

# MERGER EVALUATION

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*James P. Catty*

© 1975 expanded in 1981

## FIVE P'S TO REMEMBER

<b>Products</b>	Relation to existing business
<b>People</b>	Style/culture, stakeholders
<b>Price</b>	Value, acquisition premiums
<b>Payment</b>	Cash, securities, earn out
<b>Problems</b>	Time to solve

## Merger Evaluation

### Diversification and Return I

(Canada's 200 Largest Companies 1960 - 1975)

<b>Fit Category</b>		<b>Merger Strategy</b>	<b>Compounded Annual Return</b>	<b>CVS Risk Rating</b>
Focused	Single business		8.90%	5
Dominant	New businesses based on particular strength, skills or resources	Horizontal	19.10%	4
Related	New businesses related to most of others	Horizontal	20.30%	3
Linked	New businesses linked to aspect of original business	Chain	16.30%	3
Disparate	New businesses based on existing strength or skills but not always the same	Chain	12.20%	2
Integrated	Operating at many levels of same industry	Vertical	8.30%	5
Unrelated	New business unrelated to dominant activities	Opportunistic	10.20%	1
Conglomerate	No operating relationships between different business none of which predominates	Opportunistic	9.40%	1

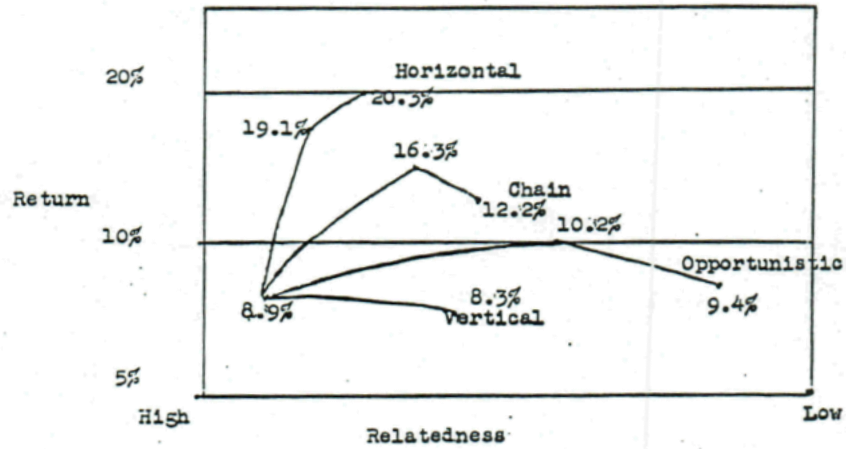
*Source: Royal Commission on Corporate Concentration*

