COMPANY ANALYSIS

CSX Transportation Inc. & Union Pacific Railroad Company

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Agenda

Background Sector Key Services Governance Strategy Financials

BACKGROUND

Union Pacific Railroad Company

History

1862

- Pacific Railway Act of 1862
- William P. Ogden elected as 1st President

. . . .

• IPO'd with only 20 shares

1863 & 1865

- UP breaks ground December 2, 1863
- First rails laid on July 10, 1865

Golden Spike Ceremony

. . .

- CP began laying rails in Sacramento, CA and expanded East
- UP began laying rails in Council Bluffs, IA and expanded West

May 10, 1869

- UP and CP connect at Promontory Summit, UT
- The First Transcontinental Railroad is created

Acquisitions + Expansions

Jan 24, 1880

• Kansas Pacific + Denver Pacific Acquired

1901

- UP assumes control of Southern Pacific
- SP owned lines from Ogden to San Francisco, key lines into Portland, New Orleans and Mexico
- \$40,000,000 for 38% stake

1912

- Govt forces UP to relinquish SP control
- UP found guilty of violating Sherman Antitrust Act
- UP & SPLA&SL work together to gain access of LA
- SPLA&SL uses UP railroad in return UP receives 50% of shares

Acquisitions + Expansions

. . .

- Canadian Pacific acquired
- British Columbia and Alberta become accessible
- Missouri Pacific's Transportation Control System integrated following acquisition

- TCS allows real time tracking, maintenance, scheduling, inventory control & billing
- 400 trains, 70,000 cars over 12 states and 12,000 mi of system

1996

- The Surface Transportation Board approves UP and SP Merger
- UP becomes largest U.S. Railroad company

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BACKGROUND

[CSX]

CSX Transportation Inc.

Early Years

Feb 28, 1827

 Began and chartered as The Baltimore and Ohio Railroad

1830

- Peter Cooper created a coal burning locomotive
- First American-built steam locomotive (Tom Thumb)

1851 & 1895

- By 1851, B&O deputed the first battery powered electric locomotive
- First mainline, electrified railroad was the Howard Street Tunnel section of the B&O railroad in 1895

Civil War

1861

- Civil War began
- Railroads constantly targeted due to importance when it came to shipping supplies

May 1861

- Confederate General Thomas "Stonewall" Jackson commandeered for Confederacy
 - 42 Locomotives
 - 386 railcars

1865

- End of Civil War
- B&O Freed
- CSX continues to supply military with equipment and supplies for overseas deployments & exercises

Late 20th Century

1960s

- Chesapeake and Ohio railroad acquired stock control of B&O in 1963
- By 1964, C&O/B&O filed for permission to acquire control of Western Maryland Railway

 1965, C&O/B&O filed for permission to acquire control of the Chicago South Shore & South Bend Railroad

