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Model trains

Strip away Google's cash and compare its price/earnings multiple to that of an old Harriman railroad, and you'll find that the latter is more highly valued than the former. Ignoring the former, we turn our attention to the latter, Union Pacific Corp., and to the other four top publicly traded North American Class I railroads: CSX Corp., Norfolk Southern Corp., Canadian Pacific Railway Ltd., Canadian National Railway Co. In preview, we're bearish on them.

We are quarreling with the tape, admittedly. Railroads are among the shiniest stars of this sparkling stock-market era. Since 1980, they've ridden the great deregulation boom. And since the mid to late 1990s, they've ridden the coattails of E. Hunter Harrison, father of precision-scheduled railroading.

Throw in the growth of the global grain trade, the plunge in interest rates and a 10-year business expansion, and you understand why the railroading narrative is captivating. The ill-managed cyclicals of yesteryear now stand (at least in the eyes of the bulls) as cycle-proof growth stocks. Harrison's votaries, implementing the master's system, will continue to drive efficiency and impose the rates they choose on their helpless, captive customers, the story goes. And if technology one day renders their legacy operations uneconomic, the lines can always monetize their immense land holdings, say the visionaries.

Few have lost money by believing it. News that Jim Vena, a protégé of Harrison's at Canadian National, was poised to become Union Pacific's chief operating officer produced, on Jan. 8, an $8.9 billion pop in UNP's stock-market capitalization. Reciprocally, few have made money by approaching the railroad stocks from the vantage point of reversion-to-the-mean—or with the attitude that the shelf life of any management cult is finite.

A handful of leading questions:

· PSR is different from zero-based budgeting (ZBB), the radical cost-control technique which, as implemented at Kraft Heinz by the cheapskates of 3G Capital, has yielded such mixed results lately—but how different?

· Do railroad stocks really deserve superior multiples given the stagnant growth in freight volumes over at least the past 13 years and the year-over-year volume declines of the past five months?

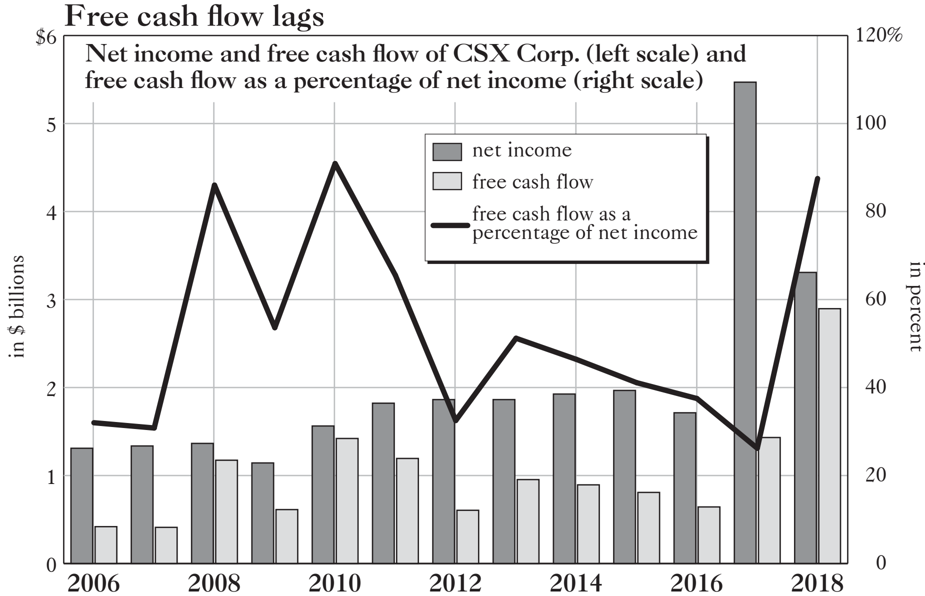
· Will cost control, monopoly-like pricing and the non-arrival of autonomous trucking create a truly winning long-term growth strategy?

· The Surface Transportation Board, successor to the old Interstate Commerce Commission, has the authority to crimp the railroads' pricing power. What if it chooses to use it?

At the moment, though, Mr. Market's mood is bullish, not inquisitive. Cummins, Inc., Deere & Co. and Caterpillar, Inc. trade at an average P/E multiple of 12.5, because they are cyclical companies in what are surely not the early days of a business expansion. Our five big railroads trade at an average P/E multiple of 19 because, as Mr. Market tacitly contends, they're somehow no longer cyclical.

