
DOT's Proposal and Alternatives

Four general options are available to the Congress for selling the government's stock in Conrail: (1) a private, negotiated sale to a single purchaser, (2) a private, negotiated sale to an investor group for eventual resale to the general public, (3) a public sale through a direct stock offering, and (4) retention of the government's stock with an eventual sale at a future date.

The first option is the one selected initially by the Department of Transportation in its proposal to sell Conrail to the Norfolk Southern Corporation. The principal concern of DOT in the sale process has been its belief that Conrail cannot survive as an independent railroad. The department proposed a sale to a single purchaser with a commitment to maintaining Conrail's services rather than a public sale because of the uncertainties a public sale would entail concerning Conrail's future level of service and survival. Consequently, the proposed sale to Norfolk Southern was designed both to provide Conrail with a strong corporate parent capable of providing financial assistance and to maintain Conrail's current level of service for the next five years by covenants in the sale proposal.

Options two through four are predicated on the assumption that Conrail can survive and remain profitable as an independent company and that Conrail's stock would therefore be attractive to investors. Each option proposes an eventual sale of Conrail's common stock to the public. They differ from each other principally in the process used to determine the value of the government's stock and who bears the risk in that process. The following sections examine the four options for the nature of the risk borne by the government in each proposal, and then consider possible methods for estimating an economic value for the corporation.

Risk

The risks perceived by each party in the transfer process will depend on their goals in the sale and in the subsequent operation of Conrail. The goals of the government--continuing service, maximizing the return to the government, and ensuring Conrail's future survival--and the goals of potential investors, principally maximizing the return on their investment, may conflict. Moreover, since Conrail's future performance and profitability cannot be predicted with certainty, any method for transferring the firm to the private sector entails risks for all parties concerned.

Option 1: Private Sale to a Single Purchaser. If patterned after the Norfolk Southern proposal, this option would reduce the risk of the loss of Conrail's

services in the next five years and provide the government with an assured price for its share in the corporation. However, the chances that Conrail's service level would decline over the next five years appear slight. On the other hand, this option would carry a higher risk that the government might not receive the maximum return on its investment and that service in the long run might be reduced. A reduction in service could have occurred under a sale to Norfolk Southern because of a loss of competition that would lead to a reduction in the output and increase in the price of rail services in the Conrail region.

Option 2: Private Sale to an Investor Group. This option is similar to the first in that the price the government receives would be assured and that restrictions on ownership and control could be negotiated to reduce the risk of service losses in the near term, even if this risk is minimal. This option would also pose the risk that the government might not maximize the return from its investment in Conrail. In both Options 1 and 2, the government could transfer the risk in valuing the corporation to the buyer.

Option 3: Public Sale. Selling Conrail through a direct stock offering would reduce the certainty of the price to be paid to the government but would increase the probability that the government would maximize its return. The risk of service reductions would be higher under this option, because the private stockholders may place a higher value on maximizing profits than would the government, and would not be bound by the restraints negotiated in the first two options.

Option 4: Temporarily Retaining the Government's Stock in Conrail. This option would permit Conrail to establish a more complete picture of its operating potential than is provided by the few years of profitability since the company's restructuring under NERSA. Consequently, the potential for the government to maximize its return would increase if the uncertainties surrounding Conrail's potential profitability were reduced. However, the government would bear the risk that the price could fall in the event of a poor showing by either Conrail or the stock markets in general. The risk of service reductions would be greatly reduced in this option.

Each of the options above is affected by the question of Conrail's viability. If Conrail's viability is in question, the government may wish to pursue Options 1 and 2, in which restrictions on the activities of the firm may be negotiated that would permit some guarantees of the level of service Conrail provides in the future. Absent concerns about Conrail's survival, Options 3 and 4 may provide a higher return to the government while not greatly increasing the risk of service losses.

Investors' perceptions of Conrail's potential profitability will determine the price they are willing to pay for its stock. While this study shows that Conrail appears viable over the next decade, the degree of its profitability depends on the macroeconomic and operating assumptions applied in the forecast. Hence, while Options 2, 3, and 4 are viable options for Conrail, the government's return under each would depend on the perceptions of the purchasers.

Value

The value of the benefits associated with the government's holdings of Conrail stock will vary according to the method used to calculate the value of the corporation, and many alternative methods exist for making this valuation. In addition, application of identical methods by both the government and potential investors may lead to different prices because of differing assumptions or perceptions of Conrail's future. This section examines two methods for obtaining rough approximations of Conrail's value: estimating the present discounted value of Conrail's future dividend payments, and imputing the company's total value using price-earnings ratios and the potential earnings of the firm.

Discounted Present Value. The first method is to estimate the present discounted value of Conrail's future dividend payments. The benefit of common stock in Conrail is that it confers the right to a portion of Conrail's future dividend stream. By discounting to the present the total value of that stream of payments, a value could be placed on the right to receive those payments and, therefore, on the total stock of the corporation. A real discount rate (corrected for inflation) of 2 percent is used in this analysis.