1973

• Chessie System, parent of C/O, B/O, and WM was incorporated

SECTOR

Key Sector Indicators

Price

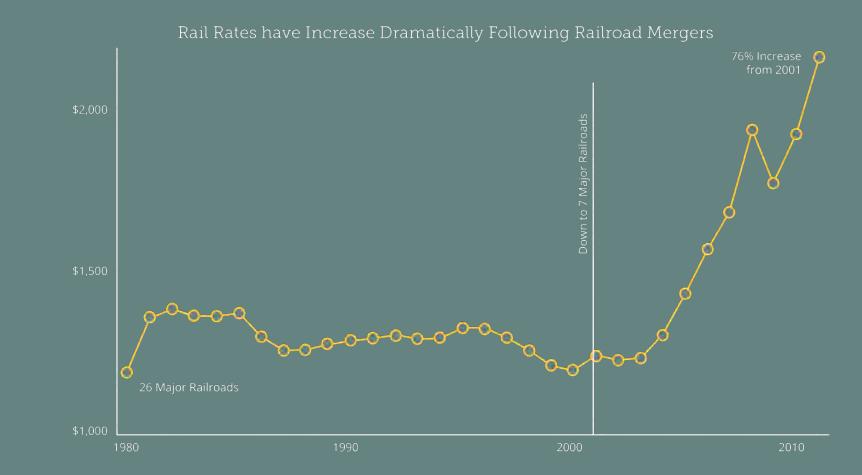
Productivity

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Logistics

Economic Growth

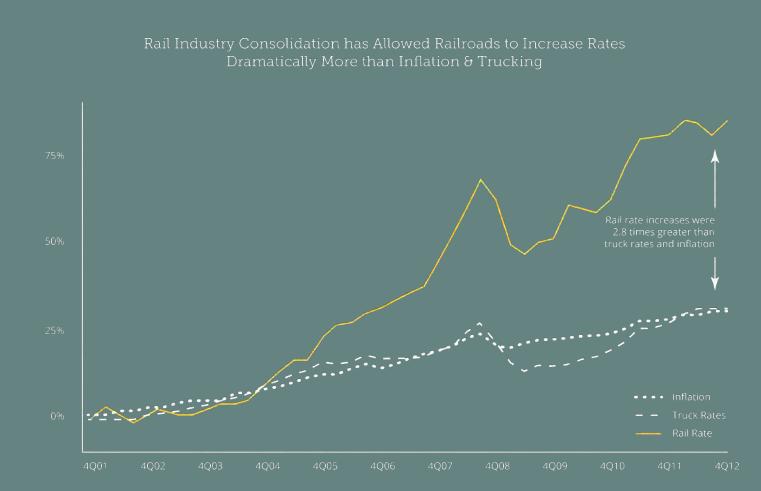
Price



The number of large railroads in the US have reduced from 26 in 1980 to only 7 by 2001. The lack of rail competition resulting from rail mergers has caused the cost of shipping to increase substantially since 2001.

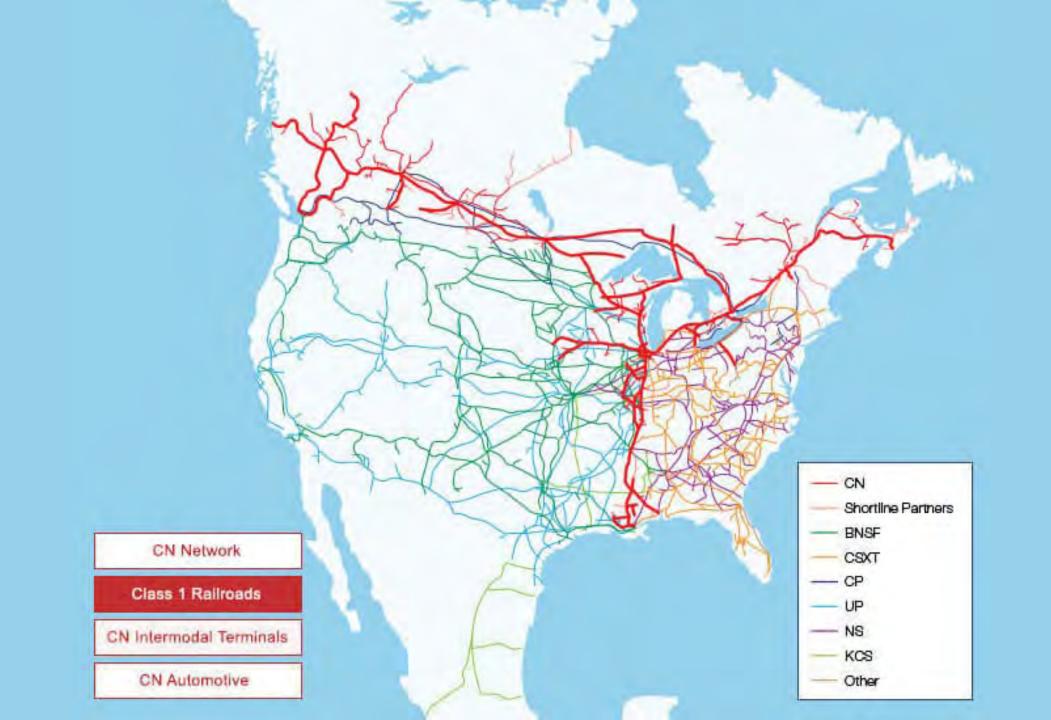
Source: AAR "Railroad Facts" *Rates are based on average revenue per car unadjusted for inflation (nominal dollars)

