

EQUITY RESEARCH

December 1, 2021

Earnings Update

DESCARTES SYSTEMS GROUP INC.

FQ3/22 Results Solid As Supply Chain Disruptions Continue

Our Conclusion

Descartes reported a solid FQ3, with revenue 2% above consensus and adjusted EBITDA 5% above expectations. Margins were 100 bps above consensus as the company continues to benefit from increased (high-margin) transaction volumes. We see the company as benefiting from a relatively easy Y/Y compare, but also a strong demand environment driven by supply chain disruptions. With the stock trading at a 3.4x turn (26%) premium to its two-year average, we see Descartes as relatively fairly valued at these levels and retain our Neutral rating and \$89 price target.

Key Points

FQ3/22 Results: Revenue of \$109 million and adjusted EBITDA of \$48 million were slightly above consensus (\$107 million/\$46 million) and our estimates (\$107 million/\$47 million). Revenue was up 24% Y/Y and 4% sequentially. EBITDA margins increased 200 bps Y/Y and were flat Q/Q at 44%. Cash flow from operations was up 31% Y/Y to \$43.3 million with 90% cash conversion.

Organic Growth Solid: We calculate organic growth in the mid teens, maintaining the higher-than-historical levels seen in FQ2/22. The quarter benefited from strong growth in sales from both new and existing customers and a ~1% FX tailwind. The company is seeing several tailwinds as the shipping and logistics industry remains in a state of uncertainty. While those tailwinds have driven strong organic growth YTD, the extent and duration of those tailwinds remains unknown. While management expects supply chain strains, labour concerns, and chip and inventory shortages to persist well into F2023, we expect that some industry pressures will start to alleviate and are forecasting organic growth of 9% for F2023. Our F2023 organic growth forecast remains above Descartes' historic mid-single-digit organic growth.

Guidance: With the quarter, Descartes maintained its F22 adjusted EBITDA margin guidance of 38%-43% and noted that margins continue to benefit from limited travel and marketing costs. The baseline calibration for Q4 is for revenue of \$97.3 million and operating income of \$36.6 million. Baseline revenues are 87% of our Q4 revenue estimate, in line with the prior quarter.

Acquisitions: Valuations in the space remain elevated as opportunistic sellers look to capitalize on favorable market conditions. That said, management noted that it continues to see some acquisitions that meet its hurdle rates. Descartes has significant room for M&A, ending FQ3 with \$171 million in net cash and \$315 million available on its credit facility. We see M&A as upside to our model and expect that if organic growth does moderate as supply chain pressures ease, Descartes may look to increase its focus on M&A.

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Neutral

DSGX-NASDAQ, Sector: Information Technology

Current Price (12/1/21): US\$78.38

Price Target (12-18 mos.): US\$89.00

CIBC Estimates and Valuation

(Jan. 31)	2020	2021	2022	2023
EPS diluted	0.45A	0.61A	1.06E	0.90E
Prior			1.02E	
Adj. EBITDA(mln)	122.5A	141.7A	184.9E	203.2E
Prior			182.7E	202.9E

EPS diluted	Q1	Q2	Q3	Q4
2023	0.22E	0.22E	0.23E	0.24E
Prior	0.19E			0.25E
2022	0.21A	0.27A	0.30A	0.29E
Prior			0.26E	0.27E

Adj. EBITDA(mln)	Q1	Q2	Q3	Q4
2023	49.5E	50.6E	51.2E	51.9E
Prior	46.5E	50.4E	51.7E	54.2E
2022	41.5A	45.9A	48.2A	49.3E
Prior			47.2E	48.2E

Valuation	2020	2021	2022	2023
P/E	NM	NM	73.6x	86.7x
EV/EBITDA	56.1x	48.5x	37.2x	33.8x

Stock Performance and Key Indicators

Enterprise Value:	US\$6,871M	Shares O/S:	84.6M
Market Cap.:	US\$6,634M	Float:	84.3M
52-wk Range:	US\$56.10 - US\$90.49	Div. / Yield:	NIL/NIL

DSGX-NASDAQ



(Source: FactSet)

All figures in US dollars unless otherwise stated.

