Is Outsourcing Profitable?

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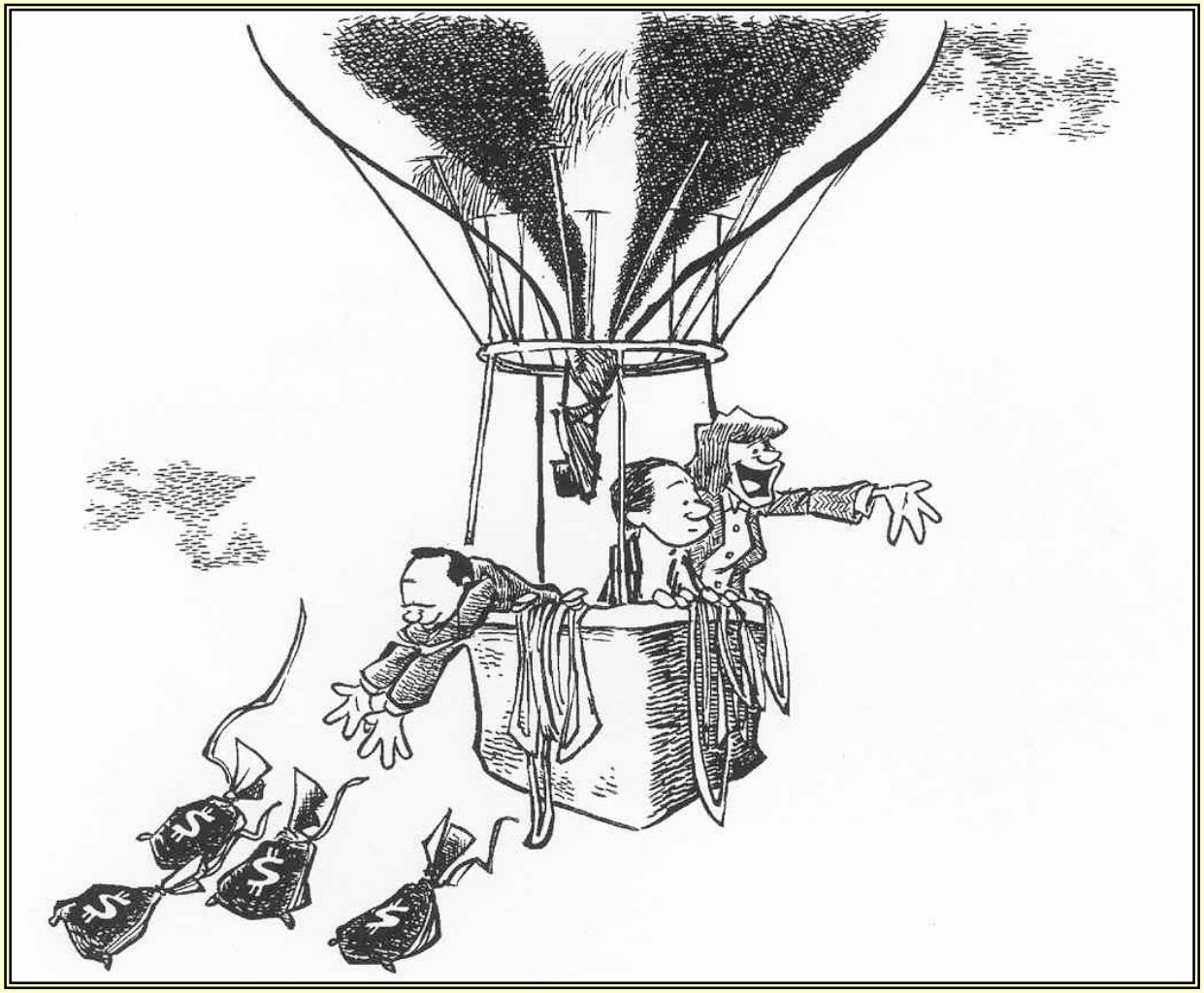
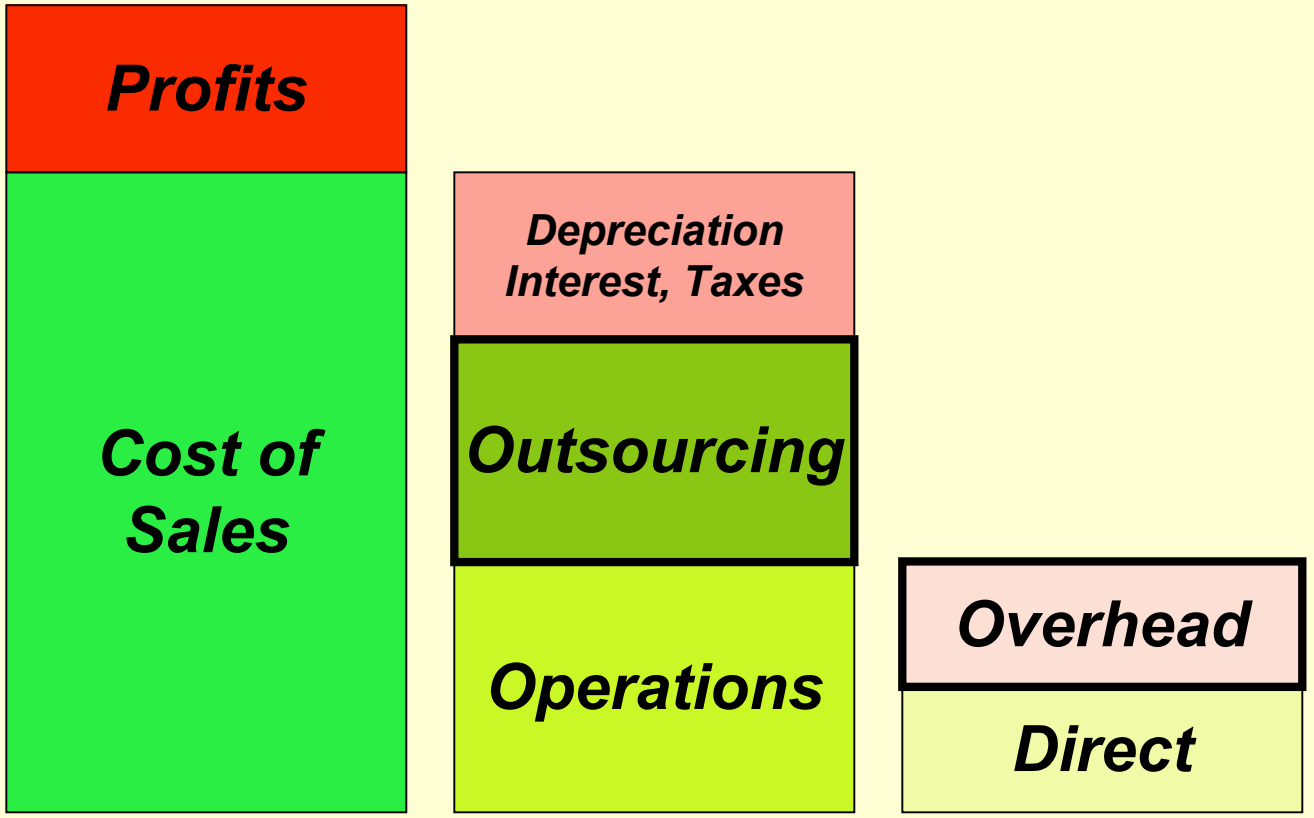
George Mason University, March 6, 2006

Outsourcing: Rising or Losing?



What is Outsourcing?

Definitions



Financial Profile of U.S. Firms (2004)

2004 S&P Data for 769 US Firms	Costs - $ Millions	% of Total
Profits	$42,031	5.3%
Depreciation, Interest, Taxes	$89,381	11.2%
Outsourcing	$370,608	46.6%
Overhead	$115,387	14.5%
Direct	$177,754	22.4%
Sales	$795,161	100.0%

