



EQUITY RESEARCH

July 26, 2022 Earnings Update

CANADIAN NATIONAL RAILWAY CO.

Getting Back To Its Roots

Our Conclusion

While CN is still in the early innings of implementing its operating plan, it is essentially getting back to its roots and refocused on running scheduled operations. Q2 results came ahead of expectations and signaled some early success in improving network fluidity and productivity. While CN maintained its 2022 guidance, it is clear the company is tracking ahead of targets, given the strong volume and pricing outlook through the balance of this year. We expect CN's shares to respond positively to its Q2 results. We maintain our Outperformer rating and \$167 price target.

Key Points

Q2/22 Beat – Adj. EPS Ahead By 11% Versus Our Expectations: CN reported Q2/22 adj. EPS of \$1.93, up from \$1.49 the year prior and versus our estimate of \$1.74 (cons. \$1.77). Revenue came in at \$4.3B, up from \$3.6B the year prior, and versus our estimate of \$4.1B (cons. \$4.1B). CN's adj. OR came in at 59.0%, down from 61.6% the year prior and versus our estimate of 60.2% (cons. 59.9%). RTMs were up 2% Y/Y, while freight revenue/RTM was up 19%. Volumes were in line with our expectations but we had forecasted yields to be up ~14% Y/Y.

Productivity Metrics Show A Strong Improvement: As we look back over the past 5+ years and CN's relative underperformance versus expectations, a key question facing the company was whether it had lost some of its Precision Scheduled Railroading (PSR) DNA. While CN is still in the early innings of implementing its operating plan, it is essentially getting back to its roots and refocused on running scheduled operations. We saw a strong improvement across a number of operating metrics in Q2, signaling some early success in improving network fluidity and productivity. For example, in Q2/22, dwell was down 6% Y/Y to 7.2 hours, car velocity was up 4 miles per day Y/Y to 209 miles per day, GTMs per average employee was up 9% Y/Y versus up 3% last year, and CN's adj. OR came in at 59.0%, a 260 bps improvement Y/Y. CN also noted its origin on-time train departures reached 91% in June, up 14% from June of 2021, and its connection performance was up 30% Y/Y to 78% in June. The company achieved a number of operating metrics it had not seen since before the pandemic, particularly in Western Canada, which is also the densest part of CN's network. Specifically, car velocity was the fastest since Q2/17, network train speed the highest since Q3/17 and through dwells the lowest since Q3/16. While we recognize that CN needs to maintain this momentum as volumes increase, we see strong early success and signs it is rebuilding its PSR foundation. It also supports our view that CN is on a path towards a mid-50% OR and a ~\$9.50-\$10.00 EPS as we approach the middle of this decade.

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Outperformer

CNR-TSX, Sector: Industrials

Current Price (7/26/22): C\$150.61 Price Target (12-18 mos.): **C\$167.00**

CIBC Estimates and Valuation

(Dec. 31)	2020	2021	2022	2023
Adj. EPS	5.31A	5.94A	7.19E	7.94E
Prior			7.08E	
Adj. EPS	Q1	Q2	Q3	Q4
2021	1.23A	1.49A	1.52A	1.71A
2022	1.31A	1.93A	1.87E	2.07E
Prior		1.74E	1.90E	2.13E
Valuation	2020	2021	2022	2023
P/F	28.4x	25 4x	21 Ox	19 0x

Stock Performance and Key Indicators

Avg. Dly. Vol.:	1,482K	Shares O/S:	698.4M
Market Cap.:	C\$105,186M	Float:	615.8M
52-wk Range:	C\$133.32 - C\$170.50	Div. / Yield:	C\$2.93/1.95%

TSX Composite Index vs. CNR-TSX



(Source: FactSet)

