

# BEE/CSS 371 Business of Technology

## Winter 2017

### Lecture 7

Nicole Hamilton

<https://faculty.washington.edu/kd1uj>

# Today's agenda

1. Negotiations
2. Chapter 3. [Vision and the business model](#)
3. Chapter 4. [Competitive strategy](#)
4. Chapter 5. [Innovation strategies](#)

Next time:

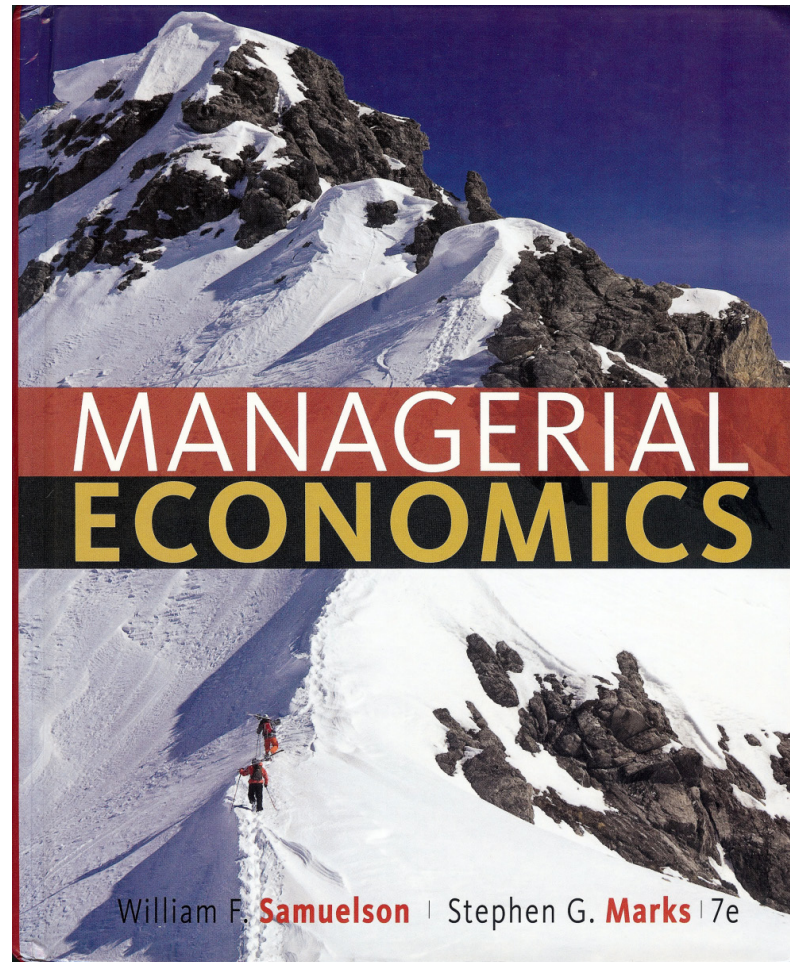
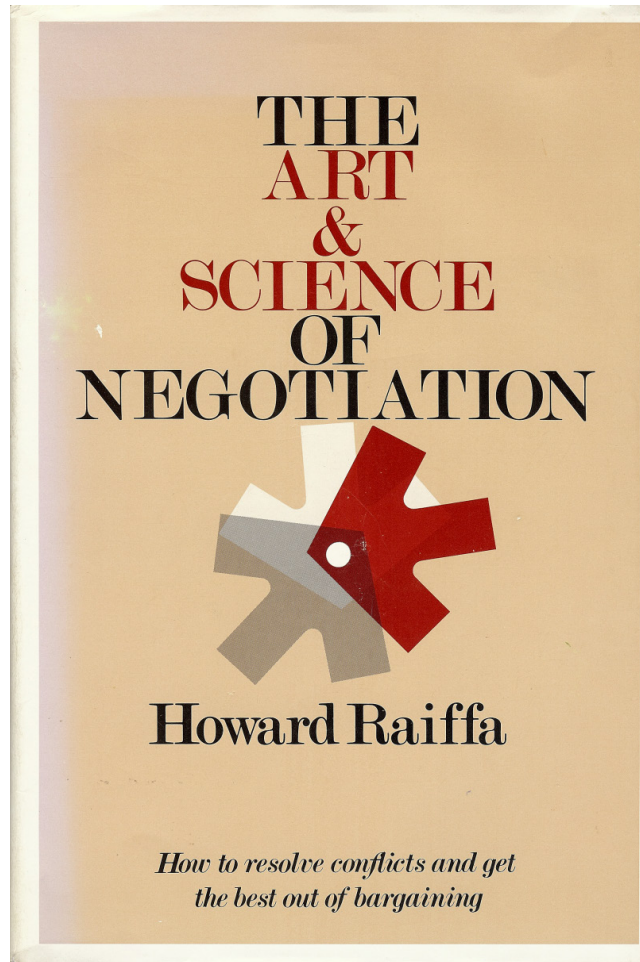
Hamilton Labs case

Negotiations again

Reminder: HP-12C calculators

# Negotiations

I'm going borrow from these sources.



# Examples

1. Buying a car from a dealer.
2. Buying or selling a car from through Craigslist.
3. Buying or selling a house.
4. Negotiating a starting salary or title.
5. Negotiating a quantity discount.
6. Negotiating a licensing agreement.
7. Negotiating with a potential investor.
8. A union negotiating with an employer.
9. Where to have dinner with friends.
10. With your spouse about whether it's a good time to have another child.

# Bargaining is cultural

Americans expect to pay posted prices except on cars and houses or when buying outside the usual retail channel.

People growing up in other parts of the world often expect to bargain over everything.

**Everything** is negotiable.

Going into a negotiation, it's helpful to know:

1. What you want.
2. The minimum you would accept.
3. What you think the other side would accept.
4. What happens if you don't get an agreement.



*Example:* Buying a new car, you might research typical prices paid or dealer invoice prices.

Lots of negotiations are simple.

One buyer, one seller, one issue: price.

Lots of negotiations are purely distributive.

One party's gain is the other's loss.

Zero sum.

# Example: Selling a warehouse

Two firms negotiating the sale of a warehouse, the equipment and inventory.

The main issue is price.

Present owner is closing down.

Valuable location to the buyer, who could make use of the equipment and inventory.

Buyer estimates the value at \$600K.

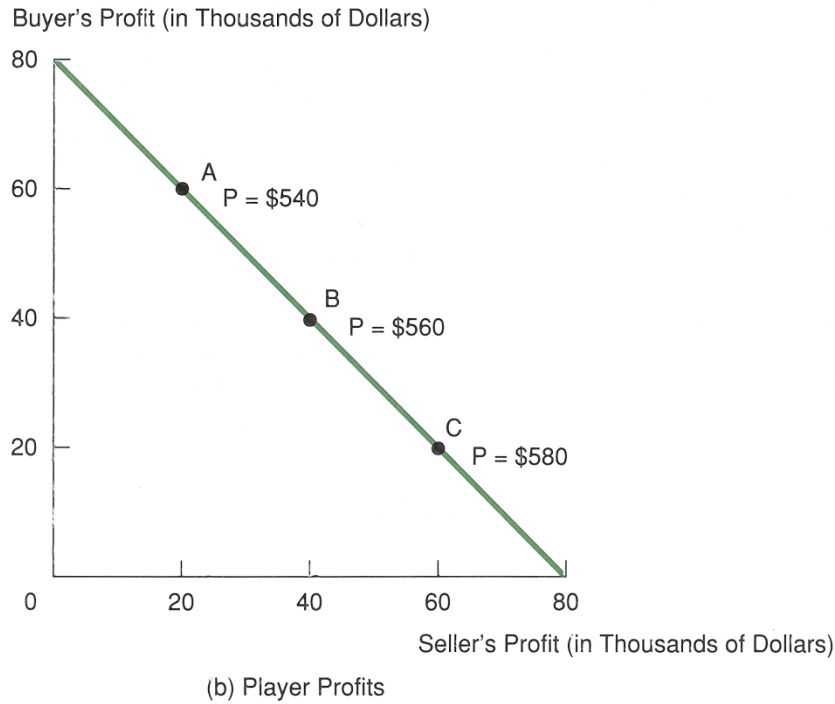
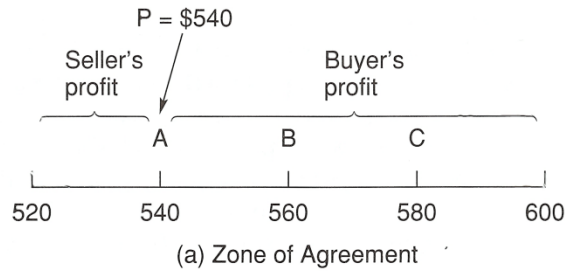
Seller estimates the value at \$520K.

These are their ***reservation prices*** or ***walk-away prices***.

Source: Samuelson & Marks, *Managerial Economics*, 7e, p. 631.

**FIGURE 15.1**

The Zone of Agreement and the Payoff Frontier



Source: Samuelson & Marks, *Managerial Economics*, 7e, p. 633.

