Case Study

Burlington Northern Santa Fe Railway[177]

1 Introduction

Burlington Northern Santa Fe Railway (BNSF) is a vertically integrated freight railway operating in 28 states in central and western United States and three Canadian Provinces. BNSF main lines of business are consumer products (intermodal and autos), industrial products (e.g., oil, plastics), coal and agricultural products. The company is the product of mergers and acquisitions involving nearly 390 railway lines that were built by the private sector (supported by the US government through grants of land) over a period exceeding 160 years. Until 2010, when it was fully acquired by Berkshire Hathaway (BH), BNSF was owned by private sector investors, with shares publicly traded.

Following its acquisition by BH, BNSF was able to leverage the inherent value of its assets and ongoing business by both optimizing its capital structure and improving its profitability. This allowed the company to steadily increase capital expenditures while returning US$ 20.2 billion in dividends to its owners. This case study describes BNSF's transition BH's ownership approach, the results of the transition, and conclusions and lessons drawn from BH's approach to managing BNSF.

2 BNSF's Transition

In February 2010, Berkshire Hathaway (BH), an investment company controlled by Warren Buffett, bought the outstanding shares of BNSF in a transaction valued at US$ 40 billion (including debt assumption).

BH's overall investment strategy has been to invest in long-term profitable businesses, using relatively low-cost financing generated by float from its insurance business and deferred taxes of its other businesses. The investments are selected by a team of BH staff, led by Warren Buffett, who exercise "value investing." They seek out business that: (a) are understandable; (b) have a consistent operating history and strong management; (c) have a brand or other attribute that gives them a strong market position; and (d) have solid earnings and strong growth prospects.

BNSF met these criteria: (a) its business was providing rail transport, which is understandable; (b) the railway had steady operating results, indicative of strong management; (c) BNSF has an extensive rail network that would be very costly to

[177] 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

reproduce and a 40-percent market share in rail transport in the western USA; and (d) BNSF was a profitable company that provided its shareholders with a return on equity of 13 percent and a return on assets of 4.4 percent in 2009, with good growth prospects linked to growth in the US economy. At the time of the acquisition, Warren Buffett called the acquisition an "all-in wager on the economic future of the United States."

Figure 1 BNSF Network

BNSF Railway, 2016.

2.1 The Acquisition

Prior to the transaction, BH had acquired 22.6 percent of BNSF shares on the stock market. On November 2, 2009, BNSF and BH entered into a merger agreement that called for BH to acquire the outstanding shares of BNSF common stock. Owners of BNSF were offered $100 per share or the equivalent in BH stock. The transaction required approval of holders of two-thirds of the outstanding shares (other than those already held by BH). The transaction was approved by shareholders and closed on February 12, 2010. BH paid US$ 15.9 billion in cash and $10.6 billion in BH stock for the outstanding shares of BNSF. The transaction was valued at US$ 40 billion, including assumption of outstanding debt.

3 Berkshire Hathaway's Approach

3.1 BH Management Principles

BH manages its investment portfolio using three core principles: management autonomy, value based capital allocation and a long-term perspective.

Management autonomy**:** At BH, company managers are in charge of all operating decisions. (Although BH has over 360,000 employees, only 25 of them are at headquarters.) BH seeks out managers that "love their business, think like owners, and exude integrity and ability[178]", and gives them autonomy to manage the business. This autonomy enabled the BNSF managers to double BNSF's profits within four years.

***Value based capital allocation*:** All excess capital generated by the companies reverts to headquarters and is invested by BH. This keeps the operating company managers focused on their business, reducing the temptation to diversify into unrelated businesses. All funds invested back into the business are subject to a simple financial test: Does the company create at least $1 in value (discounted future return) for every $1 retained in the business? BNSF has retained a robust level of cash in the railway for capital expenditures.

BH rarely sells a business, so long as it is generating some positive cash flow, and has good management and labor relations. However, capital expenditures are squeezed in such businesses. Warren Buffett says, "we react with great caution to suggestions that our poor businesses can be restored to satisfactory profitability by major capital expenditures."[179] Sales that do occur may be executed through stock sales for publically traded companies, or through negotiated agreements with investors.