Standard & Poor's Data for U.S. Corporations with 3.8 Million Employees

Outsourcing and Corporate Economics

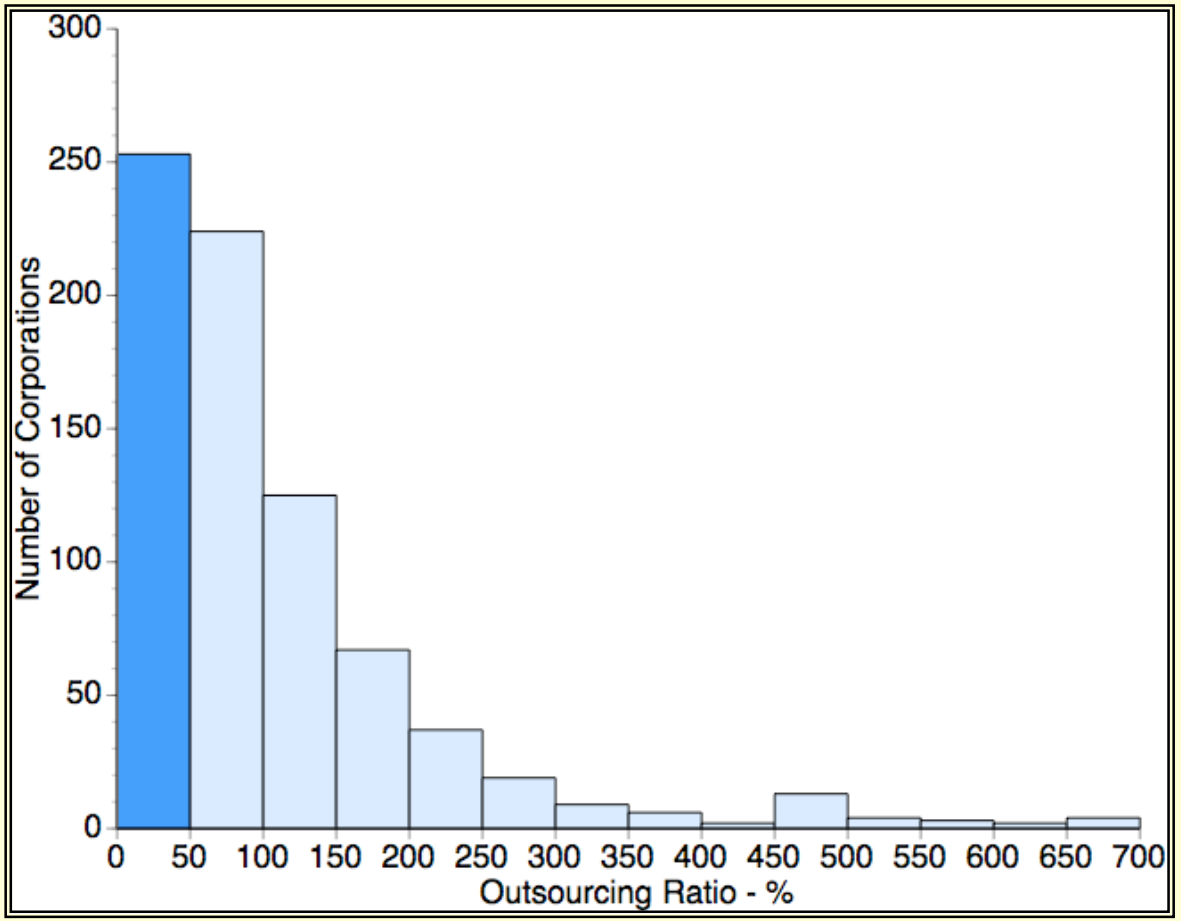
- Overhead costs now manage not only internal "direct" labor but also outsourcing work done by suppliers.
- Computer applications, optimized for "enterprise" integration have difficulty coping with the suppliers' incompatible systems.
- Unmanaged outsourcing complexity can void labor saving gains.

Critical Ratios

Outsourcing Ratio = Outsourcing / Direct Costs

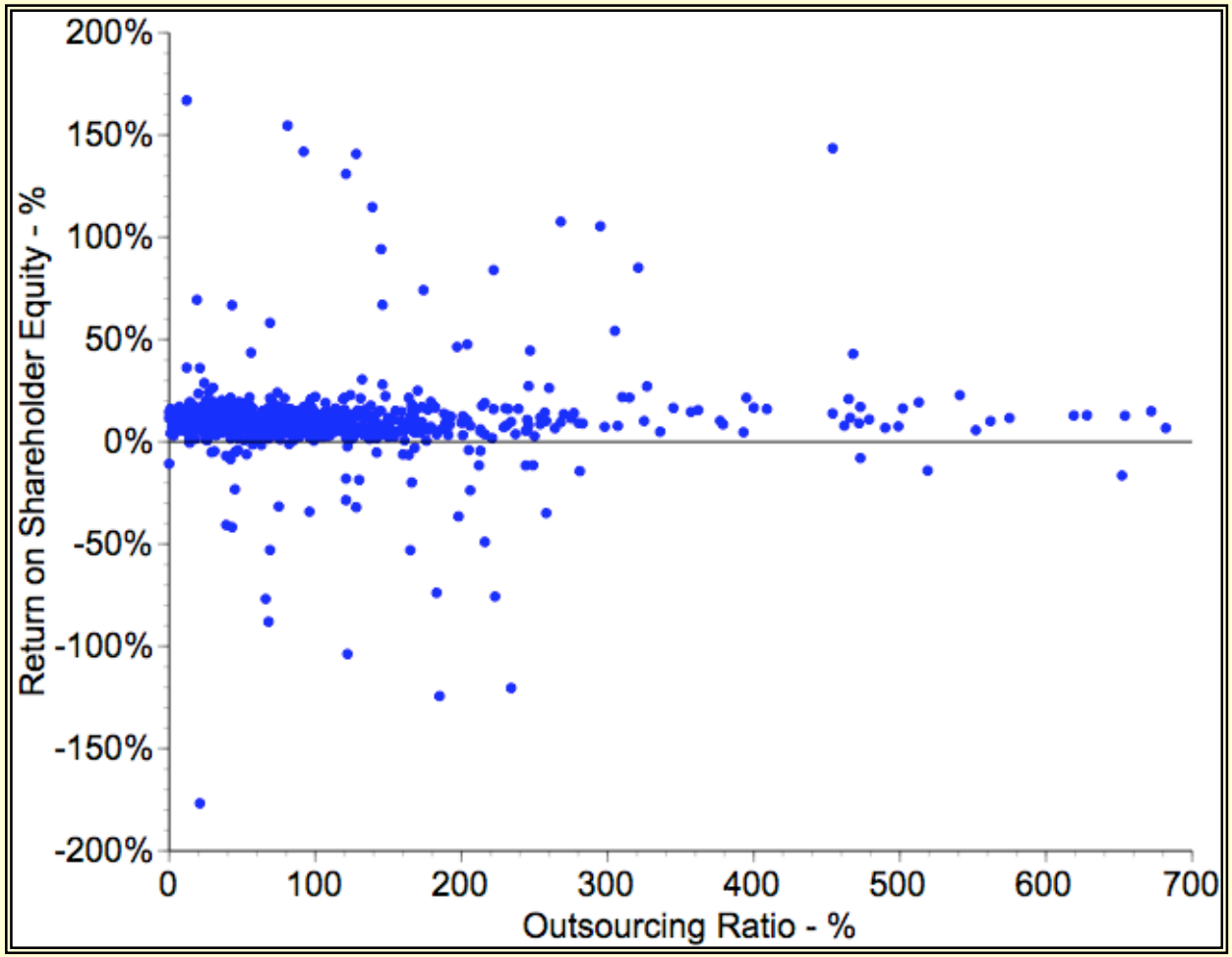
Overhead Ratio = Overhead / Direct Costs

