

Case Study

Union Pacific³⁸⁰

1 Introduction

During the mid-late 1990s, the management of Union Pacific Railway (UP) adopted a significant change in business strategy, focusing on its core railway business. During the late 1970s and throughout the 1980s, UP had sought to diversify away from its core business through large investments in non-railway ventures, including subsidiary companies in the solid waste, trucking, and natural resources sectors (i.e. oil and gas). During the 1990s, however, supported by a more favorable regulatory and policy environment, UP sought to compete better with the trucking sector through redeploying its capital towards expanding and optimizing its core railway business. UP's transition towards a "pure" railway had the following three key elements:

- The divestiture of select non-railway assets to free up capital;
- The acquisition of Chicago and Northwestern and Southern Pacific to grow its railway-related business, using a mixture of debt and equity; and
- Intensive capital investment and the rationalization of railway assets, to improve the overall efficiency of its network.

Between 1994 and 1996, UP went from a railway-intensive conglomerate to a nearly-pure railway business. This transformation was completed in 2003 with the spinoff of UP's trucking business, Overnite Corp³⁸¹. This allowed UP to have a sharper focus on railways, which helped UP to get more from its assets and to offer a better service.

Although the financial impacts of UP's decision to focus on its core railway business were negative in the short and medium terms, the company's decision to shift its focus resulted in improved technical and financial performance over the long term.

This case study first describes the policy and regulatory environment prior to and during UP's transition. It then discusses the actions UP took to effect a transition

³⁸⁰ This case study is largely based on Lawrence, Martha; Ollivier, Gerald. 2015. *Attracting Capital for Railway Development in China*. World Bank, Washington, DC. © World Bank. <https://openknowledge.worldbank.org/handle/10986/23800> License: CC BY 3.0 IGO. URI: <http://hdl.handle.net/10986/23800>

³⁸¹ UP had originally attempted to sell its trucking business in 1998 but failed to receive a favorably priced offer.

and the challenges the company faced during its transition, followed by the discussion of the transition's overarching results and finally conclusions with lessons drawn from UP's experience.

2 The Situation Surrounding UP's Transition

2.1 *Pre-Transition*

Throughout the 1970s, unfavorable railway regulation alongside increased competition from trucking adversely affected the technical and financial performance of the US railway industry. Between 1970 and 1979, the industry's return on investment resultantly never exceeded 2.9 percent³⁸². During this period, UP's non-railway businesses in oil, natural gas, coal and soda ash resources (all originally developed from land grants) increasingly contributed to the company's net income. Whereas these non-railway business contributed to 21 percent of UP's net income between 1969 and 1974, they contributed 61.7 percent between 1979 and 1982³⁸³.

Believing that there could be more opportunities for higher returns in the non-railroad business, UP's management sought further diversification. By 1988, UP had become a conglomerate with extensive and growing interests in the real estate, natural resources, trucking, and solid waste sectors. Notable holdings in 1988 included:

- Upland Industries Corporation, a company charged with administering UP's real estate holdings, estimated at nearly one million acres of land, in addition to approximately seven million acres of mineral rights in 13 states;
- Companies involved in the exploration, development and production of natural gas liquids and crude oil throughout several basins in the US and Canada;
- Ventures in the oil and gas sector's midstream (refining) and downstream (marketing) value chain;
- Joint venture and royalty interests in several coal and trona (natural soda ash) mines in Wyoming;
- Overnite Transportation Company, an interstate trucking company serving all U.S. states, Canada, Mexico, and the U.S. Virgin Islands; and
- United States Pollution Control Incorporated, a hazardous waste disposal company.

³⁸² Association of American Railroads. (Apr. 2016) "America's Freight Railroads under Balanced Regulation." Association of American Railroads. <https://www.aar.org/BackgroundPapers/Impact%20of%20the%20Staggers%20Act.pdf>

³⁸³ Ibrayeva, E., and Terrence, T. "Union Pacific: Through Deregulation & Beyond." American Journal of Management 14.1-2 (2014): 47-61. http://www.na-business-press.com/AJM/IbrayevaE_Web14_1-2_.pdf

2.2 *The Prevailing Policy and Regulatory Environment*

In 1980, the Congress passed the Staggers Act, which, for the first time in decades, allowed for railways to compete more effectively with trucks, through enabling railways to take previously disallowed actions to enhance their operational and financial performance.

Prior to Staggers, the railway industry was primarily guided by the Interstate Commerce Act of 1887. The Act created the basic legal and regulatory framework for railways through assigning them with common carrier and passenger service obligations, limiting reductions in railway levels of service and/or track, regulating railway tariffs, and forbidding discrimination in service and/or tariffs. In 1976, following one of the worst financial years in the history of American railways, the Railroad Revitalization and Regulatory Reform Act was introduced. This Act modified the Interstate Commerce Act, introducing some flexibility in rates and allowing more track/service reductions. Although the Railroad Revitalization and Reform Act marked a step in the right direction, more sweeping reform was required³⁸⁴.

The Staggers Act allowed railways to price competing routes and services differently, and also streamlined procedures for the abandonment and sale of rail lines³⁸⁵. The enabling effects of Staggers, combined with continued competitive pressures from the trucking sector, led to an unprecedented trend of mergers and acquisitions among large railways in the United States throughout the 1980s and 1990s. Such mergers were aimed at helping railways achieve economies of scale, scope and density, ultimately enhancing their ability to compete with the trucking industry³⁸⁶.