***Long-term perspective*:** BH exercises a "buy and hold" strategy. It does not concentrate on the day-to-day stock price fluctuations of the companies in which it invests. It does not sell good companies, even if their market value is high. This long-term perspective was beneficial for BNSF, because railways have high fixed costs with long-term benefits, and because it insulated BNSF managers from the temptation to defer maintenance to show better short-term financial results and increase stock price.

3.2 Governance and Incentives

BNSF is governed by a 14-person Board of Directors, who have a fiduciary responsibility to guide and oversee the company. Two directors are from BH, one from BNSF management and the remaining eleven are independent. The Board has four standing committees:

- Audit
- Compensation & development
- Corporate governance
- Executive

The BNSF manager serves on the Executive Committee. All other Committees are composed of independent directors.

BH seeks to align the interests of BH and BNSF by giving the company management an ownership interest in the success of the business. At the time of the acqui-

[178] Berkshire Hathaway (2014). *Owner's Manual* 5.
[179] Berkshire Hathaway (2014). *Owner's Manual* 3.

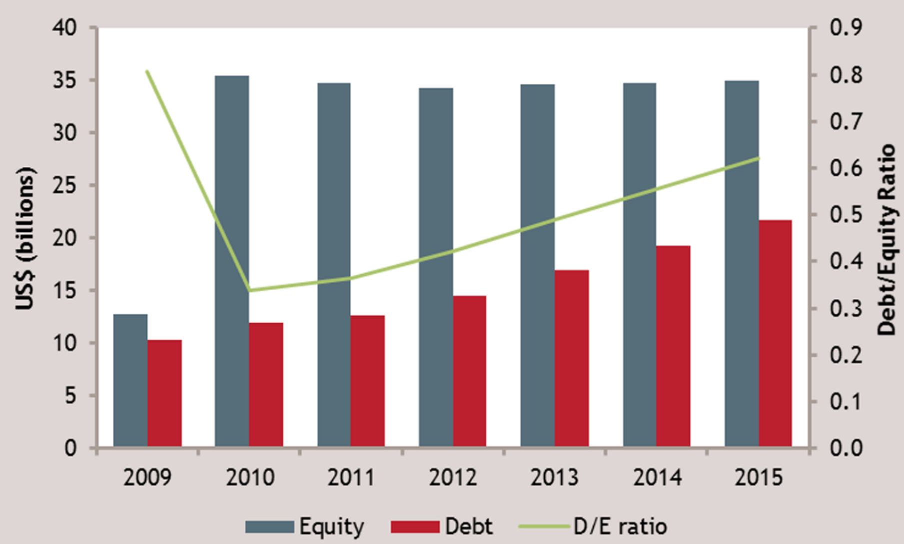
sition, BNSF managers' compensation consisted of base salary, incentive compensation linked to financial performance, asset utilization and safety. Much of the incentive compensation was paid in the form of stock and stock options.

As part of the acquisition, BNSF management's stock and stock options were converted to BH stock. After the acquisition, "to align management's interest with those of its shareholders,[180]" BH stock that vested over time was provided as incentive compensation for exceeding return on capital invested targets. As Warren Buffet says, "most of our managers are independently wealthy, and it's therefore up to us to create a climate that encourages them to work with Berkshire.[181]"

3.3 Optimizing BNSF Capital Structure

The acquisition created an opportunity to write up the assets and equity of BNSF to reflect the price that BH paid for the company. BNSF shareholder's equity was increased by more than US$ 22.7 billion. Property, plant and equipment was increased by US$ 13 billion (the asset write-up is determined by considering the current market value and the earnings potential of each asset group) and goodwill by US$ 12 billion.

