



MIT 15.S50 LECTURE 6

Monday, January 28th, 2013



BET SIZING

- Many people end up in situations where they know they should be betting, but aren't sure how much
- As default most people think about the wrong factors when determining how much to bet
- Over this lecture I'll be discussing the factors that you should think about when figuring out your bet sizing



THE 5 FACTORS WE'LL DISCUSS TODAY

- 1) How Large is the Pot
- 2) What do we have
 - A) What is our hand
 - B) What is on the board
- 3) How large is our stack(stack to pot ratio)
- 4) What our opponent likely has
- 5) What our opponent thinks we have



1) HOW MUCH IS IN THE POT

- This is arguably the most important factor, fortunately it's the simplest
- Keep track of the pot size, and think of all betting in terms relative terms rather than absolute terms
- Many players always bet the exact same % of the pot in similar situations
- This has some pros and some cons



THE PROS AND CONS TO BETTING THE SAME %

- Betting different %'s of the pot gives away information
- Poker is a game of information and as a result it usually makes sense to give away as little as possible as early in the hand as possible
- That said, everyone playing knows what the flop is and what stacks are, therefore paying attention to other factors and catering your bet size to those gives you an advantage
- Some situations call for very large or very small bets which the typical “1/2 pot bettor” may not properly capitalize on



2) WHAT WE HAVE

- The earlier we are in the hand, the more our opponents can capitalize off of information we give them
- Therefore the earlier we are in the hand, the more we should base our bet sizing off of information our opponent already has
- As a result 2b) What's on the board should be a much more relevant factor for flop bet sizes than what you cards are



2B) ILLUSTRATION OF LARGER BETS

- Here with 77 we get about the most coordinated flop possible
- It's a board that the overwhelming majority of the time at least one opponent will connect well with
- Any card T, 9, 8 is a pair, any 7/J is a straight draw, heart is a flush draw and either opponent is likely to have multiple of these cards(TT, JT with a heart etc)
- As a result on this board, since all opponents have some equity, betting a larger amount with the hands we're continuing with encourages them folding AJ, K9 etc



2B) ILLUSTRATION OF SMALLER BETS

- Here with JJ generally whoever had the better hand preflop will have the better hand postflop(unless one person has a 2 or 8 which is rare)
- In this situation letting him see a turn cheap isn't that important
- As a result we bet small(under 30% of the pot)



2B) SUMMARY

- In general the more coordinated the board is, the closer hands run as far as hot and cold equities and the more incentive you have to win the pot right now
- Since you have more incentive to win the pot now, a larger bet encourages that and you either 1) win the pot now or 2) attempt to push an equity advantage with a strong range of hands



3) HOW MUCH IS IN OUR STACK

- Again- similar to pot size this should all be thought about relatively
 - In terms of how many times the pot we have
- As stacks get shorter and shorter, its valuable to think about how many bets you'll have to make to get allin or at least threaten going allin
- As stacks get deeper, larger bets take larger advantage of your positional advantage/information advantage



3) HOW MUCH IS IN OUR STACK- LARGE STACK TO POT RATIO

- Here Honest Pete calls and again we get a very coordinated flop. Here he can have many strong hands as can we. With 10x the pot, he will have the advantage throughout the whole hand, so it makes sense for us to bet relatively large with the hands we do bet
- After getting called we still have over 4x pot. If I bet full pot on turn and river we still would not get allin
- Good turn card for me but still a vulnerable hand so a larger bet makes sense again
- River he'll have many missed hands or hands he may want to turn into a bluff



3) HOW MUCH IS IN OUR STACK- LOW STACK TO POT RATIO

- On the flop we only have 1.8x the pot.
 - If we want to bet this as 2 streets, we can bet something like 25% on flop, 100% on turn, or 40% on flop and 75% on turn
 - If we want to bet this as 3 streets, we can do something like 25%, 25%, 50%
- One of the reasons we have this flexibility is that on such an uncoordinated board, we are not very vulnerable.
- On the turn we bet 1/3 pot which in hindsight is unnecessarily big, something like 9k will be as effective and cheaper when bluffing



