Omidia.

Continued Expansion of Cloud & Hybrid Cloud

- Many companies have been migrating their services and data to the cloud to increase efficiency and performance real-time, with the Covid-19 pandemic as one of the factors driving the need to increase the pace of enterprise digitization
- According to McKinsey, most enterprises aspire to have \$8 out of every \$10 for IT hosting go toward the cloud, including private cloud, infrastructure as a service (laaS), platform as a service (PaaS), and software as a service (SaaS) by 2024
- The security industry has seen slower adoption of cloud solutions due to migration issues with existing security infrastructures. Hybrid cloud solutions have been helping with cloud migration, however. A recent study by Nutanix highlighted that 50% of interviewed companies expect to implement hybrid cloud solutions by 2026



Workload Placement and Optimization

Workload placement can be reduced to save 10-30% on cloud spend



Cloud Operating Model

Analytics, automation, and Al save an estimated 30-50% in ongoing run operations



Secure and Compliant

Cloud services are centered around security and compliance to protect business-critical workloads and data



Easy to Consume

Standardized service can be provisioned in minutes in a SaaS Opex model, which improves agility and can save 50% in start-up time

Security as PropTech





Growth of AI & Machine Learning



Security Alarm & Adjacent Industries Convergence



Continued Expansion of Cloud & Hybrid Cloud

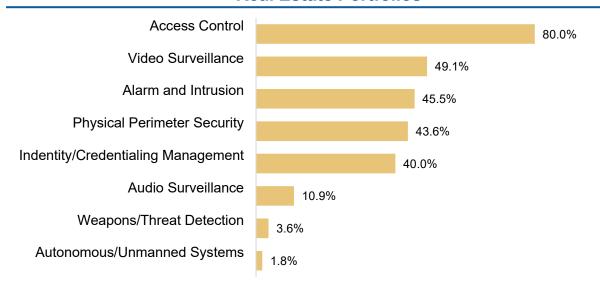


Source: Accenture, Mckinsey.

Security as PropTech

- The rise of PropTech coincides with the movement toward the unification of security systems, with smart security being central to the digitization of real estate
- In 2021, \$32 billion was invested in PropTech highlighting the burgeoning importance of the modernization of real estate on the security solutions market
- The growing number of smart buildings are integrating various security verticals including access control, video surveillance & analytics, security alarm and a host of other smart home security solutions to provide a comprehensive security solution
- This comprehensive offering helps generate data that property managers can leverage to study the efficient use of buildings, and ultimately, enhance the experience of residents and tenants
- The COVID-19 pandemic has accelerated the adoption of smart security solutions in real estate driven by increased demand for flexible and contact-less work and residential environments

Security Solutions Deployed Across Commercial Real Estate Portfolios



Physical Security & Cybersecurity Convergence





Continued Expansion of Cloud & Hybrid Cloud



Growth of AI & Machine Learning

Security Alarm & Adjacent Industries Convergence



Security as PropTech



Source: SIA, Pitchbook.

Convergence of Physical Security and Cybersecurity

- The distinction between physical security and cybersecurity is becoming increasingly blurred, resulting in the importance of jointly protecting security devices and digital assets and physical assets
- While the use of smart devices is growing, these devices leaves companies vulnerable to hackers who can use connected devices as an entry point to the security system
- Converged security is growing and can provide end-users a holistic threat management to secure both physical and cyber assets as well as be prepared to prevent, mitigate, and respond to complex threats

Recent Industry Examples



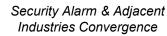
In November 2022, Axis partnered with SecuriThings, an IoTOps solution provider, to help protect devices from cyber threats and improve device management



In November 2022, Honeywell released a new cybersecurity solution, designed to assist customers in defending industrial control systems and operations



In August 2022, Johnson Controls invested in Nozomi Networks, an IoTOps solution provider, allowing Johnson controls to use Nozomi's cybersecurity services







