



EQUITY RESEARCH

June 15, 2023 Industry Update

Cashing Out – Bits & Bytes Weekly

Secondary Offerings On The Rise

Our Conclusion

In 2022, the IPO market was essentially halted and private equity (PE) was forced to hold many of its investments for longer than expected. Beyond IPOs, private equity also found it difficult to exit stakes in recently public companies amid the market turmoil. Secondary offerings were down 61% Y/Y to US\$52B in 2022, the lowest figure in five years according to S&P Global data. However, glimmers of hope for private equity investors have appeared, with the S&P 500 up ~14% year to date and +20% over October lows.

In an improving valuation environment, we have begun to see follow-on sales return. Data from the Wall Street Journal suggests that companies and private equity firms have sold more than \$24B in stock through secondary offerings since the end of April. However, valuations remain below 2021 highs, with many of these secondary sales being done at a discount. According to the Financial Times, approximately two-thirds of follow-on offerings YTD have been below IPO prices. Nevertheless, secondary sales allow PE to free up capital to be returned to partners, providing exits as the firms look to raise new funds and eventually fund the next crop of IPO candidates.

Key Points

Tech Secondaries So Far This Year: Earlier this year, Onex announced it was preparing to exit its 26-year investment in Celestica Inc., converting its multi-voting shares to single-vote stock. And last week Celestica closed a secondary offering of 12,000,000 of Onex's subordinate voting shares. Intel also announced the offering of 35 million shares of Class A common shares of Mobileye Global last week. In March, Bumble announced a secondary offering including shares from Blackstone priced at \$22.80 per share, about half of Bumble's IPO price.

Discounted Prices Suggest PE Does Not Expect A Return To 2021:

According to the Financial Times, private equity-backed follow-on offerings in the U.S. are up 180% year over year; however, two-thirds of the deals were priced below IPO prices. Firms are looking to return capital while raising new funds, and the discounted valuations suggest that PE firms believe valuation levels could remain in current ranges for the foreseeable future.

Potential Readthrough To Our Coverage? Within our coverage, a few key names have large private equity stakes. Baring Private Equity Asia holds ~17% of TIXT, while CDPQ holds ~9% of CGI and Birch Hill holds ~46% of SFTC. In other Canadian tech, CDPQ holds large stakes in Nuvei and Lightspeed, ~28% and 16% respectively. More recently, Warburg Pincus purchased a 6.8% stake in DCBO.

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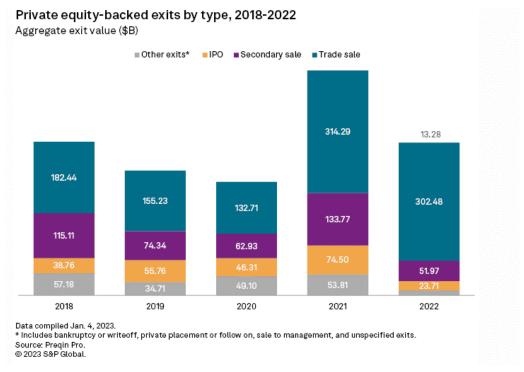
Sector:

Information Technology

Private Equity Exits Make A Return

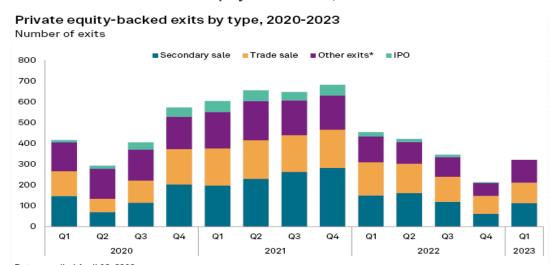
In 2022, private equity exits via IPO and secondary offerings declined to the lowest level in the last five years with private equity-backed IPOs raising a total of ~\$24B globally and secondary sales totalling \$52B. Rising uncertainty, driven by Russia's war with Ukraine, inflation, and Fed rate hikes, marked a difficult year in 2022, and the S&P 500 closed the year down 20%. Halfway into 2023, PE secondary sales appear to be beginning to pick back up from Q4/22 lows, as displayed in Exhibit 2.