2.3 *UP's Change in Strategy*

Supported by a more favorable policy and regulatory environment for railways, by 1989, UP's management believed that extending UP's network and improving its overall efficiency would better position the company to compete with trucking while earning higher returns. UP's management therefore refocused its interest on the railway business. This appears to have been the driving force behind UP's decision to divest non-railway businesses and redeploy capital towards becoming a "pure" railroad.

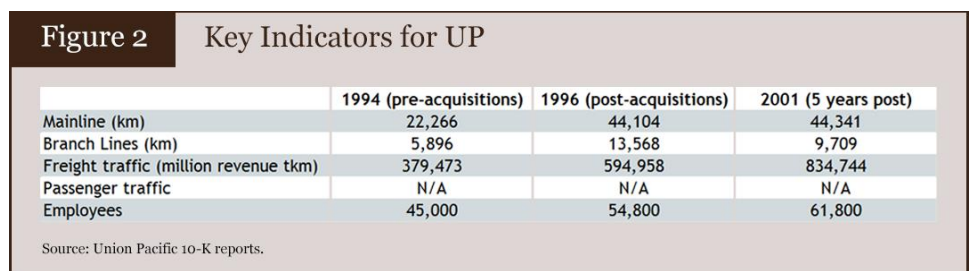
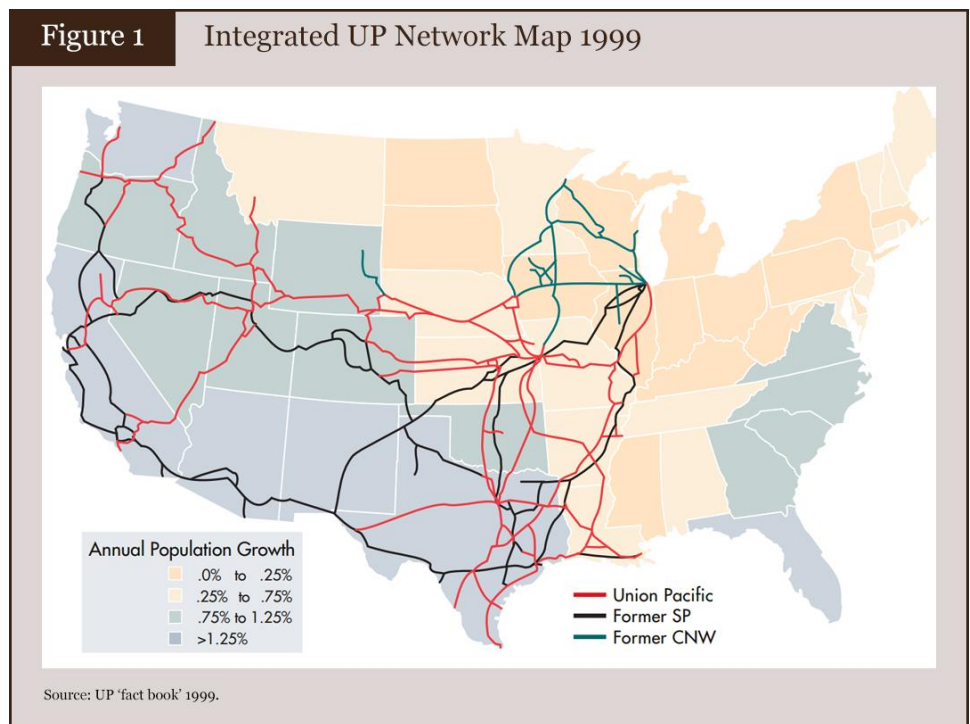
³⁸⁴ The Staggers act further modified the Interstate Commerce Act and Railroad Revitalization and Reform Act to provide for substantial deregulation of freight tariffs, allowing railways to contract with customers, easing restrictions of railway mergers and allowing the railways to close and divest any railway lines with insufficient traffic. The Rails to Trails act of 1983, further enhanced the ability of railroads to abandon freight service on specific lines.

³⁸⁵ Prior to Staggers, rates between a given origin and destination were mandated by the ICC and railways were required to service routes irrespective of their traffic potential.

³⁸⁶ When UP began its transition, the railway industry in the US included eleven large, vertically integrated, private investor-owned freight railways (Class 1 railways). Today, the US has four large and three small "Class 1" railways, in addition to more than 500 smaller railways.

3 UP’s Transition

The most notable events in UP’s transformation were: (i) the sale of its non-railway businesses in 1994 and 1995; and (ii) its railway acquisitions in 1995 and 1996. (See Figure 1 and Figure 2.)



These events are described below, followed by post-acquisition improvements.

3.1 Divestiture of Non-Railway Assets

The starting point of UP’s transition was the sale of its non-railway assets, namely:

- The US\$ 225 million divestiture of a waste management business in 1994; and
- The US\$ 2.4 billion spinoff of a natural resources business in 1995.

The spinoff of UP’s natural resources business in particular helped to free up capital for redeployment on railway-related endeavors. In 1998, UP also sought to sell its stake in a less-than-truckload shipping business known as “Overnite.” However, this divestiture was delayed until 2003 when UP secured a favorable price.

