## SPLIT THE PIE

A Radical New Way to Negotiate

## BARRY NALEBUFF

An Imprint of HarperCollinsPublishers

SPlit The pie. Copyright © 2022 by Barry Nalebuff. All rights reserved. Printed in the United States of America. No part of this book may be used or reproduced in any manner whatsoever without written permission except in the case of brief quotations embodied in critical articles and reviews. For information, address HarperCollins Publishers, 195 Broadway, New York, NY IOOO7.

HarperCollins books may be purchased for educational, business, or sales promotional use. For information, please email the Special Markets Department at SPsales @harpercollins.com.

All illustrations by Dan Ashwood.

Image on page 42: ©2020 Honest Tea, Inc. "Honest" is a registered trademark of Honest Tea, Inc.

Image on page 250: Reprinted from the Journal of Political Economy with permission under fair use provision. Matthew Backus, Thomas Blake, and Steven Tadelis (2019) "On the Empirical Content of Cheap-Talk Signaling: An Application to Bargaining," Journal of Political Economy, I27(4), I599-1628.

## FIRST EDITION

Library of Congress Cataloging-in-Publication Data.

Names: Nalebuff, Barry, 1958- author.
Title: Split the pie : a radical new way to negotiate / Barry Nalebuff.
Identifiers: LCCN 202104435I (print) | LCCN 2021044352 (ebook) | ISBN 9780063I35482 (hardcover) | ISBN 9780063I35499 (ebook)
Subjects: LCSH: Negotiation in business. | Negotiation. | Success in business.
Classification: LCC HD58.6 .N28 2022 (print) | LCC HD58.6 (ebook) |
DDC 658.4/052—dc23/eng/2021IIO4
LC record available at https://lccn.loc.gov/202104435I
LC ebook record available at https://lccn.loc.gov/2021044352

## PART I

## THE PIE

## Chapter 1

## A PIZZA



FAIRNESS PERSPECTIVE


SPLIT THE PIE


## Chapter 3

## 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 | $\$ 5,000$ | $3 \%$ | $-\$ 150$ |
| MONEY TO BHARAT |  |  | $\$ 600$ |

## Chapter 4

## TW0 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 | $49: 51$ | $47: 53$ |

$$
\begin{aligned}
\text { A's Total } & =\text { A's BATNA }+50 \% \text { Pie } \\
& =\text { A's BATNA }+1 / 2[\text { Total Value }-(\text { A's BATNA }+ \text { B's BATNA })] \\
& =1 / 2[\text { Total Value }+ \text { A's BATNA }- \text { B's BATNA }]
\end{aligned}
$$

Similarly

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


## Chapter 6

## A LEGAL PIE

## Damages

|  | RESTITUTION | EXPECTATION | DISGORGEMENT |
| :---: | :---: | :---: | :---: |
| MONEY TO ALICE | \$0 | $\begin{array}{r} \$ 11,500-\$ 9,000 \\ =\$ 2,500 \end{array}$ | $\begin{array}{r} \$ 13,000-\$ 9,000 \\ =\$ 4,000 \end{array}$ |
| MONEY TO BOB | $\begin{array}{r} \$ 13,000-\$ 0 \\ =\$ 13,000 \end{array}$ | $\begin{array}{r} \$ 13,000-\$ 2,500 \\ =\$ 10,500 \end{array}$ | $\begin{array}{r} 13,000-\$ 4,000 \\ =\$ 9,000 \end{array}$ |

$\left.\begin{array}{c|c|c} & & \text { GAIN FROM BREAKING } \\ \text { CONTRACT }\end{array}\right]$

| EXPECTED REVENUE GAIN | Six weeks of rent $=\mathbf{\$ 1 , 8 0 0}$ |
| :---: | :---: |
| EXPECTED PIE | $\$ 1,800-\$ 300=\$ 1,500$ |
| PAYMENT TO LANDLORD | $50 \%$ of $\$ 1,500+\$ 300=\$ 1,050$ |

## Chapter 7

## 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 | $\$ 600,000$ | $\$ 600,000$ <br> 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 <br> $\mathbf{~ \$ 1 4 , 4 5 0 ~}$ |

## PART II

$$
\begin{aligned}
& \text { SPLITTING } \\
& \text { THE COST }
\end{aligned}
$$

## Chapter 9

## 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 <br> $=\$ 50$ <br> Gains if No Deal |
| Pie | $\$ 150$ | $\$ 50$ | $\$ 200$ |
|  |  |  | $\$ 50$ |


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

## Chapter 10

## WHO PAYS?

## An Expense Report Dilemma



$$
\begin{aligned}
& \text { Cost of Round Trips - Cost of Triangle Route } \\
& =(\$ 2,486+\$ 1,332)-\$ 2,818=\$ 1,000
\end{aligned}
$$