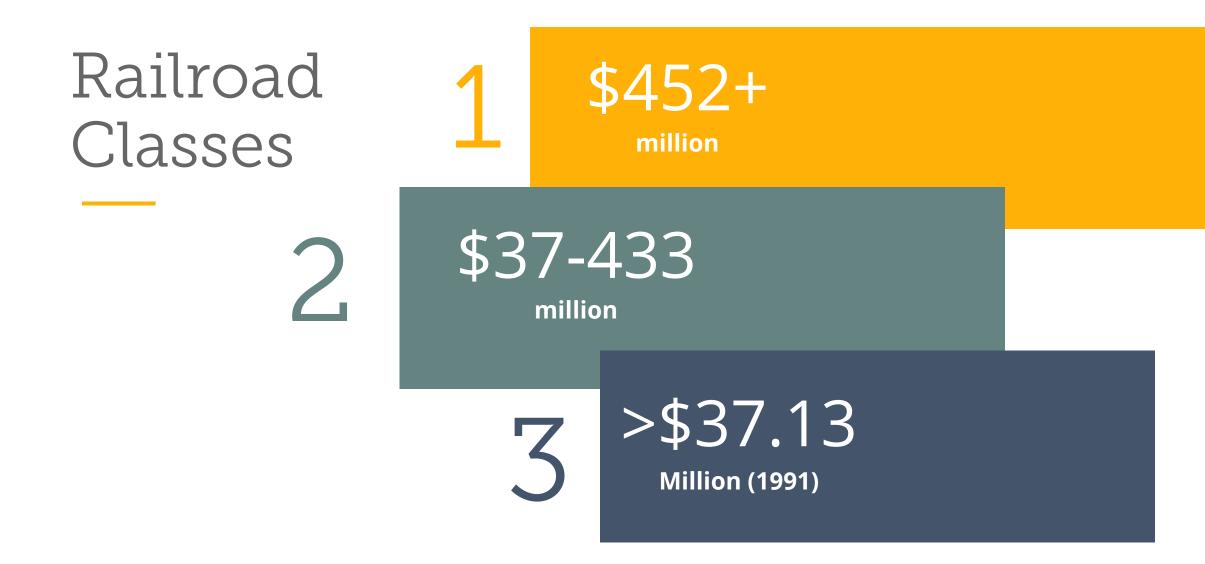
Price



Following 2001 the percent increase in Rail Rates on the Big Four US railroads has been 2.8 times greater by inflation and Long Haul Trucking.

Source: Rail Rate Increases – Big four railroad's average revenue per capita is summed up from their SEC filings. Trucking Rates – BLS Long Haul Truck Rates Index, inflation – uses CPI