3.2 Acquisition of Railway Businesses

In 1995, UP purchased the Chicago and North Western Transportation Company (CNW) for US\$1.4 billion in cash. CNW’s east-west mainline gave UP a direct route from Los Angeles to Chicago. At the time of the purchase, UP already owned 25 percent of CNW, and CNW moved UP’s trains under a haulage agreement.

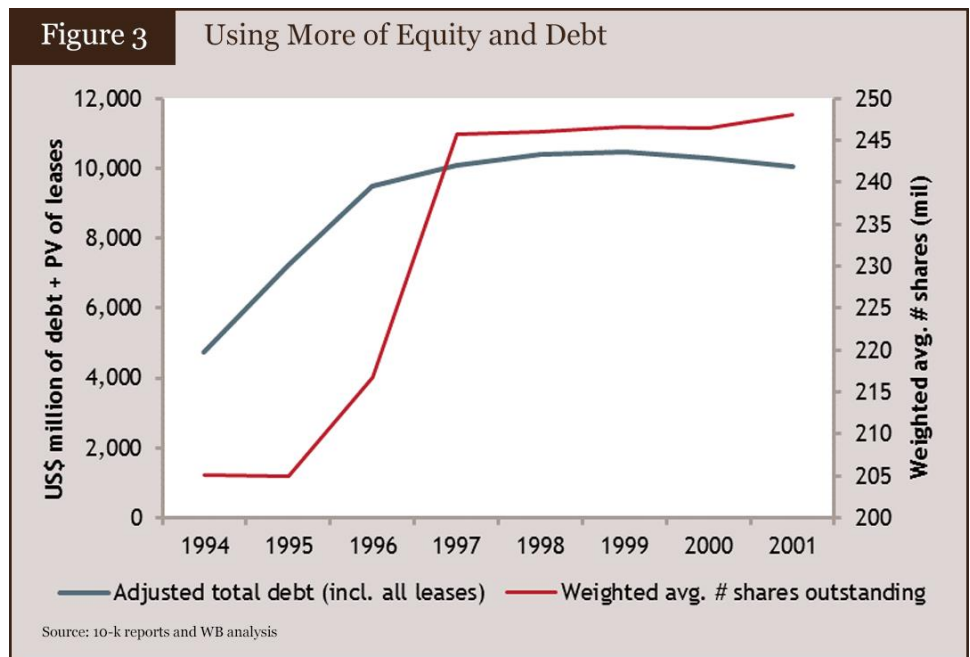
This was followed in 1996 by a merger with Southern Pacific Railway (SP). The SP merger was particularly influential in shaping UP’s business around a renewed focus on railways alone. The merger cost UP US\$4.1 billion. Equity share conversions financed 60 percent of this price, with cash paying for the remaining 40 percent.

Between 1994 and 1997, UP’s acquisitions and capital investment program increased the net value of railway assets on its balance sheet by nearly three times. In 1993, railways constituted only 70 percent of UP’s net assets with non-railways businesses accounting for the balance. By 1996, railways constituted 97 percent of UP’s net assets.

Prior to these major purchases, the market value of UP’s debt and equity was approximately US\$ 8-9 billion. The CNW acquisition was relatively small compared to the overall size of UP. In contrast, the SP merger increased the size of UP’s railway business by about half.

Supplementary Acquisition Strategies

Equity and debt – more of both: The financial mechanisms that UP used to execute its change in business strategy included corporate debt instruments and issuance of additional equity shares on the New York Stock Exchange. On balance, UP used more debt than equity in funding its transformation and increased its lease-adjusted debt to equity ratio from roughly 1 in 1994 to 1.5 in 1996. (See Figure 3.)



Stretching the balance sheet: Aside from conventional debt and equity financing, UP made greater use of leasing arrangements. While these instruments have debt-like features (i.e. a promise of future payment), provisions in US Generally Accepted Accounting Principles enable lessors to avoid capitalizing some types of leases on their balance sheet as debt liabilities. The net effect is to provide more accounting headroom for borrowing for other purposes.