Security as PropTech

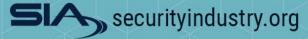
Growth of AI & Machine Learning



Physical Security & Cybersecurity Convergence

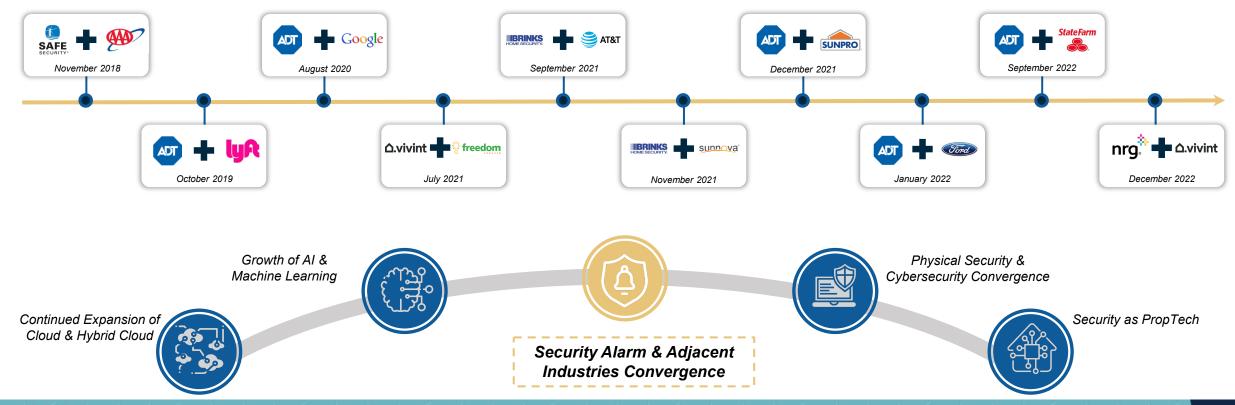


Continued Expansion of Cloud & Hybrid Cloud



Continued Convergence of Security Alarm & Adjacent Industries

- The Security Alarm Industry has seen a large increase in partnerships and acquisitions in adjacent non-security markets in recent years, led
 by top players ADT, Vivint and Brinks Home Security
- The partnerships have been primarily focused on finding new customers to cross-sell products and to create more comprehensive offerings that go beyond the home



M&A and Market Overview

Alper Cetingok

Senior Managing Director Group Head, Diversified Industrials Sector Head, Security & Safety

Raymond James

Factors Influencing the Current M&A Environment

Given the prevailing geopolitical and economic factors that are dominating the news cycle, the backdrop for transaction activity in 2023 remains uncertain as sellers and acquirors search for direction amid continued ambiguity about near- and intermediate-term market drivers

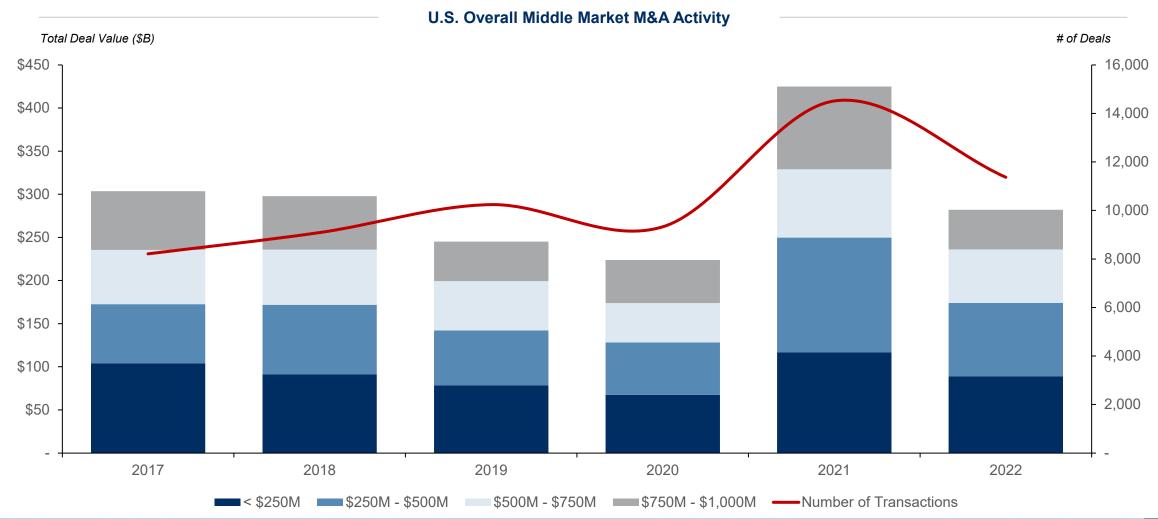
• Real GDP experienced another sequential quarter-over-quarter increase, rising at an annual rate of 2.9% in the fourth **Economic** quarter of 2022⁽¹⁾ **Conditions** However, inflation continues to dominate headlines and public market sentiment, with CPI reaching 6.5% in December After record-level increases in many equity market indices, markets are currently experiencing significant volatility, driven primarily by questions over the long-term health of the economy **Equity Markets** Despite near-term expectations for continued volatility, investors remain committed to deploying capital in the equity markets • In response to record levels of inflation, the Fed raised interest rates seven times in 2022 to a Fed Funds range of 425-450 bps, with the market anticipating further rate hikes during the balance of 2023 **Credit Markets** • This has resulted in an increased cost of capital for corporate borrowers and a widening of spreads as investors take a "risk off" approach Despite declining valuations for many public companies, most strategic acquirors are well capitalized and remain **Strategic** committed to their inorganic growth initiatives **Participation** • The dislocation in the credit markets, and the corresponding impact it has had on private equity groups' ability to transact at the rapid pace experienced recently, has given strategics the opportunity to be more competitive in M&A processes • PE firms remain active participants in M&A processes; however, following record capital deployment over the past two **Private Equity** years and in light of current economic uncertainties, many firms are increasingly selective and fewer deals are progressing **Participation** to the finish line • The compression in public equity valuations has resulted in a normalization which is flowing into private markets as well, driving increasing valuation gaps between buyers and sellers **Valuation** Valuation multiples for recent M&A transactions have declined, although the delta to 2021/22 levels are moderate and tied