*Risk Rating: 1 (low) to 5 (high)*

## Merger Evaluation

### Diversification and Return II

Returns and Acquisition Strategies



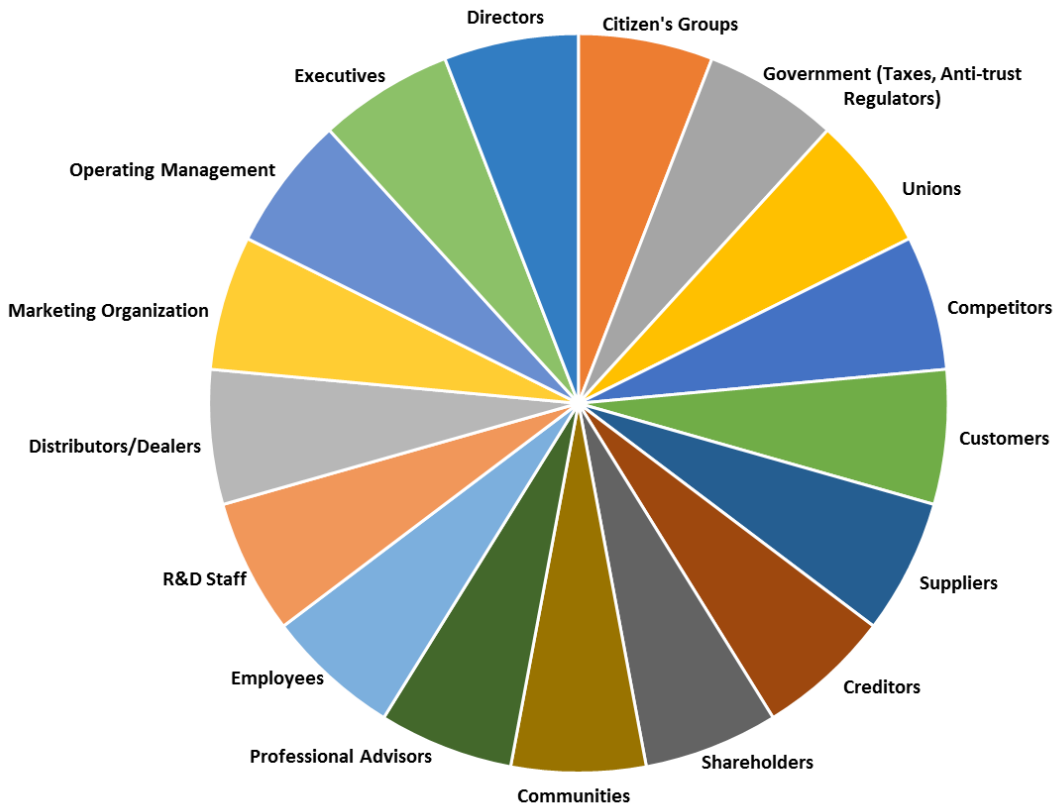
### Conglomerate versus Portfolio

Compounded Average Annual Returns (1960 - 1975) for ten Canadian Conglomerates and ten "Mirror" portfolios with the same industry mixes.

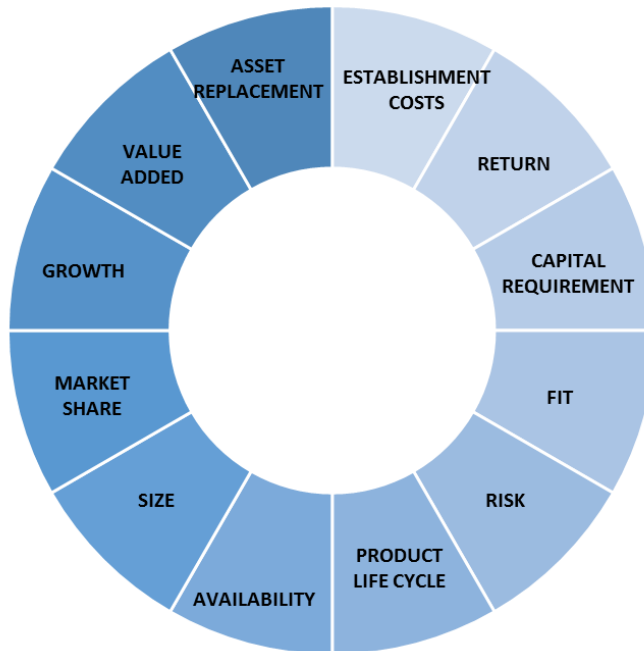
Mirror Portfolios 12.7%
Reduction due to average acquisition premium of 27.3%
Reduction due to operational costs 0.6%
Conglomerates 9.4%

# Merger Evaluation

## Stakeholders in a Business – each has a different objective



## Factors Affecting Price



## Merger Evaluation

### Stand Alone Values

#### *Earnings*

Growth	Sales / Margins / Fixed Costs / Earnings
Stability	Variation about Trends / Volatility
Multiple	Risks / Size / Development / Capital Requirements

#### *Assets*

Physical	Replacement / Liquidation / Conditions
Intangible	Brands / Licences / Technology
Goodwill	Going concern component of assembled workforce

#### *Cash Flow*

Generation	Profits / Assets / Sales
Usage	Debt Repayment / Capital Expenditures
Discount Rate	Growth / Risks

### Five Things to Think About

1. Financial Position – pre & post merger
2. Product Lines – pre & post merger
3. Competitors – potential action
4. Sales – delivery means & trends
5. Personnel & Systems – integration problems & terminations

### Risks

#### *Business*

- Product Life Change
- New Competitors
- Improved Technology
- Government Restrictions

#### *Financial*

- Gearing (fixed versus variable costs)
- Leverage (proportion of debt in capitalization)
- Interest Sensitivity (floating vs. fixed interest obligations)
- Working Capital Requirements
- Maintenance capital expendables
- Expansion projects
- Commitments

## Merger Evaluation

### Complimentary Criteria

#### *Industry Trends*

1. Offsetting seasonal swings
2. Counter cyclical sales
3. Different stage in cash flow life cycle
4. Insurance against random factors
5. High entry resistance
6. Low exit costs

