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Magazine Article

Negotiation

Rethinking Negotiation

by Barry Nalebuff and Adam Brandenburger

Rethinking

A smarter way to split the pie

Negotiation

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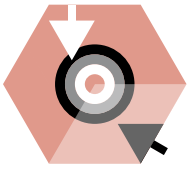

NEGOTIATION

Negotiation is stressful. A great deal is at stake: money, opportunity, time, relationships, reputations. Often that brings out the worst in people as they attempt to take advantage of the other side or try to look tough. So wouldn't we all be better off if there was a way to treat people fairly in a negotiation and get treated fairly in return? In the following pages we'll offer a simple, practical, field-tested approach that enables you to do just that.

The managerial bible on negotiation is Roger Fisher and William Ury's *Getting to Yes*. Published in 1981, it taught the world how to craft successful agreements by focusing on interests, not positions. But it left unresolved the messy problem of how to share the gains created. We propose that the answer lies in accurately identifying what's really at stake in a negotiation: the "pie," which we define as the *additional* value produced by an agreement to work together. It's the value *over and above* the sum of the two sides' best alternatives to a negotiated agreement, or BATNAs.

The notion of "dividing the pie" is commonplace in negotiations, but most people look at the wrong pie. The pie they typically have in their heads is the total value available to be split. Because of that, they argue over the wrong numbers and issues, taking positions that they think are reasonable but are in fact self-interested. When negotiators don't understand the pie correctly, it's much harder to reach agreement.

Our approach is based on one key principle: *The parties in a negotiation have an equal claim on the pie, so they should split it*. This is true regardless of what they can accomplish on their own. Because an even split fundamentally changes how people look at power, there will be resistance—especially from those who benefit under the status quo. However, that resistance can be overcome, as we will explain.

The pie framework will allow you to see a negotiation more clearly and more logically. It will help you make arguments that persuade others by highlighting inconsistencies in their approach. And though it sounds simple—perhaps too simple—we'll show how it applies in a variety of increasingly complicated scenarios. But first let's look at a very basic example that explains the pie logic.

POWER VERSUS FAIRNESS

Imagine that Pepe's will give Alice and Bob one of its famous 12-slice clam pizzas if they can agree on how to divide it up. If they can't, Pepe's will give them half a pie, but with four slices going to Alice and two to Bob. Most people adopt one of two perspectives regarding how Alice and Bob might negotiate an agreement.

The first is the power perspective. Alice has more power—her fallback of four slices is twice as big as Bob's—which

IDEA IN BRIEF

THE PROBLEM
People don't understand what's really at stake in a negotiation. Their misconceptions make it much harder to reach an agreement.

WHY IT HAPPENS
Negotiators focus on the total amount to be divided, not on the value created by an agreement. That leads to conflicting views on power and fairness.

THE SOLUTION
Recognize that the gains to be shared are the additional value the agreement creates over and above the sum of the two sides' best alternatives. This negotiation pie should be divided equally, because both sides are equally essential to creating it.

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suggests that she should get twice as much pizza: eight slices versus four for Bob. The second is the fairness perspective. In this scenario they divide the total in half: Each gets six slices.

Neither approach is truly defensible. The power perspective confuses power *outside* the negotiation with power *inside* it. While 8:4 seems like a reasonable split because it mimics the ratio of the fallbacks, there's no inherent reason why the outcome should be based on that ratio. Some might argue that Bob is in a weaker bargaining position since he will get fewer slices than Alice if there's no deal, but that argument misses the point. If they don't reach a deal, Alice will get nothing *more* than her four slices, just as Bob will get nothing more than his two. Effective negotiation is about beating your fallback. Alice and Bob need each other equally to do that and so are equally powerful. One can also see the weakness of the ratio approach by imagining a differently situated Bob who would get only crumbs if there were no deal. In that instance, mimicking the ratio of fallbacks would lead to an absurdly high proportion of slices going to Alice. Bob could reject that deal at almost no cost. Because Alice still couldn't beat her fallback without his agreement, Bob could hold out for more of the gains.

Splitting the total in two is an oversimplified view of fairness. Alice and Bob are not in equal positions; she has a better fallback. If 6:6 were really a viable approach to fairness, it should work for any set of fallbacks. It doesn't. Consider what would happen if Alice's fallback rose from four to seven slices while Bob's stayed at two. She'd reject the deal with the 6:6 split and keep her seven slices. We can see that as a rule for fairness, dividing the total value by two is fundamentally flawed, since it doesn't work for all fallbacks.