Canadian National Railway Co. (CNR-TSX) — Outperformer

Price (7/26/22) C\$150.61 12-18 mo. Price Target C\$167.00

Sector: Industrials

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Peer Comparison	2020	2021	2022E	2023E
P/E - CN	28.4x	25.4x	21.0x	19.0
P/E - CP	27.2x	25.6x	25.8x	21.1)
P/E - U.S. Class 1s	26.1x	20.2x	17.6x	16.4
EV/EBITDA - CN	17.2x	16.3x	14.0x	13.0
EV/EBITDA - CP	26.8x	26.5x	25.4x	17.2
EV/EBITDA - U.S. Class 1s	15.4x	13.2x	12.1x	11.6
Key Financial Metrics	2020	2021	2022E	2023E
Net Debt/EBITDA	1.8x	1.6x	1.7x	1.5
Free Cash Flow	3,302	4,080	3,967	4,527
Per Share Data	2020	2021	2022E	2023E
FCFPS	4.64	5.76	5.82	6.83
Adj. EPS Dil.	5.31	5.94	7.19	7.94
Income Statement	2020	2021	2022E	2023E
Revenue	13,820	14,477	16,745	17,489
Adj. EBITDA	6,853	7,220	8,389	9,040
Adj EBITDA Margin	49.6%	49.9%	50.1%	51.7%
EBIT	5,264	5,622	6,732	7,34
EBIT Margin	38.1%	38.8%	40.2%	42.0%
Interest Expense	554	610	550	603
Pretax profit	4,545	6,406	6,588	7,10°
Net Income	3,299	4,954	4,940	5,290
Cash Flow Statement	2020	2021	2022E	2023E
Change in WC	141	172	79	20
Net CFO	6,165	6,971	6,803	7,48
Capex	(2,863)	(2,891)	(2,836)	(2,960
Acquisit & Invest	(8)	0	0	(
Net CFI	(2,946)	(2,873)	(2,567)	(2,960
Dividends Paid	(1,634)	(1,740)	(2,006)	(2,142
Net CFF	(2,707)	(3,857)	(4,181)	(3,810
Net Cash Flow	512	241	55	716
Balance Sheet	2020	2021	2022E	2023
Cash & ST Investment	1,100	1,341	1,397	2,112
Total Current Assets	3,102	3,426	3,861	4,588
Net PP&E	40,069	41,178	42,698	43,96
Total Assets	44,804	48,538	50,729	52,72
Accounts Payable	2,364	2,612	3,225	3,25
Tot Curr Liab	3,274	3,120	4,804	4,83
LT Int-Bearing Debt	11,996	11,977	12,998	13,69
Total Liabilities	25,153	25,794	29,360	30,57
Shareholders' Equity	19,651	22,744	21,369	22,14
Tot Liab & SE	44,804	48,538	50,729	52,720

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

Company Profile

Canadian National Railway (CN) is Canada's largest railway, and one of seven Class 1 North American rail companies. CN's network consists of ~20,000 route miles of tracks spanning across Canada and mid-America, and connecting the coasts of the Atlantic, the Pacific and the Gulf Of Mexico.

Price Target (Base Case): C\$167.00

We assume revenue growth of 4.4% in 2023, OR of 58.0% and 21.0x P/E multiple to derive a value of \$167.

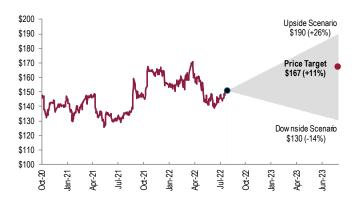
Upside Scenario: C\$190.00

We assume revenue growth of 8.0% in 2023, OR of 56.0% and 23.0x P/E multiple to derive a value of \$190.

Downside Scenario: C\$130.00

We assume revenue growth of 2.0% in 2023, OR of 58.0% and 17.5x P/E multiple to derive a value of \$130.

Scenario Analysis





2022 Outlook Reaffirmed But It Looks Conservative: CN reaffirmed its 2022 outlook, which includes adj. FD EPS growth of 15%-20% Y/Y, FCF of \$3.7B-\$4.0B and full-year ROIC of ~15%. That said, it was clear to us that this outlook remains conservative given YTD results (FD EPS up ~19% Y/Y in H1/22) and a healthy volume and pricing outlook through the back half of this year. We are forecasting 2022 adj. FD EPS to be up ~21% Y/Y.

First, from the demand side, CN's outlook was positive across its book of business. While there are concerns over the health of the consumer, the positive outlook for Canadian bulk commodities, especially the significant increase in Canadian grain production for the 2022/23 crop year, gives the company a non-cyclical commodity tailwind. For reference, Agriculture and Agri-Food Canada is forecasting 2022/23 principal field crop production of 93.9MM tonnes, up 35% Y/Y. In addition, CN will benefit from easier Y/Y comps given the BC wildfires and floods in H2/21 significantly impacted volumes (RTMs were down 6% Y/Y H2/21). Overall, CN continues to expect RTMs to be up in the low-single-digits Y/Y in 2022 despite being down 3% Y/Y in H1/22.