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 - (€1.4bKia payment) | € 700 m - Kia payment | BMW Network value - € 700 m |
| NO DEAL | BMW Network value - €1b | €О | BMW Network value - €1b |
| THE PIE |  |  | €300m |

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


## PART III

$$
\begin{aligned}
& \text { COMPLEX } \\
& \text { NEGOTIATIONS }
\end{aligned}
$$

## Chapter 14

# MULTI-PARTY NEGOTIATIONS 

The Runway Redux



| PARTY | HOW MUCH THEY PAY | TOTAL |
| ---: | :---: | :---: |
| A | $50 \%$ of $\$ 5 \mathrm{~m}$ | $\$ 2.50 \mathrm{~m}$ |
| B | $25 \%$ of $\$ 5 \mathrm{~m}+50 \%$ of $\$ 5 \mathrm{~m}$ | $\$ 3.75 \mathrm{~m}$ |
| C | $25 \%$ of $\$ 5 \mathrm{~m}+50 \%$ of $\$ 5 \mathrm{~m}+100 \%$ of $\$ 5 \mathrm{~m}$ | $\$ 8.75 \mathrm{~m}$ |
| Combined |  | $\$ 15.00 \mathrm{~m}$ |


| PARTY | HOW MUCH THEY PAY | TOTAL |
| ---: | :---: | :---: |
| A | $\$ 2.5 \mathrm{~m}-\$ 1.25 \mathrm{~m}$ | $\$ 1.25 \mathrm{~m}$ |
| B | $50 \%$ of $\$ 10 \mathrm{~m}$ | $\$ 5.00 \mathrm{~m}$ |
| C | $\$ 2.5 \mathrm{~m}+\$ 5 \mathrm{~m}+\mathbf{5 m}-(\$ 1.25 \mathrm{~m}+\$ 2.5 \mathrm{~m})$ | $\$ 8.75 \mathrm{~m}$ |
| Combined |  | $\$ 15.00 \mathrm{~m}$ |


| PARTY | HOW MUCH THEY PAY | TOTAL |
| :---: | :---: | :---: |
| A | $\$ 2.5 \mathrm{~m}-\$ 1.25 \mathrm{~m}$ | $\$ 1.25 \mathrm{~m}$ |
| B | $\$ 2.5 \mathrm{~m}+\$ 5 \mathrm{~m}-(\$ 1.25 \mathrm{~m}+\$ 2.5 \mathrm{~m})$ | $\$ 3.75 \mathrm{~m}$ |
| C | $50 \%$ of $\$ 10 \mathrm{~m}+\$ 5 \mathrm{~m}$ | $\$ 10.00 \mathrm{~m}$ |
| Combined |  | $\$ 15.00 \mathrm{~m}$ |

EXPLAINING THE

| PARTY |  | BC VS. A | AC VS. B | AB VS. C | AVERAGE | NUMBER |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A | $\$ 2.50 \mathrm{~m}$ | $\$ 1.25 \mathrm{~m}$ | $\$ 1.25 \mathrm{~m}$ | $\$ 1.67 \mathrm{~m}$ | $=1 / 3 \$ 5 \mathrm{~m}$ |  |
| B | $\$ 3.75 \mathrm{~m}$ | $\$ 5.00 \mathrm{~m}$ | $\$ 3.75 \mathrm{~m}$ | $\$ 4.17 \mathrm{~m}$ | $=1 / 3 \$ 5 \mathrm{~m}+1 / 2 \$ 5 \mathrm{~m}$ |  |
| C | $\$ 8.75 \mathrm{~m}$ | $\$ 8.75 \mathrm{~m}$ | $\$ 10.00 \mathrm{~m}$ | $\$ 9.17 \mathrm{~m}$ | $=1 / 3 \$ 5 \mathrm{~m}+1 / 2 \$ 5 \mathrm{~m}+\$ 5 \mathrm{~m}$ |  |

## Sharing a Pipeline



## Saving Bottle Costs Redux

| C-P-H | $8 \not \subset$ |
| :--- | :--- |
| C-H | $8 \not \subset$ |
| P-H | $4 \not \subset$ |
| C-P | $O \not \subset$ |

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 | HONEST TEA | PEPSI |
| :---: | :---: | :---: |
| $4 ¢$ | $4 ¢$ | $0 ¢$ |

Case 2.2

| COKE | HONEST TEA | PEPSI |
| :---: | :---: | :---: |
| $2 ¢$ | $4 \zeta$ | $2 ¢$ |

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

$$
\begin{aligned}
& \text { HOW TO } \\
& \text { GROW } \\
& \text { THE PIE }
\end{aligned}
$$