Our principle points to a new way to divide the 12 slices. If Alice and Bob reach an agreement, they'll have six more slices than they would without one. That increase is what we've defined as the negotiation pie: the additional value created by the deal. Both Alice and Bob are needed in equal measure to get it. Alice does not have a greater (or lesser) claim than Bob over it. Correctly understood, both power and fairness dictate that the six extra slices should be split evenly, with Alice keeping her fallback of four slices and Bob his fallback of two. This means Alice ends up with seven slices and Bob with five.

Simply reframing negotiations in terms of our definition of the pie is a big step forward. Without it, the norm is a simple power or fairness heuristic that varies with the situation

and who is making the proposal. The results are offers that appear fair to the side making the proposal but not to the other. Our approach provides one consistent framework that is fair to both sides and reflects their equal power.

In our pizza example, it's easy to see the pie. But how do you persuade someone to follow this logic? Our next case shows how.

FAIR INTERESTS?

Anju and Bharat were celebrating the holidays together. After dinner, Bharat turned to Anju for some financial advice. He couldn't decide how to invest his money. The stock market was volatile. So he was considering putting $20,000 into a one-year CD at 2% interest, which would net him $400.

Anju had the same problem. She had been planning to buy a one-year $5,000 CD. Because she had a smaller amount to invest, the bank was offering her only a 1% rate. While $50 in interest was better than nothing, it wasn't that much better.

The two quickly agreed that it made sense to pool their funds and invest together. With a bit of online searching, Anju found they could get a better rate—3%—if they purchased a $25,000 CD. Now they had to figure out how they would divide up the $750 interest. (See the exhibit "How Big Is the Pie?")

Bharat presented what he thought was a fair solution and what pretty much all our MBA students propose: Each of them would earn 3% on the money invested. Anju would get $150 in interest (3% on $5,000), while Bharat would get $600 (3% on $20,000). Bharat was dividing the $750 in proportion to the money invested, much like dividing the pizza slices in proportion to the fallbacks. This, he argued, was fair because the two were getting the same interest rate.

But was it fair? Anju saw things differently: Investing together would create $300 in value. The two of them were able to earn $450 before they decided to pool their funds; teaming up would increase that total to $750. Anju was equally responsible for the $300 increase. She wanted the $50 she could earn on her own plus half the extra value created by the deal, or $200 in total.

In response to the pie argument, Bharat pointed out that without his help, Anju would be stuck at $50. She should be happy to make $150. Anju was ready for this. Without her help, Bharat was stuck at $400 in interest. He was asking for $200 of the $300 increase, or two-thirds of the pie. He was the one being greedy.

At this point Bharat offered to split the difference between his proposal and hers and give Anju $175 in interest. Halfway between unfair and fair is still unfair, so Anju wasn't ready to give in. "Bharat," she said, "imagine for a moment that a $25,000 CD pays the same 2% interest rate as a $20,000 CD, so there's only $500 to divide. It would still make sense for us to invest together in that scenario, since it would lead to an extra $50 from getting 2% interest on my $5,000 contribution rather than 1%. But it wouldn't make sense for you under the scheme you proposed, where we would each earn 2% on the money invested. That means you would still get $400, and I would be going up from $50 to $100. I would be getting *all* the gain. That wouldn't be fair to you. Instead, I'd split the extra $50 with you." (See the exhibit "How Big Is the New Pie?")

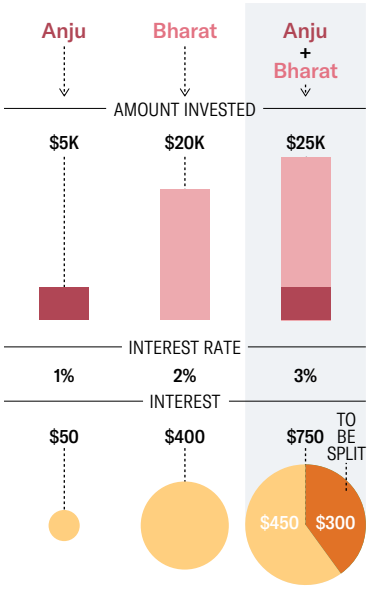
It was game over. Bharat realized that he couldn't ask to pick proportional division in one setting where it favored him but then reject it in another where it didn't.

