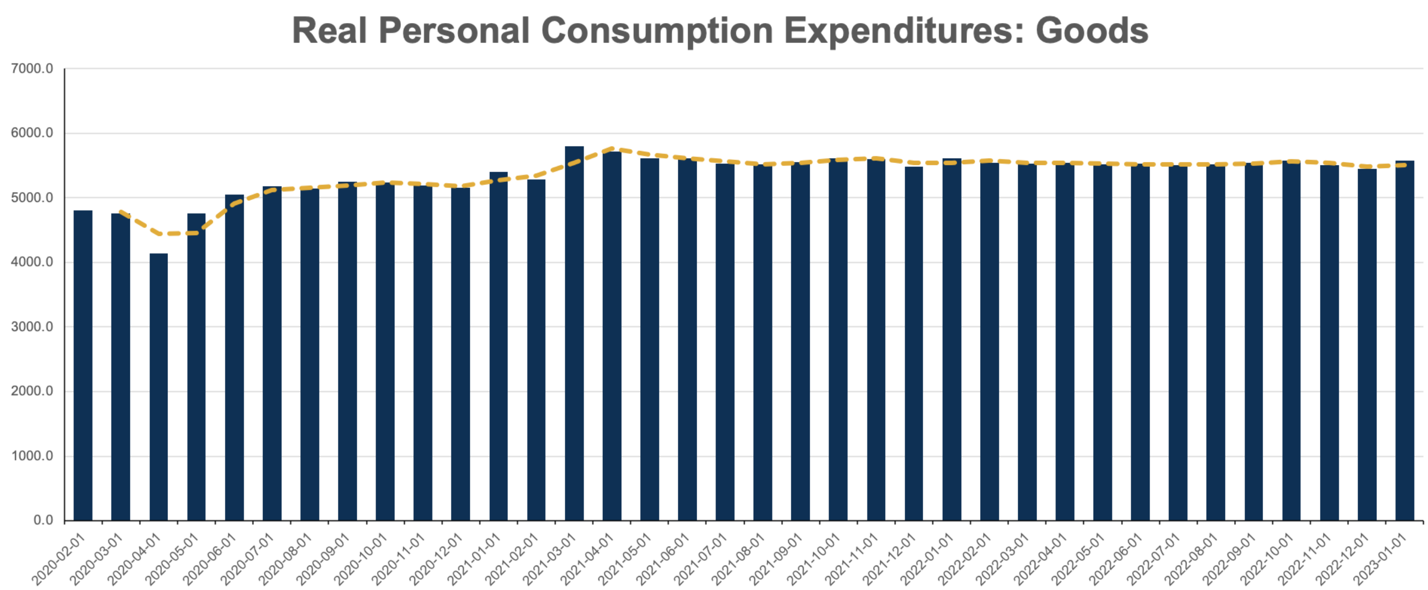
Railroad Industry Overview

GTSF Investments Committee | March 07, 2023

Jackson Borden, Macro Analyst

The Rail Industry and Consumer Demand

The United States' rail industry is a $110.1bn industry primarily consisting of freight shipments but also includes passenger rail services, which are mostly limited to the northeast region of the country. The freight rail industry can be described as an oligopoly, being dominated by a few large companies: Union Pacific, BNSF, CSX, Norfolk Southern, Kansas City Southern Railway, and Union Pacific Railroad. Canadian National Railway and Canadian Pacific Railway also own trackage in the US. These companies transport consumer goods and industrial products across the country, including coal, petroleum, agricultural products, and manufactured goods. To assess the current health and prospects of the US railroad industry, the underlying factors behind freight railroad demand must be examined. Railroad intermodal volume, which consists of 40%-50% of total freight volume, is primarily driven by the demand for goods by the U.S. population. Economists and financial analysts largely have found consensus that the demand for goods peaked during the pandemic, and U.S. consumers are more focused on events and travel over the next year. Data from the Federal Reserve Bank of St. Louis demonstrates the peak of demand for goods in March 2021 and the subsequent decline in demand. Additionally, increased inflation lowers the quantity of U.S. goods demanded, further supporting a decrease in consumer demand.



(Source: Federal Reserve Bank of St. Louis)

The Fossil Fuel Market

Furthermore, transformative energy policies, such as Biden's administration's call to eliminate fossil fuels as a form of energy generation in the U.S. by 2035, pose a long-term risk for railroad shipments. With increasing costs and constraints to fossil fuels, namely new taxes on oil imports and domestic coal production, the prices for federal oil and gas leases are expected to increase, lowering the aggregate quantity demanded nationwide. According to research by the CFRA (Center for Financial Research and Analysis), U.S. railroads generate about 20% of their revenues from the fossil fuel market, including transporting coal, sand used in oil and gas fracking, crude oil, and refinery products. Contrary to the fossil fuel market, railroads are expected to play a small, negligible role in renewable energy products. Also, worth noting, railroads are less polluting than other forms of freight shipping, including trucking, but U.S. railroads' role in the fossil fuel market creates a long-term vulnerability for growth.

