

Book review

Nalebuff, Barry (2022). *Split The Pie. A Radical New Way to Negotiate**

Rolf A.E. Mueller

*Dept. of Agricultural Economics, Christian-Albrechts-University, Kiel, Germany
raem@ag-ii.de*

Received January 2023, accepted January 2023, available online July 2023

ABSTRACT

The book is part of a bundle of tools for teaching the "split the pie" framework to students of negotiation. Nalebuff considers his "split the pie" framework for negotiations as one that is consistent, fair to both sides of a negotiation, and that reflects the equal power of negotiation partners. The other tools, which are assembled on a companion website (<https://www.splitthepiebook.com/>), include an online course, quizzes, videos, a negotiation bot, and slides for teachers.

Keywords: *Split the pie; negotiation; students.*

1 Introduction

"The propensity to truck, barter, and exchange one thing for another," the moral philosopher and economist Adam Smith (1976 [1776], p. 17) has taught us, "... is common to all men, and to be found in no other race of animals, which seem to know neither this nor any other species of contract." Smith supported his claim by pointing at absence of evidence: "Nobody ever saw a dog make a fair and deliberate exchange of one bone for another with another dog. Nobody ever saw one animal by its gestures and natural cries signify to another, this is mine, that yours; I am willing to give this for that."

Assuming that Smith is right and that we humans are truly the only exchanging species - zoologists may know better - this fact alone does not imply that we are particularly good at exchanging one thing for another. To be sure, we conduct most exchanges nearly unthinkingly and successfully. Thus, for most things we buy, we unhesitatingly pay the price the seller asks. But many of us will remember some attempted exchanges that failed because our negotiations with the other party failed to reach a mutual agreement; then there surely were instances where our negotiation partners had pulled us over the barrel, and yet other negotiations which were awkward, nerve-racking, or just plain tedious.

Smith has some advice, but not much, on how to negotiate effectively and satisfyingly non-routine economic exchanges. In particular, he insists that when we want something from someone, we should not appeal to their benevolence alone; rather we should appeal to other's "self-love," "and show them that it is for their own advantage to do for him what he requires of them." (Smith 1976 [1776], p. 18). This principle has become memetic with Smith's famous remark, "It is not from the benevolence of the butcher, the brewer, or the baker, that we expect our dinner, but from their regard for their own interest. We address ourselves, not to their humanity but to their self-love, and never talk to them of our own necessities but of their advantages" (Smith, 1976 [1776], p.18). That seems to be all that Smith had to say about the "how to" of negotiation. Apparently, there is room for guidebooks on negotiating.

2 Elements of Non-Routine Exchange Negotiations

Non-routine, voluntary exchange transactions are complex events that comprise several interrelated activities. Exchanges are always performed by two or more agents whose decisions about the exchange are interdependent. The agents are (nearly?) always humans who allocate scarce resources to pursue objectives - either their personal objectives or, if they negotiate vicariously, the objectives of their masters. Voluntary exchanges must satisfy an economic rationale; in particular, no party to an exchange transaction must be worse off from the exchange or else this party will rationally not agree to exchange. Moreover, the benefits from an exchange must be shared in a way that none of the parties considers morally repulsive. If an agreement is reached about an exchange proposition, the agents must be able to execute the transaction, or, if they are unable to do so, to compensate their exchange partners for the damages caused by their non-compliance. Finally, negotiated exchanges are social acts that are embedded in markets and in an enabling culture.

Opportunities for mutually beneficial and morally acceptable exchanges are not given to the agents by anyone; rather, they must be discovered or invented by at least one agent and communicated in negotiations to the other party, or parties, of the exchange. Such negotiations require that the agents share a common language, and are amenable to their respective negotiation rhetorics. Nalebuff focuses on exchange negotiations and he addresses only three elements of non-routine exchanges: (i) the economic rationale of exchanges, (ii) the division of the benefits from coordinated action, and (iii) the rhetoric of exchange negotiations.

3 The Economic Rationale of Exchanges

The economic rationale that Nalebuff suggests, is captured in this equation from p. 25 of the book:

$$\text{Pie} = \text{Total value with deal} - (\text{Value of A's BATNA} + \text{Value of B's BATNA}) \quad (1)$$

Nalebuff explains the equation: ""Total value with deal" is what the two parties, A and B, can do together. The BATNAs (Best Alternative To a Negotiated Agreement) are the actions A and B will pursue on their own if they don't reach a deal - in other words, each one's fall back option. The pie is how much more value is created by coming together compared to the largest value created when the parties pursue their best fallback options." The term "BATNA" has been popularized long ago by Fischer, Ury and Patton (1991). In economics, BATNA is called the opportunity costs of an exchange. Nalebuff doesn't explain why he uses the cute term "Pie" for the net gains from the exchange.