Second, pricing remains strong with CN continuing to price above inflation. While CN's yields reflect other components besides core price (i.e., fuel, FX and storage fees), freight revenue/RTM was up 19% Y/Y in Q2/22 to 6.93 cents, the highest we have seen in a decade.

Third, FX should be an incremental tailwind for CN relative to its guidance. CN's guidance assumes \$0.80 C\$/US\$ exchange rate versus the spot rate at \$0.78 and the CIBC Economics team's forecast of \$0.77 in H2/22. Every \$0.01 move in the FX rate impacts CN's EPS ~\$0.05 on an annualized basis.

Fourth, CN is adding resources to ensure it can handle the step-up in volumes in H2/22 while also benefiting from improving productivity.

Adding Resources To Ensure The Network Can Handle The Volume Outlook: A key concern as CN begins to onboard more volumes is whether it has the resources to ensure its network remains fluid. Service issues have weighed on U.S. rail performance and resulted in an increase in regulatory oversight. From this standpoint, CN is adding resources to get in front of the demand. It has seen a ~850 net increase in total headcount since the end of 2021, it will add 47 locomotives by September, it has added 500 high-capacity grain hoppers to deal with the increase in the Canadian grain crop, and it has invested in its network (four siding projects and 16 miles of double track).

Model Adjustments: We have tweaked our model, actualizing Q2 results and accounting for CN's updated guidance. We are forecasting 2022E EPS of \$7.19 (from \$7.08), and 2023E EPS of \$7.94 (no change).

Exhibit 1: CNR - Quarterly Recap (\$MM Unless Noted), Q2/22

	Q2/22						
	Actual	CIBCe	Cons.	Q2/21A	Y/Y %	Q1/22A	Q/Q %
RTMs (MM)	60,551	60,394	N/A	59,246	2.2%	56,554	7.1%
Revenue	4,344	4,141	4,075	3,598	20.7%	3,708	17.2%
EBITDA	2,204	2,061	2,089	1,788	22.6%	1,657	32.3%
EBIT	1,781	1,649	1,635	1,382	28.0%	1,237	43.0%
Operating Ratio (%)	59.0%	60.2%	59.9%	61.6%	-3.8%	66.6%	-11.0%
EPS	1.93	1.74	1.77	1.49	29.6%	1.31	47.2%

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



Environmental, Social and Governance (ESG) Metrics for CNR-TSX

	CIBO	C ESG IV	letrics		
Governance Metrics	2017	2018	2019	2020	2021
Insider Ownership	13.6%	14.0%	14.3%	14.4%	12.7%
Board Gender Diversity	38.5%	38.5%	38.5%	43.0%	55.0%
Separation of Chair & CEO	YES	YES	YES	YES	YES
Dual-class Ownership?	NO	NO	NO	NO	NO
Disclose ESG Data?	YES	YES	YES	YES	YES
Social Metrics	2017	2018	2019	2020	2021
CEO Comp./Mkt Cap*	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1
Diversity Targets	YES	YES	YES	YES	YES
Women Managers	16%	13%	19%	21%	22%
Environmental Metrics	2017	2018	2019	2020	2021
Emissions Intensity**	435	417	398	391	NA
Net-zero Targets?	NO	NO	NO	NO	NA

Su	Sustainalytics ESG Risk Rating						
15.4 Updated on Jul 15, 2022	-1.1 Momen		w Risk				
NEGL	LOW	MED	HIGH	SEVERE			
0-10	10-20	20-30	30-40	40+			

Sustainalytics ESG Risk Rating Ranking

UNIVERSE	RANK (1st = lowest risk)	PERCENTILE (1st = lowest risk)
Global Universe	1499 /14899	11th
Transportation INDUSTRY	18 /359	6th
Rail Transport SUBINDUSTRY	2 /59	3rd

Sustainalytics Material ESG Issues

These are the Material ESG Issues driving the ESG Risk Report

*CEO Compensation is shown as per thousand dollars of market capitalization
**Emissions Itensity calculated as total emitted CO2e divided by million \$ of CAD revenue