3.3 *Post-Acquisition Improvements*

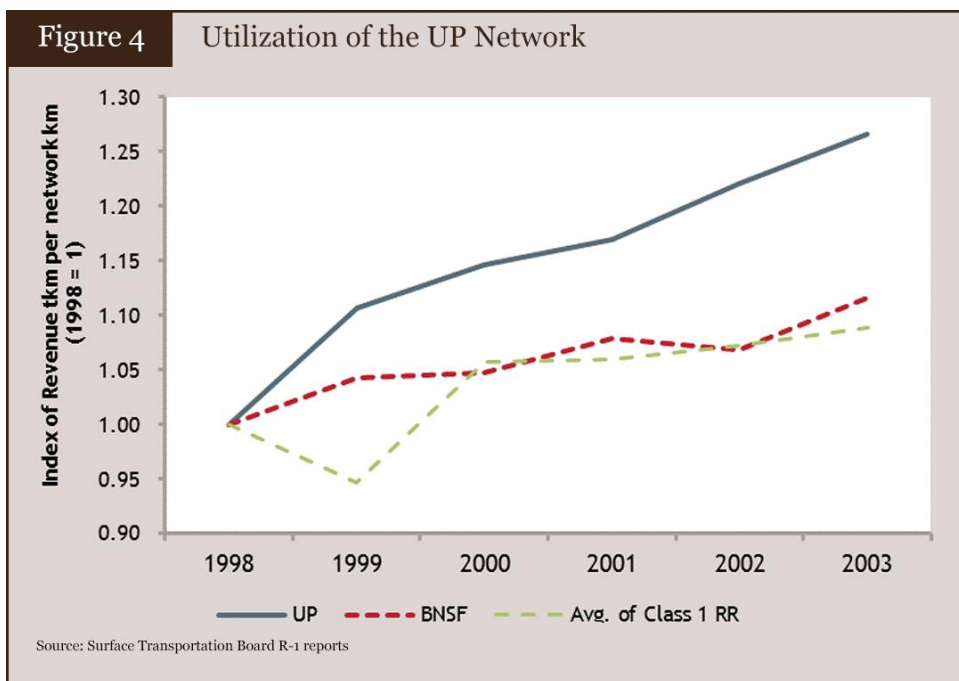
UP's acquisition of CNW and SP had the immediate effect of expanding the single network by 18,388 km to more than double its 1994 length. Though integrating operations proved difficult (see post-acquisition challenges below), UP eventually succeeded in capturing important efficiencies that this larger network could offer. Most notably, the integrated network gave shippers access to direct routes that saved time and offered increased reliability. For example, the CNW Acquisition gave UP a direct line from Los Angeles to Chicago, a main intermodal route. The combined UP-SP merger created a single-line rail service along the I-5 interstate corridor between the US Pacific Northwest and destinations in California. UP's combined network allowed for new service offerings that specifically aimed at competing with the road trucking industry. One offering this provided was "5-7-9 Service", which promised shipment from the Pacific Northwest to Northern California within five days, Southern California within seven days and Las Vegas/Phoenix within nine days.

In addition, the acquisitions also gave UP access to the Powder River Basin in southeast Montana and northeast Wyoming, known for coal deposits. This access enabled UP to generate important revenue to maintain and invest in its network. It also set the stage for improvements to the Alameda Corridor, which has benefited the ports, the City of Los Angeles, and the US in general, by creating an efficient rail-port connection.

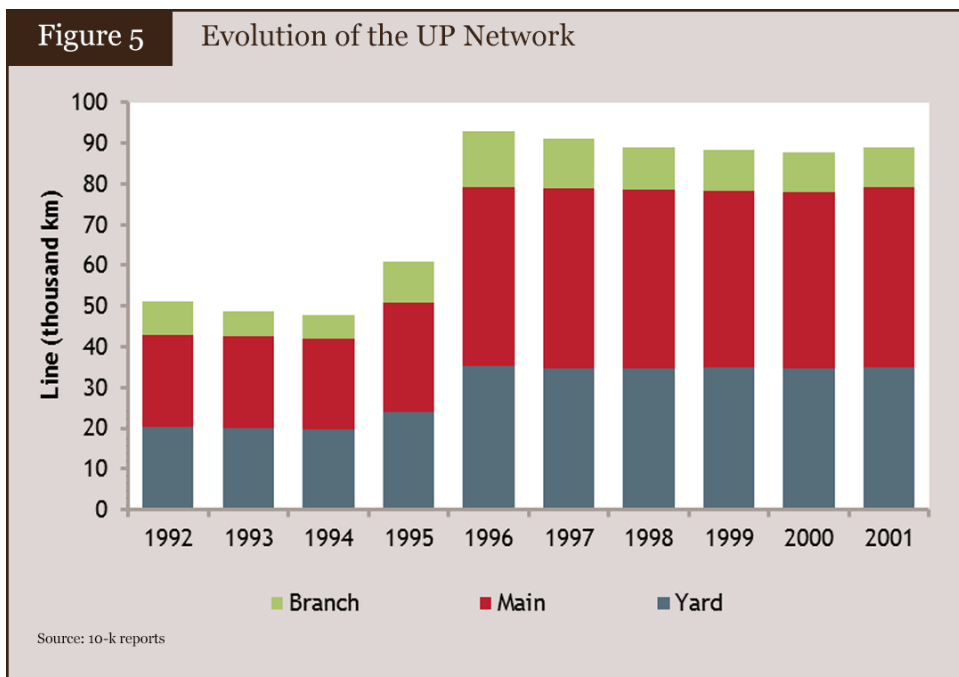
Aside from offering a longer network and more direct routes, UP also achieved three key improvements in the post-merger years:

- The rationalization of track assets;
- The increased use of rolling stock assets; and
- Intensive capital investment in rehabilitation / refurbishment.

Along with the rationalization of track assets, the convenience of more direct routes helped improve the utilization of the UP network faster than the national average for Class 1 railways in the years following the acquisitions. Increases in the utilization of UP's post-acquisition network also significantly outpaced the nearest competitor, BNSF. (See Figure 4.)