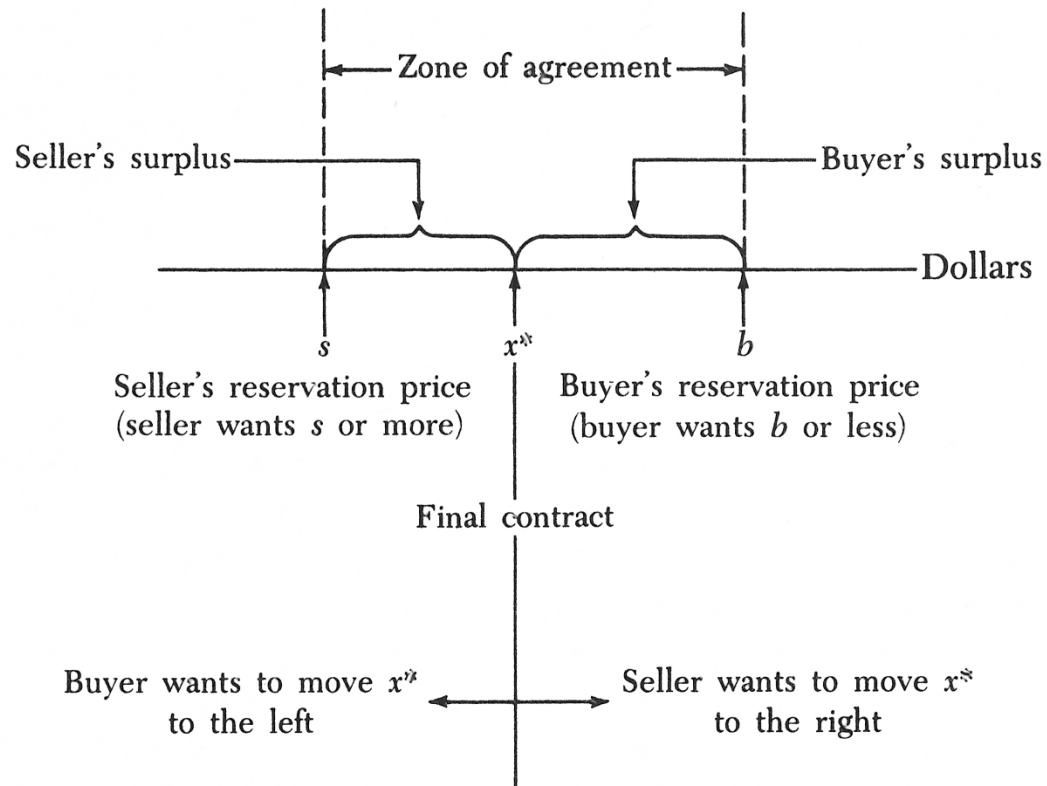


Figure 2. The geometry of distributive bargaining. (Note: If  $b < s$ , there is no zone of agreement.)

Source: Howard Raiffa, *The Art & Science of Negotiation*, p. 46.

## 48 / TWO PARTIES, ONE ISSUE

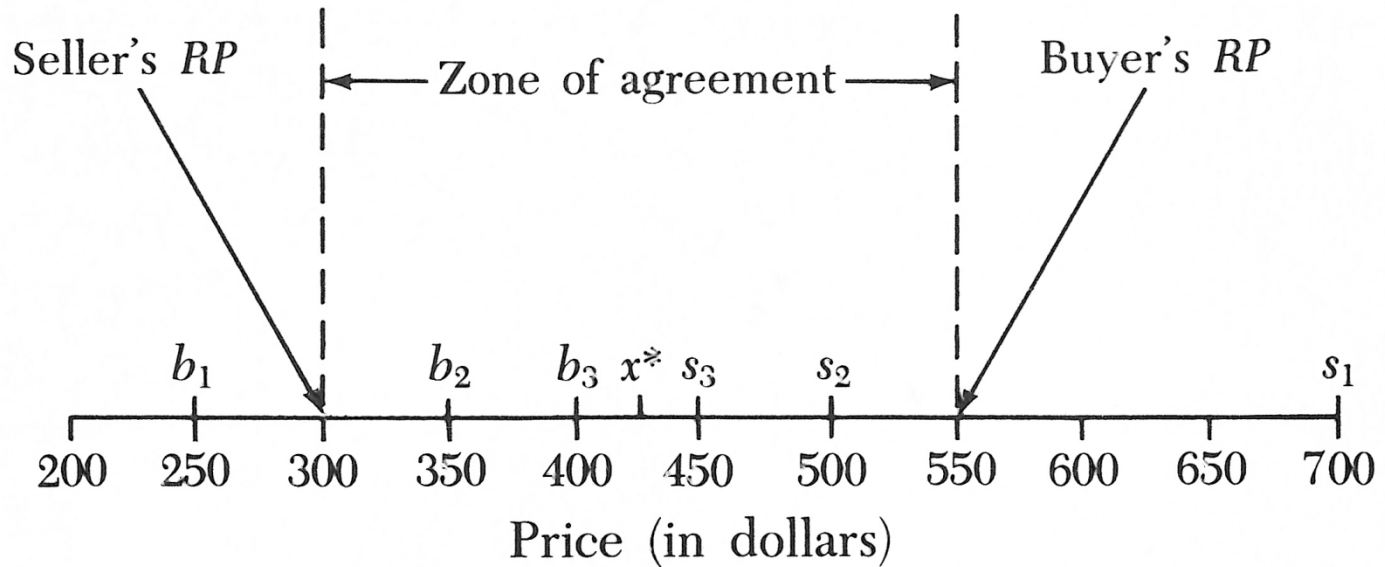
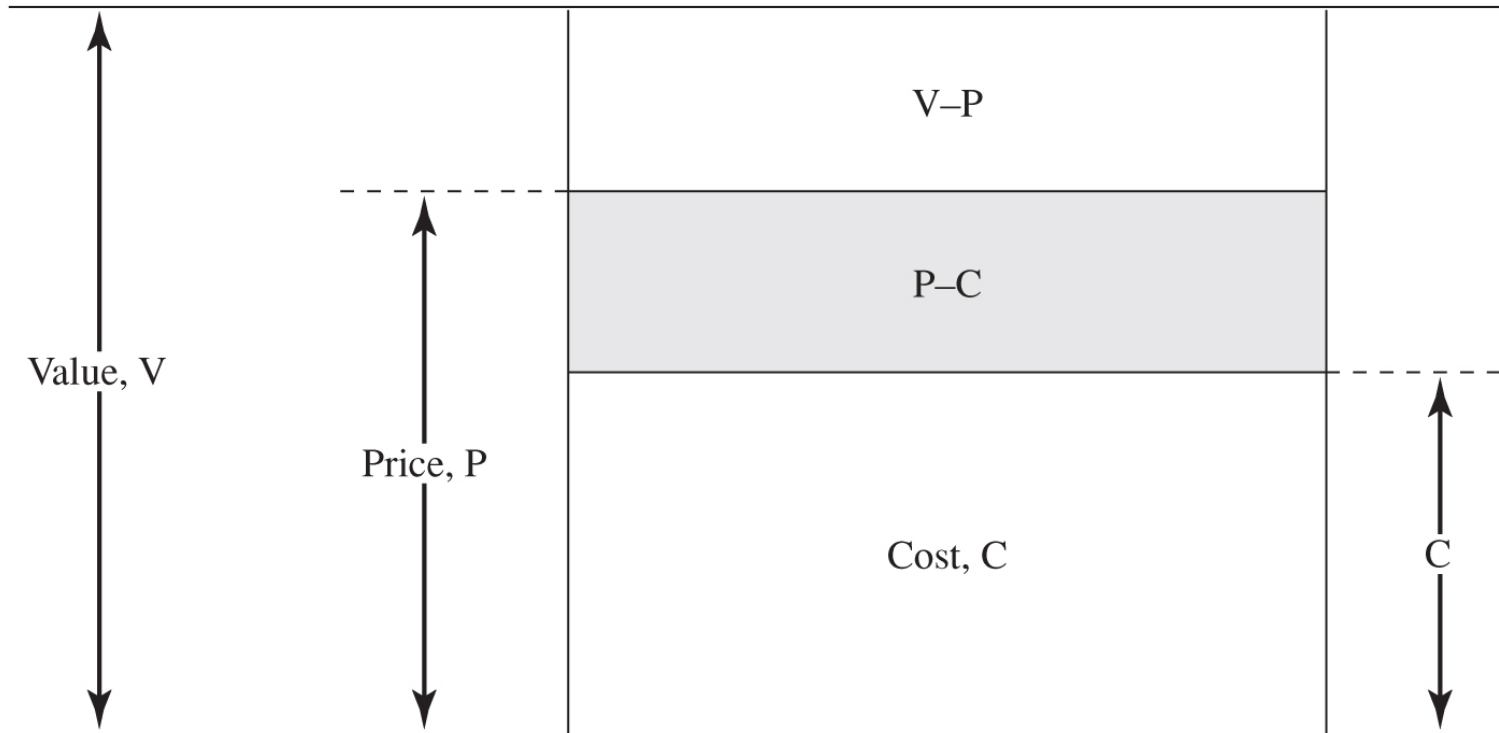


Figure 3. The negotiation dance ( $x^*$  = final-contract price).

Source: Howard Raiffa, *The Art & Science of Negotiation*, p. 48.



**FIGURE 3.5** Value and return to the customer and the firm.



When there are multiple issues, there is often an opportunity to enlarge the pie with concessions that are worth more to one side than the other.

The ***efficient frontier*** – also called the Pareto Optimal Frontier – is the locus of achievable joint evaluations from which no joint gains are possible.

Source: Raiffa, *The Art & Science of Negotiation*, p. 139.

# Hypothetical case

Associated Metropolitan Police Officers (AMPO) versus City.

The issues to be settled were the following:

1. starting salaries for police officers
2. maximum salaries for police officers
3. vacation for officers with less than five years' service
4. vacation for officers with more than five years' service
5. the status of fourteen officers under suspension
6. the percent of two-man patrol cars
7. creation of the rank of corporal
8. expansion of the number of sergeants
9. the fate of the police commissioner, Mr. Daniels
10. the status of the Police Civilian Review Board.

Source: Raiffa, *The Art & Science of Negotiation*, p. 133 – 140.

TABLE 7. Scoring schedule for AMPO and City.