Exhibit 1: S&P Global - Private Equity Backed Exits, 2018-2022



Source: S&P Global

Exhibit 2: S&P Global - Private Equity Backed Exits, 2018-2022



Data compiled April 20, 2023.

* Includes exits other than IPO, secondary sale or trade sale which includes but not limited to bankruptcy or writeoff, private placement or follow on, sale to management, add-ons, LP direct/PIPE/trade sale, PIPE/private placement/follow on, PIPE/ secondary buyout, public to private/secondary buyout, public to private/trade sale, corporate carve out/trade sale, LP direct/trade sale, PIPE/trade sale, or corporate carve outs.

Source: Preqin Pro.

2023 S&P Global.

Source: S&P Global.



News Impacting Our Coverage

Research Highlight: ENGH - Getting SaaSy - The Impact of SaaS-based M&A

Enghouse has historically sold on-premise solutions, which represent ~85% of overall revenue. However, the company is tilting towards SaaS, given demand for cloud-based contact centres and an M&A pipeline that includes an increasing number of SaaS providers. We saw the impact of two recent SaaS acquisitions (Qumu and Navita) in FQ2, with margins of 26.6% down 520 bps Y/Y. While we expect that a portion of the margin decline is short term (acquisition integration/third party contractor costs), we do expect a margin impact as the company shifts to more SaaS offerings.

Klaviyo Files Confidentially For U.S. IPO

Thomson Reuters reported that data and marketing automation firm Klaviyo submitted paperwork for an IPO offering in New York. The terms of the IPO have not been set, but the company is reportedly considering a raise of at least \$750MM according to sources. In 2021 financing rounds, Klaviyo was valued at ~\$9.5B.

Legal Victory For OpenText's Micro Focus

The court has ruled in favour of Micro Focus regarding a copyright infringement case brought by IBM earlier this year. IBM claimed copyright infringement on the grounds that Micro Focus created customer files on IBM's mainframe, which was dismissed by the judge for lack of merit. IBM initially raised the claim shortly after OpenText's acquisition of Micro Focus was announced. OpenText was quick to respond in support of Micro Focus, noting that IBM's claim was legally and factually without merit and that the timing was "curious" given its recent acquisition announcement.

Docebo Acquires Generative AI Learning Technology

The company announced its acquisition of Edugo.AI, a generative AI-based learning technology. This acquisition is not unexpected, given the recent momentum of Docebo's AI-driven Shape platform and stated focus on AI innovation. Edugo's technology optimizes learning paths adapted to individual learner needs using advanced large language models (LLMs) and algorithms. Docebo's areas of focus with this acquisition include the expansion of Shape to rapidly automate course content creation and the introduction of virtual interactive capability to give learners real time AI feedback. Financial terms were not disclosed, although we believe that the tuck-in was similar in size to the recent PeerBoard acquisition.

Accenture Follows Consulting Peers With \$3B Al Investment

Accenture is the latest company to join the AI bandwagon, announcing this week its plan to invest \$3B. With this investment, the company plans to expand its Data & AI practice to offer new industry solutions, increase headcount of AI employees, and launch AI technology on its Enterprise platform. This announcement puts Accenture on pace with its peers, many of which have a similar AI focus. In April, PwC announced \$1B of AI investment in the next three years, and EY announced in 2021 that it would invest \$2.5B in AI by 2024. The consulting sector has also seen partnerships with large tech firms, notably between Bain and Company and OpenAI as well as Deloitte and Nvidia. These demonstrate a growing trend of big AI spending and tech firm partnerships in the professional services space.