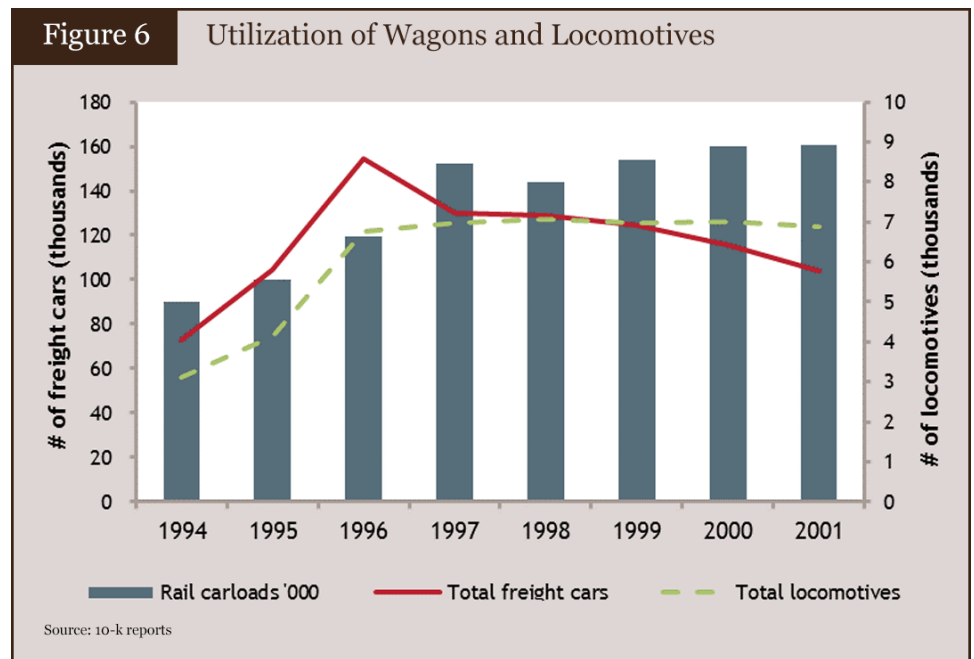
In the years following the acquisition, UP slowly divested of, or abandoned, less profitable lines (see Figures 4 and 5). Most notably, UP’s branch line network shrank by 2,398 km (28 percent) in the five years between 1996 and 2001. This helped UP focus its “pure” railway business on a core network of more profitable routes. UP’s strategy helped capture increased “economies of density” whereby more freight traffic moved over a smaller, more efficient route network (see Figure 5).



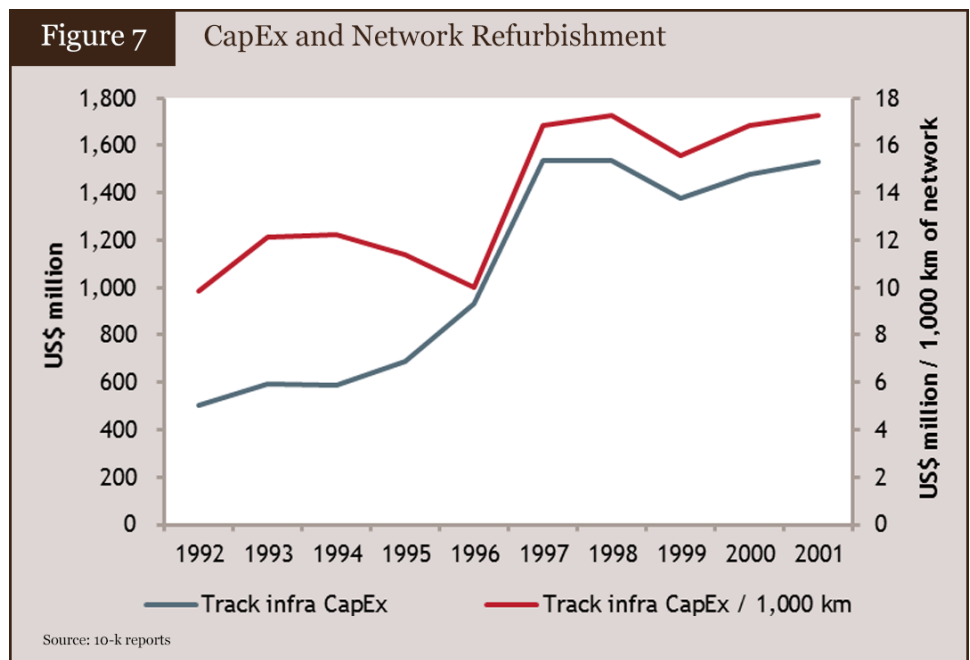
Acquiring CNW and SP roughly doubled the number of freight wagons UP owned or leased. After integrating operations, UP reduced this fleet while increasing the number of car loads carried. A key part of this strategy entailed reducing wagon

turnaround time, by reducing the amount of time that freight wagons sat idle in-between loads.

Improved planning, preventative maintenance, and consolidation of rail yards contributed to better utilization of freight wagons. Between March 1998 and March 2000, UP reduced freight car terminal dwell times by 34 percent (from 40 hours to 26 hours on average). UP also significantly increased the use of “private line” wagons (i.e. freight wagons owned by shippers themselves) (see Figure 6). Between 1996 and 2001, the loaded private wagon-km traveled on the UP network increased by 71 percent. This effectively allowed UP to leverage the rolling stock investments of others rather than tying up its own capital.



Following the merger with SP, UP significantly increased capital investments in network rehabilitation and maintenance (see Figure 7). This was in part a condition of merger approval that STB had required. During the three years after 1996 UP spent roughly 1/3 more money on capital expenditures per km of its network than in the three years prior to 1996.



The combined UP-SP network also enabled UP to establish a “hub and spoke” model for crewing trains. This model based crews at one of the combined network’s major terminals. Crews could then serve any route emanating from their respective “hub.” The hubbing of crews proved more efficient for utilizing human resources than the prior model of dedicating crews to specific routes.