Issue Name	ESG Risk Exposure	ESG Risk Management	ESG Risk Rating	Contribution to ESG Risk Rating
	Score Category	Score Category	Score Category	
Corporate Governance	9.0 High	72.6 Strong	2.5 Low	16.0%
Human Capital	4.5 Medium	61.2 Strong	1.9 Negligible	12.2%
Occupational Health and Safety	6.0 Medium	81.9 Strong	1.3 Negligible	8.6%
Product Governance	8.0 High	58.5 Strong	3.8 Low	24.6%
Emissions, Effluents and Waste	6.0 Medium	67.1 Strong	2.4 Low	15.3%
Carbon -Own Operations	5.2 Medium	53.5 Strong	3.6 Low	23.2%
Overall	38.7 Medium	67.2 Strong	15.4 Low	100%

CIBC Quantitative Scorecard

Within Sector			Within S&P/TSX Comp.				
Style	Rank	Delta	Style	Rank	Delta		
Value	10	+1	Value	156	-5		
Momentum	9	0	Momentum	80	+28		
Quality	12	+1	Quality	95	+4		
Market	6	-5	Market	55	-38		
Low Volatility	3	+1	Low Volatility	43	+3		
Growth	4	0	Growth	67	-6		
Note: Ranking out of 29 stocks			Note: Ranking out of 239 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

	TSM		TSM
Factor	Score	Factor	Score
ΓSM	2	Momentum	С
3eta	0.85	MACD	А
/olatility	\downarrow	Alpha (Sector)	В
Trend	\leftrightarrow	Alpha (Index)	А
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 \$167 price target by applying a P/E multiple of 21.0x to our 2023 EPS estimate. We are applying the historical premium spread that CN has traded at historically versus its peers.

Key Risks To Price Target

Key risks to CN's price target include changes in the economic climate and foreign exchange, employee relations, competition from other modes of freight transportation, and changes in end- markets and related margin compression potential from product mix.

Exhibit 2: CNR - Financial Summary (\$MM Unless Noted), 2020 - 2023E

	2020	Q1/21	Q2/21	Q3/21	Q4/21	2021	Q1/22	Q2/22	Q3/22E	Q4/22E	2022E	2023E
Divisional Revenue												
Grain & Fertilizers	2,610	713	609	510	643	2,475	604	604	606	777	2,591	2,785
Coal	527	126	158	169	165	618	195	249	191	212	847	862
Forest	1,700	429	451	425	435	1,740	426	513	514	523	1,976	1,969
Petroleum & Chemicals	2,631	661	685	715	755	2,816	756	829	861	850	3,296	3,475
Auto	591	158	135	137	146	576	165	208	204	203	780	893
Metals & Minerals	1,409	368	377	410	393	1,548	406	466	481	453	1,806	1,885
Intermodal	3,751	968	1,037	1,061	1,049	4,115	1,056	1,326	1,234	1,251	4,866	4,946
Other	601	112	146	164	167	589	100	149	164	171	583	673
Consolidated Income Statement												
Total Revenue	13,820	3,535	3,598	3,591	3,753	14,477	3,708	4,344	4,254	4,439	16,745	17,489
EBITDA	6,853	1,594	1,788	1,876	1,962	7,220	1,657	2,204	2,191	2,337	8,389	9,040
EBIT	5,264	1,190	1,382	1,471	1,579	5,622	1,237	1,781	1,775	1,939	6,732	7,344
Operating Ratio	61.9%	66.3%	61.6%	59.0%	57.9%	61.2%	66.6%	59.0%	58.3%	56.3%	59.8%	58.0%
Other Expenses (Income)	480	(33)	(83)	(859)	(21)	(996)	14	10	10	10	44	40
Net Interest Expense / (Income)	554	130	158	197	125	610	126	128	148	148	550	603
EBT	4,545	1,189	1,403	2,099	1,585	6,406	1,222	1,767	1,718	1,881	6,588	7,101
Income Taxes	1,246	317	345	414	376	1,452	297	433	438	480	1,648	1,811
Net Income From Continuing Operations	3,299	872	1,058	1,079	1,209	4,954	918	1,334	1,280	1,401	4,940	5,290
FD EPS (Cont. Ops.)	5.31	1.23	1.49	1.52	1.71	5.94	1.31	1.93	1.87	2.07	7.19	7.94
Cash Flow Statement												
Operating Activities												
CFO Ex. NWC	6,024	1,341	1,521	2,298	1,639	6,799	1,214	1,776	1,815	1,920	6,724	7,466
Changes In NWC	141	(389)	(46)	160	447	172	(644)	(63)	387	399	79	20
Cash Flow from Operating Activities	6,165	952	1,475	2,458	2,086	6,971	570	1,713	2,202	2,319	6,803	7,487
Cash Flow From Financing Activities												
Purchase Of Common Shares	(385)	(277)	(137)	(72)	(1,101)	(1,587)	(1,258)	(1,172)	(1,200)	(1,200)	(4,830)	(2,368)
Dividiends Paid	(1,634)	(436)	(436)	(435)	(433)	(1,740)	(509)	(504)	(500)	(494)	(2,006)	(2,142)
Cash Flow From Financing Activities	(2,707)	(592)	215	(908)	(2,572)	(3,857)	(765)	(1,023)	(1,200)	(1,194)	(4,181)	(3,810)
Cash Flow From Investing Activities												
Capex	(2,863)	(412)	(729)	(836)	(914)	(2,891)	(379)	(707)	(900)	(850)	(2,836)	(2,960)
Cash Flow From Investing Activities	(2,946)	(413)	(1,642)	42	(860)	(2,873)	(101)	(716)	(900)	(850)	(2,567)	(2,960)
FCF	3,302	540	746	1,622	1,172	4,080	191	1,006	1,302	1,469	3,967	4,527
FCFPS	4.64	0.76	1.05	2.29	1.66	5.76	0.27	1.46	1.91	2.18	5.82	6.83
Balance Sheet												
Assets												
Cash & Short Term Investments	1,100	1,047	1,094	2,687	1,341	1,341	1,045	1,020	1,122	1,397	1,397	2,112
Total Current Assets	3,102	3,374	3,486	4,937	3,426	3,426	3,239	3,354	3,448	3,861	3,861	4,588
PP&E	40,069	39,816	39,918	40,753	41,178	41,178	40,944	41,761	42,246	42,698	42,698	43,962
Total Assets	44,804	44,964	46,256	47,762	48,538	48,538	48,236	49,285	49,864	50,729	50,729	52,720
Liabilities												
Total Current Liabilities	3,274	2,838	3,750	3,552	3,120	3,120	3,848	4,756	4,267	4,804	4,804	4,836
Total Long Term Debt	12,906	12,928	13,719	13,556	12,485	12,485	13,383	14,372	14,077	14,577	14,577	15,277
Total Liabilities	25,153	25,073	25,918	26,102	25,794	25,794	26,384	27,541	28,203	29,360	29,360	30,572
Shareholders' Equity	19,651	19,891	20,338	21,660	22,744	22,744	21,852	21,744	21,661	21,369	21,369	22,147