Issue	Setting	Payoff (in points)	
		City	AMPO
Increase in salary: starting	\$0-99	0	0
	100-199	0	100
	200-299	0	200
	300-399	0	300
	400-499	0	400
	500	0	550
	501-599	-4	550
	600	-4	700
	601-699	-8	700
	700	-8	850
	701-799	-16	850
	800	-16	1,000
	801-899	-32	1,000
	900	-32	1,150
	901-999	-64	1,150
	1,000	-64	1,300
	1,000+	NA	1,300+
Increase in salary: maximum	\$0-499	0 to -12	NA
	500	-12	0
	501-600	-24	2-200 <sup>a</sup>
	601-700	-48	202-400 <sup>a</sup>
	701-750	-96	402-500 <sup>a</sup>
	750+	NA	500+
Increase in vacation: less than 5 years' service	0 days	0	0
	2	-3	40
	3	-6	60
	4	-10	85
	5	-15	110
	5+	NA	110+
Increase in vacation: more than 5 years' service	0 days	0	0
	1	-2	0
	2	-6	60
	3	-14	85
	3+	NA	85+
Bonus if increase in vacation for all officers is held to zero		+10	

TABLE 7 continued.

Issue	Setting	Payoff (in points)	
		City	AMPO
Reinstatement	No	0	NA
	Yes, without back pay	-50	-100
	Yes, with back pay	-70	0
Two-man patrols	Status quo	+15	-25
	Less than 20% increase	-5	25
	Greater than 20% increase, but less than strictly two-man patrols	-5	50
	Strictly two-man patrols	NA	100
Create rank of corporal	No	+5	0
	Yes, limit of 20	-15	50
	Yes, unlimited	-20	50
Increase number of sergeants	0	+5	0
	1	-2	10
	2	-4	20
	3	-6	30
	4	-8	40
	5	-10	50
	6	-13	60
	7	-16	70
	8	-19	80
	9	-22	90
10	-25	100	
10+	NA	100+	
Commissioner Daniels	Fire	+40	200
	Keep	0	0
Police Civilian Review Board	Disband	-100	250
	Add police, no vote change	-20	150
	Add police, change vote	+20	100
	No police, no vote change	0	25
	No police, change vote	+20	-25

Note: If the City and AMPO failed to reach agreement on a sufficient number of issues (which were specified in the confidential information sheets), the City representative received a total score of -250 and the AMPO representative received a total score of 600. These scores were City's and AMPO's reservation prices.

NA indicates that such a setting was not acceptable as part of the agreement. A City representative who agreed to a setting that was not acceptable to City received a total score of -250, and an AMPO representative who agreed to a setting that was not acceptable to AMPO received a total score of 600.

a. For these settings, the AMPO representative received 2 points for every dollar over \$500.

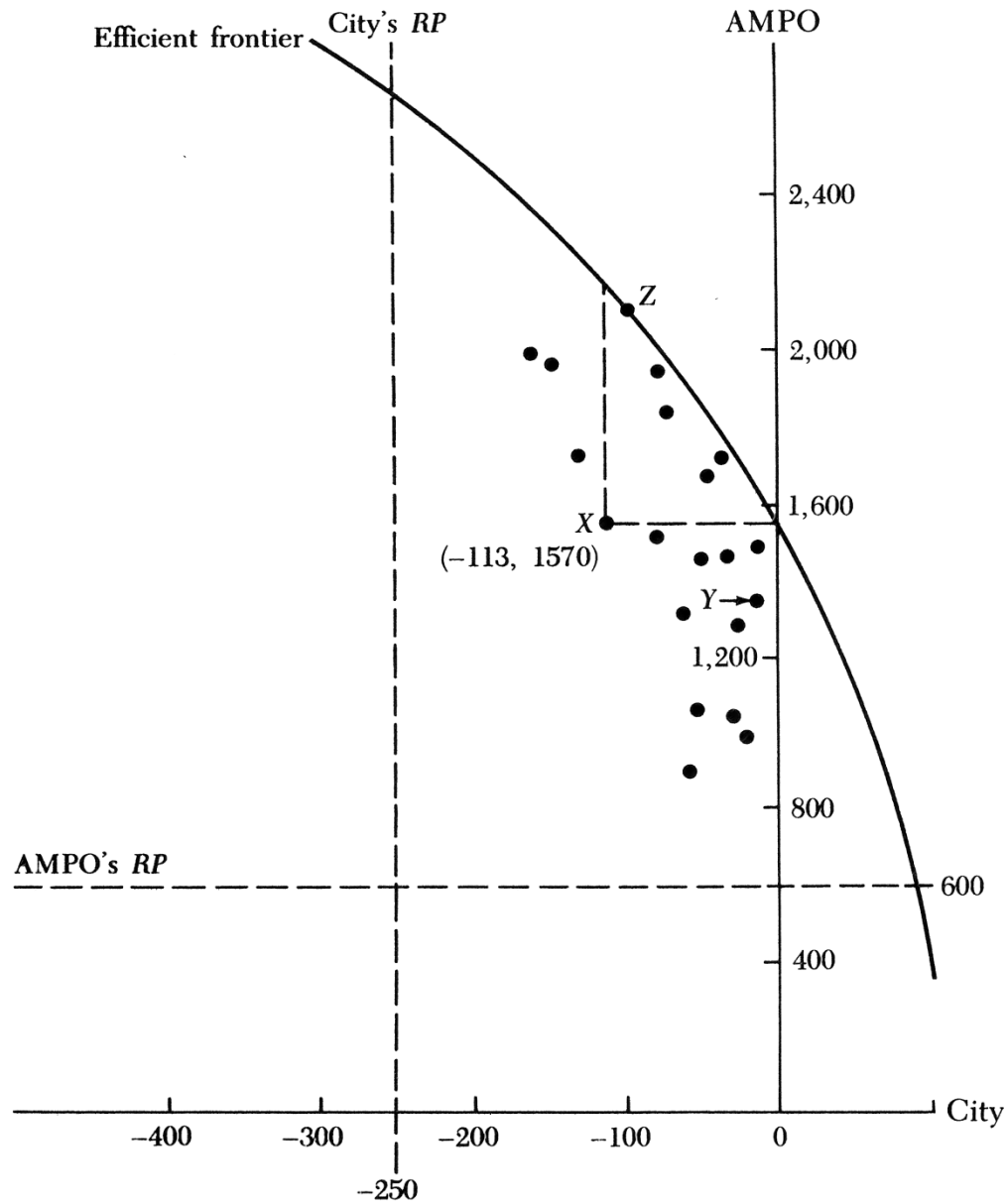


Figure 23. Selected joint evaluations and the efficient frontier.

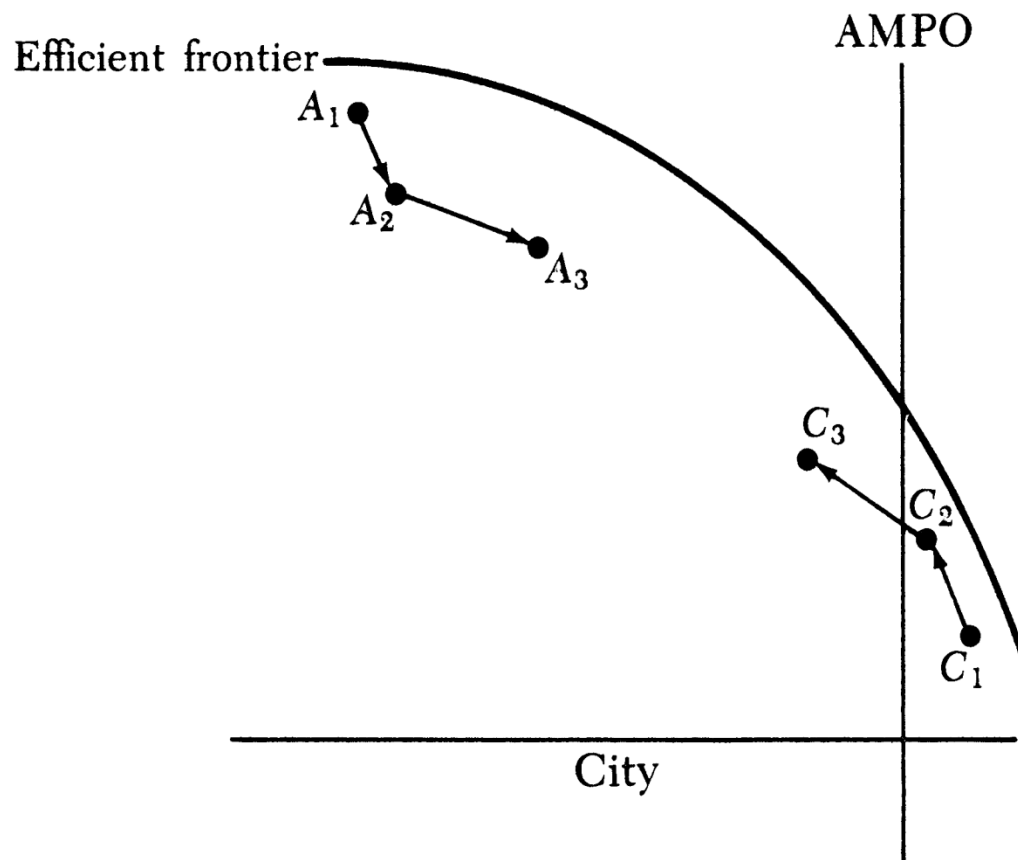


Figure 24. A dance of complete packages.

What makes a negotiation more complex?

# Possible complexities

1. Are there more than 2 parties?
2. Are the parties monolithic?
3. Is the game repetitive?
4. Are there linkage effects?
5. Is there more than one issue?
6. Is an agreement required?
7. Is ratification required?
8. Are threats possible?
9. Are there time constraints or time-related costs?
10. Are the contracts binding?
11. Are the negotiations private or public?
12. What are the group norms?
13. Is third party intervention possible?