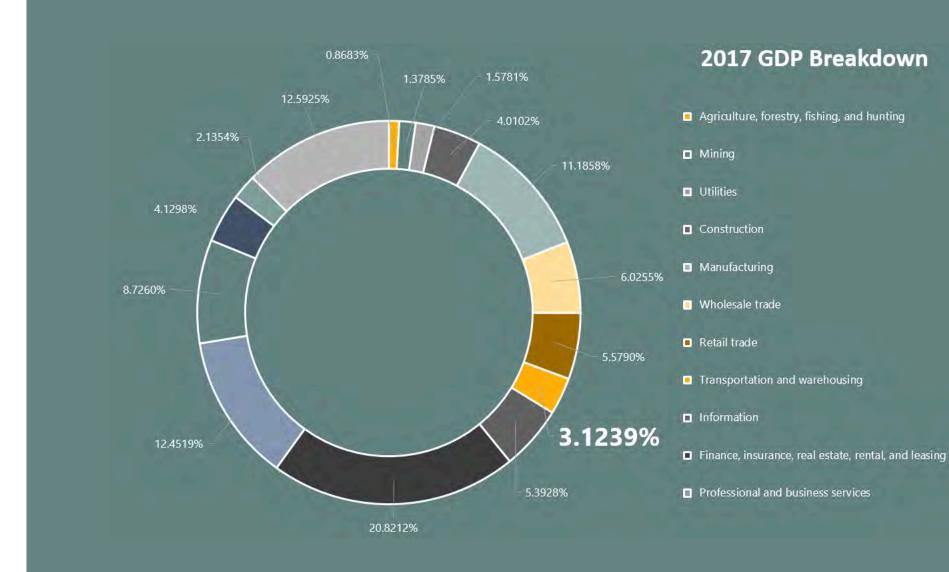




Product -ivity

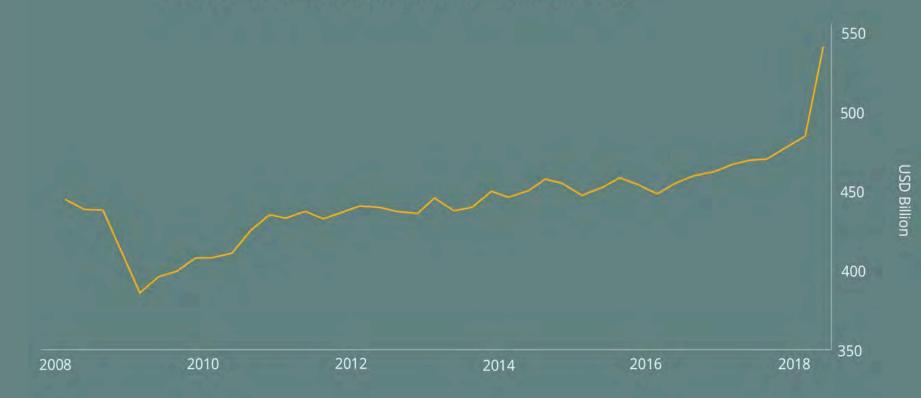


Logistics



Economic Growth

US GDP from Transportation and Warehousing





Growth

1/3 intercity freight

Outlook

Recession

TMS & Persistence



Sustainable

479 mpg per ton

[csx]

KEYSERVICES

CSX Transportation Inc. & Union Pacific Railroad Company

Key Services

Union Pacific CSX



• Rail & Intermodal

• Logistical Support Services

- Customer Services
- Tracking Technology
- Mobile Applications
- Ships everything but organisms...

What they Ship

Union Pacific

Agriculture

Energy



Industrial

Premium

What they Ship



CSX



Automotive











Bio Energy

Food Products







Machinery

Chemicals

What they Ship



CSX



Manufactured Goods



Ores





Paper, Pulp, Fiber Products



Transportatio n Equipment



Minerals



Waste



Oil, Gas and Drilling Materials







32,000 mi Links with Canada 6 Gateways to Mexico 21,000 mi 70 ports Quebec + Ontario Mexico

Union Pacific CSX



Subsidiaries

Union Pacific

- Loup Logistics Co.
 - ShipCarsNow
 - Union Pacific Distribution Services
 - Streamline
 - Insight Network Logistics
- Alton & Southern Railway
- PS Technology
- Transentric



Subsidiaries

CSX

- Intermodal Services
 - CSX Intermodal Terminals
 - Translfo Terminal Services
 - Total Distribution Services Inc.
- CSX Technology
- CSX Real Property Inc.
- Fruit Growers Express
- Winston-Salem Southbound Railway*
- Conrail *



Patents

Union Pacific

- 21 Approved
- 2 Pending
- Rail Technology for efficient transportation
- Advanced systems for tracking + cutting cost