Distribution of 2004 Outsourcing Ratios

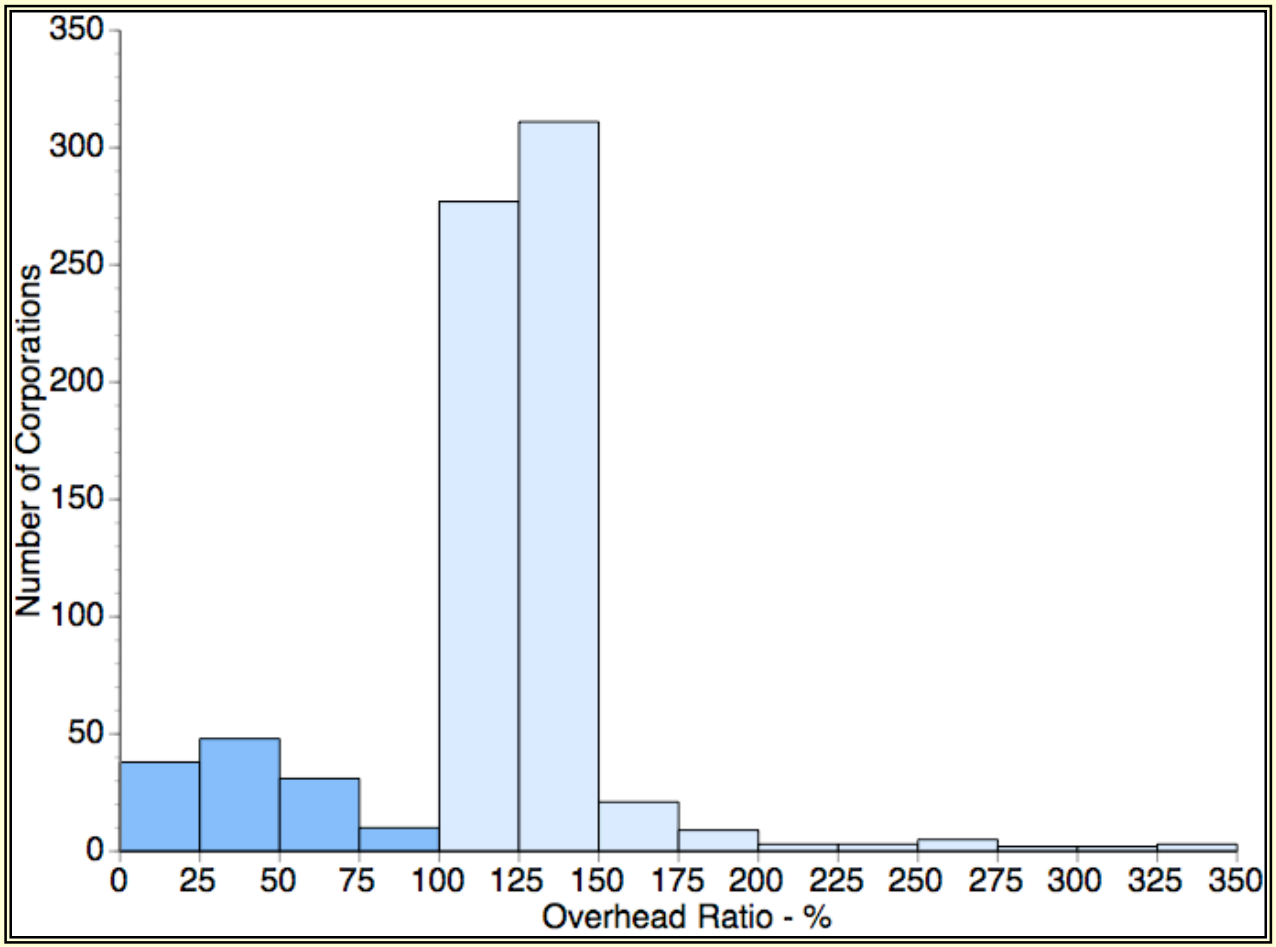


Median Outsourcing Ratio for 769 U.S. Corporations = 75.6%

Outsourcing Not Correlated with Profitability

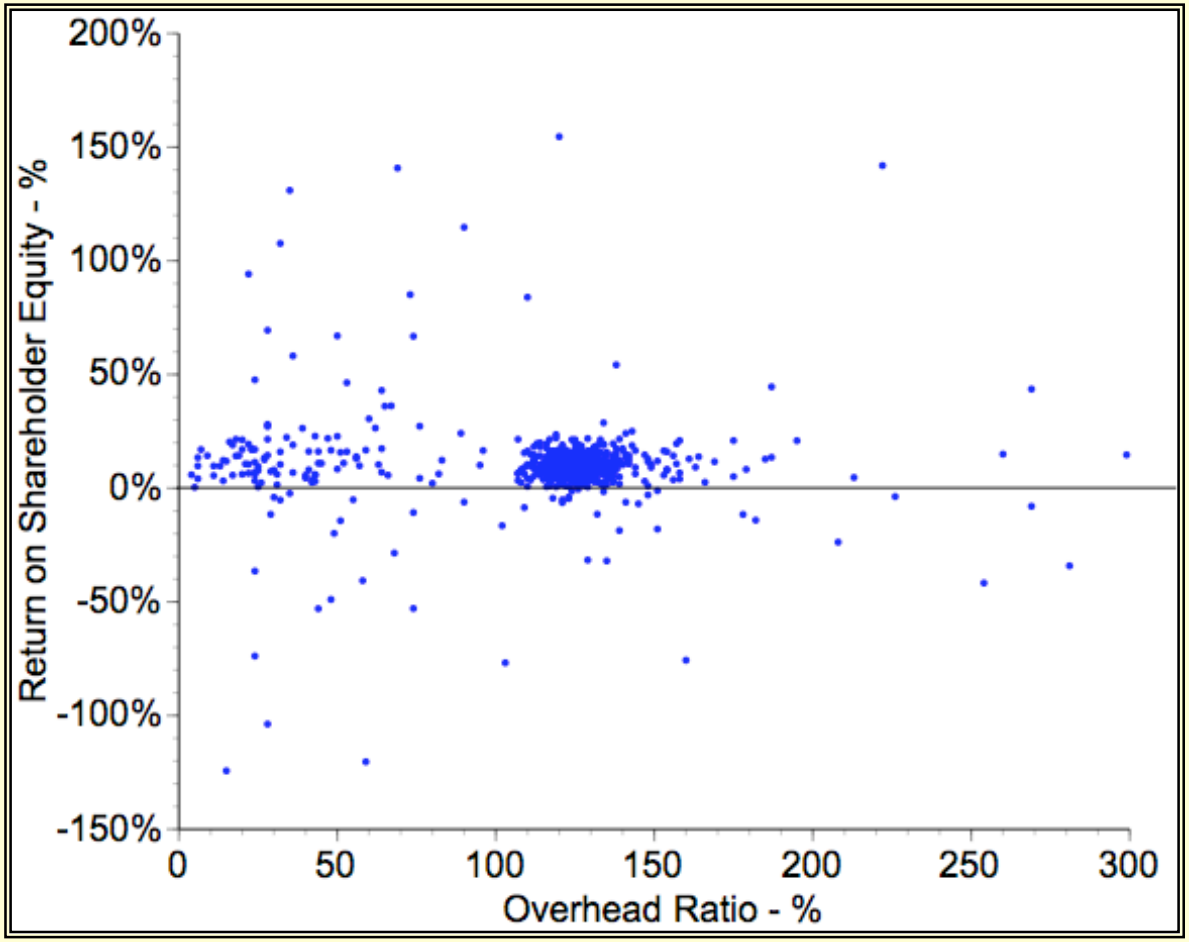


Distribution of 2004 Overhead Ratios



Median Overhead Ratio for 769 U.S. Corporations = 124%

Overhead Not Correlated with Profitability



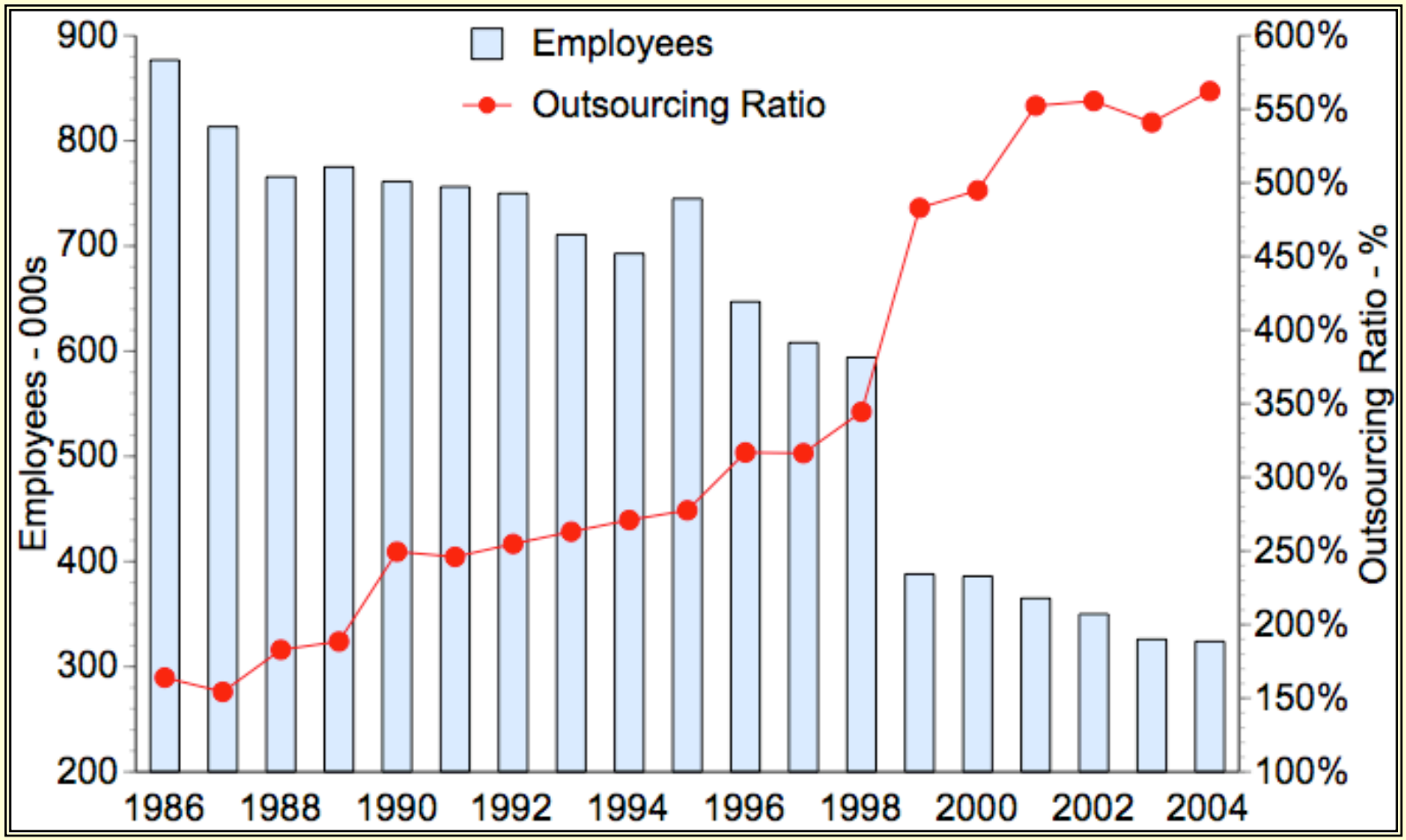
Summary: Outsourcing and Overhead Ratios

- Outsourcing now equals 75.6% of corporate direct costs and is rising.
- Overhead costs now exceed corporate direct costs by 24% and keep rising as direct costs outsourced.
- Neither outsourcing nor overhead correlates with profitability. Corporate profitability reflects effectiveness of management.