The actual future dividend streams and additional retained earnings that Conrail will produce cannot be predicted accurately because of the many uncertainties associated with Conrail's future operations. In this section, three alternative operating results--similar to those in Table 20--are used to illustrate alternative outcomes for Conrail's profitability under both the status quo (baseline) and stand-alone assumptions. These three cases are referred to as high, base, and low. The high and base cases are both constructed using the base-case traffic forecast in Chapter II and tariff recovery rates of 0.8 and 0.7, respectively, and productivity growth rates of 2.0 percent and 1.5 percent. The low case uses the traffic forecast of the low case and a tariff recovery rate of 0.4 and productivity rate of 2.0 percent. Table 23 shows net income, the change in cash, and the ending cash balance in 1995 for each case under both the status quo and stand-alone assumptions.

In order to calculate the true present value of the dividend stream for each case, the operating results for Conrail and the associated dividends would need to be forecast well beyond the year 2000. Since it is not feasible to estimate so distant an outcome, the discounted stream for the forecast period is calculated in each case and a salvage value for Conrail is estimated for the year 1995. The salvage value represents the value of the Conrail system in 1995 after the dividend stream from the forecast period has been paid and as such represents the value of the common stock to the holders at that time. This salvage value is then discounted to the present and added to the discounted value of the dividend stream to give the present worth of the stream of payments by Conrail under the two ownership

TABLE 23. PROJECTIONS OF CONRAIL'S OPERATING RESULTS
IN 1995 FOR ALTERNATIVE SCENARIOS
AND CASES (In millions of 1995 dollars)

	High Case	Base Case	Low Case
Status Quo			
Net Income	1,000	588	364
Change In Cash	51	-182	-168
Ending Cash Balance	1,596	356	-119 ^{a/}
Payment to Government	509	330	209
Stand Alone			
Net Income	954	564	341
Change in Cash	325	-64	-145
Ending Cash Balance	2,775	895	-162 ^{b/}
Dividend Payment	125	125	100

SOURCE: Congressional Budget Office.

NOTE: The high-profitability case assumes the base-case macroeconomic forecast, a tariff recovery rate of 80 percent, and an efficiency rate of 2.0 percent. The base case assumes the base-case macroeconomic forecast, a tariff recovery rate of 70 percent, and an efficiency rate of 1.5 percent. The low-profitability case assumes the low macroeconomic forecast, a tariff recovery rate of 40 percent, and an efficiency rate of 2.0 percent.

- a. Turns negative in 1995.
- b. Turns negative in 1994.

scenarios. Both the stream of dividend payments and the salvage value are calculated in real 1985 dollars at a real discount rate of 2 percent.

The salvage value in 1995 can be estimated by taking the trend of the current value of the assets represented by the common stock. A rough approximation of that current value can be made by subtracting from the value of all assets the value of all liabilities except stockholders' equity. In the stand-alone scenario, stockholders' equity is only the common stock; under the status quo, it includes preferred stock and additional paid-in capital as well as the common stock. The discounted 1995 salvage value varies from \$971 million to \$3.9 billion, depending on the macroeconomic assumptions. In the low case, salvage value would be closer to liquidation value, while in the high case it would be closer to the current asset value of the railroad.

If the status quo were maintained, the federal government would own all of Conrail's preferred stock and 85 percent of its common stock, and an ESOP would hold the remaining 15 percent of the common stock. Under the terms of the financing agreement between Conrail and USRA, dividends on the common stock cannot be paid until the preferred stock is retired. Since this retirement will not occur during the forecast period, the only payments made by Conrail would be those to the government for interest on debentures, dividends on preferred stock and, in the high case, to retire some principal amount of the outstanding debentures. In the stand-alone scenario, dividends would be paid on the common stock to both the federal government and the ESOP.

Table 24 shows the present value of the income streams and salvage value under the three cases for both the status quo and stand-alone scenarios. In all six cases, the final value of the firm has been equated by adjusting the final cash balance to equal \$500 million. The resulting cash surplus or deficit is discounted to the present and added to the dividend stream.

Under the status quo, the federal government could receive interest and dividend streams worth between \$600 million and \$2.8 billion and a 1995 salvage value of between \$1.0 billion and \$3.9 billion, for totals of between \$1.6 billion and \$6.7 billion. These numbers bracket what Conrail is worth to federal taxpayers now.

In the stand-alone scenario, 85 percent ownership of the corporation could entitle stockholders to a dividend stream worth between \$150 million and \$1.7 billion and a salvage value of between \$1.0 billion and \$3.9 billion, for a total of between \$1.1 billion and \$5.6 billion. The latter range

brackets the value of Conrail to private owners if it were sold. In addition, in this scenario the government would receive a tax stream valued at between \$290 million and \$655 million, amounts that bracket the value of Conrail to taxpayers even if the company was sold.

From the standpoint of federal taxpayers, the restructuring of Conrail and the sale of its common stock would eliminate the potential income streams of between \$1.6 billion and \$6.7 billion. In return, Conrail would produce potential tax streams of between \$290 million and \$655 million. The net difference between these values for each case--from \$1.3 billion to \$6 billion--gives the amount of money that would make the sale of the stock and the continuation of current policy equally attractive. Therefore, if this method were used to value the corporation, the government would expect to receive between \$1.3 billion and \$6.0 billion for its stock.