Credit the life's work of Hunter Harrison for that article of faith. A baseball fan will see in Harrison's system an analogy to the magic insights of Theo Epstein, who delivered world championship titles to the formerly hapless Boston Red Sox and the once futile Chicago Cubs. Har-

Free cash flow lags



source: The Bloomberg

rison, both inventing and applying PSR, led the humdrum Illinois Central Railroad to operational and financial excellence and later did the same for Canadian National and Canadian Pacific. He was making a start at CSX when he died in December 2017, age 73, after less than a year in the CEO's chair.

The basic PSR metric is the operating ratio, defined as operating expenses divided by revenues. As the idea is to reduce the numerator while enlarging the denominator, the lower the OR, the better. Canadian National's operating ratio stood at 76% in 2002, the year before Harrison arrived as CEO. By the time he left, it was 65.9%.

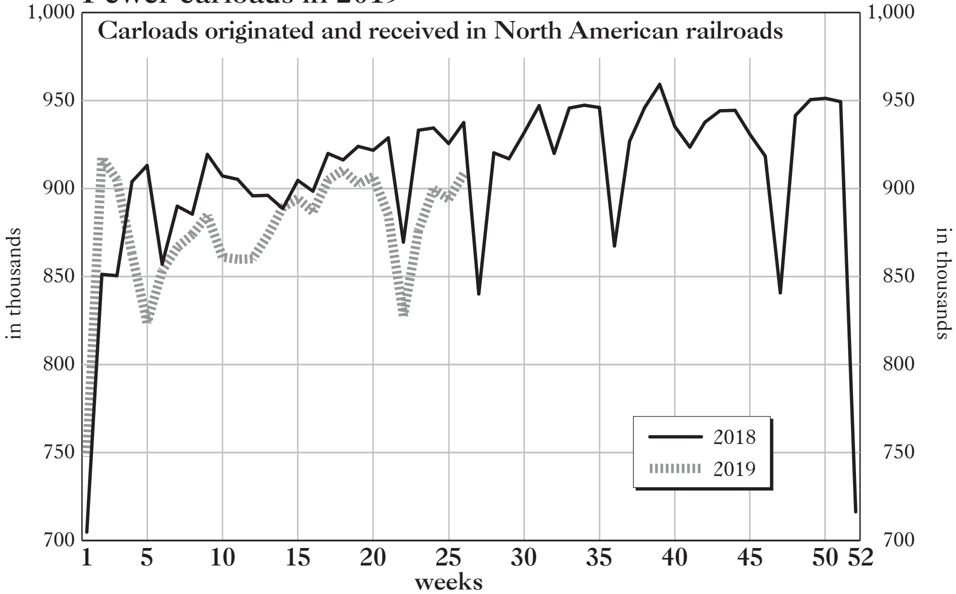
Retiring in 2009, the miracle-worker unretired in 2012 to lead Canadian Pacific, where he proceeded to slash CP's operating ratio to 58.6% in 2016 from 81.3% in 2011. In January 2017, CSX snatched the maverick away to implement PSR on the American East Coast. CSX shareholders unanimously approved an $84 million signing bonus, but Mr. Market, boosting the CSX market cap by $8 billion on the simple announcement of his probable hire, did the prospective boss one better.

"Previously, you'd have a locomotive waiting outside your manufacturing facility," a bearish student of the railroad situation describes Harrison's M.O. in a conversation with colleague Fabiano Santin. "If the customer was late, you just waited, and that threw your whole scheduling off, if you think about the massive network that these guys are managing. What [Harrison] decided to do is that you have a schedule and you stick to it no matter what. If a customer is late, yeah, you just leave, or you charge them a fee for that lateness.

"What that allows you to do is, you have fewer operating assets on the rails," Santin's informant goes on. "If you don't have late locomotives, you can just have one running all day and you attach as many cars to that locomotive as possible. It's kind of having your rail network more like an escalator than an elevator, not stopping at every place, but just flowing through. That fluidity allows you to cut locomotives, so you can cut personnel. You're never late. . . . You have better service, but there is just a massive amount of cost that drops out."

