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**Mergers and Acquisitions**

### Logic of Corporate Level Strategy Applies

Corporate level strategy should create value:

- 1) such that the value of the corporate whole increases
- 2) such that businesses forming the corporate whole are worth more than they would be under independent ownership
- 3) that equity holders cannot create through portfolio investing

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**Mergers and Acquisitions**

## DEFINITIONS

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**Mergers and Acquisitions**

### Definitions

- MERGER
  - Combination of Two Firms of Which One Survives.
- ACQUISITION
  - Bidder Buys All or Majority of Stock. Target Continues to Exist as Subsidiary or Associate
- HOLDING Co.
  - Purchase Only a Part of the Target Stock
- ASSET SALE
  - Only Assets Sold. Liabilities not Transferred.

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Mergers and Acquisitions Defined

Mergers

M+A

Acquisitions

- two firms are combined on a relatively co-equal basis
- one firm buys another firm

- the words are often used interchangeably even though they mean something very different

- merger sounds more amicable, less threatening

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Mergers and Acquisitions Defined

Mergers

IPO

Acquisitions

- parent stocks are usually retired and new stock issued
- name may be one of the parents' or a combination
- one of the parents usually emerges as the dominant management

- can be a controlling share, a majority, or all of the target firm's stock
- can be friendly or hostile
- usually done through a tender offer

100%  
51%

12-6

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Mergers and Acquisitions Defined

Types of M&A Activity

FTC Categories

Regulators: CCI, NIC.  
 SIC: 1, 2, 3, 4, 7, 8

Related	Vertical	» suppliers or customers	12, 33
	Horizontal	» competitors	32
	Product Extension	» complementary products	
	Market Extension	» complementary markets	
Unrelated	→ Conglomerate	» everything else	

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Mergers and Acquisitions Defined

MOTIVATIONS

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Mergers and Acquisitions

*M&A. → Revm.*

## Motivations for M&A

*Investment Banker*

- Strategic realignment
  - Technological change *EV*
  - Deregulation
  - Diversification (Related/Unrelated)
- Synergy
  - Operating synergy
  - Market power → *set the prices.*
  - Financial synergy
- Financial considerations
  - Acquirer believes target is undervalued
  - Booming stock market
  - Falling interest rates *Debt*
  - Tax considerations

*↓ Profit FCF → Tax.*

*12-9*

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## Synergy

*X → Y [XY] IPO*

- Operating Synergy
  - Economies of Scale → *1 product LC*
  - Economies of Scope → *multi products. & sharing costs. D/E↑ LBO.*
- Costs of Operations is Lowered and Profit/Surplus Increases Due to Synergy
  - Resource/Asset Infusion
  - Downsizing
  - Renegotiating Contracts
    - Worker/Managers
    - Creditors
    - Government

*Howe ban car loan. Debt leveraged Buyout. FCF*

*12-10*

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## Synergy

*IPO*

- Market Power
  - Horizontal Integration
    - Leads to better control over the market and greater power to fix prices and thwart competition
  - Vertical Integration & Transaction Costs
    - Must lower costs through integration or strategic posture

*↓*

*12-11*

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## Synergy

- Financial Synergy Arises from Lower Financial Costs Faced by a Merged Firm
  - This arises from lower cost of raising finance *Cost of Capital.*
- Because of combined cash flows, the debt of the new entity is more secure, as prob. of bankruptcy declines

*S. FCF Cash Reserves.*

*12-12*

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Mergers and Acquisitions

## Empirical Findings

-10  
date of announced  
21  
+10  
target ↑  
Acq ↓

- Around transaction announcement date, abnormal returns average
  - 20% for target shareholders in "friendly" transactions; 30-35% in hostile transactions
  - Bidders' shareholders on average earn zero to slightly negative returns
- Positive abnormal returns to bidders often are situational and include the following:
  - Target is a private firm or a subsidiary of another firm
  - The acquirer is relatively small
  - The target is small relative to the acquirer
  - Cash rather than equity is used to finance the transaction
  - Transaction occurs early in the M&A cycle

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Mergers and Acquisitions

## Why Is M&A Activity So Prevalent?

If managers know that acquiring firms do not capture any value from M&A's, why do they continue to merge and acquire?