Please see "Price Target Calculation and Key Risks to Price Target" information on page 5. For required regulatory disclosures please refer to "Important Disclosures" beginning on page 6.

Descartes Systems Group Inc. (DSGX-NASDAQ) — Neutral

Price (12/1/21) US\$78.38 12-18 mo. Price Target US\$89.00

Sector: Information Technology

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Peer Comparison	2020	2021	2022E	2023E
P/E - Logistics/Supply Chain Softw	28.5x	26.6x	-	-
EV/EBITDA - Descartes	-	45.7x	35.0x	-
P/FCF - Logistics/Supply Chain So	29.6x	27.1x	-	-
P/FCF - Descartes	26.3x	26.1x	-	-
P/Sales - Logistics/Supply Chain S	12.3x	10.9x	-	-
P/Sales - Descartes	15.0x	14.3x	-	-
EV/Sales - Logistics/Supply Chain	15.1x	12.3x	10.7x	-
EV/Sales - Descartes	18.6x	15.2x	13.9x	-
Key Financial Metrics	2020	2021	2022E	2023E
Sales Growth	18.4%	7.0%	21.7%	11.4%
Per Share Data	2020	2021	2022E	2023E
FCFPS	1.22	1.51	1.87	1.90
Diluted EPS	0.45	0.61	1.06	0.90
Wgt Avg # of Shares	81.7	84.4	84.6	85.2
FD Number of Shares	82.9	85.8	86.3	86.7
Income Statement	2020	2021	2022E	2023E
Revenue	326	349	424	473
Gross Profit	240	259	323	361
Tot Operating Exp	129	129	155	175
OpEx (% of Revenue)	39.45%	37.03%	36.52%	36.92%
Adj. EBITDA	122	142	185	203
Adj EBITDA Margin	37.6%	40.6%	43.6%	43.0%
D&A	(62)	(62)	(64)	(65)
Net Interest Income	(4)	(1)	(1)	0
Pretax profit	48	70	107	127
Tax Expense	11	18	15	48
Net Income	37	52	92	78
Net Margin	11.4%	14.9%	21.6%	16.6%
Cash Flow Statement	2020	2021	2022E	2023E
Net CFO	104	131	164	168
Capex	(5)	(4)	(5)	(6)
Free Cash Flow	99	127	159	162
Balance Sheet	2020	2021	2022E	2023E
Cash & ST Investment	44	134	193	284
Intangible Assets	257	240	244	264
Goodwill	524	565	616	616
Total Assets	943	1,063	1,192	1,305
ST Int-Bearing Debt	0	0	0	0
Total Liabilities	121	152	173	187
Shareholders' Equity	822	911	1,019	1,119

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

Company Profile

Descartes is a provider of value-added IT solutions to the logistics and transportation markets. The company primarily offers its solutions through a pay-for-use arrangement rather than up-front license fees

Investment Thesis

We see growth opportunities in several areas: 1) introducing new services; 2) consolidating a highly fragmented market; 3) increasing customer share of wallet, converting in-house processing

Price Target (Base Case): US\$89.00

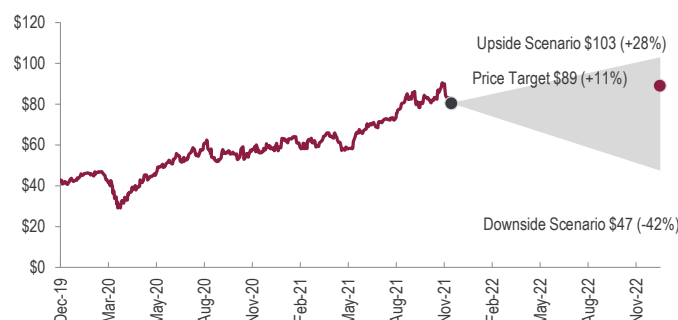
Our Price Target is calculated using 9.4% revenue growth, 44% EBITDA margins and a 36.5x EV/EBITDA multiple