4 The Division of the Benefits from Coordinated Action

In exchanges the parties cooperate in order to create value that they could not create independently. The cooperators remain, however, to be independent agents and the added value from the exchange needs to be somehow divided between them. The need to divide the spoils from cooperation raises two issues: What is to be divided among the exchange parties, and in what proportion is it to be divided?

Equation (1) contains four terms that may, or may not, be divided among the exchange parties: the "Pie", the "Total value with deal," and the "BATNAs" of the agents. The BATNAs are the property of the agents; they are external boundary conditions to the exchange. There is nothing in them that can be taken from the owning party and divided between it and the other exchange party. Nalebuff forcefully argues that it is the "Pie" that is to be divided between the exchange parties, and not the "Total value with deal". His main arguments are two. First, as equation (1) indicates, the "Total value with deal" comprises two components, the BATNAs and the "Pie". If the "Total value with deal" is split among A and B into two parts by some proportions $\{s(A), s(B)\} < 1$ such that $s(A) + s(B) = 1$, we can't be assured that each party is compensated for its BATNA and the exchange may not be successfully concluded. The "Pie," in contrast, is net of the parties' BATNAs and no split of the "Pie" can invalidate the exchange because one of the party's BATNA is not compensated in full.

I illustrate the rule using the bare bones of an example discussed in more detail in the book. Two siblings, Anju and Bharat, want to invest some savings. Anju holds \$5,000 which she may invest at 1% interest in a 1-year certificate of deposit. Bharat holds \$20,000 which he may invest at 2% interest in a 1-year certificate of deposit. If the two pool their funds they can invest \$25,000 at 3% interest. How should they divide the \$750 interest on the joint investment?

Let's fill up equation (1) with:

BATNA(Anju): 1% interest on \$5000: \$50;

BATNA(Bharat): 2% interest on \$20,000: \$400;

Total value with deal: 3% interest on \$25,000: \$750;

Pie = Total Value of the Deal - (BATNA(Anju) + BATNA (Bharat)) = \$750 - \$400 - \$50 = \$300.

Nalebuff recommends that one and the same rule is used to divide the Pie among two negotiation agents: split the Pie evenly, **always**. He discusses, but rejects, alternative rules for splitting the Pie, such as various measures of proportionality or power. Nalebuff justifies his recommendation, "To create the pie takes both parties. By definition, what is jointly created is what neither side can create alone. When viewed from this perspective, neither side is more powerful. ... This is the simple but profound insight that leads to the claim that the pie should always be divided 50:50" (p. 19). Nalebuff's recommendation has considerable intuitive appeal. The rule is widespread. Languages have special expressions for it: "half-half, moitié moitié, kif kif, etc. And young children insist on this rule when splitting the returns from activities that they have undertaken cooperatively with another child (Tomasello 2016, pp. 70-72).

In the example the rule results in a payoff for Anju of $BATNA(Anju) + 1/2 \text{ Pie} = \$50 + \$150 = \200 ; whereas the payoff for Bharat is $BATNA(Bharat) + 1/2 \text{ Pie} = \$400 + \$150 = \550 .

Alternative divisions are possible. Had the "Total value with deal" been split equally, both, Anju and Bharat, would have received \$375 irrespective of their invested sums. In that case Bharat would have been better off not to team up with his sister.

Had the "Total value with deal" been split up in proportion to the sibling's invested sums, Anju would have received 3% of \$5,000 = \$150, and Bharat would have received 3% of \$20,000 = \$600; in this case, Anju would be worse off by \$50 compared to the "Split the Pie" rule, and Bharat would be better off by \$50.

5 Negotiation Rhetoric

Nalebuff recommends his readers to adopt an "allocentric" perspective towards their negotiation partners. The online Oxford English Dictionary knows what the word "allocentric" means in psychology: "Concentrating on or interested in external objects in themselves, rather than in regard to their relation or relevance to oneself. Frequently contrasted with autocentric." Nalebuff contrasts "allocentric" with "egocentric," and, an allocentric negotiator seems to be one that goes out of his way to understand what his other side in the negotiation wants, who imagines that he or she represents the other side, that, in the extreme, writes the victory speech of his other side in the negotiation.

6 The Book

The author and his readership

Barry Nalebuff is a professor of management in the Yale School of Management where he teaches negotiation, innovation, strategy, and game theory. The audience of the book is, in my mind, anyone who is regularly involved in exchange negotiations, and who is willing to adopt principles of negotiation that help to increase the value of negotiated exchanges and reduce the stress from dividing the gains from exchange among the negotiation parties.

