

# The Mathematical Advantage of Aggressive Bidding

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No matter what bidding system you use, or how good you are, there arise some hands that offer a 50/50 chance of making game. Rather than agonize over each one as it occurs (and risk guessing wrong more often than not) it would seem to be a distinct advantage to take a consistent stand on whether or not to bid *all* close games. The question of which course to take can be answered by analyzing the mathematics of scoring.

For example, assume two hands where the odds of making game are exactly 50%. To simplify the discussion, let us further assume that the choice lies between passing three spades and bidding on to four (game). The first hand makes four; the second makes three (or goes down one, if you bid four).

Using duplicate values for part score (50 points), non-vulnerable game (300) and vulnerable game (500), we can easily construct a table for the relative value of bidding game vs. part score at various vulnerability conditions.

## Stopping in Part Score (Any Vulnerability)

Bid	Made	Score
3	4	170
3	3	<u>140</u>
		<b>310</b>

## Bidding Game

Bid	Made	Score
3	4	170
3	3	<u>140</u>
		<b>310</b>

At any vulnerability, if you stop in part score on both hands, the score for the two hands totals 310 points (140 + 170). If we compare this total to the score you would obtain by bidding game on both hands, we can derive odds for bidding game:

- **Not Vulnerable** - Bidding game on both hands results in a net score of 370 points (420-50), 60 points more than the part scores. Thus, the odds in favor of bidding game are 370 to 310, or a little over 54%.
- **Vulnerable** - When vulnerable, the odds are even better for the aggressive pair. Now, bidding game both times nets 520 points (620-100) and yields a net gain of 210 points! The odds for bidding the game increase to 520 to 310, or almost 63%!

Of course, this table does not take into account unfavorable factors which may cause the contract to be set more than one trick or doubled which change the odds somewhat, but it is clear that, mathematically at least, it pays to bid aggressively.

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## How Should These Odds Affect Your Bidding?

- **Rubber bridge or IMPs (team games):** it is clear - *be aggressive!* The odds are in your favor to bid on to game. In fact, it is mathematically sound to bid 40% games when you are vulnerable and slightly less than 50% games when you are not.
- **Matchpoints:** Sadly, these simple calculations do not apply to matchpoints. In matchpointed events (or board-a-match team events), you win a point against every opponent you beat and lose a point against everyone who beats you. Thus, the mathematical odds of a 50% game remain 50/50. However, don't lose sight of the fact that defense is generally agreed to be the *most difficult* phase of the game. Since you're declaring and the enemy is defending, you have an inherent advantage. It's not possible to quantify this edge as simply as above, but you should make it a policy to bid close games.