Exhibit 3: CIBC Coverage – Price Returns, For The Period Ending June 15, 2023

Software & Systems	Price	1 Week	1 Month	3 Month	6 Month	1 Year	YTD	52W High	52W Low
Constellation Software Inc	2,742.79	1.7	4.3	18.6	30.9	51.0	32.4	2817.38	1747.83
Descartes Systems	79.39	2.9	2.3	3.8	14.8	30.8	14.0	82.02	58.85
Enghouse Systems Limited	33.69	(3.2)	(5.4)	(11.1)	5.4	33.4	(6.4)	44.59	24.78
Open Text Corp	41.98	0.6	3.0	18.3	45.7	10.6	41.6	43.25	24.91
Kinaxis	182.83	2.7	(1.8)	8.1	20.4	44.6	20.4	191.80	119.48
Docebo, Inc.	50.28	5.0	15.7	(4.5)	8.3	41.4	12.4	55.72	31.66
Dye & Durham	17.10	9.7	4.9	(6.1)	30.9	(22.6)	4.2	23.40	11.62
Altus Group	47.79	2.1	18.0	(15.2)	(7.9)	7.6	(11.6)	61.60	40.00
Q4 Inc. Average	3.44	1.8 2.6	8.9 5.5	14.7 3.0	57.8 22.9	NA 24.6	7.2 12.7	4.92	1.88

Business Services	Price	1 Week	1 Month	3 Month	6 Month	1 Year	YTD	52W High	52W Low
CGI Group Inc	139.16	0.8	(0.2)	13.2	18.8	42.0	19.2	142.31	95.45
Converge Technologies	3.14	(8.5)	(1.9)	(24.2)	(31.3)	(48.2)	(31.6)	7.51	2.59
Information Services Corp	20.95	(0.2)	(1.6)	(4.1)	(8.8)	0.7	(13.3)	25.36	19.12
Softchoice Corporation	17.10	(2.5)	(0.3)	10.5	(1.6)	(12.0)	(6.4)	25.56	13.57
Telus International	20.32	(3.2)	(12.0)	(28.6)	(22.0)	(32.8)	(24.0)	40.55	20.33
Average		(3.3)	(3.6)	(7.2)	(9.0)	(12.8)	(10.7)		

Indices	Price	1 Week	1 Month	3 Month	6 Month	1 Year	YTD
S&P/TSX Composite Index	20,038.05	0.5	(2.4)	3.4	2.2	2.2	3.4
S&P 500 Index	4,416.45	2.9	6.8	13.5	13.4	16.5	15.0
S&P/TSX Software Index	189.96	3.5	2.7	21.2	36.7	49.4	39.3
S&P500 Software Index	5,820.12	6.7	13.5	28.9	38.6	36.4	42.1