Survival

- avoid competitive disadvantage
- avoid scale disadvantages

Free Cash Flow

- cash generating, normal return investment

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Mergers and Acquisitions

## Why Is M&A Activity So Prevalent?

If managers know that acquiring firms do not capture any value from M&A's, why do they continue to merge and acquire? growth

Principal Stockholder  
↓  
BoD Independent  
↓  
Managerial Agency  
↓  
CFO  
Agency Theory

Agency Problems

- Managers benefit from increases in size.
- Managers benefit from diversification.

Managerial Hubris

- Managers believe they can beat the odds.

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Mergers and Acquisitions

## Why Is M&A Activity So Prevalent?

If managers know that acquiring firms do not capture any value from M&A's, why do they continue to merge and acquire?

Above Normal Profits

- Some M&A activity does generate above normal profits (expected and operational over the long run).
- Proposed M&A activity may satisfy the logic of corporate level strategy.
- Managers may see economies that the market can't see. value

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**Mergers and Acquisitions**

### Motives for Mergers and Acquisitions

- **Managerial Motives**
  - Top management remuneration depends more on firm size than profitability
  - Psychological rewards--M&As project power, confer CEO celebrity status
  - Imitation: the fear of not participating in an industry's merger wave
- **Financial Motives**
  - Stock market inefficiencies—acquire undervalued companies (Berkshire Hathaway-Heinz): use overvalued equity to acquire (AOL-Time Warner)
  - Quest for tax savings—cross-border acquisitions to relocate to lower tax regime (Burger King-Tim Horten)
  - Financial re-engineering: debt-financed acquisitions that reduce the acquired company's cost of capital (KKR-RJR Nabisco) LBO
- **Strategic Motives**
  - Horizontal M&A—economies of scale and market power (Sirius-XM)
  - Geographical extension M&A—to enter overseas market (ENEL-Endesa) IB
  - Vertical M&A—to acquire supplier or customer (Gencore-Xstrata)
  - Diversifying M&A—to enter a new area of business (Kering-Puma)

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**Mergers and Acquisitions**

### Competitive Advantage

Doing the Deal

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**Mergers and Acquisitions**

### Competitive Advantage

Doing the Deal

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**Mergers and Acquisitions**

## VALUE CREATION

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Mergers and Acquisitions

## Do Mergers and Acquisitions Create Value?

The Logic

Related M&A Activity

- value creation would be expected due to synergies between divisions
  - economies of scale
  - economies of scope
    - transferring competencies
    - sharing infrastructure, and so on

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Mergers and Acquisitions

## Do Mergers and Acquisitions Create Value?

The Logic

Unrelated M&A Activity

- there would be no expectation of value creation due to the lack of synergies between businesses
- there might be value creation due to efficiencies from an internal capital market
- there might be value creation due to the exploitation of a conglomerate discount
  - a corporate raider who buys and restructures firms

cash flow reserves & surplus

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Mergers and Acquisitions

## Do Mergers and Acquisitions Create Value?

The Empirical Evidence

Research is based on stock market reaction to the announcement of M&A activity

- this reflects the market's assessment of the expected value of the merger or acquisition
- these studies look at what happens to the price of both the acquirer's stock and the target's stock
  - thus, we can see who is capturing any expected value that may be created

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Mergers and Acquisitions

## Do Mergers and Acquisitions Create Value?

The Empirical Evidence

M&A Activity creates value, on average, as follows:

Acquiring Firms

• no value created

Target Firms

• value increases by about 25%

20% to 35%

- related M&A activity creates more value than unrelated M&A activity

M&A activity creates value, but target firms capture it.

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## Are Mergers Successful?

- Evidence from Shareholder Returns:
  - Small increase in the combined value of the 2 companies involved
  - Gains flow (almost) entirely to shareholders of acquired companies *target*
  - Returns to shareholders of acquiring companies negative on average
- Evidence from Accounting Profits
  - Diverse findings: "...the results from these accounting-based studies are all over the map"
  - Key problem: separating the effects of the merger from the many other factors that influence firms' profitability
- Diversity of M&A
  - Lack of consistent findings reflects the vast diversity in types of mergers and characteristics of the firms involved
  - Even when mergers categorized (e.g. horizontal, vertical, conglomerate) no consistent performance differences

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## Empirical Findings

- Primary Reasons Some M&As Fail to Meet Expectations
  - Overpayment due to over-estimating synergy
  - Slow pace of integration
  - Poor strategy

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## EFFICIENT MARKET HYPOTHESIS

**EFFICIENT MARKET HYPOTHESIS (EMH)** is a financial theory that says the asset (or security) prices reflect all the available information or data.