#### *Investor Appeal*

7. Increased price/earnings ratio
8. Higher credit rating
9. Margin improvement
10. Smoothing earnings
11. Increasing growth in earnings per share
12. Obtaining a share listing

#### *Market Position*

13. Reaching minimum market share
14. Higher share of existing markets
15. Obtaining price independence
16. Broader customer mix
17. Access to larger market
18. Improved shelf clout with retailers
19. Additional marketing methods
20. Diversified distribution channels
21. Add-related product range
22. Full-lining
23. Product to bundle with existing item
24. Obtain fighting brand
25. Functional product in complimentary market
26. Improving anti-social image
27. Increased number of customers

#### *Operations*

28. Union relationship
29. Improve labour relations
30. Progress down experience curve
31. Improved purchasing power
32. Service efficiencies
33. Stabilization of inventories
34. Related production facilities
35. Reduced operating costs
36. Spreading of overheads
37. Rationalize transportation
38. Experienced operating management

## Merger Evaluation

### Supplementary Criteria

#### *Human Resources*

1. Directors and officers
2. Executive line management
3. Staff functions
4. Operating line management
5. Sophistication of management tasks
6. Production worker skills

#### *Facilities*

7. Compatibility with existing equipment
8. Utilization of spare capacity
9. Production of related items
10. Integration of administrative facilities
11. Combination of storage and distribution

#### *Technology*

12. Unexploited R & D
13. Improved production process
14. Product design
15. Product engineering
16. Automation potential
17. Quality control
18. Bidding and pricing
19. Customer service

#### *Marketing Resources*

20. Sales force
21. Dealers and distributors
22. Customer needs
23. Advertising efficiencies
24. Public relations

#### *Operations*

25. Supplies
26. Customers
27. Unit pricing
28. Order size
29. Industrial relations
30. Government regulation

#### *Finance*

31. Unused credit
32. Cash flow pattern
33. Information systems
34. Planning abilities
35. Data processing capacity

## Merger Evaluation

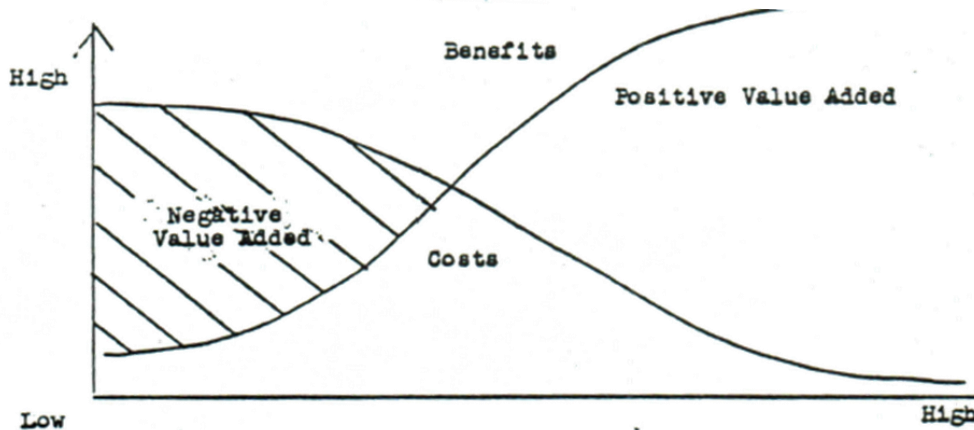
### Value Added Merger Decision Rules

#### *For Buyer*

- Buy if transaction price is less than value added plus stand-alone value of target
- Pass if transaction price exceeds 150% of value added plus stand-alone value

#### *For Target*

- Usually reject first offer; it is often a sighting bid
- White knights can be found (customers, competitors)
- Look for sugar daddies (foreigners, hungry brokers, empire builders, the cash risk, shrinkers, star worshippers)
- Sell if premium over stand-alone value is substantially part of value added (say over 90%)



### Components of Value Added

#### *Operational Benefits*

- Sales and Marketing
- Costs and Production
- Research and Technology
- Resource Utilisation
- Management and Systems

#### *Financial Factors*

- Credit Rating
- Taxes

- Risk
- Ownership
- Investor Standing

#### *Costs*

- Transaction
- Conformity
- Managerial
- Learning
- Opportunities ForeGone



## Merger Evaluation Example

### *Dupont Acquires Conoco - Value of Merged Companies*

Final Offer (July 1981)

- \$98 cash for 45% (39M CONOCO Shares) and
- 1.7 Share Dupont for each of remaining 55% (48M COMA. Shares)