Exhibit 4: Software Stocks - Return Performance (%), 6/15/2022-6/15/2023

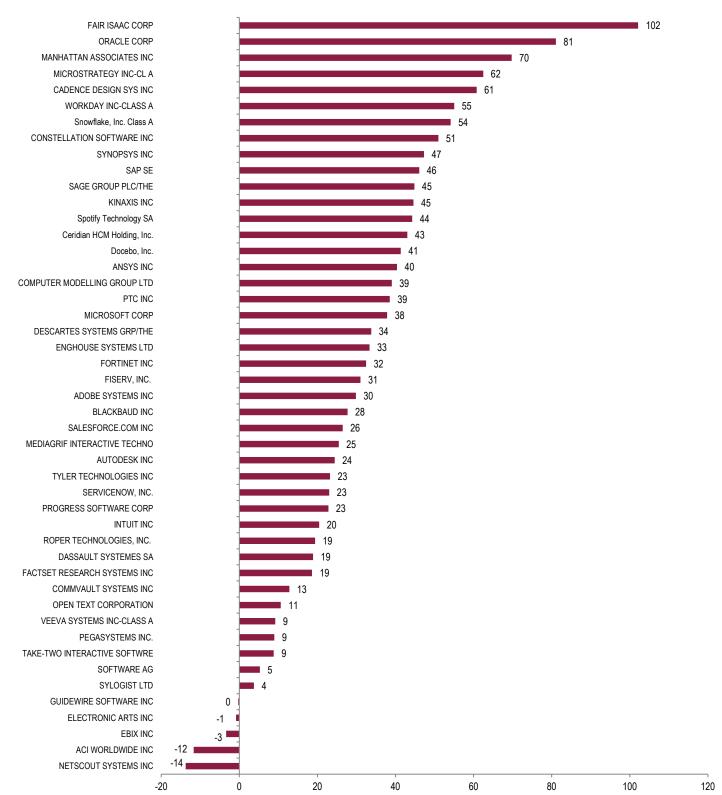




Exhibit 5: Business Services Stocks - Return Performance (%), 6/15/2022-6/7/2023

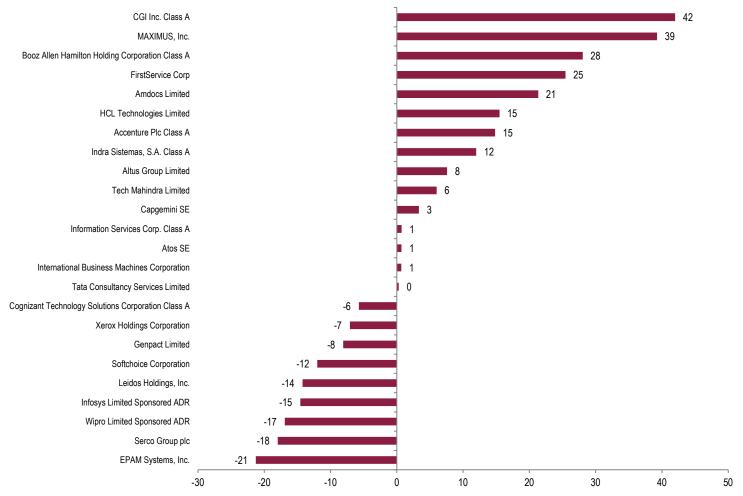




Exhibit 6: Software Stocks - Comp Table, 2022-2024E

	Enterprise		EV/S		EV/EBITDA			P/E		
	Value (\$mins.)	C22	C23E	C24E	C22	C23E	C24E	C22	C23E	C24E
Enterprise Application Software										
Constellation Software Inc.*	45,537	6.9x	5.7x	4.9x	26.8x	22.4x	19.4x	36.2x	35.3x	28.4x
BlackBerry Limited*	2,957	4.4x	3.2x	2.9x	NEG	NEG	>50	NEG	NEG	NEG
Sage Group plc	9,691	4.8x	4.4x	4.1x	21.3x	19.0x	17.1x	32.5x	27.4x	24.6x
Tyler Technologies, Inc.	17,276	9.3x	8.8x	8.1x	36.4x	36.1x	32.2x	>50	>50	45.3x
Roper Technologies, Inc.	54,983	10.2x	9.1x	8.6x	25.1x	22.5x	21.0x	32.1x	28.2x	26.1
Enghouse Systems Limited	1,644	3.9x	3.80x	3.74x	11.9x	12.2x	11.28x	17.0x	26.3x	23.36
Oracle Corporation	421,063	9.0x	8.1x	7.5x	17.8x	16.0x	14.4x	25.1x	23.4x	20.9
SAP SE	156,679	4.7x	5.0x	4.6x	19.8x	17.0x	14.8x	30.6x	23.9x	20.2
Enterprise Application Software A	verage	6.7x	6.0x	5.5x	22.7x	20.7x	18.6x	28.9x	27.4x	27.0>
Extended ERP										
Adobe Incorporated	223,012	12.6x	11.4x	10.1x	25.6x	23.6x	21.3x	35.3x	31.4x	27.6
Open Text Corporation	19,410	5.5x	3.5x	3.2x	15.6x	11.2x	8.3x	13.3x	12.4x	7.6x
Manhattan Associates, Inc.	11,758	15.3x	13.6x	12.2x	>50	>50	44.7x	>50	>50	>50
Pegasystems Inc.	4,591	3.5x	3.3x	3.0x	>50	26.7x	18.0x	>50	36.3x	23.8