Source: Howard Raiffa, *The Art & Science of Negotiation*, pp. 11-19.



“The most important thing in acting is honesty. Once you’ve learned to fake that, you’ve got it made.”

-- Samuel Goldwyn

# The Maine house

## Buyer's reservation prices

17 acres	\$150K
14 acres	\$127K

## Seller's reservation prices

17 acres	\$120K	
14 acres	\$107K	"A" pairs
	\$85K	"B" pairs

## Total profit to be shared

17 acres	\$30K	
14 acres	\$20K	"A" pairs
	\$42K	"B" pairs

# “A” pairs

House + 17 acres:

Buyer's reserve \$150K

Seller's reserve \$120K

“Profit” to be split **\$ 30K**

House + 14 acres:

Buyer's reserve \$127K

Seller's reserve \$107K

“Profit” to be split \$ 20K

Most “A” pairs should pick the house + 17 acres option because there's more profit to split.

# “B” pairs

House + 17 acres:

Buyer's reserve	\$150K
Seller's reserve	\$120K
“Profit” to be split	\$ 30K

House + 14 acres:

Buyer's reserve	\$127K
Seller's reserve	\$ 85K
“Profit” to be split	\$ 42K

Most “B”  
pairs should  
pick the  
house + 14  
acres option.

## Results of selling a Maine house

Pair	Ver	Buyer	Seller	Acres	Price \$K	1st offer midpoint	Seller's 1st offer	Buyer's 1st offer	# offers	Buyer's Profit \$K	Seller's Profit \$K	Buyer's share	Seller's share	Avail profit	Buyer's share of avail	Seller's share of avail
1	A	Bao Tram	Brandon Paper	17	145.0	165.0	130	200	7	5.0	25.0	17%	83%	30	17%	83%
2	A	Hans Nicolaus	Daniel Grimm	17	132.0	134.5	120	149	7	18.0	12.0	60%	40%	30	60%	40%
3	B	Htut Ko	Sridarsh Vinnakota	14	126.5	127.5	120	135	9	0.5	41.5	1%	99%	42	1%	99%
4	A	Son Huynh	Chiayi Lin	17	128.5	120.0	110	130	4	21.5	8.5	72%	28%	30	72%	28%
5	B	Brandon Hoang	Himson Tam	17	105.5	92.5	100	85	9	44.5	-14.5	148%	-48%	42	106%	-35%
6	A	Silviu Gruber	Arrido Arfiadi	17	145.0	130.0	90	170	5	5.0	25.0	17%	83%	30	17%	83%
7	A	Aleks Malakhovsky	Abhi Trivedi	17	127.7	122.5	105	140	15	22.3	7.7	74%	26%	30	74%	26%
8	B	Christine Sutton	Elliot White	17	145.0	162.5	125	200	6	5.0	25.0	17%	83%	42	12%	60%
9	A	Miguel Huerta	Alan Nguyen	17	120.0	127.5	115	140	6	30.0	0.0	100%	0%	30	100%	0%
10	B	Tammy Kuo	Taliesin Langford	17	135.0	120.0	120	120	5	15.0	15.0	50%	50%	42	36%	36%
11	B	Christine Jeong	Louden Ivy	17	145.0	145.0	100	190	12	5.0	25.0	17%	83%	42	12%	60%
12	A	Sasha Stavila	Farah Hasan	17	127.0	115.0	100	130	6	23.0	7.0	77%	23%	30	77%	23%
13	B	Robert Gunther	Dean Ferris	17	136.0	154.0	148	160	4	14.0	16.0	47%	53%	42	33%	38%
14	A	David Webber	Kevin Muggli	14	125.0	122.5	100	145	10	2.0	18.0	10%	90%	30	7%	60%
15	B	Wesley Lai	Karinne Barbosa	17	144.0	140.0	120	160	6	6.0	24.0	20%	80%	42	14%	57%
16	B	Regina Bloomstine	Hoa Vo	14	70.5	78.5	50	107	7	56.5	-14.5	135%	-35%	42	135%	-35%
17	A	Ali Traore	Joe Fiala	17	125.0	127.5	90	165	7	25.0	5.0	83%	17%	30	83%	17%
18	B	Sarah Dunning	Jin Kim	14	112.0	125.0	130	120	6	15.0	27.0	36%	64%	42	36%	64%
19	A	Austen Szypula	Chris Steigerwald	17	141.0	127.5	105	150	11	9.0	21.0	30%	70%	30	30%	70%
20	B	Diefa Nurkhasanah	Fenrir Hong	14	95.0	110.0	120	100	8	32.0	10.0	76%	24%	42	76%	24%
21	A	Christian Carlos	Chris Hoover	17	140.0	137.5	130	145	4	10.0	20.0	33%	67%	30	33%	67%

*First offers are in red.*

Buyer's reservation prices		Midpoints		Midpoint Profits	
17 acres	\$150K	17 acres	135	15	
14 acres	\$127K	14 acres, A teams	117	10	
		14 acres, B teams	106	21	
Seller's reservation prices					
17 acres	\$120K				
14 acres	\$107K	"A" pairs			
	\$85K	"B" pairs			

## Results of selling a Maine house, sorted by version, showing correct decisions

Pair	Ver	Buyer	Seller	Acres	Price \$K	1st offer midpoint	Seller's 1st offer	Buyer's 1st offer	# offers	Buyer's Profit \$K	Seller's Profit \$K	Buyer's share	Seller's share	Avail profit	Buyer's share of avail	Seller's share of avail
1	A	Bao Tram	Brandon Paper	17	145.0	165.0	130	200	7	5.0	25.0	17%	83%	30	17%	83%
2	A	Hans Nicolaus	Daniel Grimm	17	132.0	134.5	120	149	7	18.0	12.0	60%	40%	30	60%	40%
4	A	Son Huynh	Chiayi Lin	17	128.5	120.0	110	130	4	21.5	8.5	72%	28%	30	72%	28%
6	A	Silviu Gruber	Arrido Arfiadi	17	145.0	130.0	90	170	5	5.0	25.0	17%	83%	30	17%	83%
7	A	Aleks Malakhovsky	Abhi Trivedi	17	127.7	122.5	105	140	15	22.3	7.7	74%	26%	30	74%	26%
9	A	Miguel Huerta	Alan Nguyen	17	120.0	127.5	115	140	6	30.0	0.0	100%	0%	30	100%	0%
12	A	Sasha Stavila	Farah Hasan	17	127.0	115.0	100	130	6	23.0	7.0	77%	23%	30	77%	23%
17	A	Ali Traore	Joe Fiala	17	125.0	127.5	90	165	7	25.0	5.0	83%	17%	30	83%	17%
19	A	Austen Szypula	Chris Steigerwald	17	141.0	127.5	105	150	11	9.0	21.0	30%	70%	30	30%	70%
21	A	Christian Carlos	Chris Hoover	17	140.0	137.5	130	145	4	10.0	20.0	33%	67%	30	33%	67%
14	A	David Webber	Kevin Muggli	14	125.0	122.5	100	145	10	2.0	18.0	10%	90%	30	7%	60%
5	B	Brandon Hoang	Himson Tam	17	105.5	92.5	100	85	9	44.5	-14.5	148%	-48%	42	106%	-35%
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10	B	Tammy Kuo	Taliesin Langford	17	135.0	120.0	120	120	5	15.0	15.0	50%	50%	42	36%	36%
11	B	Christine Jeong	Louden Ivy	17	145.0	145.0	100	190	12	5.0	25.0	17%	83%	42	12%	60%
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16	B	Regina Bloomstine	Hoa Vo	14	70.5	78.5	50	107	7	56.5	-14.5	135%	-35%	42	135%	-35%
18	B	Sarah Dunning	Jin Kim	14	112.0	125.0	130	120	6	15.0	27.0	36%	64%	42	36%	64%
20	B	Diefa Nurkhasanah	Fenrir Hong	14	95.0	110.0	120	100	8	32.0	10.0	76%	24%	42	76%	24%

## Percent reaching the optimum

	Typically	Our group
Odd-numbered pairs	80%	91%
Even-numbered pairs	65%	40%

## Results of selling a Maine house, sorted by Buyer's share of available profit

Pair	Ver	Buyer	Seller	Acres	Price \$K	1st offer midpoint	Seller's 1st offer	Buyer's 1st offer	# offers	Buyer's Profit \$K	Seller's Profit \$K	Buyer's share	Seller's share	Avail profit	Buyer's share of avail	Seller's share of avail
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5	B	Brandon Hoang	Himson Tam	17	105.5	92.5	100	85	9	44.5	-14.5	148%	-48%	42	106%	-35%
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13	B	Robert Gunther	Dean Ferris	17	136.0	154.0	148	160	4	14.0	16.0	47%	53%	42	33%	38%
21	A	Christian Carlos	Chris Hoover	17	140.0	137.5	130	145	4	10.0	20.0	33%	67%	30	33%	67%
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3	B	Htut Ko	Sridarsh Vinnakota	14	126.5	127.5	120	135	9	0.5	41.5	1%	99%	42	1%	99%



## Results of selling a Maine house, sorted by Seller's share of available profit

Pair	Ver	Buyer	Seller	Acres	Price \$K	1st offer midpoint	Seller's 1st offer	Buyer's 1st offer	# offers	Buyer's Profit \$K	Seller's Profit \$K	Buyer's share	Seller's share	Avail profit	Buyer's share of avail	Seller's share of avail
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8	B	Christine Sutton	Elliot White	17	145.0	162.5	125	200	6	5.0	25.0	17%	83%	42	12%	60%
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20	B	Diefa Nurkhasanah	Fenrir Hong	14	95.0	110.0	120	100	8	32.0	10.0	76%	24%	42	76%	24%
12	A	Sasha Stavila	Farah Hasan	17	127.0	115.0	100	130	6	23.0	7.0	77%	23%	30	77%	23%
17	A	Ali Traore	Joe Fiala	17	125.0	127.5	90	165	7	25.0	5.0	83%	17%	30	83%	17%
9	A	Miguel Huerta	Alan Nguyen	17	120.0	127.5	115	140	6	30.0	0.0	100%	0%	30	100%	0%
16	B	Regina Bloomstine	Hoa Vo	14	70.5	78.5	50	107	7	56.5	-14.5	135%	-35%	42	135%	-35%
5	B	Brandon Hoang	Himson Tam	17	105.5	92.5	100	85	9	44.5	-14.5	148%	-48%	42	106%	-35%