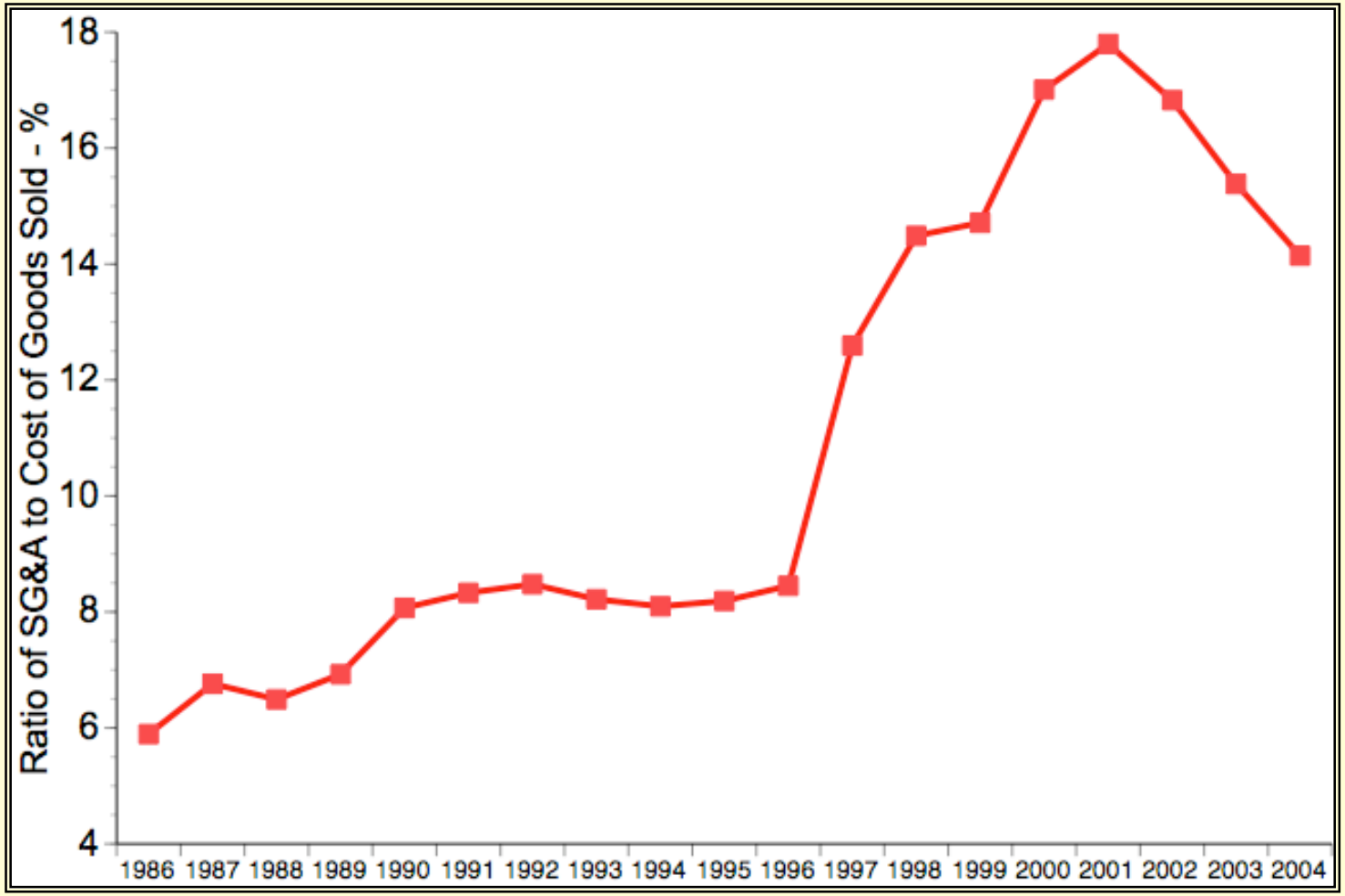
Was Outsourcing Profitable for GM?

A Case Study

GM Employment and Outsourcing



GM Outsourcing Increased Overhead Costs



The Keys to Competitive Advantage

- **Collaboration Costs**
- **Coordination Costs**
- **Intermediation Costs**
- **Transaction Costs**
- **Structural Costs**
- **Sales, General & Administrative Costs**

= Overhead Costs

Do Cuts in I.T. Indicate Success?

Critical Indicator	1997-2004 Changes - %
Sales	13.0%
Est. Information Technology	-25.0%

A Comparison of I.T. With Business Indicators

Critical Indicator	1997-2004 Changes - %
Est. Information Technology	-25.0%
BEA Index of I.T. Costs	-67.9%
Employees	-46.7%
Shareholder Returns	-73.2%

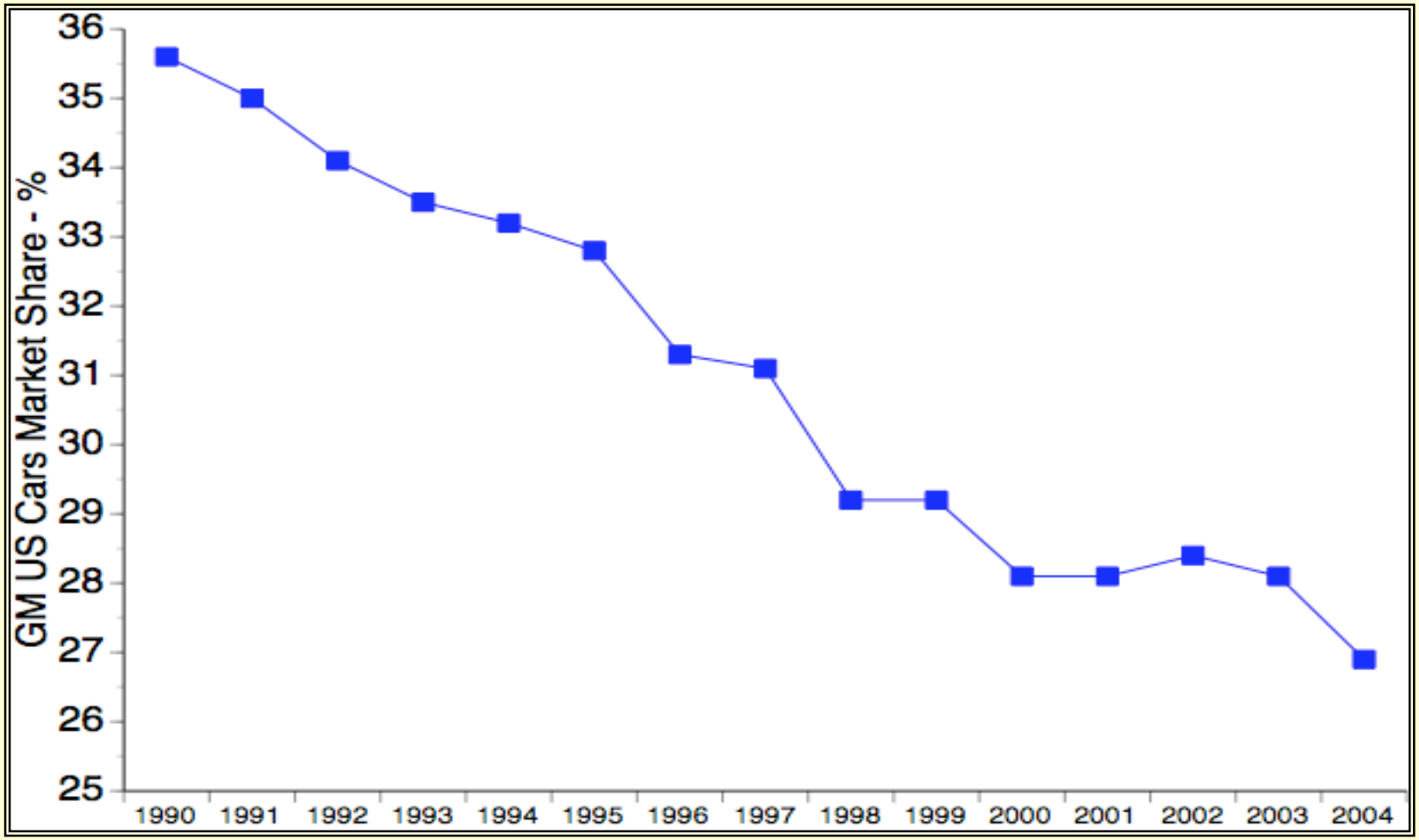
A Shareholder View

Critical Indicator	1986-2004 Changes - %
Outsourcing Ratio	242.9%
Overhead Ratio	502.4%
Profits	-4.7%
Shareholder Equaity	-9.6%
Stock Market Value	8.1%

A Comparison With Competitive Indicators

	2000-2004 Sales Increase	2000-2004 Inventory Increase
GM	5.7%	92.7%
Toyota	34.3%	31.5%
Honda	33.8%	34.8%

While Outsourcing, Market Share Declines



Summary of GM Case

- ***Outsourcing to lower costs did not stop market share erosion.***

- ***Value-chain did not improve while outsourcing;***

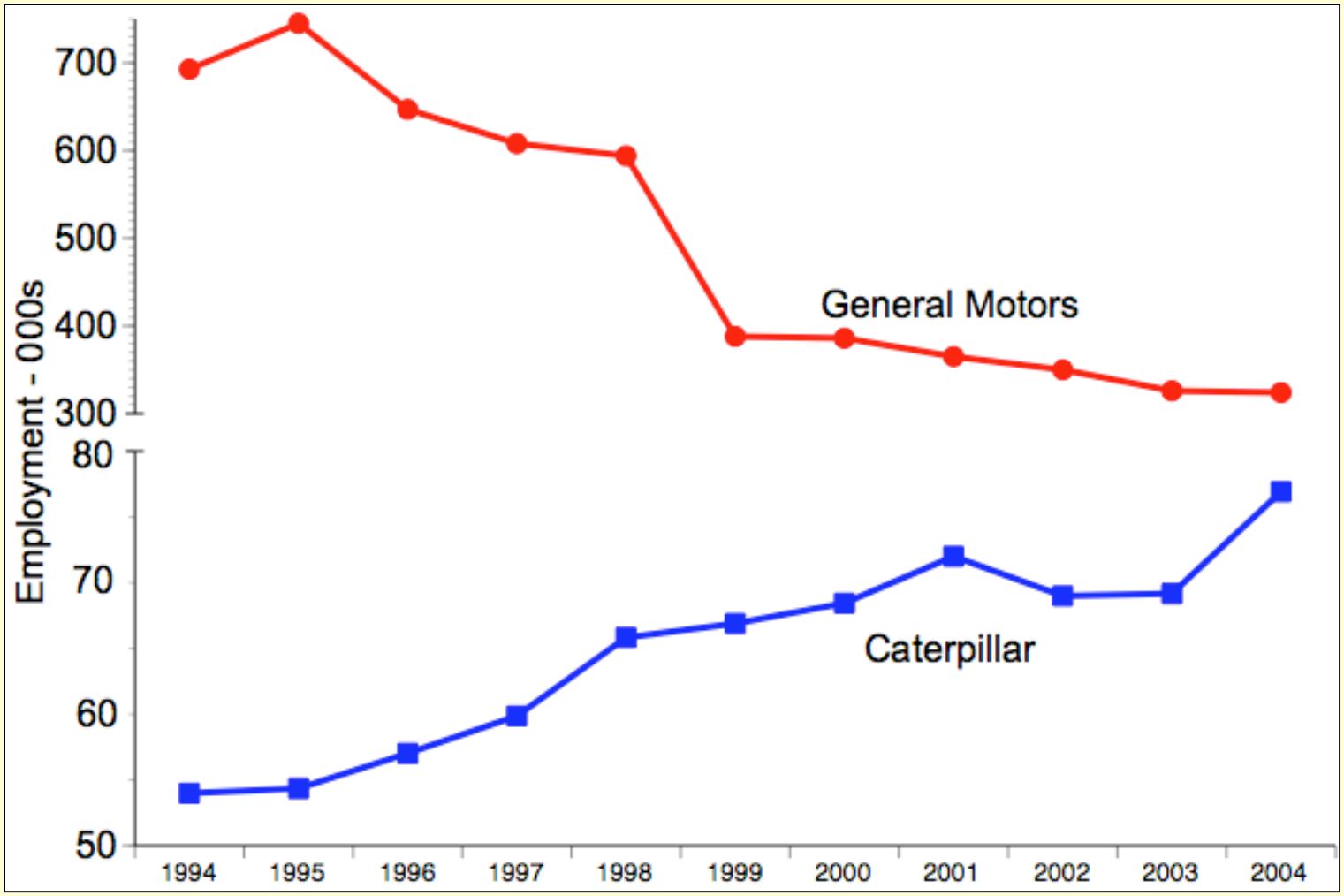
- ***Despite a decline in employment and outsourcing overhead costs are up;***