So says the theory that's transfixed not only Wall Street (the S&P Railroad Index has outperformed the broad market for the past 3, 10 and 20 years),

Fewer carloads in 2019



sources: The Bloomberg, the Association of American Railroads

but also the railroads' C-suites. Harrison's understudies are busily implementing PSR, or such parts of that set of ideas that the respective customers and boards of directors will tolerate, at Union Pacific and Norfolk Southern. Berkshire Hathaway, Inc.'s BNSF Railway Co. is the sole Class I railroad adjourning PSR for traditional methods.

Certainly, there's genius in Harrison's invention, just as there is in zero-based budgeting. (Bill Gates, a heavy personal investor in Canadian National, once commended Harrison, saying, "You paid my taxes last year!") Railroads used to lay track and run locomotives not necessarily to maximize earnings, or minimize the operating ratio, but because to run a railroad was what they did when they came to work in the morning. Harrison reminded the managers why they came to work.

The risk with PSR, as with ZBB, is that eager beavers will ask more of the system than it can reasonably deliver. Railroading is still cyclical, still capital-intensive and still, in many operational details, imprecise. Distributable free cash flow is a fraction of net income, with which the stock market is incorrectly preoccupied.

"When you talk to customers," a knowledgeable onlooker comments to Santin, "what really frustrates them, rightfully so, is that with Amazon, UPS, FedEx, you can pull up and see exactly where your package is at pretty much any point in time. Yet here you've got a $400,000 tank car, and the railroad can't even tell you what city it is in."

A defining difference between Harrison's management style and that of, say, Jeff Bezos, is that Bezos is all about the customer. Harrison was all about the railroad—about reducing its capex, idling ("rostering") unnecessary locomotives and cars, eliminating unprofitable business lines and hubs, reducing the hours the trains spend in terminals ("terminal dwell") and—not least—bending the customers to the railroad's will, exercising the kind of monopolistic leverage to which the railroaders apply the delicate euphemism "franchising power."

You can probably take customer-centricity too far. You can certainly take Harrison's anti-customer-centricity too far, as the railroads arguably have already done. Scarcely three months after the death of "the best operator since E.H. Harriman," as a transportation analyst appraised Harrison in a 2017 *Fortune* magazine interview, *The Wall Street Journal* reported on a change in the railroading zeitgeist that ran out under this headline: "Railroads Embark on Apology Tour to Make Amends for Hunter Harrison's Ways."

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Trucks carry 42% of total freight volume and generate 77% of total freight revenue in the United States, compared with 41% of volume and 9% of revenues for rail. Thus, as trucks lead, rails follow, not least in pricing.

Over the past 14 years, notes David Vernon, transportation analyst at Bernstein Research, rail stocks outperformed the broad market by 625%. The source of this amazing differential? It was earned "in periods when contract truck rates were moving higher." But now, says Vernon: "The truck market is poised to move materially lower."

The two Canadian railroads that Harrison transformed, as well as CSX, today show operating ratios in the high 50s to low 60s (compared with values in the mid 60s for the others in our group). Then, again, CN and CP are mostly straight-line, transcontinental railways, simpler in configuration than the arterial routes that American companies operate.

"One-half of the operating ratio is cost-cutting," Larry Gross, industry veteran and president of Gross Transportation Consulting, tells Santin. "The other half, obviously, is the revenue side. Inherent in the PSR mantra is a lot of discipline on the pricing side of the equation. I would characterize that a big chunk of PSR is deciding what the railroad is good at and being very selective in the customers and the freight that the railroad handles. It sloughs off freight that introduces too much complexity with too many touches into the system and concentrates on the freight that it can handle most efficiently.

"Now," Gross goes on, "there's a limit to how far you can take that. That is one of the really interesting questions right now about where the railroads are at in their ability to sort of sustain the trajectory that they've been on. . . . As you continue this, you can probably drive the operating ratio down, but what the problem is, what happens on the volume side. . . . They're certainly in a mode right now where volume is declining, although profitability is improving. That's not feasible indefinitely."

Matt Rose, the PSR holdout who recently retired as the chief executive of BNSF, argued the case against management-by-OR in December. "[T]he easiest way to reduce operating ratio is to take out track and reduce maintenance expenses," said Rose in an interview for *Railway Age*. But that's hardly the deal that the industry implicitly struck with the government and the public, he observed, in the run-up to the landmark 1980 deregulation. "The Staggers Act wasn't, 'Railroads, haul only what you want to haul on your network,'" Rose went on. "It's 'Haul everything, and you have the ability and the flexibility to differentially price on your network.' That's the deal, and it's in the public's best interest to move more tons to the railroad network, not to move tons off the railroad network."