Acquisition considerations

Developing Business Cases for M&As: One of the interesting aspects of the UP-SP acquisition was that the networks of each company significantly overlapped and complemented each other. This resulted in a business case for the acquisition that included both cost savings and increased network coverage. Overlaps along several lucrative routes such as Oakland-Denver, Houston-New Orleans, and San-Antonio-Chicago offered clear opportunities to achieve cost savings by eliminating redundancies. However, the SP network also gave UP access to routes along the US West Coast and Southwest regions, much the same as how CNW network provided access to the Midwest (i.e. Chicago).

Ensuring Regulatory Compliance: In 1995, the industry became subject to economic regulation by the Surface Transportation Board (STB)³⁸⁷. The STB also held jurisdiction over rail mergers. Although the regulatory framework for railway mergers was evolving during UP’s transition, worries about reduced competition compelled the STB to temporarily halt Class 1 railway mergers in 2000, and subsequently to impose a higher burden of proof on future merger applications. The STB’s ban was lifted in 2001, though no US Class 1 railway mergers have occurred since³⁸⁸.

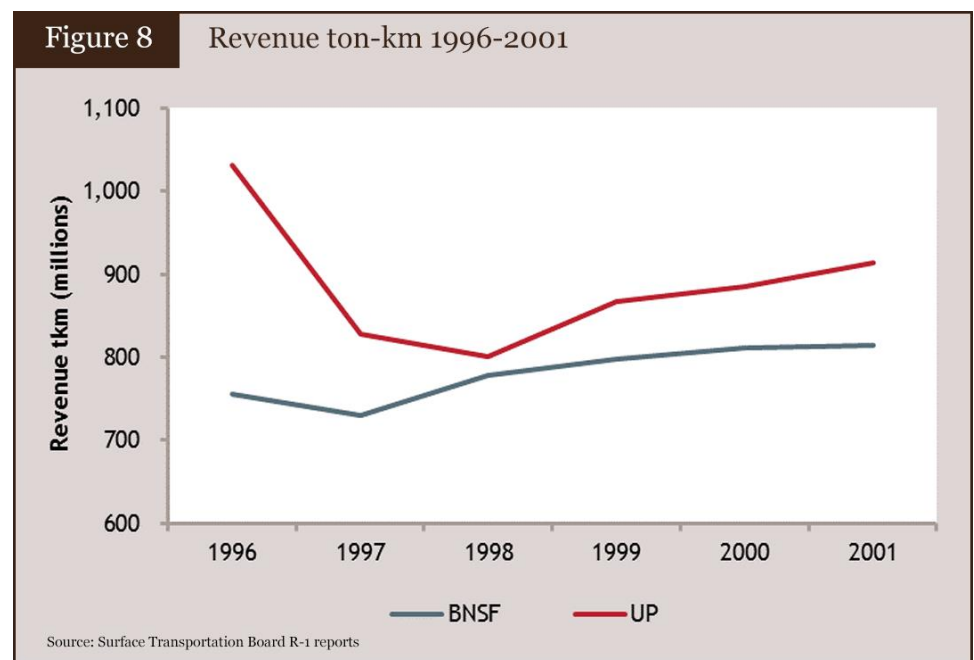
³⁸⁷ The STB also has a limited amount of authority over railway prices.

³⁸⁸ However, it is worth noting that a number of mergers have been attempted but not completed since 2001, including most recently by CP Rail in its nearly \$30 billion pursuit of Norfolk Southern. Rationalization did continue, as a number of Class 1 railway networks have expanded by taking over smaller networks.

The UP-SP merger underwent extreme scrutiny by US authorities (both the STB and the Department of Justice) to ensure that it complied with relevant anti-trust regulations and railway laws. Trackage rights in particular became a key issue due to concerns over reduced competition following the elimination of one freight services competitor. Most notably, this focused around the ability of another competitor, BNSF, to access segments of the post-merger UP-SP network. UP ultimately ceded trackage rights along more than 6,000 km of its network, including a key segment between Denver and Oakland. In addition, the STB also imposed requirements relating to negotiations with unionized labor prior to combining the operations of UP and SP.

3.4 Post-Acquisition Challenges

Immediately after the acquisitions, UP's network saw service disruptions and delays, attributable to the high demand for rail transport combined with the poor condition of the former SP network – particularly around the Houston area in 1997/1998. This created a knock-on effect, resulting in congestion and delays that affected service throughout the entire Western USA. UP was eventually able to resolve the disruptions, but not before the revenue t-km carried on the UP-SP network dropped considerably (Figure 8).



The service disruptions also had a negative impact on perceptions regarding the UP-SP merger. In 2000, the National Transportation Industrial League conducted a survey of 47 major UP customers to gauge their perceptions of UP pre- and post-SP merger. Ninety-four percent of UP customers and 70 percent of former SP customers ranked services worse than the pre-merger period.

It remains worth questioning whether the network congestion problems encountered following the UP-SP acquisition would have occurred regardless of the merger. SP's financial difficulties had resulted in chronic underinvestment in infrastructure that could have resulted in technical shortcomings regardless of who owned the assets.