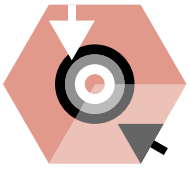
Bharat's original proposal, equal interest rates, sounds fair because it treats all the dollars involved as the same. But Bharat's dollars could earn 2% on their own, while Anju's could earn only 1%. Their dollars aren't really the same. Before the two sides figure out how to split the total, each side must first be compensated for what he or she could earn alone. Then the excess return should be divided equally. The $300 gain is equally reliant on the two parties, not proportionally reliant on the amounts contributed.

You can certainly change a deal outcome by finding an alternative partner. Bharat might team up with someone else

How Big Is the Pie?

This chart compares the interest payoffs **Anju** and **Bharat** could earn as they decide whether to invest together to buy a CD. Teaming up will create a negotiation pie of **$300**, which is the total interest on their combined investment ($750) less the sum of what they could have each earned investing separately ($450). This $300 materializes only if they agree to coinvest—so they have an equal claim on it and should split it.





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with a $5,000 investment and work out a better deal than he'd get with Anju, who couldn't as easily find a better deal with another $20,000 investor.

If, say, Chiragh will invest $5,000 with Bharat and take his 3% offer, then Bharat can earn $600 on his $20,000. That's an improvement for Bharat, but it could still make sense to do a deal with Anju—especially if Chiragh won't accept anything less than $150.

Anju would have to undercut Chiragh, but she could hold out for more than the $50 she'd earn on her own. If Bharat does the deal with Chiragh, he will earn $600, and Anju will earn $50 on her own, for a total of $650. This is $100 below the $750 Anju and Bharat could make together. That's the new diminished pie. Anju could offer to split that $100 with Bharat, collecting $100 ($50 on top of her $50 fallback) while he collects $650.

Bringing other parties into a negotiation changes the pie and what each side ends up with. If Anju and Bharat are the only two people who can come together to make the deal possible, the pie is $300, and Anju, even with the worse fallback, is equally entitled to half. If there are more people present, it's a new negotiation with different fallbacks and a smaller pie, but Anju and Bharat still split the pie.

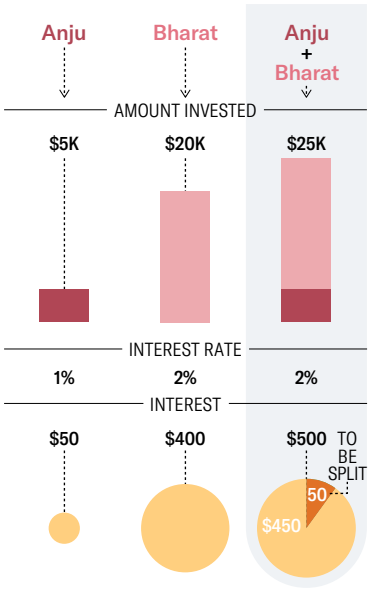
THE CONTRIBUTION TRAP

Anju and Bharat's story highlights a critical issue in negotiations: People have a hard time seeing equality when parties bring what look like very different contributions to the table. And often people don't appreciate that they're getting less than half the pie. Our next two examples look at negotiations where there is a presumptive split that is uneven but should not be.

Buying an apartment. In the city of New York, a person taking out a mortgage pays a 1.8% recording tax on mortgages below $500,000 and 1.925% on mortgages at or above $500,000. That ends up being a lot of money. But the tax code makes it possible to reduce the bill by doing a CEMA—a consolidation, extension, and modification agreement. Under a CEMA, the buyer takes responsibility for the seller's mortgage and deducts the mortgage amount from the sales price. This decreases both the buyer's recording tax and the New York state transfer tax the seller owes, which is 0.4% of the price.

How Big Is the New Pie?

Let's say that **Anju** and **Bharat** can combine their funds to buy a $25,000 CD at 2%. In this scenario the interest rate is the same one Bharat would get if he invested alone. Buying the CD together would still create additional value because Anju's funds would earn a higher rate. The total interest would increase from $450 to $500; the additional **$50** is the negotiation pie that Anju and Bharat should split equally.



Consider a case where the buyer is planning to take out a $1 million mortgage and the seller has an existing mortgage of $600,000. If the buyer were to take over the seller's mortgage, the recording tax would then apply only to the new part of the mortgage—$400,000—and the tax would fall from $19,250 to $7,200, saving just over $12,000. Meanwhile, with the new, lower sales price, the seller would save $2,400 in transfer tax.

