SPLIT THE PIE

A Radical New Way to Negotiate

BARRY NALEBUFF



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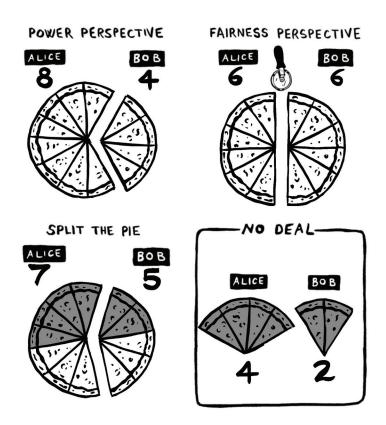
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PART I

THE PIE

A PIZZA



THE PIE

Just Interest

	AMOUNT INVESTED	INTEREST RATE	INTEREST
ANJU	\$5,000	1%	\$50
BHARAT	\$20,000	2%	\$400
ANJU & BHARAT	\$25,000	3%	\$750

	AMOUNT INVESTED	INTEREST RATE	INTEREST
ANJU	\$5,000	1%	\$50
BHARAT	\$20,000	2%	\$400
ANJU & BHARAT	\$25,000	2%	\$500

	AMOUNT INVESTED	INTEREST RATE	INTEREST
BHARAT & CHIRAGH	\$25,000	3%	\$750
PAYMENT TO CHIRAGH	\$5,000	3%	– \$15O
MONEY TO BHARAT			\$600

TWO NEGOTIATION MYTHS

A Bad BATNA

	HIGH-BATNA	LOW-BATNA
BUYER'S BATNA	\$10,000	\$9,000
SELLER'S BATNA	\$8,000	\$7,000
PIE	\$2,000	\$2,000
TRANSACTION PRICE	\$9,027	\$8,061
GAIN TO BUYER	\$973	\$939
GAIN TO SELLER	\$1,027	\$1,061
SPLIT OF PIE	49 : 51	47 : 53

A's Total = A's BATNA + 50% Pie

= A's BATNA + $\frac{1}{2}$ [Total Value - (A's BATNA + B's BATNA)]

= 1/2 [Total Value + A's BATNA - B's BATNA]

Similarly

B's Total = $\frac{1}{2}$ [Total Value + B's BATNA - A's BATNA]

A LEGAL PIE

Damages

	RESTITUTION	EXPECTATION	DISGORGEMENT
MONEY TO ALICE	\$0	\$11,500 – \$9,000 = \$2,500	\$13,000 - \$9,000 = \$4,000
MONEY TO BOB	\$13,000 - \$0 =\$13,000	\$13,000 – \$2,500 = \$10,500	13,000 - \$4,000 = \$9,000

	SPLIT THE PIE	GAIN FROM BREAKING CONTRACT
MONEY TO ALICE	\$11,500 - \$9,000 + 50% x (\$13,000 - \$11,500) = \$2,500 + \$750 = \$3,250	\$750
MONEY TO BOB	\$13,000 – \$3,250 = \$9,750	\$9,750 – \$9,000 = \$750

EXPECTED REVENUE GAIN	Six weeks of rent = \$1,800
EXPECTED PIE	\$1,800 – \$300 = \$1,500
PAYMENT TO LANDLORD	50% of \$1,500 + \$300 = \$1,050

DO YOU HAVE TO SPLIT THE PIE?

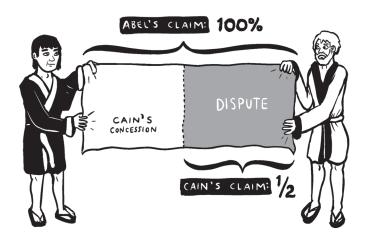
CEMA

	NO CEMA	WITH CEMA
PURCHASE PRICE	\$1,300,000	\$1,300,000
BUYER'S MORTGAGE	\$1,000,000	\$400,000
SELLER'S MORTGAGE	\$600,000	\$600,000 taken over
TRANSACTION PRICE	\$1,300,000	\$700,000
MORTGAGE RECORDING TAX	\$19,250	\$7,200
SELLER TAX	\$5,200	\$2,800
TAX SAVING		\$24,450 – \$10,000 = \$14,450

PART II

SPLITTING THE COST

A TALMUDIC SOLUTION





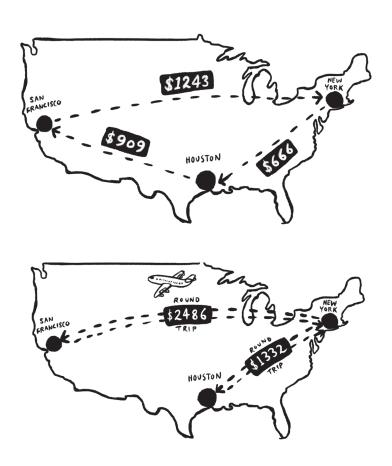
COST OF CLIPPERS	ABEL (\$200 BENEFIT)	CAIN (\$100 BENEFIT)
	Abel pays	Cain pays
\$50	\$25	\$25
\$150	\$100	\$50
\$250	\$175	\$75

CLIPPERS COST \$50	ABEL BENEFIT \$200	CAIN BENEFIT \$100	TOTAL
Combined Gain if Deal			\$300 – \$50 = \$250
Gains if No Deal	\$150	\$50	\$200
Pie			\$50

CLIPPERS COST \$150	ABEL BENEFIT \$200	CAIN BENEFIT \$100	TOTAL
Combined Gains if Deal			\$300 - \$150 = \$150
Gains if No Deal	\$50	\$0	\$50
Pie			\$100

WHO PAYS?