Patents

CSX

- 8 Approved
- 2 Pending
- Restorative/Supportive Innovations

[**csx**]

• Systems for tracking & analytics

[csx]

GOVERNANCE

CSX Transportation Inc. & Union Pacific Railroad Company

Board of Directors

Union Pacific



Fritz (2015)



(2006)



(2004)



DeLaney

(2018)



Dillon

(2014)



Hopkins (2017)



Lute (2016)





Villarreal (2009)

McCarthy (2008)

McLarty (2006)

McLarty (2017)

Board of Directors





Kelly (2002)



Alvarado (2006)







Halverson (2006)





(2005)





Riefler (2017)



McPherson (2008)

Moffett (2015)

(2010)





(2017)



Zillmer

(2017)

Whisler (2011)

Executives

Union Pacific



Tennison, CSO (2018)



Ferguson, CLO (2016)

Whithead, CHRO

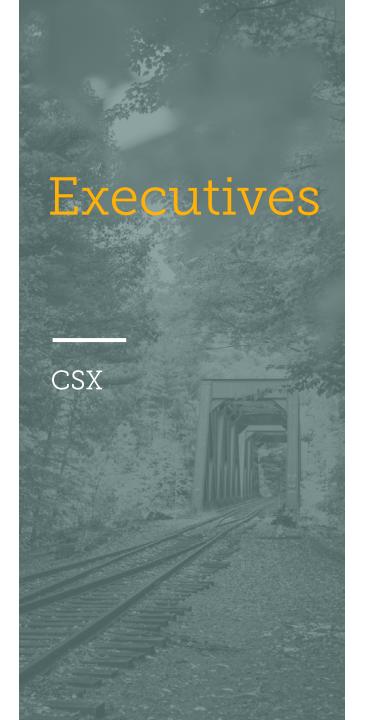
(2018)



Knight, CFO (2004)



Moore, CAO (2017)





Foote, CEO (2017)



Lonegro, CFO (2015)



Goldman, CLO (2017)

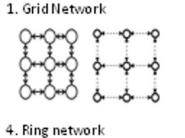


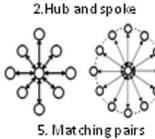
Sorfleet, CAO (2018)

STRATEGY

Industry Strategy

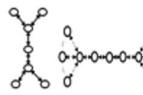
- A to B, A to C, etc.
- Different Operation Network Models



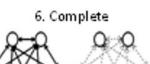


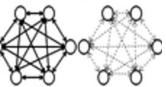
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3. Double tree