## Results of selling a Maine house, merged, sorted by Buyer's share of available profit

Pair	Ver	Buyer	Seller	Acres	Price \$K	1st offer midpoint	Seller's 1st offer	Buyer's 1st offer	# offers	Buyer's Profit \$K	Seller's Profit \$K	Buyer's share	Seller's share	Avail profit	Buyer's share of avail	Seller's share of avail
16	B	Regina Bloomstine	Hoa Vo	14	70.5	78.5	50	107	7	56.5	-14.5	135%	-35%	42	135%	-35%
5	B	Brandon Hoang	Himson Tam	17	105.5	92.5	100	85	9	44.5	-14.5	148%	-48%	42	106%	-35%
9	A	Miguel Huerta	Alan Nguyen	17	120.0	127.5	115	140	6	30.0	0.0	100%	0%	30	100%	0%
17	A	Ali Traore	Joe Fiala	17	125.0	127.5	90	165	7	25.0	5.0	83%	17%	30	83%	17%
12	A	Sasha Stavila	Farah Hasan	17	127.0	115.0	100	130	6	23.0	7.0	77%	23%	30	77%	23%
20	B	Diefa Nurkhasanah	Fenrir Hong	14	95.0	110.0	120	100	8	32.0	10.0	76%	24%	42	76%	24%
7	A	Aleks Malakhovsky	Abhi Trivedi	17	127.7	122.5	105	140	15	22.3	7.7	74%	26%	30	74%	26%
4	A	Son Huynh	Chiayi Lin	17	128.5	120.0	110	130	4	21.5	8.5	72%	28%	30	72%	28%
2	A	Hans Nicolaus	Daniel Grimm	17	132.0	134.5	120	149	7	18.0	12.0	60%	40%	30	60%	40%
18	B	Sarah Dunning	Jin Kim	14	112.0	125.0	130	120	6	15.0	27.0	36%	64%	42	36%	64%
10	B	Tammy Kuo	Taliesin Langford	17	135.0	120.0	120	120	5	15.0	15.0	50%	50%	42	36%	36%
21	A	Christian Carlos	Chris Hoover	17	140.0	137.5	130	145	4	10.0	20.0	33%	67%	30	33%	67%
13	B	Robert Gunther	Dean Ferris	17	136.0	154.0	148	160	4	14.0	16.0	47%	53%	42	33%	38%
19	A	Austen Szypula	Chris Steigerwald	17	141.0	127.5	105	150	11	9.0	21.0	30%	70%	30	30%	70%
1	A	Bao Tram	Brandon Paper	17	145.0	165.0	130	200	7	5.0	25.0	17%	83%	30	17%	83%
6	A	Silviu Gruber	Arrido Arfiadi	17	145.0	130.0	90	170	5	5.0	25.0	17%	83%	30	17%	83%
15	B	Wesley Lai	Karinne Barbosa	17	144.0	140.0	120	160	6	6.0	24.0	20%	80%	42	14%	57%
8	B	Christine Sutton	Elliot White	17	145.0	162.5	125	200	6	5.0	25.0	17%	83%	42	12%	60%
11	B	Christine Jeong	Louden Ivy	17	145.0	145.0	100	190	12	5.0	25.0	17%	83%	42	12%	60%
14	A	David Webber	Kevin Muggli	14	125.0	122.5	100	145	10	2.0	18.0	10%	90%	30	7%	60%
3	B	Htut Ko	Sridarsh Vinnakota	14	126.5	127.5	120	135	9	0.5	41.5	1%	99%	42	1%	99%

Only one team found a reasonably win-win outcome.

## Results of selling a Maine house, merged, sorted by Seller's share of available profit

Pair	Ver	Buyer	Seller	Acres	Price \$K	1st offer midpoint	Seller's 1st offer	Buyer's 1st offer	# offers	Buyer's Profit \$K	Seller's Profit \$K	Buyer's share	Seller's share	Avail profit	Buyer's share of avail	Seller's share of avail
3	B	Htut Ko	Sridarsh Vinnakota	14	126.5	127.5	120	135	9	0.5	41.5	1%	99%	42	1%	99%
1	A	Bao Tram	Brandon Paper	17	145.0	165.0	130	200	7	5.0	25.0	17%	83%	30	17%	83%
6	A	Silviu Gruber	Arrido Arfiadi	17	145.0	130.0	90	170	5	5.0	25.0	17%	83%	30	17%	83%
19	A	Austen Szypula	Chris Steigerwald	17	141.0	127.5	105	150	11	9.0	21.0	30%	70%	30	30%	70%
21	A	Christian Carlos	Chris Hoover	17	140.0	137.5	130	145	4	10.0	20.0	33%	67%	30	33%	67%
18	B	Sarah Dunning	Jin Kim	14	112.0	125.0	130	120	6	15.0	27.0	36%	64%	42	36%	64%
14	A	David Webber	Kevin Muggli	14	125.0	122.5	100	145	10	2.0	18.0	10%	90%	30	7%	60%
8	B	Christine Sutton	Elliot White	17	145.0	162.5	125	200	6	5.0	25.0	17%	83%	42	12%	60%
11	B	Christine Jeong	Louden Ivy	17	145.0	145.0	100	190	12	5.0	25.0	17%	83%	42	12%	60%
15	B	Wesley Lai	Karinne Barbosa	17	144.0	140.0	120	160	6	6.0	24.0	20%	80%	42	14%	57%
2	A	Hans Nicolaus	Daniel Grimm	17	132.0	134.5	120	149	7	18.0	12.0	60%	40%	30	60%	40%
13	B	Robert Gunther	Dean Ferris	17	136.0	154.0	148	160	4	14.0	16.0	47%	53%	42	33%	38%
10	B	Tammy Kuo	Taliesin Langford	17	135.0	120.0	120	120	5	15.0	15.0	50%	50%	42	36%	36%
4	A	Son Huynh	Chiayi Lin	17	128.5	120.0	110	130	4	21.5	8.5	72%	28%	30	72%	28%
7	A	Aleks Malakhovsky	Abhi Trivedi	17	127.7	122.5	105	140	15	22.3	7.7	74%	26%	30	74%	26%
20	B	Diefa Nurkhasanah	Fenrir Hong	14	95.0	110.0	120	100	8	32.0	10.0	76%	24%	42	76%	24%
12	A	Sasha Stavila	Farah Hasan	17	127.0	115.0	100	130	6	23.0	7.0	77%	23%	30	77%	23%
17	A	Ali Traore	Joe Fiala	17	125.0	127.5	90	165	7	25.0	5.0	83%	17%	30	83%	17%
9	A	Miguel Huerta	Alan Nguyen	17	120.0	127.5	115	140	6	30.0	0.0	100%	0%	30	100%	0%
16	B	Regina Bloomstine	Hoa Vo	14	70.5	78.5	50	107	7	56.5	-14.5	135%	-35%	42	135%	-35%
5	B	Brandon Hoang	Himson Tam	17	105.5	92.5	100	85	9	44.5	-14.5	148%	-48%	42	106%	-35%

## Results of selling a Maine house, merged, sorted by number of offers

Pair	Ver	Buyer	Seller	Acres	Price \$K	1st offer midpoint	Seller's 1st offer	Buyer's 1st offer	# offers	Buyer's Profit \$K	Seller's Profit \$K	Buyer's share	Seller's share	Avail profit	Buyer's share of avail	Seller's share of avail
7	A	Aleks Malakhovsky	Abhi Trivedi	17	127.7	122.5	105	140	15	22.3	7.7	74%	26%	30	74%	26%
11	B	Christine Jeong	Louden Ivy	17	145.0	145.0	100	190	12	5.0	25.0	17%	83%	42	12%	60%
19	A	Austen Szypula	Chris Steigerwald	17	141.0	127.5	105	150	11	9.0	21.0	30%	70%	30	30%	70%
14	A	David Webber	Kevin Muggli	14	125.0	122.5	100	145	10	2.0	18.0	10%	90%	30	7%	60%
3	B	Htut Ko	Sridarsh Vinnakota	14	126.5	127.5	120	135	9	0.5	41.5	1%	99%	42	1%	99%
5	B	Brandon Hoang	Himson Tam	17	105.5	92.5	100	85	9	44.5	-14.5	148%	-48%	42	106%	-35%
20	B	Diefa Nurkhasanah	Fenrir Hong	14	95.0	110.0	120	100	8	32.0	10.0	76%	24%	42	76%	24%
1	A	Bao Tram	Brandon Paper	17	145.0	165.0	130	200	7	5.0	25.0	17%	83%	30	17%	83%
2	A	Hans Nicolaus	Daniel Grimm	17	132.0	134.5	120	149	7	18.0	12.0	60%	40%	30	60%	40%
17	A	Ali Traore	Joe Fiala	17	125.0	127.5	90	165	7	25.0	5.0	83%	17%	30	83%	17%
16	B	Regina Bloomstine	Hoa Vo	14	70.5	78.5	50	107	7	56.5	-14.5	135%	-35%	42	135%	-35%
18	B	Sarah Dunning	Jin Kim	14	112.0	125.0	130	120	6	15.0	27.0	36%	64%	42	36%	64%
8	B	Christine Sutton	Elliot White	17	145.0	162.5	125	200	6	5.0	25.0	17%	83%	42	12%	60%
15	B	Wesley Lai	Karinne Barbosa	17	144.0	140.0	120	160	6	6.0	24.0	20%	80%	42	14%	57%
12	A	Sasha Stavila	Farah Hasan	17	127.0	115.0	100	130	6	23.0	7.0	77%	23%	30	77%	23%
9	A	Miguel Huerta	Alan Nguyen	17	120.0	127.5	115	140	6	30.0	0.0	100%	0%	30	100%	0%
6	A	Silviu Gruber	Arrido Arfiadi	17	145.0	130.0	90	170	5	5.0	25.0	17%	83%	30	17%	83%
10	B	Tammy Kuo	Taliesin Langford	17	135.0	120.0	120	120	5	15.0	15.0	50%	50%	42	36%	36%
21	A	Christian Carlos	Chris Hoover	17	140.0	137.5	130	145	4	10.0	20.0	33%	67%	30	33%	67%
13	B	Robert Gunther	Dean Ferris	17	136.0	154.0	148	160	4	14.0	16.0	47%	53%	42	33%	38%
4	A	Son Huynh	Chiayi Lin	17	128.5	120.0	110	130	4	21.5	8.5	72%	28%	30	72%	28%

