

SUMMARY

The Consolidated Rail Corporation, or Conrail, was formed from the remnants of seven bankrupt railroads in the Northeast and Midwest. It began operations on April 1, 1976. An infusion of government funds--in total, over \$10 billion in constant dollars--has helped to restore Conrail to profitability. The system produced \$442 million in net income in 1985.

The Northeast Rail Service Act of 1981 (NERSA) directed the Department of Transportation (DOT) to examine ways of returning Conrail to private-sector ownership. Specifically, it required DOT to initiate a sale of Conrail if it became profitable. Accordingly, DOT first solicited proposals for the sale of Conrail in 1983, and in 1985, announced its intention to sell Conrail to the Norfolk Southern Corporation, a railroad holding company that controls the Norfolk and Western Railway and the Southern Railway. The proposal to sell Conrail to Norfolk Southern, however, has recently been rescinded.

The Department of Transportation chose a private sale to the Norfolk Southern Corporation over the alternatives of other private bids or a competitive stock offering because it believed that Conrail required the resources and expertise of a larger railroad company in order to guarantee that it would remain a viable railroad. The agreement with Norfolk Southern contained numerous covenants designed to ensure service in the Conrail region for five years after the sale. But if Conrail were a profitable firm in that period, these covenants would have been largely redundant. Thus, the relative merits of various approaches to the sale of Conrail hinge on whether Conrail is now a viable private enterprise. This paper investigates that issue and attempts to appraise Conrail's value. Its principal findings are that Conrail appears to be a viable independent enterprise over the next decade under a broad range of conditions in both the economy in general and the railroad industry in particular, and that the value of the government's current holdings could range from \$1.1 billion to \$5.6 billion.

THE VIABILITY OF CONRAIL

This study employed the following criteria in analyzing Conrail's potential to continue as an independent corporation over the next 10 years (1986-1995):

- o In the absence of extensive economic dislocations in its service region, Conrail should haul a level of traffic commensurate with its recent experience.
- o Its net operating income should remain positive and at a level consistent with its traffic base.
- o Its capital investment should be sufficient to maintain the existing quality of its track and equipment.
- o Its net income and cash flow should be sufficient to meet capital, debt, and dividend payments.

Each of these criteria is discussed below.

Traffic

In 1985, Conrail hauled 181 million tons of freight. Under a set of base-case assumptions, Conrail is projected to haul 194 million tons in 1990 and 193 million tons in 1995. This base case is built around the Congressional Budget Office's (CBO's) macroeconomic forecast as detailed in *The Economic and Budget Outlook: Fiscal Years 1987-1991*, released in February 1986. The traffic projections were obtained using econometric equations that estimated traffic as a function of gross national product, the share of national economic activity in the Conrail service region, and the relative price of rail and truck services. These projections were made for each of the 14 major classes of commodities hauled by Conrail.

Using this technique, and under the assumptions in the CBO macroeconomic forecast, Conrail's traffic is projected to rise steadily to 195 million tons in 1992 and 1993. Tonnage would then decline slightly in 1994 and 1995. This decline is related to changes in Conrail's commodity mix: manufactured products such as processed food, lumber, pulp and paper, transportation equipment, and stone, clay, and glass products would gradually decline over time; "bulk" commodity products such as grain, coal, ores, and scrap materials would increase, more than offsetting the decline in manufactured goods until late in the forecast period.

A "low" macroeconomic case, which includes a severe recession in 1987 and 1988, was also constructed to test Conrail's resilience to a prolonged downturn. In this low case, the recession would reduce the number of tons hauled to a level that is 20 million tons below the base case by 1988. Traffic would recover partially in 1989 and grow only slightly

thereafter to a level of 180 tons in 1995, roughly equal to 1985 traffic. Thus, a severe recession would preclude any growth in Conrail's predicted traffic, but would not cause a serious decline in its level of service.

Net Operating Income

Net operating income is the difference between income derived from transportation services and the cost of providing them. In 1985, Conrail had net operating income of \$388 million. Under CBO's base-case assumptions, this figure would rise to \$493 million (in 1985 dollars, as are all figures in this Summary unless otherwise noted) in 1991, and then decline to \$432 million by 1995. Under the low macroeconomic case, operating income would decline to \$276 million in 1988 because of the effects of recession, and then would rise to \$396 million by 1995.