## Chapter 16

## GIVE THE <br> OTHER SIDE WHAT THEY WANT

## Smart Trades

GAIN IN 2019 MODEL OVER 2020 MODEL

| COLOR + MODEL YEAR | $-\mathbf{\$ 1 , 5 0 0}$ |
| :---: | :---: |
| INFOTAINMENT VALUE | $\mathbf{\$ 2 9 5}$ |
| INFOTAINMENT COST | $\mathbf{\$ 5 9 5}$ |
| REDUCED DEALER COST | $\mathbf{\$ 1 , 0 0 0}$ |
| REDUCED DEALER PROFIT | $\mathbf{\$ 2 , 5 0 0}$ |
| NET GAIN | $\mathbf{\$ 1 , 7 0 0}$ |

## Chapter 17

## WHAT IF THE PARTIES SEE DIFFERENT PIES?

## Zinc-It

| PACKAGE | UP-FRONT | BONUS <br> (if FDA approval) | EXPECTED VALUES <br> (see discussion below) |  |
| :---: | :---: | :---: | :---: | :---: |
| A | $\$ 25 \mathrm{~m}$ |  | $\$ 0$ | $\$ 25 \mathrm{~m}: \$ 5 \mathrm{~m}$ |
| B | $\$ 20 \mathrm{~m}$ | $\$ 15 \mathrm{~m}$ | $\$ 29 \mathrm{~m}: \$ 8.5 \mathrm{~m}$ |  |
| C | $\$ 20 \mathrm{~m}$ | $\$ 10 \mathrm{~m}$ | $\$ \mathrm{~m}$ | $\$ 26 \mathrm{~m}: \$ 9 \mathrm{~m}$ |
| D |  | $\$ 17 \mathrm{~m}$ | $\$ \mathrm{~m}$ | $\$ 11.5 \mathrm{~m}$ |
| E |  | $\$ 120 \mathrm{~m}$ | $\$ \mathrm{~m}: \$ 16 \mathrm{~m}$ |  |

PACKAGE
EXPECTED VALUES
THE PIE

| A | $\$ 25 m+\$ 5 m$ | $\$ 30 m-(\$ 20 m+\$ 0)=\$ 10.0 m$ |
| :---: | :---: | :---: |
| B | $\$ 29 m+\$ 8.5 m$ | $\$ 37.5 m-(\$ 20 m+\$ 0)=\$ 17.5 m$ |
| C | $\$ 26 m+\$ 9 m$ | $\$ 35 m-(\$ 20 m+\$ 0)=\$ 15.0 m$ |
| D | $\$ 26 m+\$ 11.5 m$ | $\$ 37.5 m-(\$ 20 m+\$ 0)=\$ 17.5 m$ |
| E | $\$ 24 m+\$ 16 m$ | $\$ 40 m-(\$ 20 m+\$ 0)=\$ 20.0 m$ |

## Plot the Options



## Trade Beets for Broccoli

BONUS
GAIN TO HASAN
GAIN TO ZINC-IT

| \$10m | ! | - \$14m | ! | \$29m |
| :---: | :---: | :---: | :---: | :---: |
| \$20m | ! | - \$8m | ! | \$28m |
| \$30m | ' | - \$2m | ' | \$27m |
| \$40m | ' | \$4m | ' | \$26m |
| \$50m | ! | \$10m | ' | \$25m |
| \$60m | ' | \$16m | ! | \$24m |
| \$70m | ' | \$22m | ' | \$23m |
| \$80m | ' | \$28m | ! | \$22m |
| \$90m | ' | \$34m | ' | \$21m |
| \$100m | ' | \$40m | ! | \$20m |

## Chapter 18

## MAKING THE OTHER SIDE'S CASE

| PACKAGE | UP-FRONT |  | BONUS |  | EXPECTED GAINS |  | THE PIE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A | \$25m | I | \$0 | ! | \$5m + \$5m | , | \$10.0m |
| B | \$20m | I | \$15m | ' | \$9m + \$8.5m | ! | \$17.5m |
| C | \$20m | ' | \$10m | ' | \$6m + \$9m | ' | \$15.0m |
| D | \$17m | ' | \$15m | ' | \$6m + \$11.5m | I | \$17.5m |
| E | \$12m | ' | \$20m | ' | \$4m + \$16m | ' | \$20.0m |

## PART V

$$
\begin{aligned}
& \text { NEGOTIATION } \\
& \text { MECHANICS }
\end{aligned}
$$

## Chapter 20

## 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."

## Theodore Roosevelt's Confession of Faith <br> before the <br> Progressive National Convention

August 6, 1912

## Chapter 22

## OPENING MOVES

Make Precise Bids