	\$M	\$M
Value of Dupont - pre merger 156M shares at \$46.50 (pre offer price)		7,254
Stand alone value of Conoco – 87M shares at \$50 (pre approach)	4,350	
Gain on sale of Hudson's Bay Oil & Gas	245	4,595

### **Amount added by Merger**

#### *Operational Benefits*

Sales & Marketing	-	
Costs &-Production - Secure feedstodk supply 15% increase in DuPont earnings	1,085	
Research & Technology - 20% increase (\$200M) in.Conoco profits in 5 years x PE(6) x 20% risk factor	240	
Resource Utilization	-	
Management & Systems - 10% increase (\$100M) in Conoco profits in 3 years x PE(6) x 50% risk factor	300	

#### *Financial Factors*

Credit rating decline- AAA to AA	-	
Taxes - increased depletion (\$100M/yr) x 50% x PE (6) x 90% risk factor	240	
Integration risk	-	
Ownership changes	-	
Investor standing - PE decline: (9.3 to 8.0) due to chain diversification (1.3 x 156M x \$5.00)	(1,014)	

#### *Costs*

Transaction	(15)	
Systems uniformity	-	
Managerial changes	-	
Employee learning - 2.5% of Conoco value	(115)	721
Value of merged companies		12,570

## Merger Evaluation

<b>Dupont Shareholders Position</b>		<b>\$M</b>
Value of merged companies		12,570
Cash portion - 39m Conoco shares @ \$98		<u>(3,822)</u>
Post-merger value Dupont shares		<u><u>8,748</u></u>
 <i>Common shares outstanding</i>		<b>M</b>
Pre merger		156
For Conoco - 48 M x 1.7 (exchange ratio)		<u>82</u>
Post merger		<u><u>238</u></u>
<i>Value per Dupont share</i>		
Pre-merger		\$ 46.50
Post-merger		\$ 36.82
Change		-20.8%
		<b>\$M</b>
Post-merger value		8,748
Value at 1981 low (\$35.75 in December)		<u>8,508</u>
Decrease		<u><u>240</u></u>
Decrease from post merger value		<u>-2.7%</u>
 Value added by merger		<u>721</u>
As % of Dupont pre-merger value	<b>Impact</b>	9.9%
Allocated to Dupont shareholders	-21.0%	(1,525)
Conoco shareholders	48.9%	<u>2,246</u>
		<u><u>721</u></u>
 <b>Conoco Shareholders Position</b>		<b>\$M</b>
Offer - cash		3,822
- shares - 82m Ddupont shares at \$36.82		<u>3,019</u>
Purchase price		6,841
Stand alone value		<u>4,595</u>
Premium		<u><u>2,246</u></u>
Value added		<u>721</u>
Multiple of value added		<u><u>3.12</u></u>

## Merger Evaluation

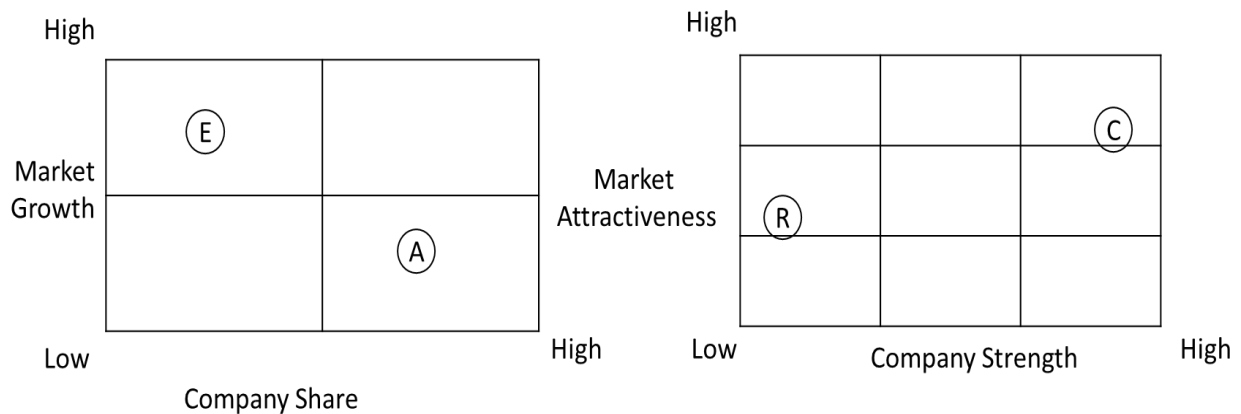
### Divestiture Evaluation – Industrial Products Inc.