Figure 2 BNSF Capital Structure



Source: SEC Form 10K Filings, Burlington Northern Santa Fe, LLC

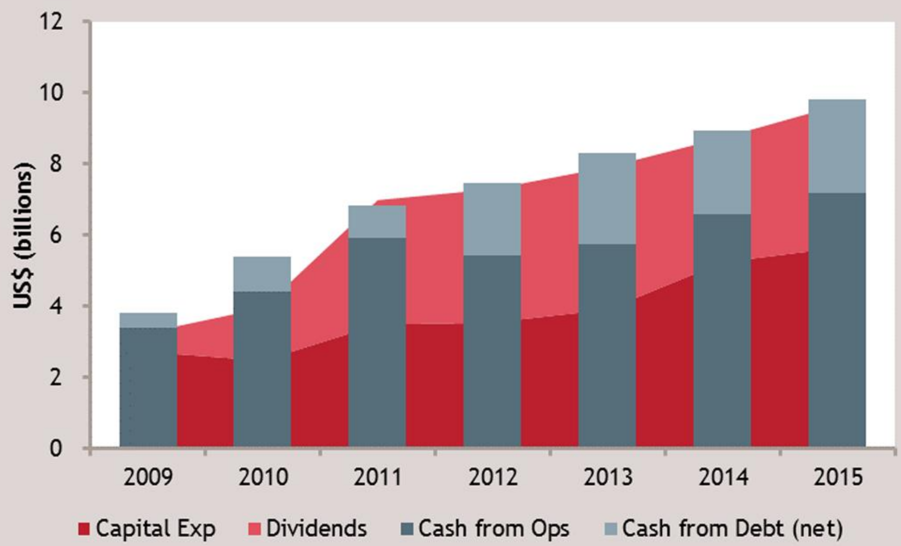
Within two years of the acquisition, BNSF profits more than doubled, and cash flow from operations increased substantially, enabling BNSF to raise more long-term debt. The recapitalization and asset revaluation in 2010 caused the company's debt/equity ratio to drop from 0.81 to 0.34. Between 2010 and 2015, BNSF increased long-term debt by US$ 10.1 billion, which gradually brought its debt/equity ratio to 0.62.

The increase in cash from operations, together with an increased amount of debt, enabled BNSF to engage in substantial capital expenditures, ranging between

[180] Burlington Northern Santa Fe Railway (2008 – 2013). *Class 1 Railroad Annual Report*.
[181] Berkshire Hathaway (2014). *Owner's Manual* 5.

US$ 2.5 and US$ 5.8 billion in each year following the acquisition. Such expenditures were maintained, while substantially increasing the shareholder's dividend from US$ 550 million in 2009 to US$ 4 billion in 2015 (see Figure 3).

Figure 3 BNSF Capital Investment and Dividends 2009-2015



Source: SEC Form 10K Filings, Burlington Northern Santa Fe, LLC

4 Results

In the five years following the acquisition (i.e. up to 2015), BNSF traffic grew steadily, slightly exceeding its 2008, pre-recession level. Revenue and profitability grew at an even greater pace, causing cash flow from operations to increase by over 110 percent.

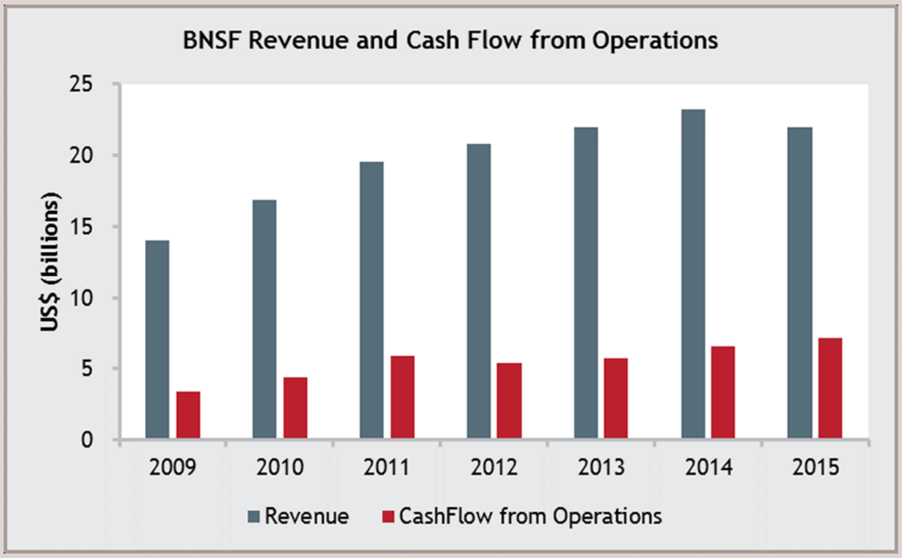
Between 2009 and 2015 BNSF revenue per ton-km increased by nearly 31 percent[182] (Figure 6 below). In part, this was due to increasing prices, but it also resulted from a change in traffic mix. Coal traffic declined by about five percent, and agricultural products grew by about ten percent. At the same time, the higher-valued consumer products and industrial traffic categories grew by 30 percent and 60 percent, respectively.