## Results of selling a Maine house, merged, sorted by Buyer's first offer

Pair	Ver	Buyer	Seller	Acres	Price \$K	1st offer midpoint	Seller's 1st offer	Buyer's 1st offer	# offers	Buyer's Profit \$K	Seller's Profit \$K	Buyer's share	Seller's share	Avail profit	Buyer's share of avail	Seller's share of avail
1	A	Bao Tram	Brandon Paper	17	145.0	165.0	130	200	7	5.0	25.0	17%	83%	30	17%	83%
8	B	Christine Sutton	Elliot White	17	145.0	162.5	125	200	6	5.0	25.0	17%	83%	42	12%	60%
11	B	Christine Jeong	Louden Ivy	17	145.0	145.0	100	190	12	5.0	25.0	17%	83%	42	12%	60%
6	A	Silviu Gruber	Arrido Arfiadi	17	145.0	130.0	90	170	5	5.0	25.0	17%	83%	30	17%	83%
17	A	Ali Traore	Joe Fiala	17	125.0	127.5	90	165	7	25.0	5.0	83%	17%	30	83%	17%
15	B	Wesley Lai	Karinne Barbosa	17	144.0	140.0	120	160	6	6.0	24.0	20%	80%	42	14%	57%
13	B	Robert Gunther	Dean Ferris	17	136.0	154.0	148	160	4	14.0	16.0	47%	53%	42	33%	38%
19	A	Austen Szypula	Chris Steigerwald	17	141.0	127.5	105	150	11	9.0	21.0	30%	70%	30	30%	70%
2	A	Hans Nicolaus	Daniel Grimm	17	132.0	134.5	120	149	7	18.0	12.0	60%	40%	30	60%	40%
14	A	David Webber	Kevin Muggli	14	125.0	122.5	100	145	10	2.0	18.0	10%	90%	30	7%	60%
21	A	Christian Carlos	Chris Hoover	17	140.0	137.5	130	145	4	10.0	20.0	33%	67%	30	33%	67%
7	A	Aleks Malakhovsky	Abhi Trivedi	17	127.7	122.5	105	140	15	22.3	7.7	74%	26%	30	74%	26%
9	A	Miguel Huerta	Alan Nguyen	17	120.0	127.5	115	140	6	30.0	0.0	100%	0%	30	100%	0%
3	B	Htut Ko	Sridarsh Vinnakota	14	126.5	127.5	120	135	9	0.5	41.5	1%	99%	42	1%	99%
12	A	Sasha Stavila	Farah Hasan	17	127.0	115.0	100	130	6	23.0	7.0	77%	23%	30	77%	23%
4	A	Son Huynh	Chiayi Lin	17	128.5	120.0	110	130	4	21.5	8.5	72%	28%	30	72%	28%
18	B	Sarah Dunning	Jin Kim	14	112.0	125.0	130	120	6	15.0	27.0	36%	64%	42	36%	64%
10	B	Tammy Kuo	Taliesin Langford	17	135.0	120.0	120	120	5	15.0	15.0	50%	50%	42	36%	36%
16	B	Regina Bloomstine	Hoa Vo	14	70.5	78.5	50	107	7	56.5	-14.5	135%	-35%	42	135%	-35%
20	B	Diefa Nurkhasanah	Fenrir Hong	14	95.0	110.0	120	100	8	32.0	10.0	76%	24%	42	76%	24%
5	B	Brandon Hoang	Himson Tam	17	105.5	92.5	100	85	9	44.5	-14.5	148%	-48%	42	106%	-35%

## Results of selling a Maine house, merged, sorted by Seller's first offer

Pair	Ver	Buyer	Seller	Acres	Price \$K	1st offer midpoint	Seller's 1st offer	Buyer's 1st offer	# offers	Buyer's Profit \$K	Seller's Profit \$K	Buyer's share	Seller's share	Avail profit	Buyer's share of avail	Seller's share of avail
13	B	Robert Gunther	Dean Ferris	17	136.0	154.0	148	160	4	14.0	16.0	47%	53%	42	33%	38%
1	A	Bao Tram	Brandon Paper	17	145.0	165.0	130	200	7	5.0	25.0	17%	83%	30	17%	83%
21	A	Christian Carlos	Chris Hoover	17	140.0	137.5	130	145	4	10.0	20.0	33%	67%	30	33%	67%
18	B	Sarah Dunning	Jin Kim	14	112.0	125.0	130	120	6	15.0	27.0	36%	64%	42	36%	64%
8	B	Christine Sutton	Elliot White	17	145.0	162.5	125	200	6	5.0	25.0	17%	83%	42	12%	60%
15	B	Wesley Lai	Karinne Barbosa	17	144.0	140.0	120	160	6	6.0	24.0	20%	80%	42	14%	57%
2	A	Hans Nicolaus	Daniel Grimm	17	132.0	134.5	120	149	7	18.0	12.0	60%	40%	30	60%	40%
3	B	Htut Ko	Sridarsh Vinnakota	14	126.5	127.5	120	135	9	0.5	41.5	1%	99%	42	1%	99%
10	B	Tammy Kuo	Taliesin Langford	17	135.0	120.0	120	120	5	15.0	15.0	50%	50%	42	36%	36%
20	B	Diefa Nurkhasanah	Fenrir Hong	14	95.0	110.0	120	100	8	32.0	10.0	76%	24%	42	76%	24%
9	A	Miguel Huerta	Alan Nguyen	17	120.0	127.5	115	140	6	30.0	0.0	100%	0%	30	100%	0%
4	A	Son Huynh	Chiayi Lin	17	128.5	120.0	110	130	4	21.5	8.5	72%	28%	30	72%	28%
19	A	Austen Szypula	Chris Steigerwald	17	141.0	127.5	105	150	11	9.0	21.0	30%	70%	30	30%	70%
7	A	Aleks Malakhovsky	Abhi Trivedi	17	127.7	122.5	105	140	15	22.3	7.7	74%	26%	30	74%	26%
11	B	Christine Jeong	Louden Ivy	17	145.0	145.0	100	190	12	5.0	25.0	17%	83%	42	12%	60%
14	A	David Webber	Kevin Muggli	14	125.0	122.5	100	145	10	2.0	18.0	10%	90%	30	7%	60%
12	A	Sasha Stavila	Farah Hasan	17	127.0	115.0	100	130	6	23.0	7.0	77%	23%	30	77%	23%
5	B	Brandon Hoang	Himson Tam	17	105.5	92.5	100	85	9	44.5	-14.5	148%	-48%	42	106%	-35%
6	A	Silviu Gruber	Arrido Arfiadi	17	145.0	130.0	90	170	5	5.0	25.0	17%	83%	30	17%	83%
17	A	Ali Traore	Joe Fiala	17	125.0	127.5	90	165	7	25.0	5.0	83%	17%	30	83%	17%
16	B	Regina Bloomstine	Hoa Vo	14	70.5	78.5	50	107	7	56.5	-14.5	135%	-35%	42	135%	-35%