largely to the decline in leverage levels

Recent U.S. Middle Market M&A Activity

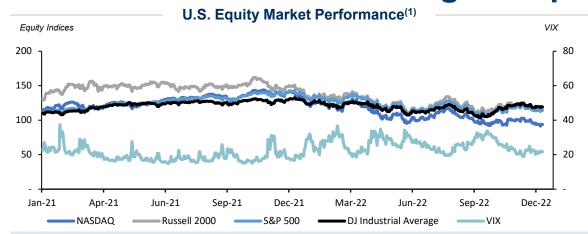
Overall U.S. middle market deal volumes and publicly disclosed deal values significantly declined year-over-year in 2022 following record volume in 2021



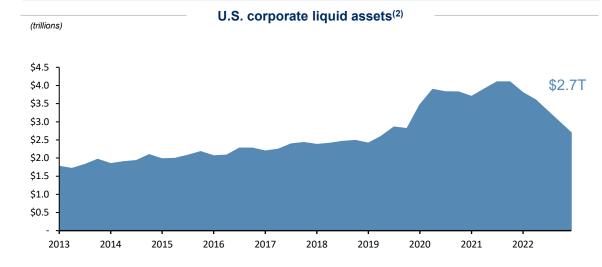


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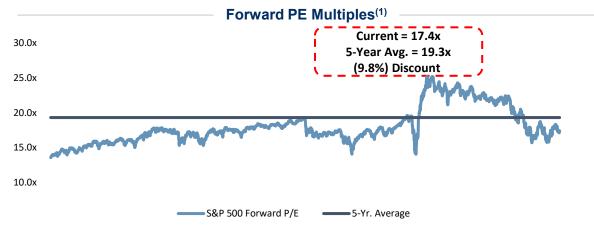
M&A Market Drivers – Strategic Acquirers



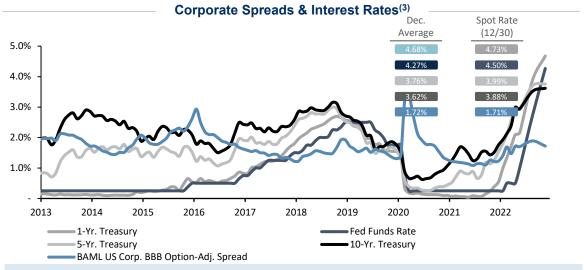
U.S. public equity markets declined in in 1H 2022 and have continued to trend downwards in 2H 2022



U.S. corporate businesses are estimated to have nearly \$2.7T in liquid assets as of the most recent reporting period, down significantly from Q4 2021



Public market trading multiples rebounded since late 2019 / early 2020 and continue to help support healthy M&A valuations



Interest rates began to rise at the end of 2021 as a result continued inflation, and have continued a rapid increase over the course of 2022

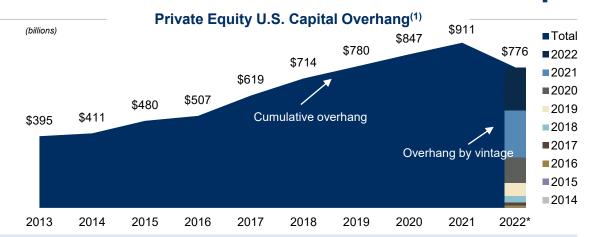


(1) Source: S&P Capital IQ. Data as of 12/31/2022.

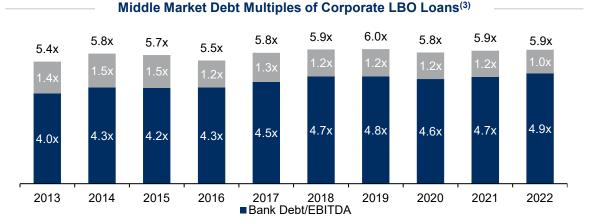
(2) Source: Federal Reserve Economic Data updated as of latest available (12/09/2022) for non-farm and non-financial U.S. companies.

(3) Source: Federal Reserve Economic Data. Chart data represents monthly averages.