[182] Revenue declined in 2015 due to weakening customer demand in the latter half of 2015 (this primarily impacted coal, energy, and industrial product unit volumes).

Figure 4 Key Indicators for BNSF

	2009 (pre-acquisition)	*2015 (post-acquisition)*
Network	37,000 km owned right to operate on additional 14,500 km	37,000 km owned right to operate on additional 14,500 km
Freight traffic (million tons)	486	562
Passenger traffic	none	none
Employees	35,000	44,000

Source: Burlington Northern Santa Fe LLC 10-K and R-1 reports

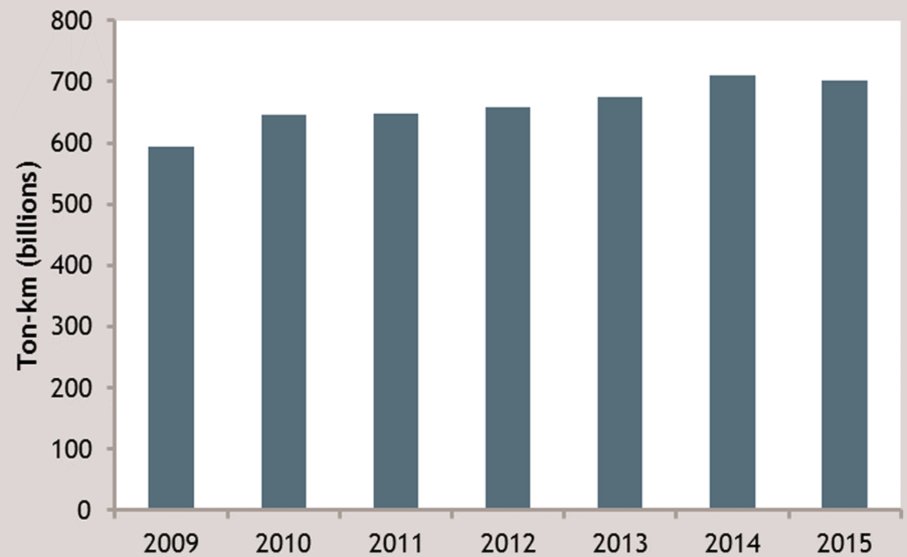


Note: Revenue declined in 2015 due to weakening customer demand in the latter half of 2015 (this primarily impacted coal, energy, and industrial product unit volumes).
Source: SEC Form 10K Filings, Burlington Northern Santa Fe, LLC

Over the same period, operating expenses per ton-km were held to a 12 percent increase. While staff costs increased at a slower pace than revenue, and materials costs increased at a greater pace, fuel and equipment rental costs actually decreased[183].

[183] Fuel efficiency increased by five percent over the period as a result of replacing old locomotives with more fuel-efficient ones and introducing improvements in operating practices.

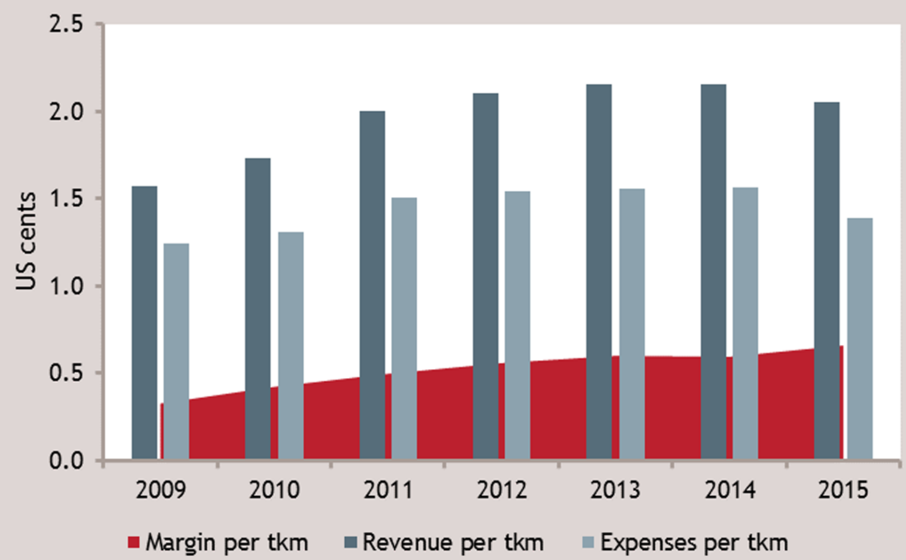
Figure 5 BNSF Traffic 2009-2015



Source: BNSF R-1 Reports

The growth in margin created by a greater increase in revenue than in expenses generated substantial growth in cash flow from operations. Figure 6 below highlights the steady growth in unit margin (revenues per ton-km less expenses per ton-km).