**EXPLANATION OF EMH**

- Theory says that stock trades at fair value all times.
- EMH suggests that it is impossible to find undervalued stocks or sell it at premium.
- It suggests that fundamental or technical analyses are not useful under EMH.

**WEAK FORM OF EMH**  
It assumes that stock price includes all information publicly available, but not the information that is not publicly available.

**FORMS OF EFFICIENT MARKET HYPOTHESIS**

**SEMI-STRONG EMH**  
This form gives no importance to both technical and fundamental analysis

**STRONG FORM EMH**  
It assumes that both public and private information is priced into the stock price. Private info is available to insiders

**ASSUMPTIONS OF THEORY**

- ✓ Investors act Rationally & Normal.
- ✓ Relevant info is available freely.

**CRITICISMS OF EHM**

- Warren Buffett, Paul Tudor Jones, John Templeton, and Peter Lynch have always beaten the market returns in long run.
- Those against EMH say that a few financial events could push the stock away from their fair value in a single day.

*Hand Media.*  
 $\pm 20$   
 $\pm 30$

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## CASE STUDY


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**Mergers and Acquisitions**

## Canadian Pacific Railway Limited

- Formed in - Late 19<sup>th</sup> century
- Purpose - To connect major cities in eastern Canada
- Position - Canada's 2<sup>nd</sup> largest Railroad operating in North America
- Employees - 13,700
- Track - 12,500 miles of track in Canada, Mid Western and North Eastern parts of US.
- Income - \$ 1.3 Billion on operating revenue of \$ 5.7 Billion in 2014.  
- Canadian Pacific is considerably smaller than Norfolk Southern.



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## Canadian Pacific Railway Limited



**Hunter Harrison, CEO**

Acquired.

- A long-term railroad executive.
- Retired as the CEO of Canadian National (CN) in 2009.
- Believed consolidation was a good way to add critical rail capacity and simultaneously improve efficiency.
- Under his leadership, CP's operating ratio had fallen from 81% in 2011 to close to 60% in 2015.
- CP's share price during his tenure had soared from less than \$68 at the end of 2011 to almost \$215 in October 2014.




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## Norfolk Southern Corporation

- Formed in - 1982
- Formed by - Merger of Norfolk & Western and Southern Railway
- Position - 4<sup>th</sup> Largest Class I Railroad operating in North America
- Employees - 30,456 17x
- Track - 20,000 miles in 22 Eastern States, and served all major East coast ports.
- Income - \$ 2 Billion of income on operating revenue of \$ 11.6 Billion in 2014.




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**Mergers and Acquisitions**

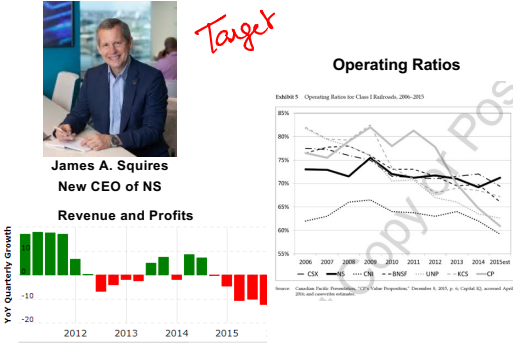
## Norfolk Southern Corporation



**James A. Squires  
New CEO of NS**

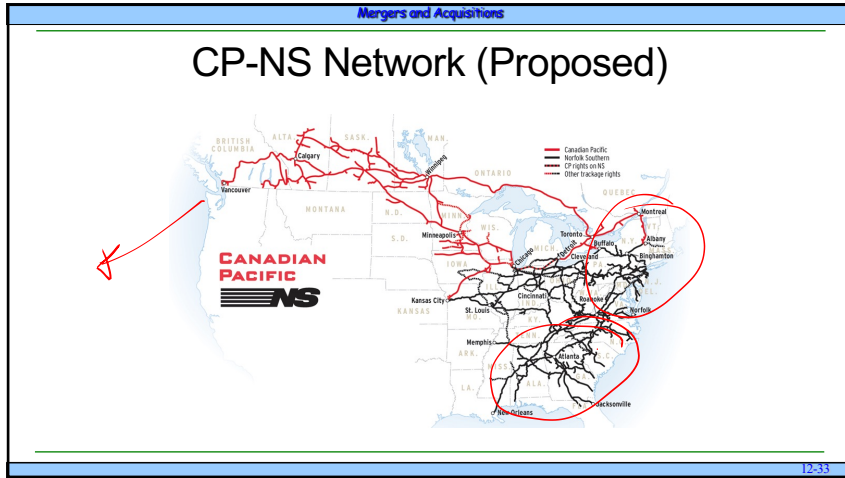
Target

- Became CEO of NS on June 1, 2015, at the age of 53.
- Had joined the company in 1992.
- He rose through the ranks of the legal division before being named senior vice president of financial planning in 2006, CFO in 2007, and then president in 2013.