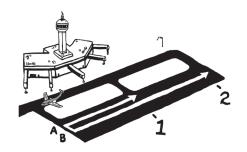
An Expense Report Dilemma

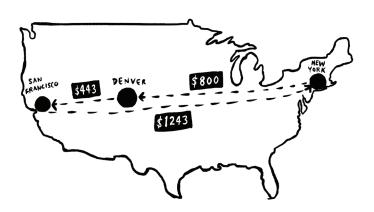


Cost of Round Trips - Cost of Triangle Route = (\$2,486 + \$1,332) - \$2,818 = \$1,000

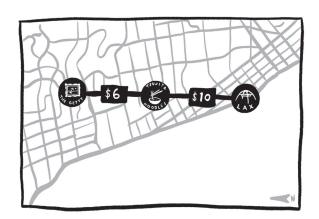
Houston pays \$1,332 - \$500 = **\$832** San Francisco pays \$2,486 - \$500 = **\$1,986**

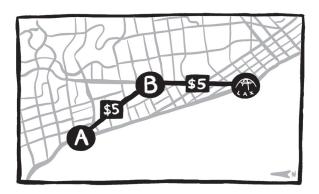
Sharing a Runway

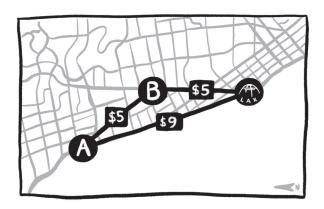


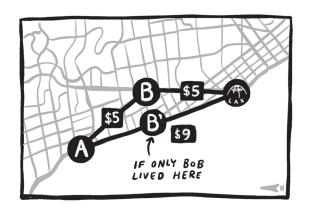


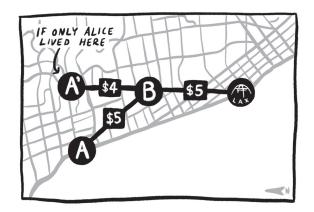
Sharing a Ride

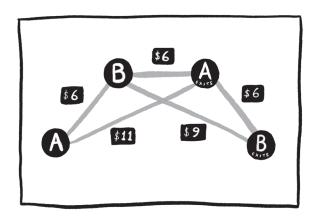












Ionity

	BMW	KIA	TOTAL
WORK TOGETHER*	BMW Network value – (€1.4b – Kia payment)	€700m – Kia payment	BMW Network value – €700m
NO DEAL	BMW Network value – €1b	€0	BMW Network value – €1b
THE PIE			€300m

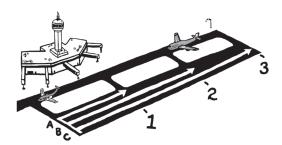
^{*} When they work together, the total amount paid must add up to ϵ 1.4 billion. BMW pays the difference between Kia's payment and ϵ 1.4 billion.

PART III

COMPLEX NEGOTIATIONS

MULTI-PARTY NEGOTIATIONS

The Runway Redux



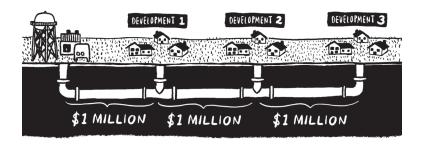
PARTY	HOW MUCH THEY PAY	TOTAL
А	50% of \$5m	\$2.50m
В	25% of \$5m + 50% of \$5m	\$3.75m
С	25% of \$5m + 50% of \$5m + 100% of \$5m	\$8.75m
Combined		\$15.00m

PARTY	HOW MUCH THEY PAY	TOTAL
А	\$2.5m – \$1.25m	\$1.25m
В	50% of \$10m	\$5.00m
С	\$2.5m + \$5m + \$5m – (\$1.25m + \$2.5m)	\$8.75m
Combined		\$15.00m

PARTY	HOW MUCH THEY PAY	TOTAL
Α	\$2.5m – \$1.25m	\$1.25m
В	\$2.5m + \$5m – (\$1.25m + \$2.5m)	\$3.75m
С	50% of \$10m + \$5m	\$10.00m
Combined		\$15.00m

PARTY	BC VS. A	AC VS. B	AB VS. C	AVERAGE	EXPLAINING THE NUMBER
А	\$2.50m	\$1.25m	\$1.25m	\$1.67m	= 1/3 \$5m
В	\$3.75m	\$5.00m	\$3.75m	\$4.17m	= 1/3 \$5m + 1/2 \$5m
С	\$8.75m	\$8.75m	\$10.00m	\$9.17m	= 1/3 \$5m + 1/2 \$5m + \$5m

Sharing a Pipeline



Saving Bottle Costs Redux

C-P-H	8¢
С-Н	8¢
P-H	4¢
C-P	o¢

As before, we are in scenario 2 and there are three possibilities in the event there is no three-way "agreement."