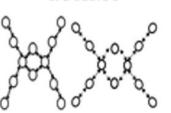


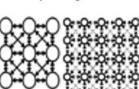


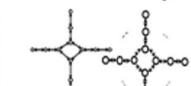
7. Complete grid



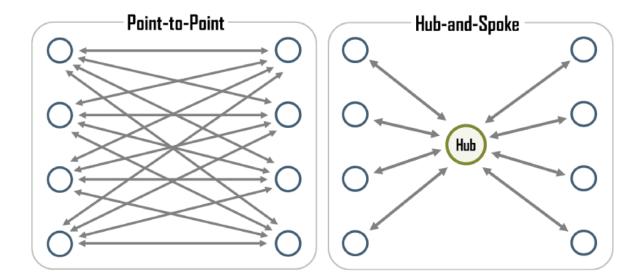




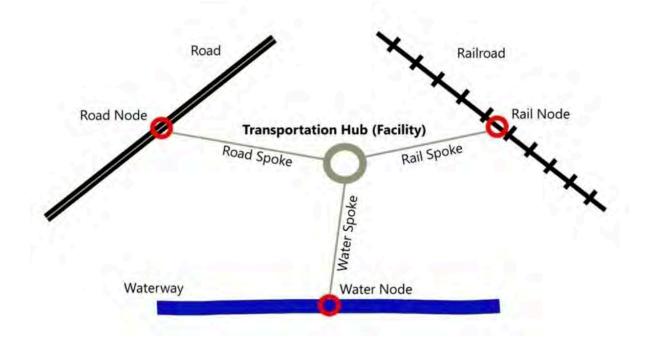


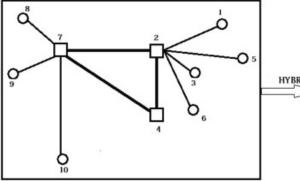


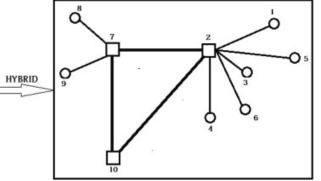
Industry Strategy



Industry Strategy









Precision Scheduled Railroading

- Improving Customer Service
- Controlling Costs
- Optimizing Asset Utilization
- Operating Safely
- Empowering Employees

Railroad Strategy



- Unified Plan 2020
 - Began Oct 1, 2018
 - Stretching from Wisconsin to Texas
- Achieve 60% Operating Ratio by 2020
 - Ultimately 55%

- Continuing Precision Schedule Railroading (PSR)
 - 2 Phases
 - Top Bottom Exchange
 - Daily Execution on Top 5 PSR Tenets

PROS

Better Metrics

- Operating Ratio
- Fuel Efficiency
- EPS
- Customer Service
- Long Term Investment Potential

CONS

- Aggressive cost cutting and asset stripping
- Eliminated 327 origin/destinatio n pairs
 - 192 interrail pairs
 - 12 hump yards
 - 2700+ jobs
 - 1000+ contracts
 - 300 pairs -> 2019
- Customer Service

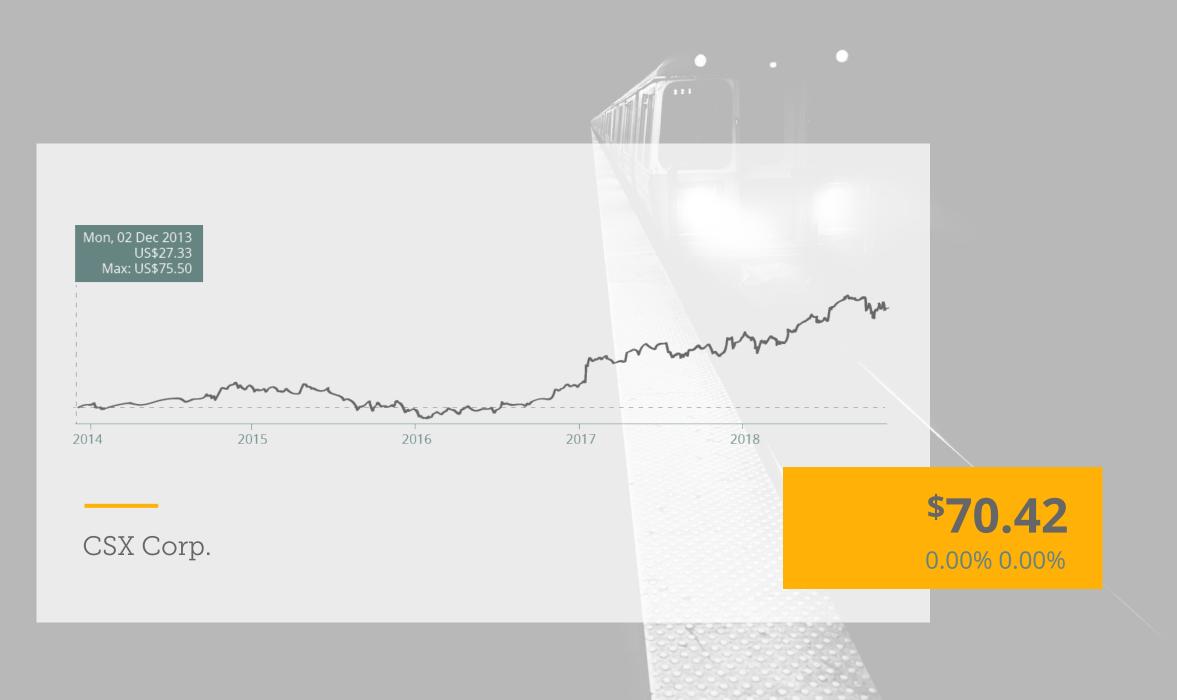
Precision Scheduled Railroading

[csx]