## Results of selling a Maine house, sorted by Seller's share of available profit

Pair	Ver	Buyer	Seller	Acres	Price \$K	1st offer midpoint	Seller's 1st offer	Buyer's 1st offer	# offers	Buyer's Profit \$K	Seller's Profit \$K	Buyer's share	Seller's share	Avail profit	Buyer's share of avail	Seller's share of avail
2	A	Matt Wallig	Karen Schoen	17	152.5	155.0	175.0	135.0	12	-2.5	32.5	-8%	108%	30	-8%	108%
19	B	Andrew Nguyen	Farhood Mogharrabin	17	162.0	82.5	165.0	-	4	-12.0	42.0	-40%	140%	42	-29%	100%
3	B	Alex Auxler	Joshua Yang	14	125.0	165.0	180.0	150.0	4	2.0	40.0	5%	95%	42	5%	95%
9	B	Yunian Chen	Landon Freden	14	125.0	132.5	140.0	125.0	4	2.0	40.0	5%	95%	42	5%	95%
13	A	Joey Guinasso	Herbert Trout	17	145.0	225.0	400.0	50.0	19	5.0	25.0	17%	83%	30	17%	83%
14	A	Kristy Cullen	Andrew Artemie	17	145.0	125.0	150.0	100.0	3	5.0	25.0	17%	83%	30	17%	83%
11	A	Randy Hang	Brynne Alexander	17	140.0	117.5	135.0	100.0	13	10.0	20.0	33%	67%	30	33%	67%
17	A	Lean Redda	Tasneem Zeghmi	17	140.0	140.0	150.0	130.0	6	10.0	20.0	33%	67%	30	33%	67%
10	B	Andrew Morrow	Brandon Renstrom	14	110.0	135.0	170.0	100.0	9	17.0	25.0	40%	60%	42	40%	60%
5	B	Nicolus Koudsieh	Zakaria Ali	14	108.0	95.0	110.0	80.0	6	19.0	23.0	45%	55%	42	45%	55%
6	A	Karim Oumghar	Peterson Nguyen + Chris Erickson	17	134.0	135.0	140.0	130.0	4	16.0	14.0	53%	47%	30	53%	47%
8	A	Chris Gunn	David Beckman	14	120.0	8,952.5	17,800.0	105.0	14	7.0	13.0	35%	65%	30	23%	43%
15	B	Mark Langley	Zach Chadwick	17	136.0	155.0	185.0	125.0	17	14.0	16.0	47%	53%	42	33%	38%
1	A	Paige Allen	Remenick Bautista	17	131.0	125.0	160.0	90.0	17	19.0	11.0	63%	37%	30	63%	37%
16	A	Brian Oh	William Kim	14	116.0	125.0	140.0	110.0	7	11.0	9.0	55%	45%	30	37%	30%
7	B	Josh Lambert	Zhan Shi	14	94.0	120.0	140.0	100.0	8	33.0	9.0	79%	21%	42	79%	21%
18	B	Jack Eldridge	Ruzanna Ayvazyan	14	93.0	115.0	160.0	70.0	10	34.0	8.0	81%	19%	42	81%	19%
4	A	Chris Sinclair	Amritpal Sandhu	17	125.5	129.5	159.0	100.0	13	24.5	5.5	82%	18%	30	82%	18%
12	B	Daniel Biwott	Drew Byland	17	127.0	145.0	180.0	110.0	9	23.0	7.0	77%	23%	42	55%	17%

What worked well  
or not so well?



# Observations

Make the pie bigger. Try to create a larger zone of agreement to share.

Negotiations tend to end in the middle between the opening offers.

Biggest mistake is being too generous in the first offer. Need to ask for a lot but not so much that the expected midpoint is outside any zone of agreement. Helps to compare offers by calculating profit.

Helps to ask questions like, “Suppose we changed the deal this way? What would that do?”

It also helps to be obstinate but being unreasonable doesn't help.

Lots of negotiations end “on the courthouse steps.”

# Rose Bowl negotiation

1. A local alumni association is negotiating with a local sports bar about the cost of a buffet at their upcoming Rose Bowl viewing event.
2. Some of you will be buyers, representing the alumni, some of you will managers of the sport bar.
3. Your objective is to get the absolute best price possible.
4. Different pairs may have different information.
5. It's real: I will consider your result in deciding your grade.
6. I will be matching top buyers against top sellers, working my way down the list from the Maine house results.

# Assignments this time

## Sellers

Regina Bloomstine  
Brandon Hoang  
Miguel Huerta  
Ali Traore  
Sasha Stavila  
Diefa Nurkhasanah  
Aleks Malakhovsky  
Son Huynh  
Hans Nicolaus  
Tammy Kuo  
Sarah Dunning  
Robert Gunther  
Christian Carlos  
Austen Szypula  
Bao Tram  
Silviu Gruber  
Wesley Lai  
Christine Sutton  
Christine Jeong  
David Webber  
Htut Ko

## Buyers

Sridarsh Vinnakota  
Brandon Paper  
Arrido Arfiadi  
Chris Steigerwald  
Chris Hoover  
Jin Kim  
Kevin Muggli  
Elliot White  
Louden Ivy  
Karinne Barbosa  
Daniel Grimm  
Dean Ferris  
Taliesin Langford  
Chiayi Lin  
Abhi Trivedi  
Fenrir Hong  
Farah Hasan  
Joe Fiala  
Alan Nguyen  
Hoa Vo  
Himson Tam

Back to business

# A firm's theory of its business

- 1. Vision:** A statement of purpose in response to an opportunity.
- 2. Mission:** The goals, products and customers.
- 3. Value proposition:** How the customer needs will be satisfied.
- 4. Business model:** Economics and activities of the firm.

# The value proposition

Value is the worth, importance, or usefulness to the customer. It is ***the value you propose to deliver.***

To be successful, a business must *create value*, selling goods or services that are more valuable than whatever it cost to create them.

# Value propositions

Most value propositions offer some combination of these values to the customer:

1. Product
2. Price
3. Access
4. Service
5. Experience

The **business model** is an integrated description of:

1. The firm's unique customer value proposition.
2. How the firm will configure its resources and activities to deliver that value and earn sustainable profits.

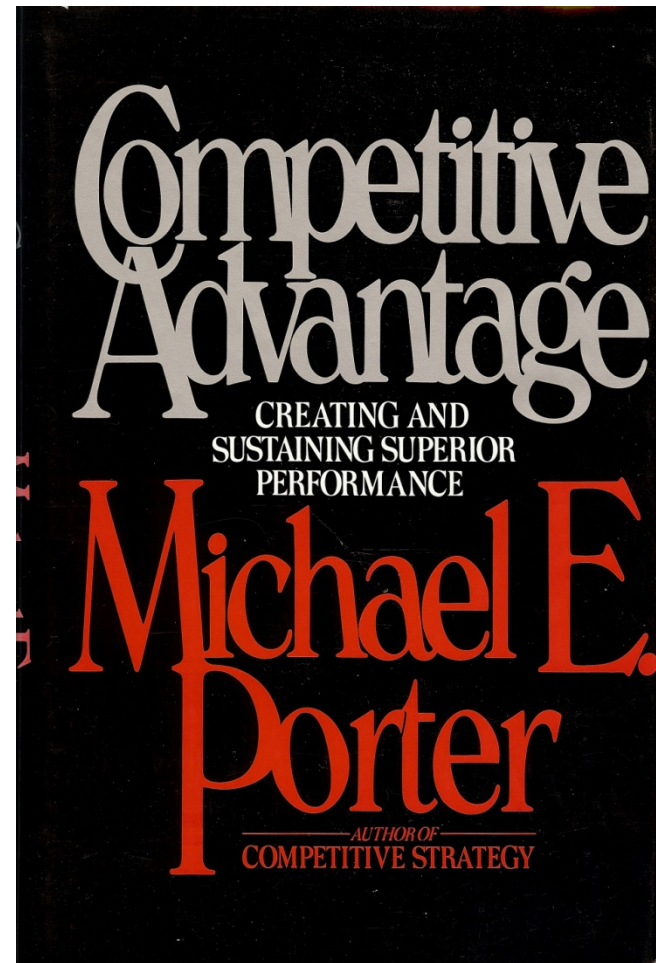
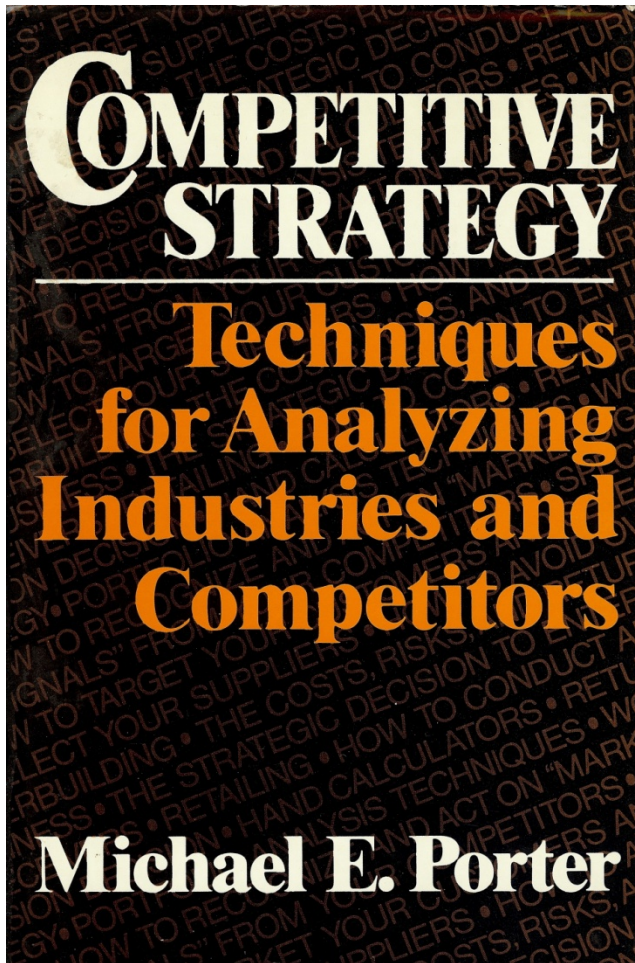


# Chapter 4.

## Competitive strategy

# Important ideas

1. Strategy
2. Core competencies
3. Industry and context
4. SWOT analysis
5. Barriers to entry
6. Competitive advantage
7. Alliances
8. Tactics
9. Social responsibility



Many of the ideas come from Michael Porter's seminal books in 1980 and 1985.

A **strategy** is a plan or roadmap of the actions that a firm or organization will take to achieve its mission and goals.

Every firm competing in an industry has a competitive strategy, whether explicit or implicit.

Source: Porter, *Competitive Strategy*, p. xiii.

The **core competencies** of a firm are its unique capabilities and resources that enable it to implement its business model.