4) WHAT OUR OPPONENT HAS

- This is the toughest of the 5 to analyze and essentially why poker is interesting
- If you have the answer to this question, you should be the one teaching me!
- In poker we use all the information we're given in an attempt to make the best deductions about our opponent's hand strength



4) WHAT WE THINK OUR OPPONENT HAS- MOSTLY NOT MUCH ON THE FLOP

- Tricky opponent
- I only have 16.5BB and he would reraise all pocket pairs(beside occasionally trapping AA/KK) and most strong broadways
- Calling generally represents medium broadways like KQ, AJ, AT, KJ, QJs KT's etc
- Cards T, J, Q, K are most relevant on the flop
- 2 T's on the flop highly discounts the number of Tx combo's he can have
- So we bet only 1/3 of the pot and get called



4) WHAT WE THINK OUR OPPONENT HAS- ON THE TURN, SOMETIMES HUGE, SOMETIMES NOT MUCH

- He calls which looks like he's trying to say he has 55+ or Tx
 - 55+ is almost never, 4x is literally never, Tx is somewhat likely-> probably a mixture of Tx and random calls
- When the T comes on the turn it highly changes the ratio of strong hands to bluffs
 - 1: 1 -> 1: 2 ->50% weak to 66.7% weak
 - 3:1 ->1.5-1-> 25% weak to 40% weak
 - 1:3 -> 1:6 ->66.7% weak to 83.3% weak
- As a result we bet extremely small again threatening a 2/3 pot river shove



4) WHAT WE THINK OUR OPPONENT HAS- LIKELY SOMETHING

- Good opponent on the tighter side
- Preflop can make strong deductions about hand strength (TT-66, AQ, AJ, KQ, ATs KJs, QJs and discounted JJ+ approximately)
- On the flop just calling eliminates many KQ, AJ, 66 type hands, and discounts some 99,77, KK+, flush draw type hands
 - So most likely hands are QQ-TT, 88, AhQ type of hands



WHAT WE THINK OUR OPPONENT HAS- ALWAYS SOMETHING

- This 8h is one of the absolute best cards in the deck for the types of hands my opponent can have
 - 88 is a set now (but only $\frac{1}{2}$ as likely)
 - TT/JJ have higher equity
 - AhQ has a flush draw
 - I win 0% against flush combos
- Despite all that I want to choose a bet that gets the most money in when called but also gives the illusion of some fold equity to prevent AhQ from folding so elected for a little over $\frac{1}{2}$ pot leaving roughly $\frac{1}{2}$ pot on river



5) WHAT OUR OPPONENT THINKS WE HAVE

- Our opponent is usually going through the same type thought process as us
 - At least in theory, in practice many people are more erratic/ less analytical
- Therefore paying attention to what types of things he might think we can do with what types of hands will give us an advantage
- I'll go over one hand where I try to represent a weaker hand, one where I represent a stronger hand based on perceptions



5) WHAT OUR OPPONENT THINKS WE HAVE

- Here after reraising him and getting called, its clear we have a somewhat strong hand(usually JJ+,AK, at loosest maybe 99+,AQ+)
- All of those hands hit on that board but combinatorially AK is the most likely(16 combos of AK vs 15 of AA, KK, QQ combined)
- On this board AK is good enough that we should be getting allin with it and betting small doesn't make much sense, so betting allin for the full pot even with a hand this strong puts him in the toughest situations



5) WHAT OUR OPPONENT THINKS WE HAVE- VERY STRONG OR VERY WEAK

- Here my opponent is another good thinking player from a recent live tournament
- On the flop he has mostly KQ-KT, 55-TT type hands, flush draws, Axx and some flush draws
- Betting very large and threatening a large bet puts the most substantial amount of pressure on him
- Here his range is very capped and he knows I can play all AK+ type hands this way