Source: Company reports and CIBC World Markets Inc.



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CIBC World Markets Inc. Stock Rating System

Abbreviation	Description
	Description
OP	Stock is expected to outperform similar stocks in the coverage universe during the next 12-18 months.
NT	Stock is expected to perform in line with similar stocks in the coverage universe during the next 12-18 months.
UN	Stock is expected to underperform similar stocks in the coverage universe during the next 12-18 months.
TR	Shareholders are advised to tender shares to a specific offer as we do not believe a superior offer will materialize.
NR	CIBC World Markets does not maintain an investment recommendation on the stock.
R	CIBC World Markets is restricted (due to potential conflict of interest) from rating the stock.
Abbreviation	Description
0	Sector is expected to outperform the broader market averages.
M	Sector is expected to equal the performance of the broader market averages.
U	Sector is expected to underperform the broader market averages.
	NT UN TR NR R Abbreviation O

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

Sector rating is not applicable.



CIBC World Markets Inc. Price Chart

For price and performance charts, please visit CIBC on the web at https://researchcentral.cibccm.com/#/disclaimer-central-new or write to CIBC World Markets Inc., 161 Bay Street, 4th Floor, Toronto, ON M5H 2S8, Attn: Research Disclosure Chart Request.

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- 2g CIBC World Markets Inc. expects to receive or intends to seek compensation for investment banking services from these companies in the next 3 months: Canadian National Railway Company
- 7 CIBC World Markets Corp., CIBC World Markets Inc., and their affiliates, in the aggregate, beneficially own 1% or more of a class of equity securities issued by these companies: Canadian National Railway Company

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Ratings Distribution*: CIBC World Markets Inc. Coverage Universe

(as of 26 Jul 2022)	Count	Percent	Inv. Banking Relationships	Count	Percent
Outperformer	169	54%	Outperformer	169	100%
Neutral	129	41%	Neutral	128	99%
Underperformer	9	3%	Underperformer	9	100%
Tender	3	1%	Tender	3	100%
Restricted	5	2%	Restricted	5	100%

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