FINANCIALS

CSX Transportation Inc. & Union Pacific Railroad Company





Revenue Overview

Union Pacific

Fiscal year is January-December. All values USD millions.	2013	2014	2015	2016	2017	5-year trend	Pretax Income	7.05B	8.34B	7.66B	6.77B	7.63B	REAR
Sales/Revenue	21.96B	23.99B	21.81B	19.94B	21.24B		Pretax Income Growth		18.37%	-8.23%	-11.62%	12.80%	1.0
							Pretax Margin	1.4				35.93%	NA
Sales Growth	-	9.22%	-9.07%	-8.58%	6.51%	" "	Income Tax	2.66B	3.16B	2.88B	2.53B	(3.08B)	allas _a
Cost of Goods Sold (COGS) incl. D&A	13.67B	14.31B	12.84B	11.67B	12.23B		Income Tax - Current Domestic	1.88B	2.36B	2.11B	1.69B	1.99B	allat
COGS excluding D&A	11.89B	12.41B	10.83B	9.63B	10.13B		Income Tax - Current Foreign	5-	-	8M	8M	2M	Н.
Depreciation & Amortization Expense	1.78B	1.9B	2.01B	2.04B	2.11B		Income Tax - Deferred Domestic	778M	803M	765M	831M	(5.08B)	
-			1.1.2				Income Tax - Deferred Foreign					10M	
Depreciation	1.78B	1.9B	2.01B	2.04B	2.11B		Income Tax Credits			-	-		
Amortization of Intangibles	-	-	2	-	-		Equity in Affiliates			-			
COGS Growth		4.70%	-10.30%	-9.08%	4.79%	101	Other After Tax Income (Expense)	-	-	-	-	4	
Gross Income	8.3B	9.68B	8.98B	8.27B	9.01B	INI	Consolidated Net Income	4.39B	5.18B	4.77B	4.23B	10.71B	and
			200	41444			Minority Interest Expense	+	-		+		
Gross Income Growth	-	16.66%	-7.24%	-7.88%	8.95%	 .	Net Income	4.39B	5.18B	4.77B	4.23B	10.71B	ates.
Gross Profit Margin		-	-	-	42.42%	NA	Net Income Growth	1	18.05%	-7.88%	-11.30%	153.06%	

Revenue Overview

CSX Corp.

Fiscal year is January-December. All values USD millions.	2013	2014	2015	2016	2017	5-year trend	Pretax Income	2.92B	3.04B	3.14B	2.74B	3.14B	
Sales/Revenue	12.03B	12.67B	11.81B	11.07B	11.41B		Pretax Income Growth	+	4.18%	3.09%	-12.65%	14.63%	- 10 ¹⁰
					-		Pretax Margin		-	-	2	27.54%	NA
Sales Growth	-	5.35%	-6.77%	-6.28%	3.06%	1 01	Income Tax	1.06B	1.12B	1.17B	1.03B	(2.33B)	
Cost of Goods Sold (COGS) incl. D&A	8.46B	8.88B	8.09B	7.7B	7.54B		Income Tax - Current Domestic	758M	819M	714M	622M	(2.6B)	·····
COGS excluding D&A	7.35B	7.73B	6.88B	6.39B	6.22B		Income Tax - Current Foreign	1		100	-	-	
Depreciation & Amortization Expense	1,1B	1,15B	1.21B	1.3B	1.32B		Income Tax - Deferred Domestic	300M	298M	456M	405M	273M	anilla i
Depresidion & Anonization Expense	1.10	1,100	1.210	1.50	1.520		Income Tax - Deferred Foreign	-	-	-	-	+	
Depreciation	1.1B	1.15B	1.21B	1.3B	1.32B		Income Tax Credits	-	14	-	-	114	
Amortization of Intangibles	+				-		Equity in Affiliates		-	-	-		
COGS Growth	-	5.01%	-8.95%	-4.82%	-2.08%	a part	Other After Tax Income (Expense)	1M	(1M)	(1M)	(1M)	(1M)	-
Gross Income	3.57B	3.79B	3.73B	3.37B	3.87B		Consolidated Net Income	1.87B	1.93B	1.97B	1.71B	5.47B	
	5.010	5.750	5.755	5.576	5.070		Minority Interest Expense			2	-	÷	
Gross Income Growth	+	6.13%	-1.66%	-9.45%	14.79%		Net Income	1.87B	1.93B	1.97B	1.71B	5.47B	
Gross Profit Margin	-		-	1.	33.95%	NA	Net Income Growth	-	3.27%	2.13%	-12.91%	219.32%	