Contact Information

Gleb Solntsev, Director of Macro
gsolntsev3@gatech.edu

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Plateauing Efficiency Gains

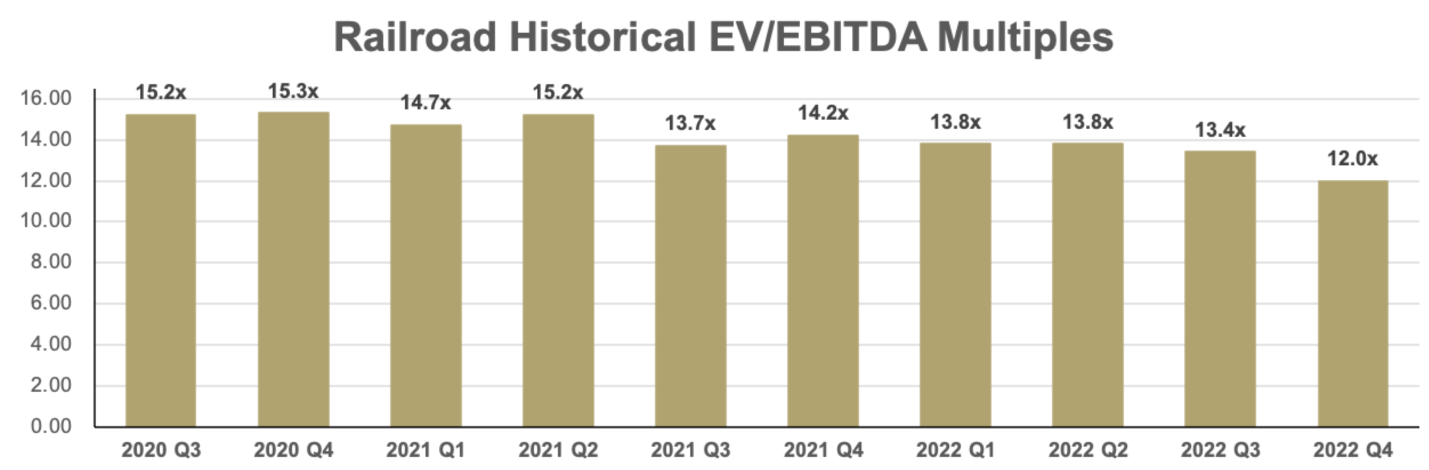
Railroads have been the benefactor of efficiency gains driven by improved technology and queuing theory via the precision scheduled railroading concept. Financially, the efficiency gains have manifested in a substantial decrease in railroad operating ratios; from 2015 to 2020, the industry's railyard throughput improved by 40% while simultaneously employee count dropped by roughly 30%. However, efficiency gains began slowing down in 2021 evidenced by increasing railroad dwell times and headcounts in 2022. The marginal gains in efficient scheduling appear to be shrinking, signaling a potential end of the efficiency gains, and limiting long-term growth prospects in the railroad market.

U.S. Labor Strikes

According to the Association of American Railroads, a nationwide rail shutdown would cause a loss of economic output of more than $2 billion per day. A rail shutdown would lead to a retail product shortage, lost jobs, widespread plant shutdowns, and higher costs of transportation and shipping being passed to consumers and small businesses. U.S. rail strikes in 2022 placed enormous upward pressure on rail workers' wages, shrinking the operating efficiency of the railroad industry. The Biden administration, in an effort to keep the nation's infrastructure operational, negotiated a deal guaranteeing a 24% pay raise and increased bonuses through 2024. While a widespread labor strike is unlikely based on historical data, with the last rail strike occurring in 1992 and lasting less than four days, the threat of economic collapse is a powerful bargaining tool for railroad workers, which could be a negative signal for the future growth of the railroad industry.

EBITDA Multiples

Regarding security analysis, the railroad industry has recently been experiencing a decline in EBITDA multiples since Q3 2020, which could illustrate an overvaluing of railroads during the pandemic and a subsequent decline in value. As illustrated by the chart below, the rail industry experienced a relative peak in EBITDA multiples in Q3 2020 and has been in decline since 2021. Despite efficiency gains, a gloomy outlook for the future of the railroad industry has caused a shrinking of EBITDA multiples of U.S. railroad shares.



(Source: S&P Capital IQ as of 3/06/2023; ultiples calculated as an average over the specified period)

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