Upside Scenario: US\$103.00

Our upside scenario is calculated using 25% revenue growth, 44% EBITDA margins and a 37.0x EV/EBITDA multiple

Downside Scenario: US\$47.00

Our downside scenario is calculated using 8% revenue growth, 38.7% EBITDA margins and a 22x EV/EBITDA multiple



FQ3 Results

Revenue: Revenue of \$109 million was up 24% Y/Y, and we calculate organic growth in the mid teens as strong demand continued in the quarter. Services revenue of \$97 million was up 25% Y/Y and comprised 89% of total revenue. Professional services revenue of \$10.3 million was up 11% Y/Y.

Profitability: Adjusted EBITDA increased 32% Y/Y to \$48.2 million. Margins of 44.3% were up 270 bps Y/Y given strong organic revenue growth and continued savings from a lack of travel and marketing costs. Management maintained its target adjusted EBITDA margin at 38%-43%. Management continues to target annual EBITDA growth in the range of 10%-15%.

Cash Flow: Cash flow from operations was up 31% Y/Y to \$43.3 million. EBITDA to cash conversion was 90% in the quarter. The company exited the quarter with net cash of \$171 million, up sequentially from \$128 million.

Exhibit 1: Descartes FQ3/22 Financial Summary

	Q3-F2022			Q3-F2021	Y/Y%	Q2-F2022	Q/Q%
	Actual	CIBCe	Cons.				
Consolidated							
Revenue (\$MM)	108.9	107.1	107.2	87.5	24%	104.6	4%
License	1.4	0.6	1.4	0.6	139%	1.2	21%
Professional Services	10.3	10.2	10.3	9.3	11%	9.9	4%
Services	97.2	96.3	95.9	77.6	25%	93.5	4%
EBITDA (\$MM)	48.2	47.2	46.1	36.4	33%	45.9	5%
EBITDA Margin	44.3%	44.0%	43.0%	41.6%	7%	43.9%	1%
EPS	0.30	0.26	0.25	0.15	94%	0.27	11%

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

Calibration: We are updating our model to reflect the current quarter and an improving revenue growth and EBITDA margin outlook.

Exhibit 2: Descartes – Changes To Our Model – 2021A – 2023E

	Revenues (\$mlns)	EBITDA (\$mlns)	EPS	CFO (\$ mlns)
2021A	349	142	0.61	131
2022E				
CIBC est. – new	424	185	1.06	164
CIBC est. – prior	422	183	1.02	158
Consensus	431	185	1.00	165
2023E				
CIBC est. – new	473	203	0.90	168
CIBC est. – prior	461	203	0.90	160
Consensus	484	209	1.07	175

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

Environmental, Social and Governance (ESG) Metrics for DSGX-NASDAQ

CIBC ESG Metrics

Governance Metrics	2016	2017	2018	2019	2020
Insider Ownership	0.4%	0.4%	0.4%	0.3%	0.3%
Board Gender Diversity	25.0%	25.0%	25.0%	25%	25%
Separation of Chair & CEO	YES	YES	YES	YES	YES
Dual-class Ownership?	NO	NO	NO	NO	NO
Disclose ESG Data?	NO	NO	NO	NO	NO

Social Metrics	2016	2017	2018	2019	2020
CEO Comp./Mkt Cap*	\$1.5	\$1.4	\$1.2	\$1.4	\$1.2
Diversity Targets	NO	NO	NO	NO	NO
Women Managers	NA	NA	NA	14%	0%

Environmental Metrics	2016	2017	2018	2019	2020
Emissions Intensity**	NA	NA	NA	NA	NA
Net-zero Targets?	NO	NO	NO	NO	NO

* CEO Compensation is shown as per thousand dollars of market capitalization

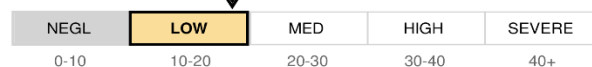
** Emissions Intensity calculated as total emitted CO2e divided by million \$ of CAD revenue