All told the CEMA would save $14,400 in taxes. That is the pie. Yet few buyers and sellers see themselves contributing equally to it. The buyer thinks she is creating $12,000 in savings while the seller sees himself creating $2,400. Consequently, the seller accepts an uneven split according to the default tax savings for each side: $12,000 to $2,400, or 5:1.

Sellers accept the default split all the time. They shouldn't. Both parties are equally responsible for the tax savings. The CEMA works only if the seller has an existing mortgage. The buyer has to get her lender to agree and the seller has to give permission to his lender too. The savings should be split 50:50, or $7,200 to each. Savvy sellers know to ask for a payment that divides the pie evenly.

A merger of equals. In standard merger-of-equals agreements, the parties split synergy gains in proportion to their premerger sizes. Here's an example loosely based on an actual proposed merger. Two industry giants, Adelaide and Brisbane, could achieve large cost savings by consolidating their overlapping operations. Under the status quo, Adelaide has a market capitalization of $240 billion, and Brisbane's is $160 billion. If they merge in a stock-for-stock deal, their combined market capitalization will be $430 billion, with the extra $30 billion representing the joint cost savings.

Our approach still applies even when the size of the pie is uncertain, the parties see very different pies, or they have reputations at stake.

In a merger of equals, each side retains its proportionate share in the combined enterprise. Since the size ratio of the companies is 60:40, Adelaide will end up with 60% of the new entity and thus 60% of the $30 billion, or $18 billion. Brisbane will get the other 40%, or $12 billion. Adelaide will garner 50% more of the gains because it was 50% larger.

Many professionals think this is a perfectly reasonable outcome. We disagree. It's true that if Adelaide walks away, there will be no deal and the full $30 billion will be lost. But it's equally true that if Brisbane walks away, there will be no deal and the full $30 billion would be lost. There is no sense in which Adelaide is more important to realizing the cost savings. Since their contributions are equal, the split of the pie should be too: Each should get $15 billion.

One solution would be for Adelaide to pay $3 billion up front to the Brisbane shareholders. That, added to their 40% of whatever gains arise from the merger (which should be $12 billion), would bring their total to $15 billion, the same amount that Adelaide shareholders would expect from their 60% of the gains after the $3 billion payment. There's still a risk that the gains won't come out exactly as predicted, but the risk is limited to 10% of the total (the $3 billion payment). That isn't zero risk, but it is manageable.

However, to determine the right payment, the two sides must have a similar view of the potential pie. And while they could agree in principle that their contributions are equal, they might still disagree about the size of the pie. With mergers and many other kinds of deals, correctly calculating the pie means knowing what the two sides can accomplish together and on their own, which may require them to share confidential information.

If the relevant numbers in a deal are hidden or hard to confirm, it creates the potential for bluffing and misrepresentation. In some of these situations, especially mergers, the parties may choose to reveal the numbers. All the facts were on the table in the actual negotiation on which the Adelaide-Brisbane example is based, a proposed merger between the mining giants BHP and Rio Tinto. Far from trying to keep its estimate of potential synergies hidden, BHP publicized it. The company wanted to provide shareholders, regulators, and the public with its rationale for the merger. The pie was relatively easy to estimate since there were no comparable options to create synergies with other firms. The fallback values were just the two companies' valuations prior to the merger. Ultimately, though, there was no pie because the European Commission blocked the deal.

BUT WHAT IF...

So far, we've focused on deals where the parties agree on how to value the pie and aren't looking beyond the one deal. Our approach still applies even when the size of the pie is uncertain, one side cares more about the pie, or the parties have reputations at stake.

The size of the pie is uncertain. When a large consumer products company, say Coca-Cola, partners with a start-up, it can use its buying power to greatly reduce the cost of packaging. Let's assume Coke can cut the start-up's cost for a plastic bottle from 19 cents to 11 cents. For a start-up with sales of 100 million bottles a year, the savings would be $8 million annually. But if the $8 million pie were split in proportion to firm revenues, the result would be quite lopsided. Coke's share could well be 2,000 times as big as the start-up's. In that case, Coke would get $7,996,000 and the start-up $4,000!

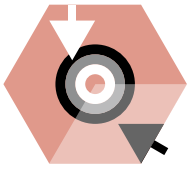
Who is more responsible for those savings? Coke is bringing its vast purchasing power to the table, but is it contributing more than the start-up?