TABLE 24. REAL DISCOUNTED VALUE OF POTENTIAL GOVERNMENT RECEIPTS FOR ALTERNATIVE SCENARIOS AND CASES
(In millions of 1985 dollars)

	High Case	Base Case	Low Case
Status Quo			
Federal Receipts	2,778	1,658	624
Salvage Value	<u>3,901</u>	<u>2,803</u>	<u>971</u>
Total	6,679	4,461	1,595
Stand Alone			
Federal Dividends	1,709	810	147
Salvage Value	<u>3,901</u>	<u>2,803</u>	<u>971</u>
Total	5,610	3,613	1,118
Federal Tax Receipts	655	480	290

SOURCE: Congressional Budget Office.

NOTE: The high-profitability case assumes the base-case macroeconomic forecast, a tariff recovery rate of 80 percent, and an efficiency rate of 2.0 percent. The base case assumes the base-case macroeconomic forecast, a tariff recovery rate of 70 percent, and an efficiency rate of 1.5 percent. The low-profitability case assumes the low macroeconomic forecast, a tariff recovery rate of 40 percent, and an efficiency rate of 2.0 percent.

Valuing Conrail Using P/E Ratios. An alternative method of valuing Conrail would be to impute the total value of the corporation using price-earnings (P/E) ratios and the potential earnings of the firm. The P/E ratio is the ratio of the value of a firm's stock to its profits. A P/E ratio takes into account a company's current and future earning power along with numerous other considerations including its financial structure, debt levels, cash flow, dividend policy, and the quality of its management. For stocks in which a market already exists, the judgment and decisions of individual investors, taken together, determine the market value of the firm, and a P/E ratio can be easily calculated using the firm's earnings. A high ratio suggests that investors are optimistic, and vice versa. Working backward in the case of Conrail, the forecasted level of Conrail's future earnings could be used to construct a price range for the firm by applying a range of P/E ratios.

TABLE 25. CURRENT VALUE OF THE GOVERNMENT'S COMMON STOCK IMPLIED BY PRICE-EARNINGS RATIOS AND BY PROJECTIONS OF REAL NET INCOME
(In millions of 1985 dollars)

	Average Annual Real Net Income <u>a/</u>	Price-Earnings Ratio						
		6	7	8	9	10	11	12
High Case	482	2,458	2,868	3,278	3,687	4,097	4,507	4,916
Base Case	360	1,836	2,142	2,448	2,754	3,060	3,366	3,672
Low Case	233	1,188	1,386	1,584	1,782	1,981	2,179	2,377

SOURCE: Congressional Budget Office.

NOTE: This table presents only 85 percent of the total value of Conrail since the government owns only 85 percent of its common stock. Values (v) are calculated by the following formula: $v = .85 \times (P/E) \times (\text{Average Real Net Income})$.

NOTE: The high-profitability case assumes the base-case macroeconomic forecast, a tariff recovery rate of 80 percent, and an efficiency rate of 2.0 percent. The base case assumes the base-case macroeconomic forecast, a tariff recovery rate of 70 percent, and an efficiency rate of 1.5 percent. The low-profitability case assumes the low macroeconomic forecast, a tariff recovery rate of 40 percent, and an efficiency rate of 2.0 percent.

a. Average real net income on a book tax basis over the forecast period serves as a proxy for earnings.

Table 25 lists various price-earnings ratios and applies them to Conrail's average real net income on a book tax basis over the forecast period for the three cases in the stand-alone scenario.^{1/} Representative P/E ratios of between 6 and 12 are used since the average railroad price-earnings ratio ranged between these values from 1976 through 1984. Exactly where on this range railroad stocks might be at the time of the sale would depend on all of the uncertainties that determine the prices of railroad stocks as well as other stocks. The values range from a low of \$1.2 billion to a high of \$4.9 billion.

While the range of possible market values for Conrail derived by the two methods above are large, they are similar to the ranges one would expect in applying these methods to any firm of Conrail's size. The forecast of the operating and financial condition of any firm involves so many variables and so much uncertainty that assessments of market values by individual investors will extend over a wide range. Indeed, stocks on the stock market exhibit a range of price-earnings ratios much wider than the 6 to 12 band used here, reflecting in part this uncertainty.

Whether a discounted present value or a price-earnings ratio method is used, the range of values for the government's interest in Conrail as a stand-alone firm are similar. The discounted present value technique yields a range of \$1.1 billion to \$5.6 billion, while the P/E technique yields a range of \$1.2 billion to \$4.9 billion.

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1. The use of "book tax basis" reflects the fact that Conrail's tax depreciation defers taxes rather than cancels them. Some of Conrail's apparent cash earnings, therefore, are effectively borrowed from its future income. In the absence of deflation, however, and if Conrail's investment program does not decline, this borrowing from the future continues indefinitely. The use of book tax basis avoids assuming this indefinite shifting of taxes to the future and provides a conservative estimate of Conrail's income.

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