- ***I.T. can not be successful if business is indicators reveal information-related malfunctions.***

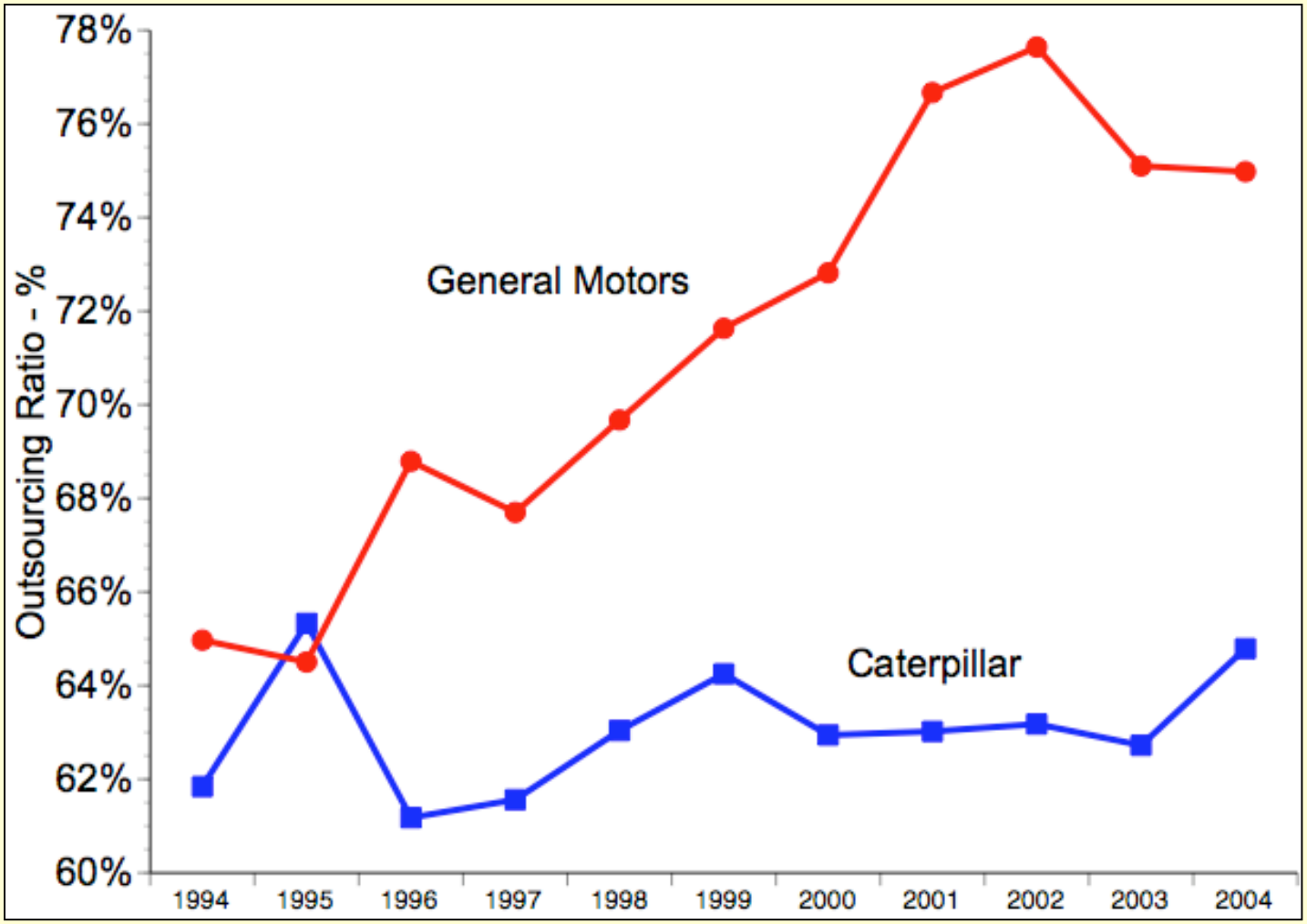
Is Outsourcing Damaging?