The Surface Transportation Board hinted at a more activist tone in an April 25 staff report. "[T]he railroads' ability to differentially price traffic should be restricted once revenue adequacy is achieved," said the summary of that document. "This report is good news for rail shippers," commented Chris Jahn, president and CEO of The Fertilizer Institute; and, by extension, not so good for the railroads.

On May 22 and 23 the STB heard complaints on demurrage and accessorial charges, the penalties that railways slap on shippers for failing to load or unload railroad cars, for causing network congestion or for committing other operational infractions (the shippers have no reciprocal redress against nonpunctual locomotives). Fee revenue for the Class I companies rose by 31% year-over-year to $1.3 billion in 2018, according to Bernstein Research.

"Such levies may look small as a percentage of 2018 revenues—ranging from 1% for Union Pacific to 2.7% for CSX—but they represent 5% and 13%, respectively, of the companies' operating income," Santin points out. "So it was probably not in a spirit of pure charity that UNP last month rolled back one such late fee to $2,500 from $10,000. 'Rest assured, we are listening to your concerns and taking action,' the executive was quoted as saying. It didn't sound like Harrison."

But this does sound like Elon Musk: "It's economic suicide for rail. This beats rail." The entrepreneur so said in unveiling the Tesla Semi, an electric truck with allegedly unbeatable range and fuel efficiency.

"But," Santin relates, "battery-powered or not, wholly autonomous or not, trucks arrayed in 'platoons' may one day soon crush the highest cost variables in trucking: fuel and labor. Ultra-low interest rates certainly reduce the cost of infrastructure and research to expedite the demise of railroads and their recent abnormal profits. But it's hard to see anybody worried about profits 10 years from now, although most of the value of the railroad stocks lies in long-term terminal-growth projections."

"[Investors] are making the bet that the last 20 years will have been more typical than the next 20," says Noël Perry, transportation economist and founder of freight consulting firm Transport Futures. "I think that is completely wrong. By the end of the 20 years this [era of railroad prosperity] is going to be over. Does that mean you can't make good money for the next 10 years? No. I expect that railroads will. But beyond 2030, it is a crapshoot. It is 1880s technology."

The PSR narrative so deeply permeates the industry that even short-line railroad businesses trade like gemstones. On July 1, affiliates of Brookfield Asset Management, Inc. and GIC, the Singapore sovereign wealth fund, announced their intention to purchase Genesee & Wyoming, Inc. for $112 a share, a 40% premium to the March 8 closing price, when takeover speculation began. The transaction is valued at 13 times 2019 adjusted earnings before interest, taxes, depreciation and amortization, above the already rich 12 times multiple of Class I railroads, and gives the new owners exposure to international-freight operations in Australia, Britain and continental Europe, as well as legacy short-lines in the United States. Whether the G&W managers can make a go of their program to restore profitability—they call it "Roots Reset"—will be their own affair. Out of the public eye, they will succeed or fail discreetly.

"The market's love affair with the railroads is, as noted, all the more striking when compared with the skepticism that investors are according the great industrial enterprises that everyone knows to be cyclical," Santin notes. "Take Caterpillar: At $134 a share, the stock trades at less than 11 times earnings, down from 18 times as recently as April 2017. Assume that the analysts' earnings forecast is correct. Assume, next, a drop in the P/E multiple to nine times. The investor would be looking at an 18% decline. Now take our five railroads. Assuming they re-rate to the five-year average multiple of 14 times from today's average of 19 times, a stockholder would be looking at a 26% drop.

"Then, too," Santin winds up, "earnings, for a railroad, tell only part of the story. Maintenance capital expenditures are very real, even though, depreciated over 30 to 40 years, they make little difference in short-term net income. In the past 20 years the free cash flow generated by the five Class I railroads amounted to only 55% or so of earnings. The stocks trade at a 3.9% free-cash-flow yield, nearly half of the 7.6% yield on machinery and construction stocks, or 7.9% for equities of autos and auto parts, according to Barclays."

The 20 to 30 analysts who cover each of the five companies say either "buy" or "hold." A grand total of two say "sell." Then, again, the minority does seem to command one knowledgeable audience. Run your eye down Bloomberg's tally of insider transactions in the group, and the color you see is red. Overwhelmingly, the officers and directors are sellers.

What would Harrison do?

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