Operating Margin

Companies with similar Operating Margin in Quarter ending 9/30/18 w/in Railroads Industry	Operating Profit Margin	9/30/18 MRQ Operating Income	9/30/18 MRQ Revenue
CSX Corp	41.32%	\$1,293.000	\$3,129.000
Union Pacific Corp	38.28%	\$2,269.000	\$5,928.000
Kansas City Southern	37.97%	\$265.400	\$699.000
Norfolk Southern Corp	34.61%	\$1,020.000	\$2,947.000
Usd Partners LP	26.44%	\$7.822	\$29.586
Gatx Corporation	24.13%	\$84.400	\$349.700

Debt to Equity Analysis

Union Pacific

Union Pacific Debt/Equity Ratio Historical Data						
Date	Long Term Debt	Shareholder's Equity	Debt to Equity Ratio			
2018-09-30	\$20.94B	\$20.65B	1.01			
2018-06-30	\$21.36B	\$19.91B	1.07			
2018-03-31	\$15.70B	\$24.39B	0.64			
2017-12-31	\$16.14B	\$24.86B	0.65			
2017-09-30	\$15.93B	\$19.15B	0.83			
2017-06-30	\$15.23B	\$19.62B	0.78			
2017-03-31	\$14.31B	\$19.72B	0.73			
2016-12-31	\$14.25B	\$19.93B	0.72			
2016-09-30	\$15.21B	\$20.28B	0.75			
2016-06-30	\$14.78B	\$20.42B	0.72			
2016-03-31	\$14.79B	\$20.48B	0.72			

Railroad Industry Average: 0.96

Debt to Equity Analysis

CSX

CSX Debt/Equity Ratio Historical Data							
Date	Long Term Debt	Shareholder's Equity	Debt to Equity Ratio				
2018-09-30	\$13.75B	\$13.74B	1.00				
2018-06-30	\$13.77B	\$14.02B	0.98				
2018-03-31	\$13.77B	\$14.39B	0.96				
2017-12-31	\$11.79B	\$14.72B	0.80				
2017-09-30	\$11.79B	\$10.90B	1.08				
2017-06-30	\$11.81B	\$11.60B	1.02				
2017-03-31	\$10.96B	\$11.67B	0.94				
2016-12-31	\$10.96B	\$11.69B	0.94				
2016-09-30	\$9.89B	\$11.67B	0.85				
2016-06-30	\$9.91B	\$11.63B	0.85				
2016-03-31	\$10.52B	\$11.61B	0.91				

Railroad Industry Average: 0.96

Performance

- Both have excellent return on equity
- Both have return on assets that are nearly double the industry standard
- Union Pacific used capital more effectively than CSX
- This is a key indicator for the industry as well since capital expenditure is the most significant expense.



Transportation Average ROE: 22.8% ROA: 11.2% ROCE: 11.6%

DECISION



Decision

QUESTIONS