Conrail's net operating income depends not only on the macroeconomic environment but on its own performance and the condition of the railroad industry in general. These last two factors are represented by assumptions regarding Conrail's **tariff recovery rate** and its **rate of productivity growth**.

The **tariff recovery rate** is the proportion of cost inflation that Conrail is able to pass forward to its customers. Conrail is assumed to be a competitive price-taker on a systemwide basis--that is, it is too constrained by competition to raise its prices for reasons other than higher costs (which, presumably, affect other railroads and modes of transportation as well). A tariff recovery rate of 0.8, for example, means that 80 percent of cost increases are passed through to rates. This same rate is used in Conrail's internal forecasts, and it is very close to the average value of this measure (0.82) over the 1980-1984 period. In this analysis, a base-case estimate of 0.7 is used for the tariff recovery rate.

A second important assumption is the **rate at which Conrail improves its productivity**. In the past three years, Conrail's productivity has improved by 9.0 percent, 5.4 percent, and 4.5 percent, respectively, and Conrail projects improvements of 3.5 percent for 1986 and between 2.0 percent and 3.0 percent thereafter. While such improvements are possible and consistent with historical experience, this study employed a more conservative assumption of annual productivity gains of 1.5 percent over the forecast period.

If a recession occurs and Conrail loses traffic, the railroad will probably moderate increases in its rates to retain its market share and also attempt to reduce labor and input costs in an effort to improve productivity.

High tariff recovery rates would tend to obviate the need for greater efficiency and, therefore, are probably accompanied by lower rates of productivity improvement. Therefore, in the low macroeconomic case, a lower tariff recovery rate (0.5) and a higher productivity improvement rate (2.0 percent) were assumed.

Capital Investment

In the base case, Conrail's investment in its system is projected to rise steadily over the forecast period. While real spending is projected to decline initially from 1985 to 1986 (\$574 million and \$484 million, respectively) according to Conrail's planned investment program, steady increases are then projected for the rest of the decade, bringing real investment to \$633 million by 1995. In the low case, investment levels are lower, since the levels of both traffic and inflation are lower. Real investment rises nonetheless to \$546 million by 1995.

This level of investment would be sufficient to maintain the scope and quality of the Conrail system. In order for Conrail to be viable while undertaking these investments, however, it would need enough cash to meet all of its current obligations--its operating costs, these investments, and interest and dividend payments.

Cash Flow

Conrail, in both the base and low cases, would have sufficient cash to meet all of its obligations over the 10-year forecast period. Conrail would add to its cash balance each year until 1988, when it must begin making interest and dividend payments to the federal government. These payments, which in current dollars vary between \$265 million and \$334 million annually under the base case (and between \$171 million and \$256 million under the low case), are large given the size of Conrail as an enterprise. Over the 10-year period, total payments to the government in current dollars are forecasted as \$2.5 billion, of which \$1.9 billion would come from income earned during that time. According to these projections, and under the conservative operating assumptions used in this report, Conrail would run out of cash in 1997 or 1998 in both cases, forcing a reduction in its dividend payment at that time. Nonetheless, Conrail appears to be able to meet all of its commitments over the next decade.

The choice of operating assumptions is very important in estimating Conrail's cash flow. The cash flow described above was calculated using

conservative assumptions about Conrail's operating environment. If the operating environment for Conrail proves to be more pessimistic than is characterized in the base case, Conrail's cash on hand could turn negative in 1993. But it is unlikely that this would actually occur. If Conrail were to observe dramatic declines in its profitability and cash on hand, then it probably would curtail its operations, eliminating unprofitable traffic to restore its viability.

On the other hand, if more optimistic assumptions are made regarding Conrail's operating environment (specifically, if the assumptions used in Conrail's own projections are employed), then Conrail's cumulative payments to the government would rise in current dollars from \$2.5 billion under the base case to \$3.3 billion (and from \$1.8 billion to \$2.5 billion under the low case), and the company's cash balances would increase steadily over the 10-year period in both cases.