The significance of "split the pie"

Nalebuff considers his "split the pie" framework for negotiations as one that is consistent, fair to both sides of a negotiation, and that reflects the equal power of negotiation partners. The book is part of a bundle of tools for teaching the "split the pie" framework to students of negotiation. The other tools, which are assembled on a companion website (<https://www.splitthepiebook.com/>), include an online course, quizzes, videos, a negotiation bot, and slides for teachers.

The contents of the book

The book is composed of five parts. Part I, "The Pie," introduces the "split the pie" principle and it demonstrates the application of this principle by means of stylized negotiations and of real cases of increasing complexity. The string of cases begins with a simple ultimatum game about how to divide a pizza, this is followed by a case where the question is how to split the proceeds from a joint investment, then comes the sale of a used car, the sale of a tea brand to Coca-Cola, and finally the allocation of damages caused by breaking a lease. To me the most interesting case in this suite was the case involving the sale of Nalebuff's tea brand to Coca-Cola. Nalebuff and one of his students had founded a company making and selling organic tea. The company was successful and Coca-Cola offered to buy it. Nalebuff relates how determining the pie and splitting it helped him to successfully conclude the sales negotiations with his much larger negotiation partner.

Part II, "Splitting the Cost," assembles negotiation cases where the issue is to divide the costs of a joint project or activity. The first chapter in this Part, Chapter 9, addresses a much older concern. The Babylonian Talmud, Nalebuff informs his readers, contains the oldest record of an application of the split-the-pie principle. The story is this: "Two persons appear before a court holding a garment. One says it's all mine and the other says half of it is mine. The first will receive three-quarters and the latter will receive one-quarter" (p. 75). Nalebuff then shows that the "Principle of the Divided Cloth" is the same as splitting the pie. The cost-sharing, or cost-dividing cases in Chapter 10 involve, (i) how to share among two travel cost sponsors the travel cost savings from a triangular trip instead of two two-way trips, (ii) the division of the costs of a landing strip among two airlines with different needs for strip lengths, (iii) and how to share the transport costs among ride sharing passengers.

In Part III, "Complex Negotiations," Nalebuff answers critics of his approach to negotiation and he deals with complications that arise in practical applications of the split-the-pie principle. In particular, Nalebuff addresses difficulties that arise when the valuations of the parties vary extremely widely. Next, he discusses how negotiators may cope with uncertainty about the pie, and what to do when one party is able to impose an ultimatum on the other party. Negotiations become really difficult when more than two parties negotiate. Finally, Nalebuff offers some advice about what to do when a party is used by the other(s) as a pawn - as is regularly the case in academic job applications which are intended to improve the conditions in the present job rather than to take up a new one.

Very early in Part IV of the book, "How to Grow the Pie," Nalebuff vents his frustration with narrow-minded, poor negotiators: "Poor negotiators see everything in terms of dividing the pie and frame everything as zero-sum. When the other side is getting more, you must be getting less. Good negotiators work to make the largest pie possible. That way each half is as big as possible" (p. 163). An important, but counter-intuitive negotiation strategy that Nalebuff strongly advocates, is "to give the other side what they want" (p. 163.). He explains, "The reason isn't to be nice or generous. If they get what they want from a deal, you will be able to get what it is that you want. ... What matters is making sure that the side that cares the most wins - and compensates the other side" (p. 163). The sage of Kirkcaldy certainly would agree. The four chapters in Part IV of the book elaborate the point.

Part V, "Negotiation Mechanics," is concerned with how to negotiate with people who have not read the book and who are not sold to the split-the-pie principle. This Part also covers issues such as which information to reveal and what is better to be kept hidden, how to prepare for a negotiation, and how to open a negotiation dance.

The book summarizes the main lessons in 45 takeaways. As is the nature of takeaways, they tend to be a bit stale compared to the freshly served course. But for someone in a real hurry, they may serve a purpose.

7 Recommendation

Nalebuff has resurrected an ancient principle for dividing contested resources and he has forged the ancient principle into one with a wide scope of application in negotiations. I recommend the book to all students of negotiation, and to their teachers too.

References

Fisher, R., Ury, W. and Patton, B. (1991). *Getting to yes: Negotiating agreement without giving in*. Boston: Houghton Mifflin 2nd. ed.

Smith, A. (1976 [1776]). *The wealth of nations. An inquiry into the nature and causes of the wealth of nations*. Chicago, IL: University of Chicago Press.

Tomasello, M. (2018). *A natural history of human morality*. Cambridge, London: Harvard University Press.