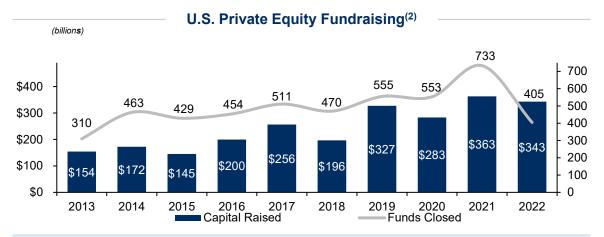
M&A Market Drivers – Financial Acquirers



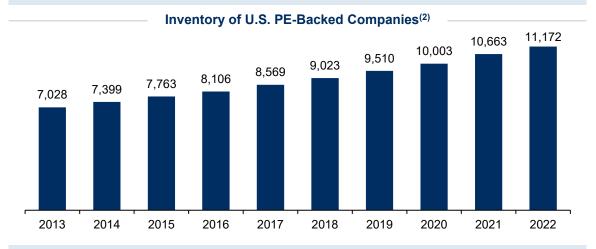
PE firms have substantial buying power with over \$775B in equity capital available to invest, prior to the use of leverage



The leveraged loan market remains robust and debt multiples have helped support overall M&A valuation levels



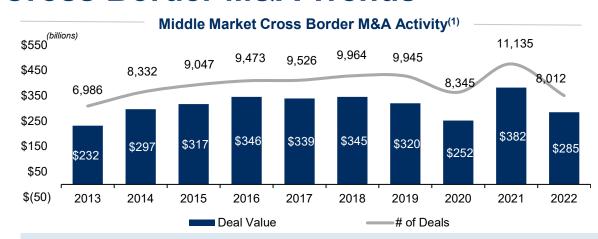
Total U.S. private equity fundraising in 2021 was down ~6% to ~\$343B, despite a reduction in funds raised of over 40%



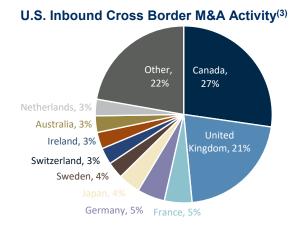
Since 2012, the number of U.S. PE-backed companies has increased nearly 59%, priming the market for future M&A sales



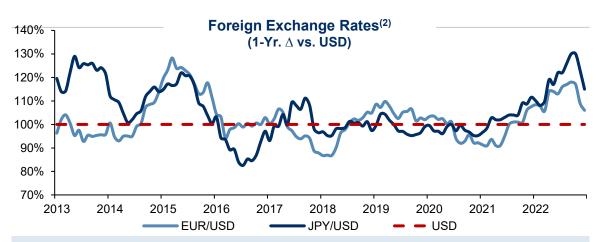
Cross Border M&A Trends



Global cross border YoY M&A volume decreased by ~28% while value decreased by ~25% as global trade slowed due to macro economics conditions

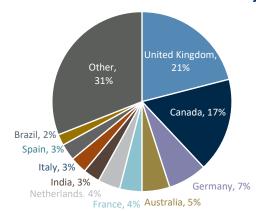


Canada, the UK, Germany and France represent over 50% of inbound cross border M&A activity since 2015



The EURO and JPY continued to appreciate against the U.S. dollar in 2022, with a recent decline in late 2022





Nearly 45% of recent outbound cross border transactions were with companies in the UK, Canada and Germany



- (1) Source: FactSet. Includes all cross border M&A transactions with deal value up to \$1,000M.
- (2) Source: Capital IQ.
- (3) Source: FactSet. Based on number of deals. Includes M&A transactions announced between 01/01/2017 and 12/31/2022 with deal value undisclosed or up to \$1,000M.

Security Industry M&A: Key Themes

- Following a robust 2021 which saw historical levels of transaction activity in the security industry, 2022 was slightly more muted but still meaningfully more active than the rest of the market on a relative basis
- The commercial sector continued to be the most active segment of the industry with access control, commercial monitoring, fire & life safety and video surveillance being most active markets
- While the volume of activity in the residential sector remained low, there were several notable transactions headlined by the State Farm investment in ADT and NRG's pending acquisition of Vivint
- Unlike many other industries, valuation levels in the security industry did not experience material declines due to macroeconomic dislocations, and in certain cases, the industry recorded record valuations, particularly for commercial-focused recurring revenue models
- 2022 also saw the continuation of the trend of increased activity from strategic acquirors, which is expected to continue into 2023