No. Coke's clout is essential, but it needs the start-up's customers because it has already harvested all the savings on its own bottles. For Coke to create $8 million in additional savings, it must find someone who is paying too much for bottles and needs a lot of them. It's only by putting Coke's purchasing power together with the start-up's customers that $8 million can be saved. The two sides are equally essential, and therefore the savings should be split evenly: $4 million to each.

But this ignores the uncertainty. The size of the pie is an estimate—and Coke wouldn't want to pay out $4 million only to discover the start-up's sales are 50 million bottles. A good solution here is to split the pie as it's being created. If Coke provides the bottles at 15 cents each, rather than 11 cents, then Coke and the start-up each gain 4 cents a bottle. This way they evenly split the pie whatever size it turns out to be.

People often resist the idea of equal power when one party is a great deal bigger than the other. Many believe that the larger party is better positioned to find an alternative

Many believe that the larger party is better positioned to find an alternative partner. That's not always the case.



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partner. That's not always the case. Coke could certainly find another start-up, but the start-up could just as easily approach Pepsi, which might offer it a deal at 15 cents a bottle, improving the start-up's fallback from 19 cents a bottle to 15 cents. Coke could still bring value to the table by offering 11 cents a bottle, but the pie would shrink from $8 million to $4 million since the additional savings would be only 4 cents a bottle on 100 million bottles. In this case the pie should again be split 50:50. If the start-up's fallback is now 15 cents a bottle, it should get $2 million or pay 13 cents a bottle to Coke. The start-up does even better.

One side cares more about the pie. The biggest objection people have to our approach is this: What if one party cares more about the outcome than the other?

Let's go back to Coke. When a start-up is negotiating with a large established firm, the money involved will be life changing (if not lifesaving) for the start-up but not material to the big player. The large player will use that asymmetry to argue that the small player should be happy to accept less than half the pie, since even a modest slice creates a lot of value for it. Such thinking underlies the view that the larger party has more power in a negotiation. The larger player says, "You need this deal much more than we do," and the smaller side goes along.

We'll put some numbers on the Coke and start-up deal to illustrate the point. Let's say they're still negotiating over $8 million in savings, but the start-up cares seven times as much about each dollar. Coke will argue that giving $1 million of the total savings to the start-up and keeping $7 million for itself leads both parties to achieve the same effective gain.

But any argument the larger party can make about getting more can be flipped into one for giving it less. If Coke contends it should get more because it cares less, the start-up can reply, "If you care so little, give us $7 million of the $8 million. Money matters a lot more to us, and you would hardly miss it. The $1 million we are giving up feels like $7 million. So that's an equal sacrifice given how much more each dollar is worth to us."

Our solution—$4 million to each—cuts through this impasse. The split doesn't depend on how much either side cares. The two sides value the $4 million differently but can agree that each is getting half the pie as it sees it. Each is halfway between getting its worst outcome (no savings) and its best outcome (all the savings). Even though the start-up cares more, it doesn't end up with less.

A reputation is at stake. Many negotiations are of a one-off nature, but there are clearly situations where one or both sides want to develop a reputation for how they negotiate. Even if Coca-Cola won't negotiate with the start-up again, it may care about how it's perceived by other ventures it might do future deals with.

We find that the concern over reputation generally reinforces equal-share outcomes. A party might be willing to agree to an unfavorable split in a one-off negotiation. But if it's likely to be involved in similar future negotiations, it will not accept a disadvantageous deal, because it won't want to be seen as an easy mark. In other circumstances one party might have the opportunity to end up with more than half the pie but refrain from seizing it out of concern that future potential deal partners wouldn't want to do business with it.

WE FULLY APPRECIATE that most people don't negotiate in the manner we've discussed. We know our approach is novel. The pie framework reveals the otherwise-hidden equality of power. It will allow you to negotiate more logically and more clearly and make arguments that persuade others. It works whenever there's an opportunity to cooperate with another party to maximize the value you create together. It also works when negotiating with people who don't care about fairness. They will have no good counterarguments against the pie principle, and refusing to accept your case for equal division will paint them as inconsistent or intransigent and may cost them the deal. But you will have to hold firmly to this principle.

Because the pie approach is fair, it eliminates the traditional posturing that happens in negotiations. By resolving the issue of division, it frees parties to focus their energies on creating the biggest possible pie. **HBR Reprint** R2106H

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