Software AG	2,605	2.7x	2.6x	2.4x	14.6x	15.1x	12.7x	35.4x	22.7x	19.1
Fiserv, Inc.	95,240	5.7x	5.3x	4.9x	13.2x	12.0x	11.1x	18.5x	16.3x	14.3
Extended ERP Average		7.5x	6.6x	6.0x	17.3x	17.7x	19.4x	25.6x	23.8x	18.5x
Software As A Service										
Descartes Systems Group Inc.	6,559	13.5x	11.6x	10.6x	30.5x	26.8x	23.4x	>50	>50	>50
Kinaxis, Inc.*	3,675	10.0x	8.5x	7.1x	46.3x	>50	43.8x	>50	>50 >50	>50
Docebo, Inc.*	1,033	7.2x	5.7x	4.4x	>50	>50 >50	43.6x 33.8x	>50	>50 >50	>50 >50
Lightspeed Commerce Inc*	1,642	2.4x	1.9x	4.4x 1.5x	NEG	NEG	44.3x	NEG	>50 >50	>50 >50
Veeva Systems Inc Class A	29,006	13.6x	12.3x	10.4x	35.3x	34.9x	28.0x	47.2x	44.1x	37.1
Shopify, Inc. Class A	29,006 81,111	14.5x	12.3x 12.0x	10.4x 10.2x	>50.3X	> 50	26.0x >50	47.2X >50	>50	> 50
Q4 Inc*	81	1.5x	1.4x	1.3x	NEG	NEG	NEG	NEG	NEG	NEG
Ceridian HCM Holding, Inc.	11,286	9.1x	7.6x	6.6x	45.1x	30.3x	24.4x	>50	>50	43.0
ServiceNow, Inc.	114,720	15.8x	13.0x	10.7x	>50	42.0x	33.3x	>50	>50	48.3
Workday, Inc. Class A	54,896	9.0x	7.7x	6.6x	35.0x	28.8x	23.9x	>50	42.7x	35.2
Software As A Service Average	04,000	9.7x	8.2x	6.9x	38.4x	32.5x	31.9x	>50	>50	>50
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Infrastructure Vendors										
Microsoft Corporation	2,553,571	12.5x	11.4x	10.2x	25.3x	23.1x	19.9x	36.8x	33.6x	29.2
Infrastructure Vendors Average		12.5x	11.4x	10.2x	25.3x	23.1x	19.9x	36.8x	33.6x	29.2x
Software Average		8.3x	7.2x	6.4x	26.2x	23.3x	23.7x	30.0x	28.9x	27.9

*Share Price Converted to USD

Note: Bolded names are covered by CIBC World Markets Inc.