4 Results

Beneficiaries of UP’s transition included railway customers, who gained from the economies of scale and scope that UP’s larger post-merger network provided. Over the medium term, a sharper focus on railways helped UP to get more from its assets and to offer a better service. The STB, the Federal Trade Commission (FTC), and the Government Accountability Office (GAO) undertook ex-post reviews regarding the impact of UP’s acquisition, in an effort to assess whether economic benefits materialized as UP had promised to regulatory authorities. While it is difficult to disentangle UP-specific results from overall industry and economic trends, these reviews were generally positive in terms of broader public benefits achieved. Most notably, the STB observed that inflation-adjusted freight rates declined 9.2 percent in the Western USA (served by the UP/SP network) vs. 5.1 percent in the Eastern USA. The GAO found the UP-SP merger attributable for reduced rates on four of the six commodity routes it studied.

The largest beneficiaries of UP’s transition, however, may have been unionized workers and the US Government. SP’s railway assets and finances were in relatively poor health at the time of UP’s acquisition. The merger with UP may have helped avoid a politically difficult decision about possible government intervention if SP became financially distressed. The involvement of politically influential unions would have made any decision much more complicated and contentious. As UP’s annual reports show, streamlining staff resources subsequent to the SP merger was difficult.

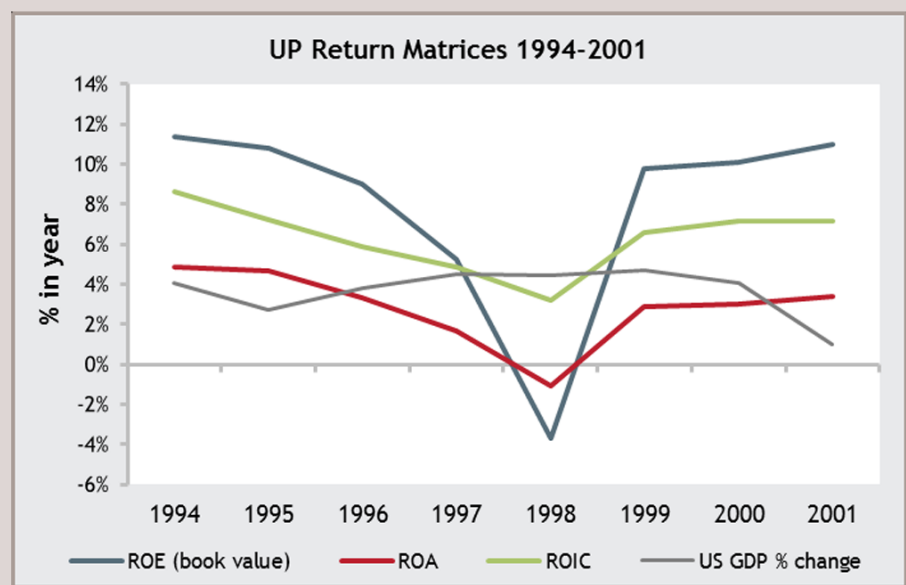


A large part of UP’s labor force was “off limits” to restructuring, due to deals struck with the STB and labor unions that represented train crews as a condition of the merger between UP and SP. Though UP did lay off approximately 5,000 employees (see Figure 9), the majority of layoffs did not involve train crews. In this respect, the former SP’s train crews may have been amongst the biggest beneficiaries, as they traded a financially unhealthy employer for a more sustainable one. Though

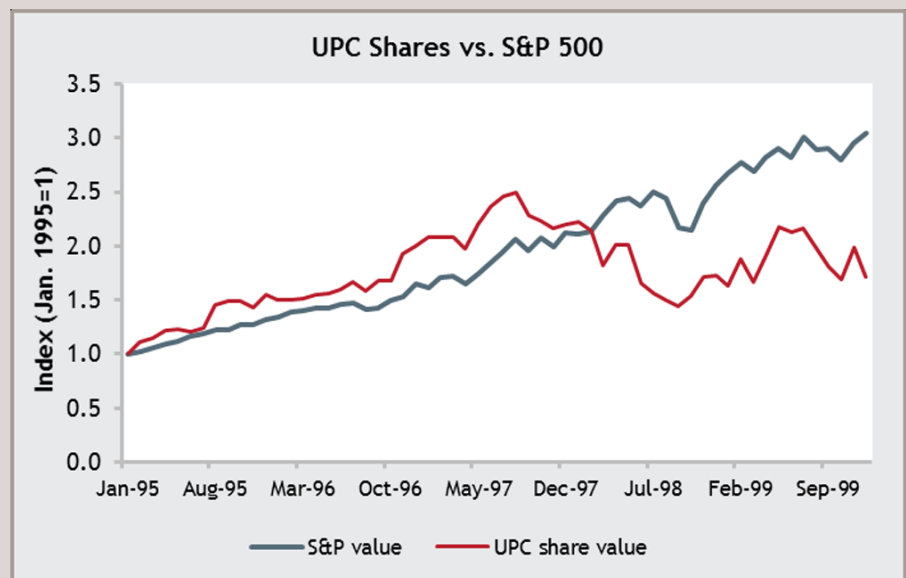
UP's layoffs occurred gradually in the post-acquisition years, as the company's operations became less labor-intensive, it is important to note that staff reductions were concentrated in functions where organized labor's influence was less pronounced. The rate of staff reductions between 1996 and 2000 also appears have been more in line with natural attrition, rather than resulting from a sudden redundancy program.