A Case Study: GM vs. Caterpillar

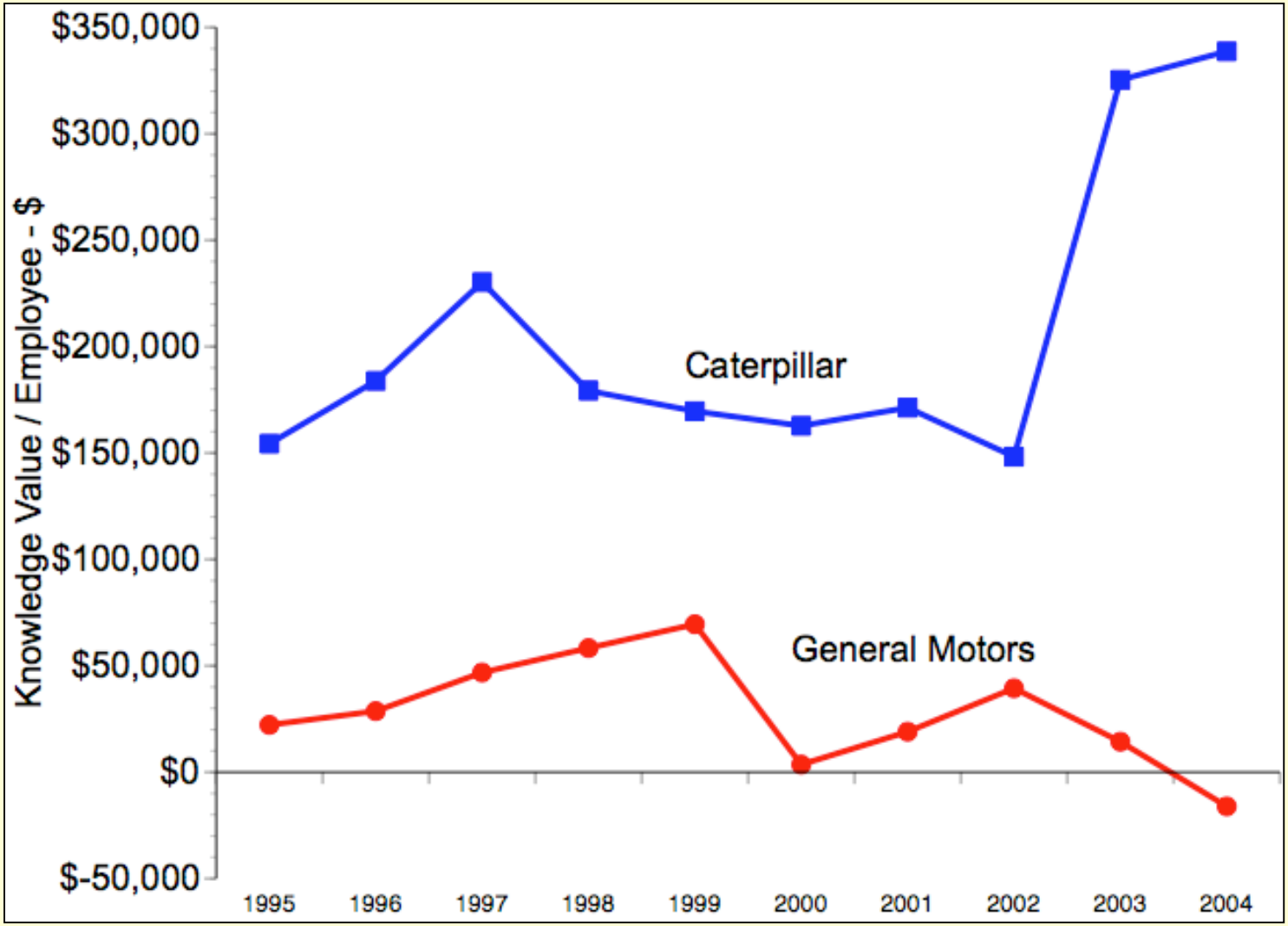
Employment: GM vs. Caterpillar



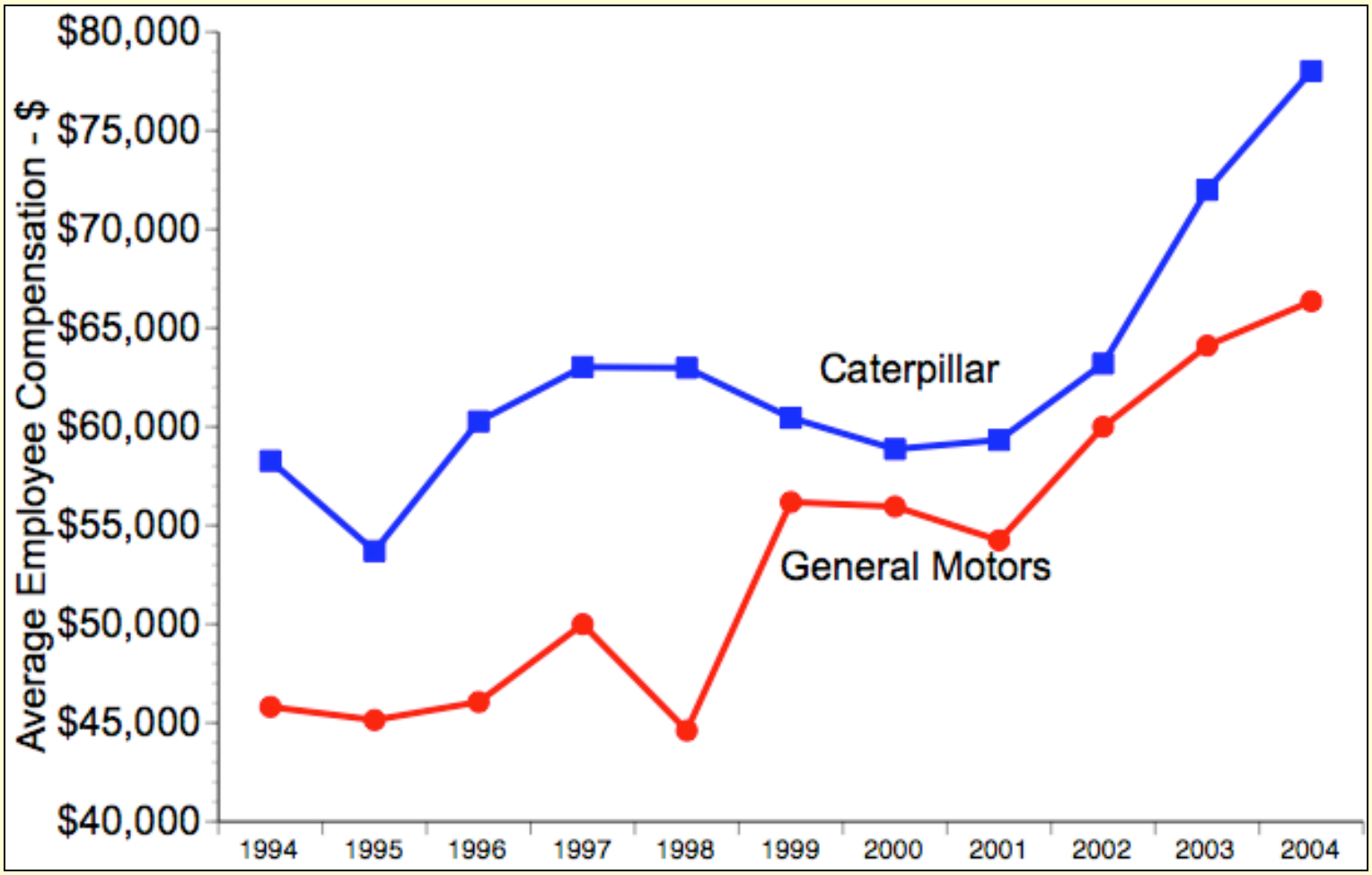
Outsourcing: GM vs. Caterpillar



Knowledge Value: GM vs. Caterpillar



Compensation: GM vs. Caterpillar



Summary of GM vs. Caterpillar Comparison

- Despite higher wages Caterpillar increased employment.
- Despite high level of outsourcing Knowledge Value of Caterpillar gains.

Research Findings

Highly Profitable Firms Outsource Less

Comparison of Outsourcing Ratios for 1,110 Firms	Medians for High Ranking Half	Medians for Low Ranking Half
Top Ranking 277 Firms - Median Return on Shareholder Equity = 18.0%	49.1%	54.6%
Bottom Ranking 277 Firms - Median Return on Shareholder Equity = (55.4%)	71.1%	83.2%

There Will Always be Outsourcing (2002)

Company Name	Sales	Value Added	Purchases	Outsourcing Ratio
ROYAL DUTCH/SHELL	179,431	36,870	142,561	79%
DEUTSCHE BANK	57,816	8,255	49,561	86%
VOLKSWAGEN	98,708	26,273	72,435	73%
FRANCE TELECOM	48,892	-13,146	62,038	127%
CITICORP	65,874	18,796	47,078	71%
JOHNSON & JOHNSON	36,298	19,532	16,766	46%
GLAXOSMITHKLINE	34,261	17,151	17,111	50%
UNILEVER	50,611	14,646	35,965	71%
SIEMENS	82,999	35,922	47,077	57%
GENERAL MOTORS	184,214	46,660	137,554	75%
DAIMLERCHRYSLER	156,838	51,113	105,724	67%
NESTLE S A	64,455	23,017	41,438	64%

Outsourcing Ratios Differ by Industry

Sector	EC Code	Median Outsoucing Ratio	Min Ratio	Max Ratio
Materials	1000	66.5%	53.2%	89.8%
Consumer Discretionary	2000	62.2%	25.9%	93.8%

Higher Pay Need not Result in Outsourcing

Compamy	Average Compensation per Employee	Outsourcing Ratio - %	Return on Assets - %
Johnson & Johnson	$90,461	45.2%	14.9%
Wyeth	$57,336	59.2%	6.6%

Summary of Research Findings

- "Outsourcing" is essential for the growth of any economy.
- Whether outsourcing is economically effective depends on the organization of the the value-chain.

Outsourcing in the Value-Chain

Case Study

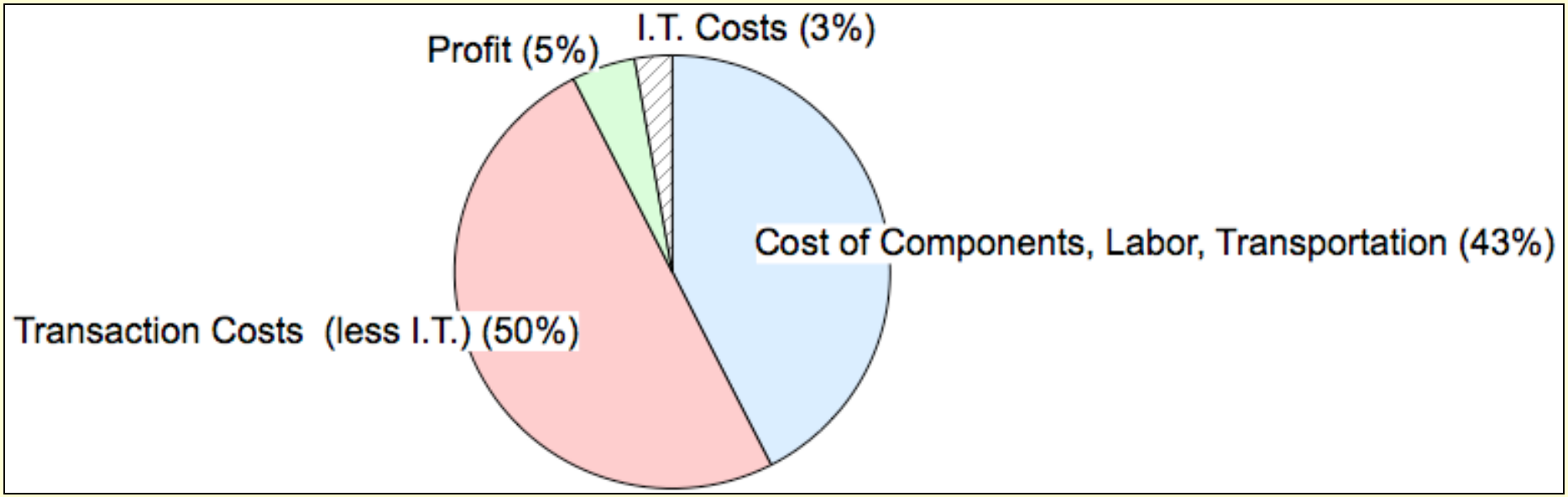
Estimated Cost of a Logitech Mouse

Elements of Value Chain	Total Costs in Value Chain	Estimated Transaction Costs	Estimated IT Costs
Assembly In China	$3.00	$1.00	$0.02
Parts from Suppliers for China	$14.00	$3.50	$0.18
Corporate Costs + Profit	$8.00	$6.00	$0.66
Global Distributors & Retailers	$15.00	$10.00	$0.30
Total Costs	$40.00	$20.50	$1.16
% of Retail Price	100%	51%	2.9%

Different Perspectives on Outsourcing

Outsourcing Perspectives	Cost Inputs	Value Outputs	% Outsourcing Ratio
As Seen by Factory	$3.00	$17.00	467%
As Seen by Management	$8.00	$25.00	213%
As Seen by Competitor	$20.50	$40.00	95%

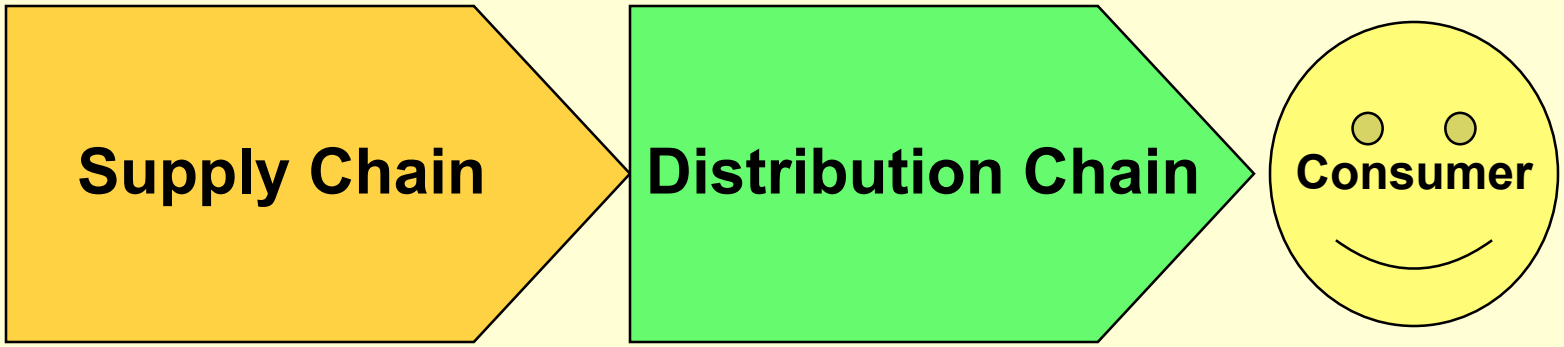
Distribution of Costs of a Logitech Mouse