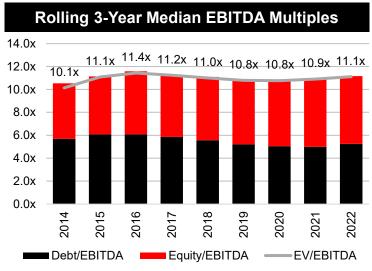
Private Equity Perspectives

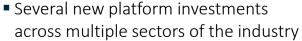
General

Security

- US PF deal volume and values declined in 2022 over 2021 levels, but still represented the second highest levels on record
- US middle-market PE activity was more insulated than large-cap transactions as debt availability for middle-market transactions did not decline as dramatically
- It is anticipated that PE activity will be muted during the first half of 2023 and pick up pace as the year progresses
- PE activity within the security industry continued at a rapid pace during 2022
- 2023 likely to be strong year for PE investment in the industry due to countercyclical, recession resilient nature of the industry and strong secular trends resulting in outsized







growth across a number of key sectors

Notable Transactions



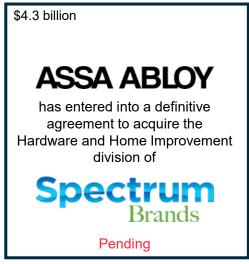






Security Industry M&A: Select Large-Cap Transactions













Security Industry M&A: Select Small-Cap/Mid-Cap Transactions





















Security Industry M&A: Select Small-Cap/Mid-Cap Transactions (cont.)





















Security Industry M&A: Select Small-Cap/Mid-Cap Transactions (cont.)











Market Focus: Remote Video Monitoring

The remote video monitoring (RVM) market is experiencing significant growth as a result of macro trends, such as the adoption of cloud-based surveillance, increasing use of Al and ML technologies and transition to managed services business models

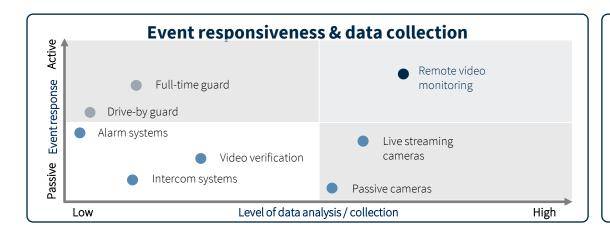
	Market Description	Business Models Utilized	Hardware Pricing	Solutions Offered
Video surveillance	 Industry historically dominated by hardware-centric solutions Responsive solutions based on recording and playback of incidents for evidentiary purposes Lack of business intelligence applications led to surveillance being perceived as only a security tool Characterized by very low margin profiles and minimal ROI to customers 	 One-time hardware sale with corresponding maintenance contracts 	\$\$\$	
Monitored video	 Provides hosted, or cloud-based, video surveillance services Adoption accelerating due to the transition from analog to IP and network video surveillance Data hosted through the cloud and delivered through web-based applications Architecture enabling scalability and remote viewing of multiple locations 	One-time sale of software licenses s	\$\$	
Managed video- as-a-Service	 Combines cloud-based architecture of the VSaaS ⁽¹⁾ platform with powerful analytics tools of video-based business intelligence Creates a business intelligence solution with minimal IT requirements and enterprise-class scalability Remains in nascent stages, but market adoption is accelerating 	 Contracted, subscription-based recurring revenue (i.e., RMR) 	\$	



Notes: (1) Video Surveillance-as-a-Service (VSaaS). Sources: Industry research reports.

Market Focus: Remote Video Monitoring

RVM has continued to gain traction in the broader commercial security monitoring market due to technological innovation facilitating a more attractive value proposition than traditional methods of protecting either the perimeter or the premises of a property



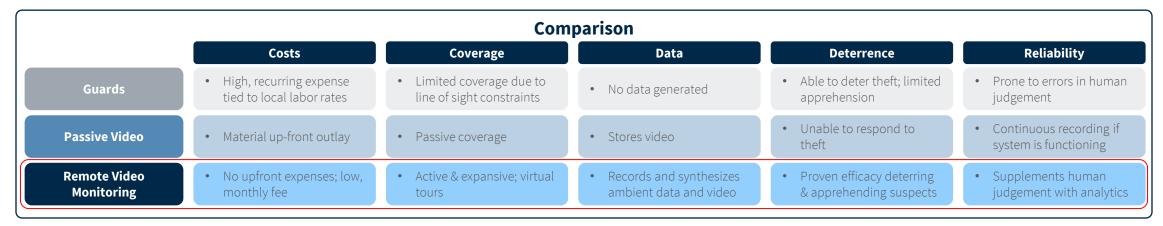
Remote video monitoring value proposition

Customer needs:

- Reduce theft
- Data-driven operational improvements
- Cost-efficient security for large sites
- Lower liability
- Stop recurring crime
- Provide safe and secure environment for site tenants

Value proposition:

- Proactively deters theft and improves site security
- Generates data to drive operational insights
- Effectively decreases total spend
- Legally-compliant video storage and post-incident audits





36

Market Focus: Remote Video Monitoring

The competitive landscape of the broader RVM market consists of players from various segments pursuing initiatives with differing strategies and areas of emphasis

Video surveillance market segmentation





Market Focus: Remote Video Monitoring

There has been strong levels of M&A activity within the RVM segment with strong valuations across both the active and passive segments of the market

Date	Target	Acquiror
Oct-22	SUMMIT INNOVATIONS	DTI
Sep-22	LivEye	Nordic Capital
Dec-21		O LPHA
Nov-21	Envysion®	MOTOROLA SOLUTIONS
Mar-21	IIIEYEWITNESS SURVEILLANCE	STEALTH MONITORING
Mar-21	DeterTech	Freshstream
Mar-21	W C C T V	LDC
Feb-21	BouWatch	H /NIEL
Dec-20	LIVEVIEW (1) TECHNOLOGIES	LEADEDGE C A P I T A L

Date	Target	Acquiror
Sep-19	STEALTH MONITORING	TWIN® POINT CAPITAL
Jun-18	() KOOİ	Bencis
Feb-15	PRO-VIGIL	Riverside.
Jan-13	Envysion®	PARTHENON CAPITAL
Mar-12	DTT CE	INVESTMENT PARTNERS

Composite Multiples	EV / Revenue	EV / EBITDA
Mean	4.2x	23.5x
Median	4.1x	21.3x

Debt Capital Markets

John Robuck
Head of Security and Fund Finance
Managing Director
Capital One, N.A.

It has been a volatile few years





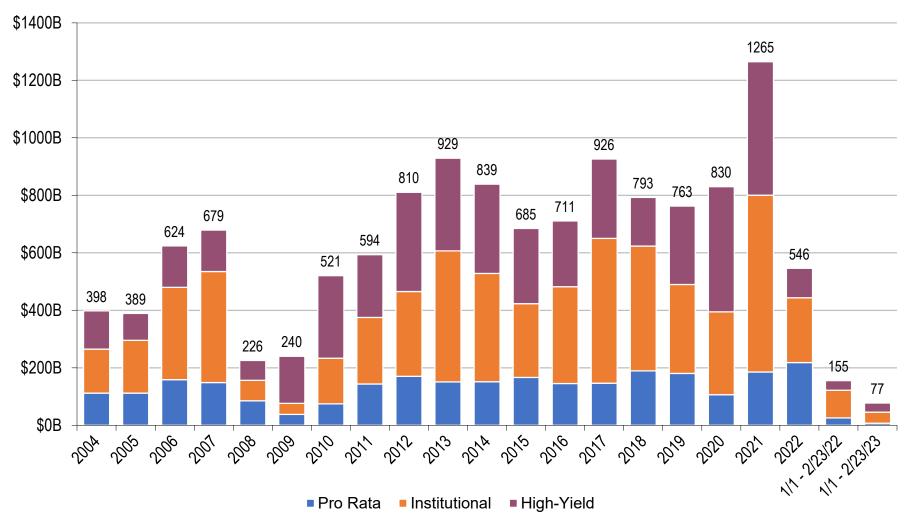
10 year Treasury Yield





Volume: Annual US Leveraged Finance - Bank Debt and Bonds

Volume of US leveraged loans has plummeted to post-crisis low

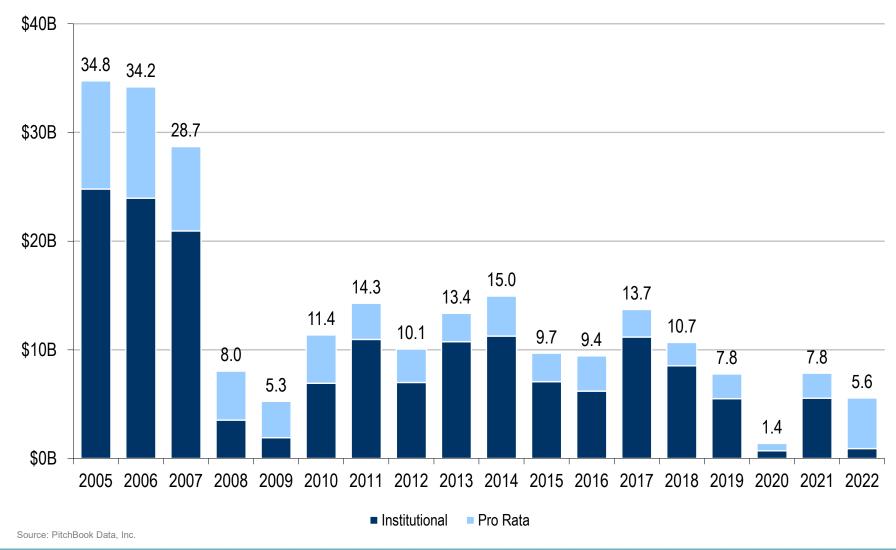


Source: PitchBook Data, Inc.