To be **competitive**, a firm must have either:

1. Unique and valuable resources and the capability to exploit these resources.

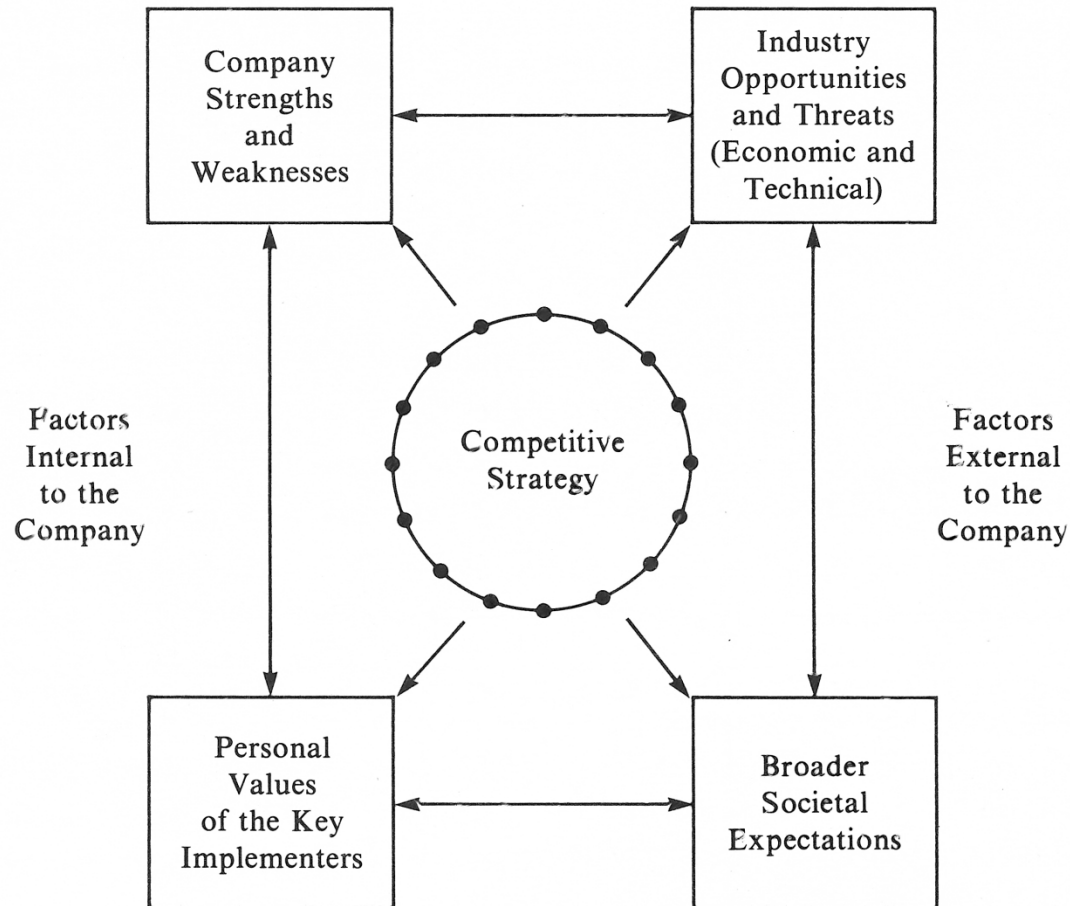
*Examples:* Intel, 3M, Weyerhaeuser.

2. A unique capability to manage common resources.

*Example:* Southwest Airlines.

The **context** of a firm is the industry in which it operates and the customers it serves.



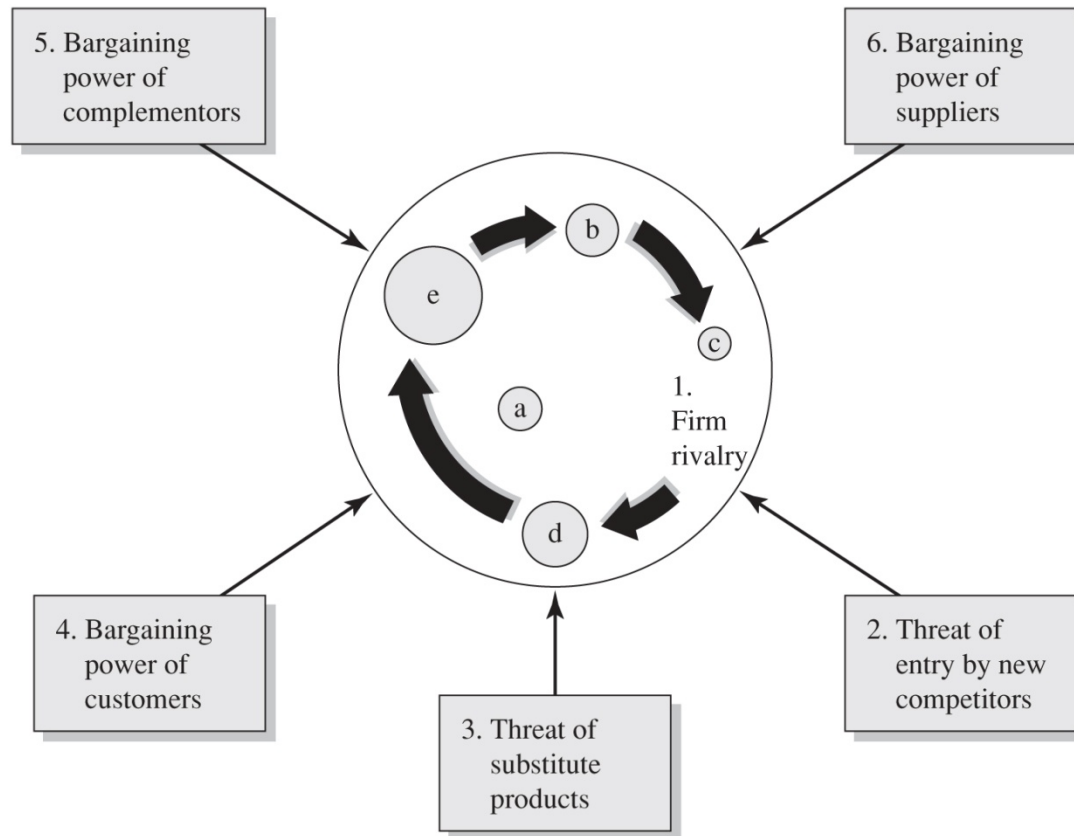


**FIGURE I-2. Context in Which Competitive Strategy Is Formulated**

Source: Porter, *Competitive Strategy*, p. xviii.

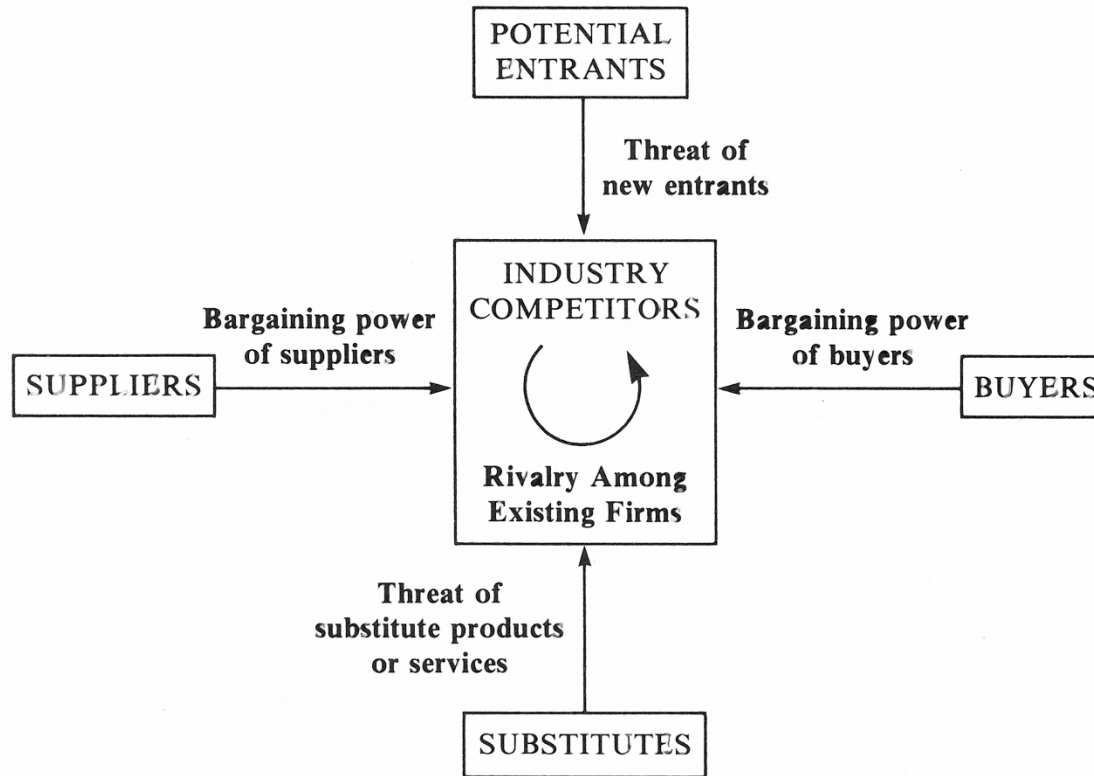
**TABLE 4.3 Four stages of an industry life cycle.**

<b>Stage</b>	<b>Examples</b>
1. Emergence	Artificial organs Nanotechnology Genomics
2. Growth	Medical technology Software Smart phones
3. Maturation	Electric appliances Automobiles Personal computers
4. Decline	Steel Fax machines Car phones



Note: Firms are represented by a circle; for example, (a) represents firm a. The size of the circle indicates the size of revenues of the firm. The six forces are numbered for clarity. The rivalry of the firms is shown as a vortex of competition illustrated by the solid arrows.

**FIGURE 4.3** Six forces model.



**FIGURE 1-1. Forces Driving Industry Competition**

Porter's original diagram, missing only the complementors.  
Source: Porter, *Competitive Strategy*, p. 4.

# Six forces

1. Rivalry between ***current competitors***
2. Threat of entry by ***new competitors***
3. Threat of ***substitutes***
4. Bargaining power of ***customers***
5. Bargaining power of ***complementors***
6. Bargaining power of ***suppliers***