Shareholders suffered in the short run following UP's acquisition, as they experienced dilution from the issuance of new shares and sub-par returns during the integration of SP's operations. In the years immediately following the acquisitions, UP's Return on Assets (ROA), Return on Equity (ROE), and Return on Invested Capital (ROIC) all underperformed relative to both pre-acquisition trends and to the overall trend in US GDP (Figure 10). Despite an initial spike at the time of the

Figure 10 UPC Financial Performance



Source: Union Pacific Corp. 10-K reports



Source: Yahoo! Finance data and WB analysis

acquisitions, UP’s share price significantly underperformed relative to the S&P 500.

UP’s poor financial performance immediately following the acquisitions suggests one or more of the following:

- UP overpaid for its acquisition targets;
- The cost of regulatory concessions given to obtain approval for the SP merger exceeded expectations; or
- Integrating different operating companies offered more challenges or less financial benefits than envisaged.

In 2001/02, BNSF was carrying only five percent of the freight traffic along UP’s key central corridor from the mid-west to California under the trackage rights regime prescribed by the STB. This suggests that trackage rights were not the primary reason why shareholders lost value initially. Rather, the most likely reason why shareholders initially lost is that UP struggled more than anticipated to integrate operations with SP³⁸⁹. This challenge peaked in 1998, which became an “*annus horribilis*” for both technical and financial performance.

Figure 11 Changes in UP’s Annual Financial Results between 1994 and 2001 (US\$ Millions)

Income Statement	Change	% change	Balance Sheet	Change	% change	Cash Flow	Change	% change
Revenue			Assets			Operations	786	73%
Rail services	5,482	103%	Current assets	-280	-15%			
Government support	0	0	PPE (net)	16,521	135%	Investing		
Other	-1,307	-53%	Other long term assets	-632	-34%	Capital investment	696	79%
Total	4,175	54%	Total	15,609	98%	Sale of assets	162	579%
						Other	-295	-100%
Operating Expenses			Liabilities			Total	239	-221%
Wages & benefits	1,816	74%	Current liabilities	746	37%			
Materials & energy	968	109%	Deferred taxes	5,484	229%	Financing		
Depreciation	1,805	145%	Long term debt + leases	5,321	113%	Financing proceeds	150	21%
Other	1,368	77%	Other	102	3%	Retire long term debt	-900	282%
Total	4,653	89%	Total	12,753	148%	Dividends	-136	-41%
						Other	53	N/A
Operating Income			Equity	4,444	87%	Total	-561	N/A
Interest & other	354	202%						
Financial exp.						Net Change in Cash	-8	-7%
Income before Income tax	635	71%						
Income tax	237	72%						
Net Income	420	77%						

Source: UP Corp. 10-K Reports.

UP was, however, eventually able to capture considerable efficiencies once it managed its combined railway assets effectively. There is clear evidence that UP increased the utilization of its network faster than either its main competitor (BNSF) or the overall US rail industry. In part, this reflects prudent capital budgeting decisions and targeted reductions of less profitable branch lines. Similarly, UP achieved increased rates of utilization in its fleet of rolling stock. The absence of

³⁸⁹Aside from debt service, much of UP’s cash (that could have otherwise funded dividends) went into funding capital investments aimed at rehabilitating SP’s aging assets that had suffered from years of under investment.

distractions from non-railway businesses may have helped UP's management to achieve these critical improvements.

5 Conclusion

UP's shift in strategy following the introduction of enabling legislation and regulation offers many valuable lessons, particularly because the outcome was mixed. On the whole, UP's decision to focus on its core railway business appears to have been a success, when looking at long-term efficiency metrics. However, the history of UP's transition shows that major railway restructurings can be tremendously disruptive in the short run. The route to achieving operational improvements "on the ground" was much more difficult than executing the financial transactions that enabled it to take place. This is particularly evident in the financial and technical performance of UP in the years immediately following its acquisitions. The US regulatory framework created additional challenges, requiring concessions as a condition of merger approval. The regulator compelled UP to offer trackage rights, to execute labor agreements with unions, and to promise certain levels of capital investments as a condition of merger approval.

The relevant lessons for entities with holdings in both railway and non-railway businesses, which are looking to restructure their portfolio and/or operations include the following:

- ***Focusing a railway operating company's efforts around a core railway business can help drive operational improvements.*** In addition to having an enabling legal and regulatory framework, becoming a better railway likely requires substantial investment and management effort before results become visible to customers. Reducing the amount of time and capital tied up in other endeavors is critical to allowing a sharper focus.
- ***Major railway restructurings are complex and likely to be disruptive in the short run, although they can be very positive in the medium to long run.*** This is true in both developed and developing country contexts. As the UP case shows, major operational changes and the political economy of labor relations in particular can be disruptive. However, working through the initial difficulties can unlock longer term, sustainable efficiencies.
- ***Consistently making sound commercial investments is essential for improving operating results.*** The nature of railway assets means that restructuring is a long-term proposition. Capital programs span multiple years. Their relative success depends on consistently making good investments and optimizing the use of assets – regardless of shorter-term financing decisions. Evidence from the UP experience demonstrates how consistently sound investments can even overcome a difficult start to restructuring.
- ***The right regulatory framework applied at the right time helps customers and the broader economy to "win."*** Capable regulators can help ensure that restructurings serve customers and the broader economy rather than a narrow group of stakeholders. In particular, the UP example shows how regulatory mechanisms can help distribute the benefits of restructuring more broadly.

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