Exhibit 7: Business Services Stocks - Comp Table, 2022-2024E

Enterprise Value

	(\$mIns.)	C22	C23E	C24E	C22	C23E	C24E	C22	C23E	C24E
Business & IT Services	,									
CGI Inc. Class A	35,337	13.6x	12.4x	11.5x	22.2x	19.1x	18.1x	2.7x	2.4x	2.3x
TELUS International (CDA), Inc.	5,980	9.9x	8.5x	7.4x	12.5x	12.3x	10.2x	2.4x	2.0x	1.8x
Accenture Plc Class A	209,344	18.3x	17.6x	16.1x	29.3x	27.2x	24.9x	3.3x	3.2x	3.0x
Booz Allen Hamilton	16,594	16.7x	15.4x	14.4x	23.8x	22.0x	19.8x	1.8x	1.7x	1.6x
CACI International Inc Class A	9,325	13.7x	12.6x	11.9x	17.7x	16.7x	15.0x	1.4x	1.4x	1.3x
DXC Technology Co.	9,323	3.9x	4.1x	4.0x	7.9x	7.4x	6.3x	0.6x	0.6x	0.6x
Genpact Limited	8,268	10.5x	9.9x	8.8x	14.3x	13.3x	11.9x	1.9x	1.8x	1.6x
International Business Machines	170,464	10.8x	11.4x	10.9x	15.1x	14.6x	13.8x	2.8x	2.7x	2.6x
Atos SE	3,297	3.8x	3.0x	2.9x	NEG	5.9x	4.6x	0.3x	0.3x	0.3x
Capgemini SE	35,739	10.2x	9.8x	9.1x	15.2x	15.6x	14.1x	1.6x	1.6x	1.5x
Sopra Steria Group SA	4,961	8.3x	7.4x	6.8x	13.2x	10.8x	9.6x	1.0x	0.9x	0.8x
Converge Technology Solutions Corp	976	6.8x	5.8x	5.4x	29.7x	49.4x	34.1x	0.5x	0.4x	0.4x
Business & IT Services Average		10.9x	10.2x	9.4x	17.1x	15.0x	13.5x	1.8x	1.7x	1.6x
UD O de la			EV/EDITO			D/E			E\//0	
HR Outsourcing	44.000		EV/EBITDA		. 50	P/E	40.0	0 1	EV/S	
Ceridian HCM Holding, Inc.	11,286	45.1x	30.3x	24.4x	>50	>50	43.0x	9.1x	7.6x	6.6x
Willis Towers Watson	28,865	12.1x	12.0x	10.8x	17.3x	16.3x	13.8x	3.3x	3.1x	3.0x
Aon Pic Class A	78,032	19.6x	18.0x	16.8x	24.7x	23.0x	20.5x	6.3x	5.9x	5.6x
Automatic Data Processing, Inc.	93,083	20.2x	18.1x	16.5x	29.0x	25.8x	23.2x	5.4x	5.0x	4.7x
Paychex, Inc.	40,326	18.8x 23.1x	17.5x 19.2x	16.2x 16.9x	27.7x 24.7x	25.3x 22.6x	23.5x 24.8x	8.3x 6.5x	7.8x 5.9x	7.3x 5.4x
HR Outsourcing Average		23. IX	13.28	10.38	24./X	22.01	24.01	0.5%	5.38	3.4X
Information Services			EV/EBITD#	A		P/E			EV/S	
Broadridge Financial Solutions, Inc.	22,584	17.2x	15.9x	14.8x	23.7x	22.0x	20.1x	3.8x	3.6x	3.4x
Dye & Durham Ltd.	2,193	13.8x	12.5x	11.5x	0.1x	0.1x	0.1x	4.6x	4.8x	4.5x
Deluxe Corporation	2,105	5.0x	5.2x	5.1x	4.2x	5.4x	5.1x	0.9x	1.0x	0.9x
Information Services Corp	411	6.4x	6.1x	5.7x	10.4x	10.1x	9.2x	2.2x	2.0x	1.9x
Information Services Average		10.6x	9.9x	9.3x	9.6x	9.4x	8.6x	2.9x	2.8x	2.7x
<u></u>			EV/EDITO			D/E			E)//0	
Financial Services Technology	50.100		EV/EBITDA		2.1	P/E	0.0	ô.5	EV/S	2.4
Fidelity National Information Services	50,423	8.1x	8.3x	7.8x	8.1x	9.1x	8.3x	3.5x	3.5x	3.4x
Fisery, Inc.	95,240	13.2x	12.0x	11.1x	18.5x	16.3x	14.3x	5.7x	5.3x	4.9x
Jack Henry & Associates, Inc.	12,119	19.2x	17.7x	16.3x	33.5x	32.2x	29.0x	6.1x	5.7x	5.3x
ACI Worldwide, Inc. Temenos AG	3,503	9.4x	9.1x	8.5x	18.4x	24.0x	15.7x	2.5x	2.4x	2.3x
Global Payments Inc.	6,259 39,344	17.1x 10.1x	16.5x 9.1x	14.4x 8.4x	26.0x 11.0x	24.3x 9.9x	21.0x 8.7x	6.6x 4.9x	6.3x 4.5x	5.7x 4.2x
Financial Services Technology Average	39,344	10.1x	12.1x	11.1x	19.2x	19.3x	16.2x	4.9x	4.6x	4.2x
Financial Services Technology Average		12.38	12.13	11.13	13.28	19.5%	10.28	4.31	4.0X	4.31
Diversified Real Estate Services		l.	EV/EBITD	Ą		P/E			EV/S	
Colliers International Group Inc.	6,072	9.6x	9.0x	8.3x	13.8x	14.1x	12.4x	1.4x	1.4x	1.3x
Altus Group Limited	2,332	17.2x	17.4x	14.1x	25.1x	29.4x	26.3x	3.2x	3.0x	2.7x
CBRE Group, Inc. Class A	26,346	9.0x	10.3x	9.2x	13.7x	16.1x	13.5x	0.9x	0.8x	0.8x
Jones Lang LaSalle Incorporated	9,645	7.7x	9.2x	7.5x	9.6x	12.1x	9.0x	0.5x	0.4x	0.4x
Diversified Real Estate Services Average	9	10.9x	11.5x	9.7x	15.5x	17.9x	15.3x	1.5x	1.4x	1.3x
Software Focused IT Solutions/VARs			EV/EBITDA		10 1	P/E	44.5		EV/S**	
Softchoice Corporation* USD	860	10.5x	10.0x	9.0x	16.1x	16.7x	14.8x	2.8x	2.6x	2.4x
Softcat Plc*	2,797	16.3x	14.6x	13.4x	21.8x	20.2x	19.1x	6.7x	5.6x	5.1x
Crayon Group Holding ASA*	12,132	>50	>50	>50	>50	>50	>50	27.4x	23.0x	19.8x
Bytes Technology Group Plc*	1,197	17.5x	15.1x	13.3x	23.3x	21.4x	19.4x	NA 40.2×	NA 40.4×	NA
Bytes Technology Group Plc* Average		14.8x	13.2x	11.9x	20.4x	19.4x	17.8x	12.3x	10.4x	9.1x
Business Services Average		13.4x	12.3x	11.1x	17.7x	16.8x	15.7x	4.1x	3.8x	3.4x