- 2.1 Coke and Honest Tea get together with Pepsi excluded.
- 2.2 Pepsi and Honest Tea get together with Coke excluded.
- 2.3 Coke and Pepsi get together with Honest Tea excluded.

Case 2.1

COKE	COKE HONEST TEA	
4¢	4¢	O¢

Case 2.2

COKE	HONEST TEA	PEPSI	
2¢	4¢	2¢	

Case 2.3

COKE	HONEST TEA	PEPSI
2¢	6¢	0¢

Under scenario 2, all three cases are equally likely. We take the average of the three cases:

COKE	HONEST TEA	PEPSI
8¢/3	14¢/3	2¢/3

PART IV

HOW TO GROW THE PIE

GIVE THE OTHER SIDE WHAT THEY WANT

Smart Trades

GAIN IN 2019 MODEL OVER 2020 MODEL

COLOR + MODEL YEAR	-\$1,500
INFOTAINMENT VALUE	\$295
INFOTAINMENT COST	-\$595
REDUCED DEALER COST	\$1,000
REDUCED DEALER PROFIT	\$2,500
NET GAIN	\$1,700

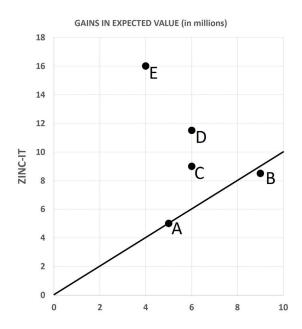
WHAT IF THE PARTIES SEE DIFFERENT PIES?

Zinc-It

PACKAGE	UP-FRONT	BONUS (if FDA approval)	EXPECTED VALUES (see discussion below)
А	\$25m	\$0	\$25m:\$5m
В	\$20m	\$15m	\$29m:\$8.5m
С	\$20m	\$10m	\$26m:\$9m
D	\$17m	\$15m	\$26m:\$11.5m
E	\$12m	\$20m	\$24m : \$16m

PACKAGE	EXPECTED VALUES	THE PIE
А	\$25m + \$5m	\$30m - (\$20m + \$0) = \$10.0m
В	\$29m + \$8.5m	\$37.5m – (\$20m + \$0) = \$17.5m
С	\$26m + \$9m	\$35m – (\$20m + \$0) = \$15.0m
D	\$26m + \$11.5m	\$37.5m – (\$20m + \$0) = \$17.5m
Е	\$24m + \$16m	\$40m - (\$20m + \$0) = \$20.0m

Plot the Options



Trade Beets for Broccoli

BONUS	GAIN TO HASAN	AN GAIN TO ZINC-IT	
\$10m	– \$14m	\$29m	
\$20m	– \$8m		
\$30m	– \$2m	– \$2m \$27m	
\$40m	\$4m	\$26m	
\$50m	\$10m	\$25m	
\$60m	\$16m	\$16m \$24m	
\$70m	\$22m	\$23m	
\$80m	\$28m	\$22m	
\$90m	\$34m	\$21m	
\$100m	\$40m	\$20m	

MAKING THE OTHER SIDE'S CASE

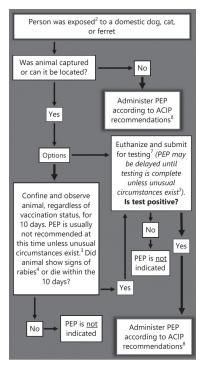
PACKAGE	UP-FRONT	BONUS	EXPECTED GAINS	THE PIE
А	\$25m	\$0	\$5m + \$5m	\$10.0m
В	\$20m	\$15m	\$9m + \$8.5m	\$17.5m
С	\$20m	\$10m	\$6m + \$9m	\$15.0m
D	\$17m	\$15m	\$6m + \$11.5m	\$17.5m
E	\$12m	\$20m	\$4m + \$16m	\$20.0m

PART V

NEGOTIATION MECHANICS

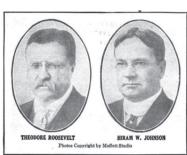
PREPARING FOR A NEGOTIATION

The Dog Bite



North Dakota Dept. of Health flowchart, https://www.health.nd.gov/diseases -conditions/rabies/rabies-faqs

Moffett Studio



"For there is neither East nor West,
Border nor Breed nor Birth,
When two strong men stand face to face
Though they come from the ends
of the earth." —Kipling.

Theodore Roosevelt's Confession of Faith

before the

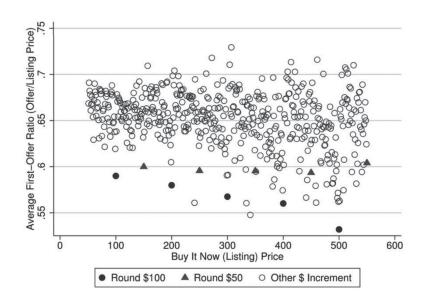
Progressive National Convention

August 6, 1912

OPENING MOVES

Make Precise Bids





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