Four divisions:

- Abrasive
- Chemicals
- Rubber
- Electronics

Each has sales of about \$100 M but different strategic and financial outlooks.

#### Product Portfolio Analysis



Division	Margin	Economic Life	Risk	Capital Requirements	Status	15% ** NPV (\$M)
Abrasive	20%	Short	Low	Low	Cash Cow	71.4
Chemicals	20%	Long	Medium	High	Star	191.3
Rubber	5%	Short	Low	Low	Dog	17.9
Electronics	-2%	Long	High	High	Wildcat	<u>7.3</u>
						<u>287.9</u>

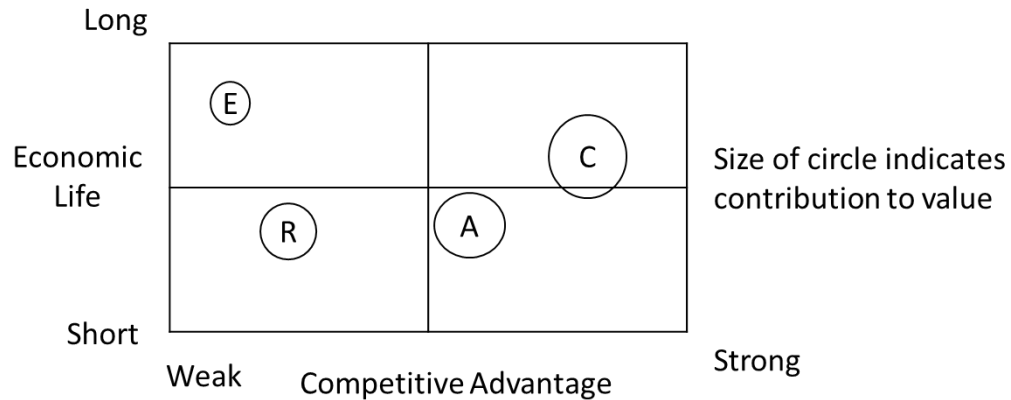
\* After R&D increasing to 8% of sales in year 6

\*\* Company Hurdle Rate

Shares Outstanding		<u>10,127,256</u>		
Stock Market Prices	last 12 months	<u>High</u>	<u>Low</u>	<u>Last</u>
		\$ 34.125	\$ 23.625	\$ 27.500
Market Capitalization	\$M	345.6	239.3	278.5
Net Present Value	\$M	<u>287.9</u>	<u>287.9</u>	<u>287.9</u>
Apparent Value of Synergies	\$M	<u>57.7</u>	<u>(48.6)</u>	<u>(9.4)</u>

## Merger Evaluation

### Value Contribution Analysis



<b>Alternatives for Electronic Division</b>	<b>Net Present Value (NPV) \$M</b>	<b>Risk</b>
Expand - increase investment (margins 14% from year 6)	53.5	High
Expand - acquisition for \$? (double sales - 2% margin)	56.1 less acquisition	Medium
Form Joint Venture	?	Low
Rundown - low investment	36.8	Low
Divest for \$4.4 M (60% NPV and reinvest in other divisions at 15%)	32	Nil
Close down	17.7	Nil

### Rule of Two & One Half

Developed by Tony O'Reilly, President & COO of H J Heinz Company.

In reviewing any project assume:

1. It takes twice as long as expected.
2. It costs twice as much as expected.
3. Half the return is half that projected.

If the resulting benefit is better than leaving the funds in the bank or government bonds, put the deal on the acceptable list.

## **Merger Evaluation**

### **Successful Acquisition Decision Making**

1. Formulate acquisition criteria consistent with overall strategy.
2. Rigorously apply them. Don't let acquisitions become plaything of CEU.
3. Do not react to what is available go out and find what you want.
4. An experienced specialist can usually improve the quality interest of the merger decision process and reduce management learning time.
5. Reduce risk by involving operating management as well as staff in the merger analysis and discussion.
6. Apply rule of 2 1/2 to estimates of future funds acquired and management time demanded.
7. Give responsibility for running acquisition to managers involved in the sale.
8. "Practice makes Perfect" – the more prior deals the higher the chances of success.
9. Unrelated acquisitions increase the risk (one survey says two out of three not totally satisfactory) and do not add to returns.