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### Event Timeline

#### 1. Merger Rumours

While there were rumours of a possible bid for CP's acquisition with NS, there was an increase in stock prices of both the companies.

NS Stock Price				CP Stock Price			
Shares Outstanding: 301 Mn				Shares Outstanding: 161 Mn			
Beg	End	Change	% Change	Beg	End	Change	% Change
79.87	88.62	8.75	11.00%	134.31	142.18	7.87	5.90%

*Handwritten notes:*  
 $301 \times 8.75 = 2633.75 \text{ mn. Target.}$   
 $2.63 \text{ Bn.}$   
 $161 \times 7.87 = 1.267 \text{ Bn. Acq.}$   
 $3.89 \text{ Bn.}$   
 $\frac{2.63}{3.87} \approx 67\% \text{ Target}$   
 $\frac{1.26}{3.87} \approx 33\% \text{ aca}$

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### Event Timeline

#### 2. Initial CP offer to NS

- Acquisition for \$46.72 in cash at fixed exchange ratio of 0.348 CP shares for each NS share.
- Offer worth: \$94.95 per NS share
- Acquisition premium = 9%

NS Stock Price				CP Stock Price			
Shares Outstanding: 301 Mn				Shares Outstanding: 161 Mn			
Beg	End	Change	% Change	Beg	End	Change	% Change
86.97	92.49	5.52	6.3%	138.58	146.65	8.07	5.40%

*Handwritten notes:*  
 $301 \times 5.52 = 1.66 \text{ Bn.}$   
 $161 \times 8.07 = 1.29 \text{ Bn.}$   
 $T: 2.63 + 1.66 = 4.29 \text{ Bn.}$   
 $A: 1.26 + 1.29 = 2.55 \text{ Bn.}$   
 $\frac{4.29}{6.84} \approx 63\%$   
 $\frac{2.55}{6.84} \approx 37\%$   
 $\frac{138.58}{146.65} \approx 0.348$   
 $\$46.72$

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### Event Timeline

#### 3. NS rejected this offer, stating the deal to be Inadequate

NS Stock Price				CP Stock Price			
Shares Outstanding: 301 Mn				Shares Outstanding: 161 Mn			
Beg	End	Change	% Change	Beg	End	Change	% Change
93.11	92.06	-1.05	-6.3%	140.91	134.49	-6.42	-4.55%

*Handwritten notes:*  
 $301 \times -1.05 = -2.969 \text{ Bn.}$   
 $161 \times -6.42 = -1.54 \text{ Bn.}$   
 $4.29 - 2.99 = 1.30 \text{ Bn.}$   
 $2.55 - 1.54 = 1.01 \text{ Bn.}$

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Mergers and Acquisitions

$301 \times -5.2 = -2.95$

$161 \times -4.35 = -1.56$

$T: 1.3 - 2.95 = -1.65 \text{ Bn}$

$A: 1.01 - 1.56 = -0.55 \text{ Bn}$

+10  
+20  
+30

### Event Timeline

**4. Revised acquisition offer by CP**

\$32.86 in cash and at a fixed exchange ratio of 0.451 CP shares for each NS share

- Offer worth = \$91.70 per NS share

NS Stock Price				CP Stock Price			
Shares Outstanding: 301 Mn				Shares Outstanding: 161 Mn			
Beg	End	Change	% Change	Beg	End	Change	% Change
91.52	86.32	-5.20	-5.68%	130.48	126.13	-4.35	-3.33%

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Mergers and Acquisitions

### Summary

M&A activity is a mode of entry for vertical integration and diversification strategies.

A firm's M&A strategy should satisfy the logic of corporate level strategy.

M&A activity can create economic value at announcement, but target firms usually capture that value.

M&A activity can create value over the long term for the acquiring firm.

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