EV/EBITDA

Note: Bolded names are covered by CIBC World Markets Inc.

Source: Company reports, FactSet and CIBC World Markets Inc.



EV/S

^{**}Software Focused IT Solutions/VARs uses EV/GP metric.

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Stock Ratings	Abbreviation	Description
Outperformer	OP	Stock is expected to outperform similar stocks in the coverage universe during the next 12-18 months.
Neutral	NT	Stock is expected to perform in line with similar stocks in the coverage universe during the next 12-18 months.
Underperformer	UN	Stock is expected to underperform similar stocks in the coverage universe during the next 12-18 months.
Tender	TR	Shareholders are advised to tender shares to a specific offer as we do not believe a superior offer will materialize.
Not Rated	NR	CIBC World Markets does not maintain an investment recommendation on the stock.
Restricted	R	CIBC World Markets is restricted (due to potential conflict of interest) from rating the stock.
Sector Ratings	Abbreviation	Description
Overweight	0	Sector is expected to outperform the broader market averages.
Marketweight	М	Sector is expected to equal the performance of the broader market averages.
Underweight	U	Sector is expected to underperform the broader market averages.
None	NA	Sector rating is not applicable.

Note: Broader market averages refer to S&P 500 in the U.S. and S&P/TSX Composite in Canada.



CIBC World Markets Inc. Price Chart

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Ratings Distribution*: CIBC World Markets Inc. Coverage Universe

(as of 15 Jun 2023)	Count	Percent	Inv. Banking Relationships	Count	Percent
Outperformer	153	52%	Outperformer	153	100%
Neutral	128	43%	Neutral	127	99%
Underperformer	6	2%	Underperformer	5	83%
Tender	0	0%	Tender	0	0%
Restricted	9	3%	Restricted	9	100%

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