Volume: Annual New-Issue Middle-Market (≤ \$50M EBITDA) Loan Volume

Pro rata market has been one savior in the middle-market while institutional volume has been at historical lows



Secondary Market Volatility

While leveraged loans rallied in the secondary to start the year there has been increased volatility reflecting increased uncertainty, the changing rate environment and increased capital requirements

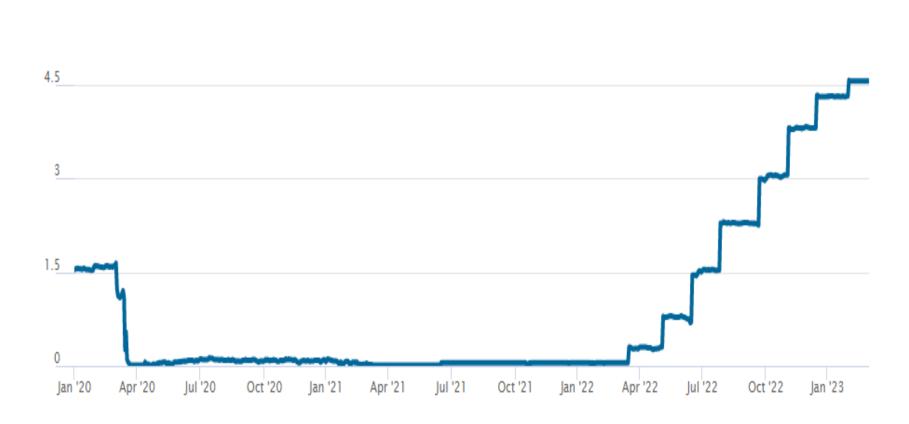


Source: Refinitiv LPC, LSTA/Refinitiv LPC MTM Pricing



All in interest expense is impacting free cash flow for levered companies

• The Secured Overnight Financing Rate (SOFR) index is up 4.50% in the last 12 months, which will substantially increase borrowing costs

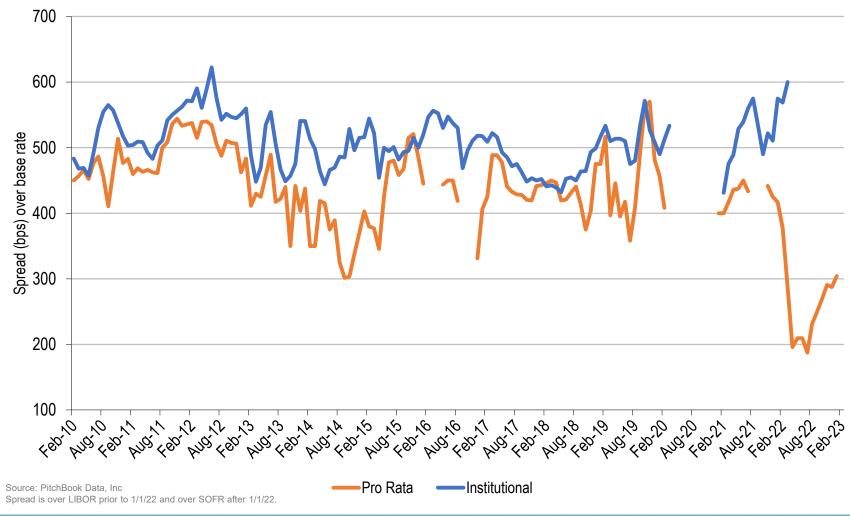


Source: Federal Reserve Bank of New York



Spreads: Average Rolling 3 Month for Middle-Market Issuers (≤ \$50M EBITDA)

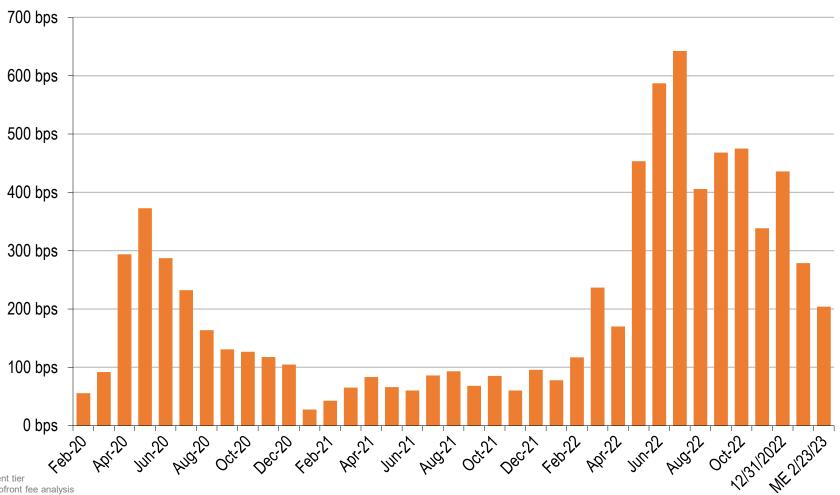
- Changes to spreads tend to lag, but started to see some material increases in spreads in 2H '22 and Q1 '23
- Refinancings are less likely to occur at favorable terms and will be reserved for situations with short-term maturities