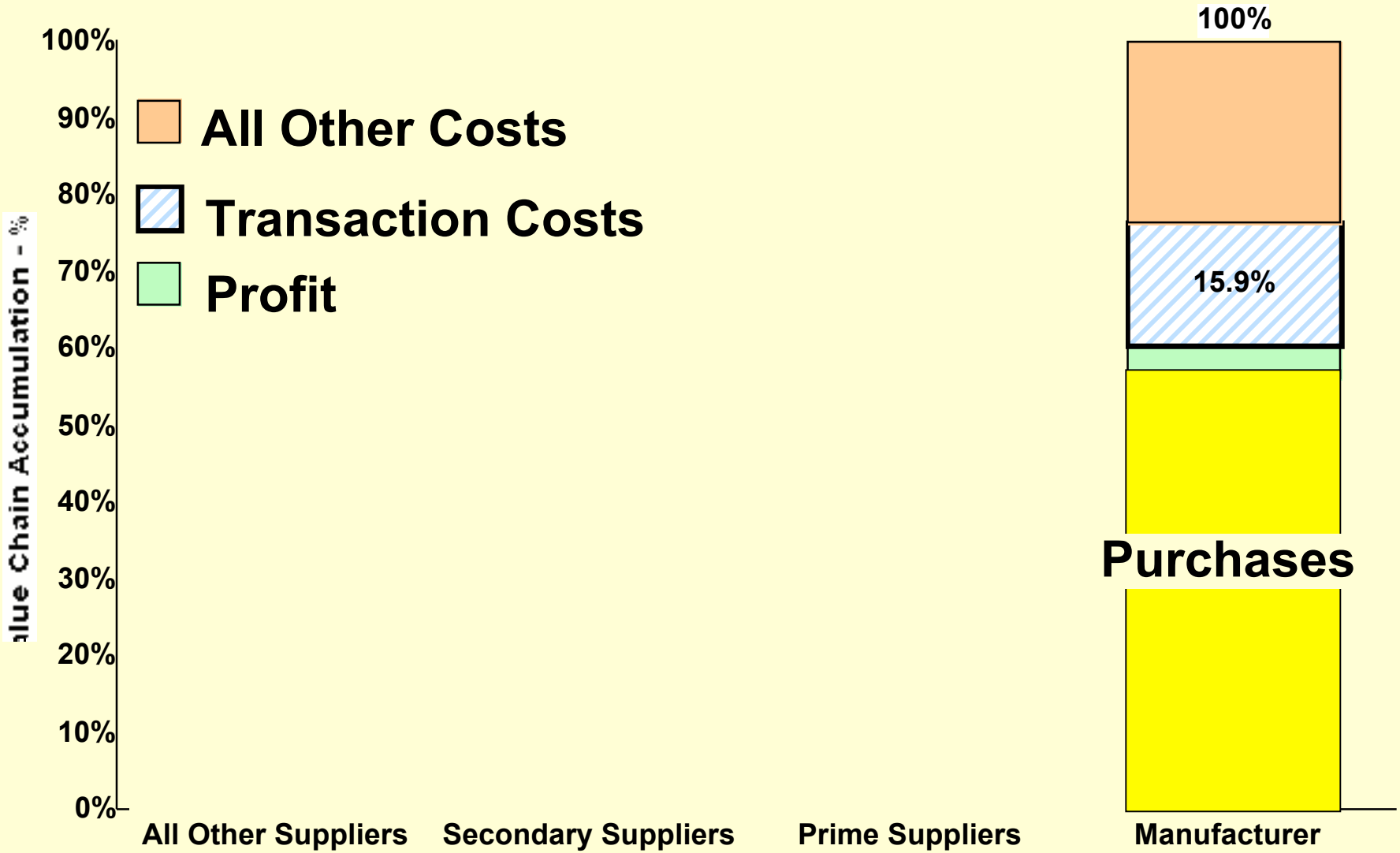
Summary of Case Study

- The definition of “outsourcing” depends on the position in the value-chain.
- The dominant cost in global commerce are transaction costs, not labor costs;
- Assembly takes place from global sources where technology and logistics dictates sourcing.
- The greatest damage to the U.S. economy can come from vertical integration that reduces transaction costs.

