

## Case Study Questions

### Canadian Pacific's Bid for Norfolk Southern

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Formed in 1982 out of railroads that have been in existence for 100 years, Norfolk Southern Corporation (NS) had a proud history as one of the largest and most efficient railroads in the United States. Despite this legacy, both revenues and profits began falling in 2015 as shipments of coal (20% of revenues) and other commodities declined and cost reduction efforts stalled. As a result, the company's stock price had fallen by almost 40% from a high of \$117 in late 2014 to a low of \$72 in August 2015.

1. Why does Canadian Pacific want to acquire Norfolk Southern?
2. What is the value of Norfolk Southern cash flows on a stand-alone basis? In your analysis, assume the following:
  - a. A valuation date of December 31, 2015, and year-end cash flows;
  - b. Beta of debt for railroad companies is 0.15
  - c. Corporate tax rate of 36%.
3. What is the present value of the projected merger benefits in Table A as of December 31, 2015? Are the projections reasonable? How does the present value of the pre-merger operational improvements compare to the post-merger combination synergies?
4. Using the data in case Exhibit 9b, analyze the changes in market values of CP and NS in response to the rumors of a pending offer (11/06/15 – 11/09/15) and the initial CP offer (11/17/15 – 11/18/15). Is the market's reaction consistent with your valuation of the projected merger benefits from Question 3? Why or Why not?
5. What is the value of CP's revised offer on December 8 (before CP "sweetened" its offer by adding the CVR security)? In your analysis, assume the following:
  - a. A valuation date of December 31, 2015, and year-end cash flows;
  - b. The stand-alone (pre-merger) values of CP and NS are \$134 and \$80 per share, respectively;
  - c. NS shareholders approve the merger and the Surface Transportation Board (STB) approves it;
  - d. Investors expect 100% of projected merger benefits to be realized. What is the value if investors expect none of the projected merger benefits to be realized?

- e. NS must debt finance 100% of the cash portion of the revised offer (\$32.86 per share).
6. Why did CP include the CVR security in its “sweetened” offer on December 16? What is CP’s motivation and how does the CVR sweeten the deal?
  7. As a Norfolk Southern shareholder, would you accept CP’s “sweetened” offer?