Figure 6 Operating Revenue and Expenses per ton-km 2009-2015



Source: SEC Form 10K Filings & R1 Report, Burlington Northern Santa Fe, LLC

4.1 Financial Impacts

The change in BNSF's ownership and its financial restructuring significantly enhanced the company's financial performance. In line with BH's portfolio principles of managerial autonomy and value-based capital allocation, BNSF's management has made extensive capital investments while increasing both the railway's profitability and its shareholder dividend[184]. The changes in BNSF's financial situation between 2009 and 2015 are detailed in Figure 7.

It remains worth noting that the change in BNSF's ownership was not the primary factor behind the railway's traffic growth. Although traffic has grown by about 18 percent since 2009, much of this has been a recovery of pre-recession traffic levels.

Figure 7 Changes in BNSF Annual Financial Results between 2009 and 2015 (US$ Millions)

Income Statement	Change	Balance Sheet	Change	Cash Flow	Change
Revenue		**Assets**		**Operations**	3,762
Rail services	7,414	Current assets	1,682		
Government support	0	PEE* (net)	27,216	**Investing**	
Other	537	Other long term assets	14,130	Capital investment	-2,927
Total	7,951	Total	43,028	Sale of assets	-492
				Other	229
Operating Expenses		**Liabilities**		Total	-3,190
Wages & benefits	1,562	Current liabilities	294		
Materials & energy	766	Deferred taxes	9,750	**Financing**	
Depreciation	464	Long term debt	11,657	Issue long term debt	2,175
Other	697	Other	-907	Retire long term debt	58
Total	3,489	Total	20,794	Dividends	-3,454
				Other	-42
Operating Income		**Equity**		Total	-1,263
Interest & other financial	328	Share capital	13,267		
Income before Income tax	4,134	Retained earnings	8,967	**Net Change in Cash**	**-691**
Income tax	1,607	Total	22,234		
Net Income	**2,527**				

*Property, Plant, and Equipment
SEC Form 10K Filings, Burlington Northern Santa Fe, LLC

4.2 Stakeholder Contributions and Impacts

Customers: Major BNSF customers include container shipping companies, automobile manufacturers, coal and other mining companies, oil companies and Midwest farmers. As a result of the extensive capital investments made post-acquisition, BNSF dramatically improved its service to its customers[185].

Employees: BNSF has approximately 42,000 employees, represented by a number of unions. The number of employees increased from 35,000 to 42,000 between 2009 and March, 2016.

***Local communities*:** Communities benefit from BNSF employment and from provision of transport to local communities. They experience negative impacts

[184] This was done in part through optimizing BNSF's capital structure.
[185] BNSF has significantly enhanced its reliability and service velocity through adding capacity along previously constrained parts of its network. For instance, in its November 2016 network update, average train velocity was up 13.6% in 2016 when compared to 2015. For more information, please see the Berkshire Hathaway 2015 Annual Financial Report (pg. 4) and the BNSF Railway Network Update from November 2016 available at: https://www.bnsf.com/customers/service-page/pdf/bnsf-service-deck.pdf

such as noise, blockage of level crossings, and risk of accidents. They have seen little overall change.

***Investors*:** Before acquisition by BH, BNSF was a publically traded company owned by many thousands of investors. Many of these investors now hold shares of BH.

5 Conclusion

The example of BNSF illustrates that a railway can succeed in a conglomerate of unrelated businesses, provided that:

- The railway's business is profitable;
- The railway management has decision making autonomy and responsibility for results; and
- The railway's owner exercises strict, objective, value based capital budgeting.

The lessons for conglomerates with holdings in railways amongst other unrelated businesses include the following:

- To earn a consistent high return on a diversified portfolio, every investment has to stand on its own financially, and to increase value;
- The BH portfolio principles—management autonomy, value based capital allocation, and long-term perspective—allow for a railway business to maximize cash flow and long-term value; and
- Optimizing the capital structure of a profitable investment through revaluating assets and balancing with debt can release cash for capital investment and dividends.

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