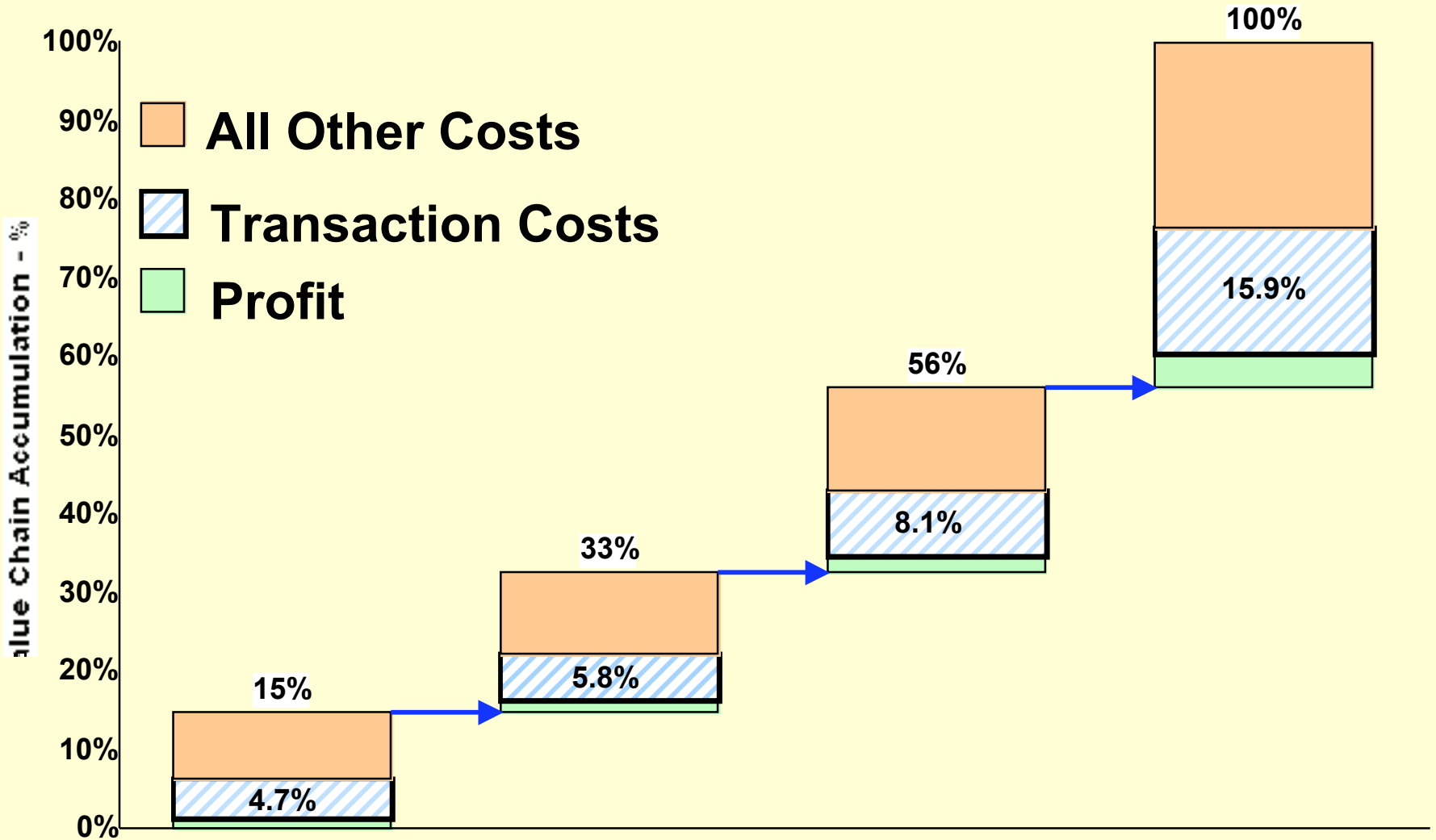
Transaction Costs in the Value Chain



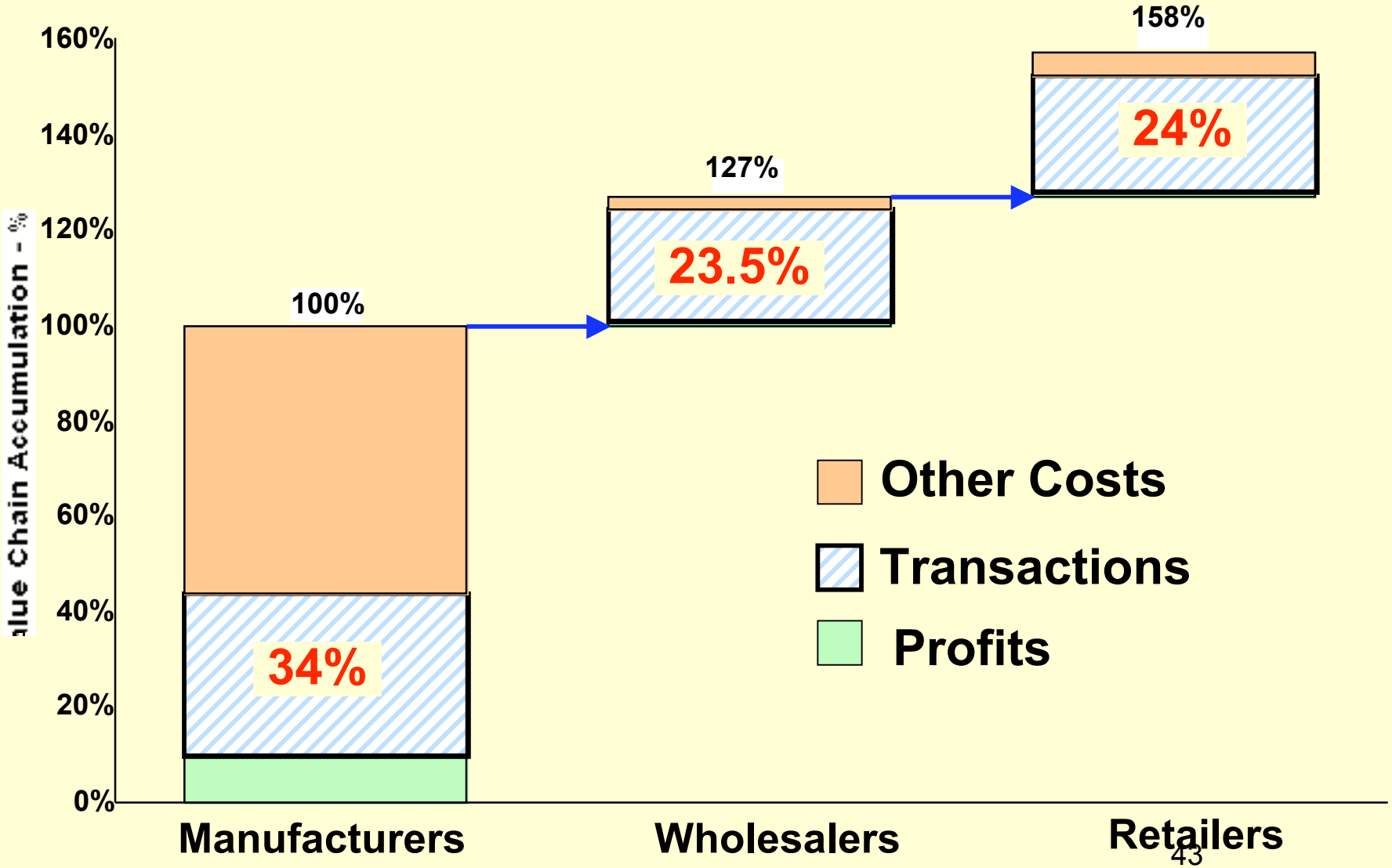
Manufacturing Supply Chain Costs



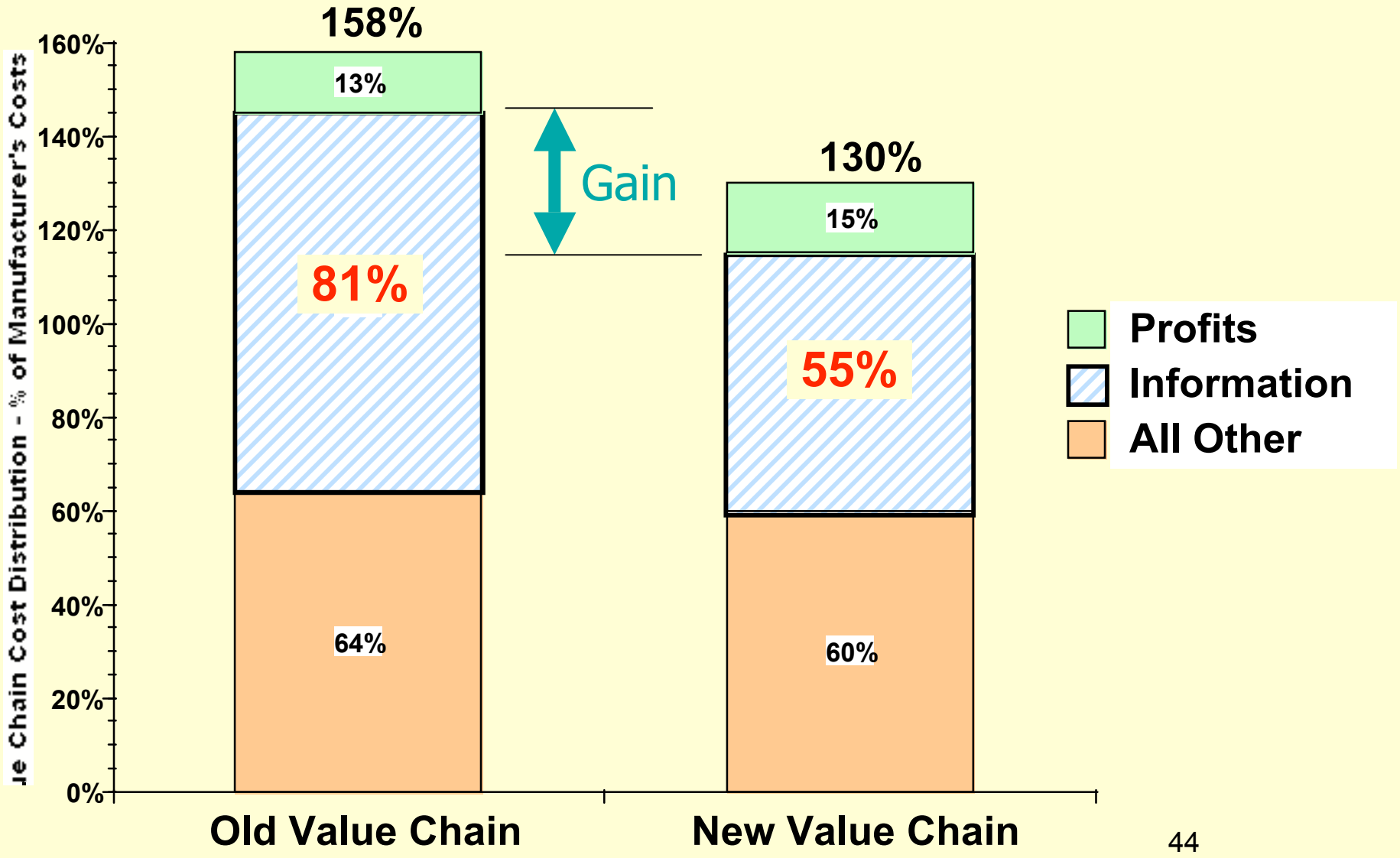
Costs in a Manufacturing Supply Chain



The Total Value Chain



Potential Gains in the Automobile Industry



A Value Chain View of Information Costs

Elements of Value Chain	Direct Costs	Transaction Costs	I.T. Costs
Suppliers	$15,000	$1,800	$198
Manufacturing	$5,000	$1,100	$165
Management	$7,000	$5,600	$1,232
Dealers	$3,000	$2,400	$120
Customer	$43,691	$7,350	$1,617
Cost of Automobile	$73,691	$18,250	$3,332
% of Total Costs	100%	30%	6%

A Perspective of the CIO's Job

Managerial Perspective	Metric	Scope of CIO Job	Scope of Value-Chain
Corporate CTO	I.T. Costs / Revenue	$1,397	$12,000
Corporate CIO	Info Costs / Revenue	$6,700	$27,000
Enterprise CIO	Info Costs / Revenue	$10,900	$30,000
Information Economist	Transaction Costs / Total Cost	$18,250	$73,691

Impacts of Information Technologies

- Information drives an economic "arms race".
- Obsolete assets will be discarded.
- Collaboration favors global consolidation.
- I.T. becomes an economic weapon.

A Case of Value-Chain Superiority

	Albertson's	% of Consumer Price	Wal-Mart	% of Consumer Price	Wal-Mart Advantage
Consumer Price	$15.29	100.0%	$12.83	100.0%	19%
Distribution Profit	$0.24	1.6%	$0.26	2.0%	8%
Retail Store	$0.92	6.0%	$0.49	3.8%	88%
Transaction Costs	$0.82	5.4%	$0.31	2.4%	165%
Logistics & Distribution	$1.46	9.5%	$0.89	6.9%	64%
Manufacturer's Price	$11.85	77.5%	$10.88	84.8%	9%

Outsourcing and the U.S. Economy

Is the US Economy Off-Shoring Itself?

	2000	2001	2002	2003	2004
US Imports ($ billions)	$1,443	$1,365	$1,392	$1,482	$1,542
US GDP ($ billions)	$9,825	$10,082	$10,446	$10,875	$11,437
US Imports / GDP	14.7%	13.5%	13.3%	13.6%	13.5%
Canada Imports / GDP	39.7%	37.7%	36.6%	34.1%	34.1%
France Imports / GDP	27.6%	26.7%	25.3%	28.1%	28.7%
Germany Imports / GDP	34.0%	33.9%	32.3%	32.1%	33.6%
Italy Imports / GDP	26.6%	26.3%	25.3%	24.5%	25.2%
United Kingdom / GDP	30.1%	29.9%	28.9%	27.1%	26.6%

Summary

- Outsourcing is not subcontracting I.T. costs.
- Outsourcing is not “off-shoring.”
- Outsourcing is the distribution of labor and knowledge through specialization.
- Gains from increases in Value-Added.
- Losses from divestment of Knowledge.

Issue: Cut Costs or Lose Knowledge Assets?

Next GMU Lecture

When: April 17,2006

Topic:

What is the Worth of Employee Knowledge?

Prior lectures available on:

http://video.google.com/videosearch?q=strassmann