Fees: Average Retail First-Lien Institutional Upfront Fee

While spreads have been slower to react, upfront fees have significantly increased, reflecting increased return requirements at most lending institutions



Source: PitchBook Data, Inc.

Represents fee at lowest commitment tier

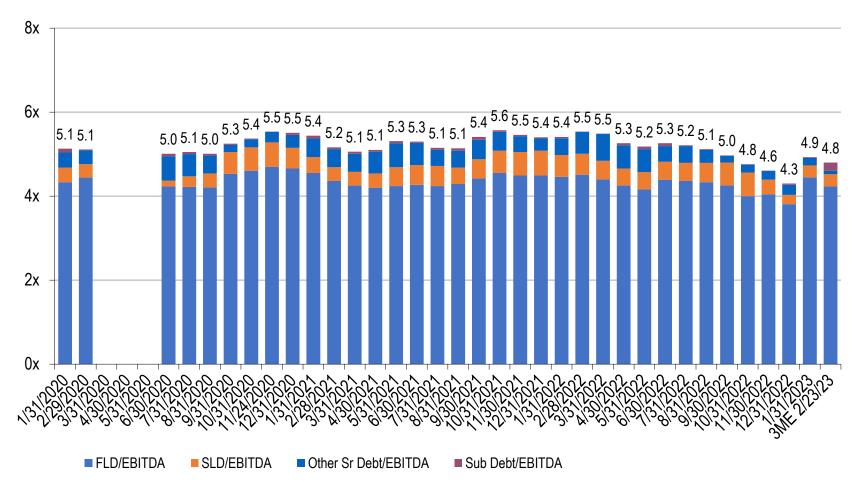
• As of 3Q 2001, OID is included in upfront fee analysis

Current month is based on a rolling 30-day period



Credit Stats: Average Debt Multiples of Large Corporate Loans (> \$50M EBITDA)

Total leverage multiples reduced in 2H '22; however, leverage multiples have started to rebound in Q1 '23



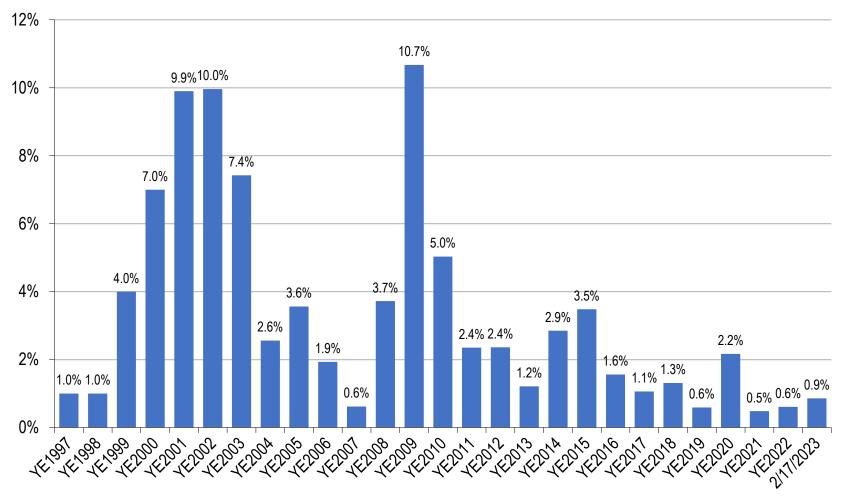
Source: PitchBook Data, Inc.

- · As of June 2020 analysis is based on rolling 90-day period rather than monthly period to obtain more robust sample of data
- Media and telecom loans excluded prior to 2011
- EBITDA adjusted for prospective cost savings or synergies



Defaults: Percent of Outstanding Loans in Payment Default or Bankruptcy

Notwithstanding significant increases in debt service resulting from interest rate increases, payment defaults and bankruptcies continue to remain at historical lows



Source: Morningstar LSTA US Leveraged Loan Index Includes all loans including those not included in the LSRA/TRLPC mark-to-market service; primarily institutional tranches