Sustainalytics ESG Risk Rating

18.7 **+0.3** **Low Risk**

Updated on
Oct 05, 2021

Momentum



Sustainalytics ESG Risk Rating Ranking

UNIVERSE	RANK (1 st = lowest risk)	PERCENTILE (1 st = lowest risk)
Global Universe	2660/14640	19th
Software & Services INDUSTRY	172/957	19th
Enterprise and Infrastructure Software SUBINDUSTRY	63/381	17th

Sustainalytics Material ESG Issues

These are the Material ESG Issues driving the ESG Risk Report

Issue Name	ESG Risk Exposure Score Category	ESG Risk Management Score Category	ESG Risk Rating Score Category	Contribution to ESG Risk Rating
Data Privacy and Security	7.2 Medium	22.2 Weak	5.9 Medium	31.7%
Human Capital	7.2 Medium	22.0 Weak	5.7 Medium	30.5%
Corporate Governance	9.0 High	61.5 Strong	3.5 Low	18.5%
Product Governance	1.9 Low	7.5 Weak	1.8 Negligible	9.4%
Business Ethics	2.7 Low	33.8 Average	1.8 Negligible	9.8%
Overall	28.0 Low	35.8 Average	18.7 Low	100%

CIBC Quantitative Scorecard

Within Sector			Within S&P/TSX Comp.		
Style	Rank	Delta	Style	Rank	Delta
Value	8	-1	Value	189	0
Momentum	1	+2	Momentum	17	+4
Quality	4	0	Quality	73	-6
Market	10	-2	Market	134	0
Low Volatility	4	+1	Low Volatility	91	+4
Growth	5	0	Growth	60	+9

Note: Ranking out of 15 stocks

Note: Ranking out of 233 stocks

General Notes Behind the Quantitative Scorecard

Delta refers to the change in the ranking over the past month. Number of stocks "Within Sector" is defined by the number within the GICS. In the "Within S&P/TSX" category, we use all stocks in the S&P/TSX Composite. For detail on the Quant Factors included in each style above, please contact the CIBC Portfolio Strategy Team.

The table above is based upon quantitative, statistical, and mathematical analysis and is not intended to serve as a fundamental recommendation.

CIBC Technical Scorecard

Factor	TSM Score	Factor	TSM Score
TSM	4	Momentum	A
Beta	0.95	MACD	B
Volatility	↑	Alpha (Sector)	B
Trend	↗	Alpha (Index)	B
RSI	Neutral		

General Notes Behind the Technical Scorecard

TSM: The Trendspotting Matrix uses technical factors to score uptrend durability.

Momentum and alpha metrics compare performance over one-month, one-quarter and one-year timeframes, outputting a rating from A to D.

Trend/Volatility metrics measure price deviations relative to underlying moving averages.

RSI is an oscillator that provides mean-reversion estimations.

MACD is a momentum indicator rated from A to D based off the strength of its signal.

The table above is based upon a technical methodology that examines the past trading patterns and trades and is not intended to serve as a fundamental recommendation.

Price Target Calculation

We derive our price target of \$89 by applying a multiple of 36.5x to our F2023E EBITDA using the current capital structure. The multiple is in line with logistics software peers. This is supported by a discounted cash flow (DCF) using a 7% WACC with 2.3% terminal growth.

Key Risks To Price Target

Economic Slowdown: An economic slowdown would represent a headwind to Descartes' volume-sensitive (transaction-driven) revenues.

Competition: The logistics, transportation and supply chain technology markets are highly competitive. A number of competitive vendors have significantly greater resources than Descartes, and sector consolidation could result in new, more potent competitors.

Commoditization And Price Pressure: Over time, we would expect competition to drive commoditization of certain value-added services, which could adversely affect Descartes' ability to drive revenues.

Changing Technology And Industry Dynamics: The logistics industry faces a number of changing technology and business dynamics (e.g., compliance). Descartes must continually invest in its solutions to remain current.

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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.
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Marketweight	M	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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Tender	0	0.0%	Tender	0	0.0%
Restricted	14	4.9%	Restricted	14	100.0%

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