IMPLICATIONS FOR POLICY

Four general options are available to the Congress for selling the federal government's interest in Conrail:

- o A private, negotiated sale to a single purchaser, like the Department of Transportation's previous proposal to sell to the Norfolk Southern;
- o A private, negotiated sale to an investor group for eventual resale to the general public, like the proposals by Morgan Stanley & Co., Inc., and by Allen & Co. and First Boston Corp.;
- o A public sale through a direct stock offering; and
- o Retention of the government's stock for sale at a later date.

The first option is predicated on the belief that Conrail's viability is in jeopardy and that the company requires the resources and expertise of a corporate parent such as the Norfolk Southern. Under this option, the government would accept the risk of receiving less than a "market" value for Conrail in exchange for an agreement with the corporate parent to preserve Conrail's service to its region. This analysis indicates, however, that the risk of Conrail's abandoning its service region is slight--projections show that Conrail's traffic will not decline and that it has the resources to maintain its system. Service could be reduced, however, if Conrail was

merged with the Norfolk Southern and railroad competition in the Midwest and Northeast decreased.

The second option is similar to the first in that the federal government would accept less uncertainty regarding Conrail's price in exchange for a price that could be less than its market value. In addition, stipulations regarding Conrail's service could be inserted into its conditions of sale. Again, given the apparent low risk of Conrail's proving unable to provide service to its region, this "resale" option has the sole advantage of reducing price uncertainty.

The third option, a public offering of Conrail stock, explicitly views Conrail as sound. Thus, it would have the government sell Conrail as an independent, "stand-alone" entity. In exchange for added price uncertainty, the government would stand a much better chance of realizing Conrail's full market value. The fourth option, deferring any sale, would permit Conrail to establish a more detailed picture of its operating potential. There is no certainty that a deferred sale would increase the price offered for the Conrail system. In fact, such an option could lower the price received for Conrail if a recession materialized and lowered Conrail's profitability.

WHAT IS CONRAIL WORTH?

A final question concerns the value of the government's interest in Conrail. This question cannot be answered with precision, however, because many uncertainties exist regarding the value of any asset, let alone one as large as the Conrail system. The two techniques used here to value Conrail yield similar but wide ranges. However, significant uncertainty would surround comparable estimates for any private concern.

One approach to ascertaining Conrail's value is to estimate the present value of the stream of dividends that Conrail will pay in the future. This present value should be equal to the value of Conrail's stock, since owning the stock entitles one to the dividend payments. Theoretically, these dividend payments should be calculated for a very long time horizon, well into the next century. Because estimating so distant an outcome is not feasible, CBO instead used the discounted stream of dividend payments for the forecast period plus the estimated value of the company at the end of the period.

CBO constructed three cases for the purpose of estimating the total value of Conrail: a low-profitability case, the base case used throughout this analysis, and a high-profitability case. The present value of the stream of dividend payments to the federal government over the next 10 years under these three cases, assuming that Conrail exists as a stand-alone corporation, would be \$147 million, \$810 million, and \$1.7 billion, respectively. To this sum must be added the present value of the firm as it will exist in 1996, after the 10 years of dividend payments. This "salvage value" is very speculative, but can be approximated in all three cases by forecasting the value of all of Conrail's assets and subtracting from them all liabilities except stockholders' equity. Using this procedure, the present value of the firm 10 years from now would be \$1.0 billion, \$2.8 billion, and \$3.9 billion under the three profitability cases. Thus, the expected value of Conrail today would be roughly \$3.6 billion in the base case, but could range from \$1.1 billion to \$5.6 billion using this technique.

A second way to value Conrail is to use the "price-earnings" ratios of comparable firms' common stock. This ratio is the ratio of the value of the firm's stock to its profits. A very high ratio suggests that investors are optimistic about a firm's future, and vice versa. Railroad stocks, over the past 10 years, have had an average price-earnings ratio of between 6 and 12, with values at the high end of the range in the past year. Applying this range of ratios to the average level of Conrail's real earnings under the three profitability cases suggests a price range for the government's common stock of between \$1.4 billion and \$5.6 billion. Using a value of 9--the middle of the range of price-earnings ratios--and the base-case estimates of Conrail's profitability, the government's interest in Conrail would be worth \$3.2 billion on the open market today.

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