



# **MIT 15.S50 LECTURE 2**

**Friday, January 20<sup>th</sup>, 2012**

LEAVE TABLE  
VIEW LOBBY

UTG+1  
\$0

UTG  
\$7554

BB  
\$8455

SB  
\$4036

BTN  
\$4300

CO  
\$2443

HJ  
\$8654

HJ-1  
\$16155

HJ-2  
\$6685

\$5878

\$800

\$400

\$900

4♣ 4♠ 3♠

Chat Notes Stats Info

Last Action  
SB folds



## REMEMBER THIS RULE OF THUMB?

- >50BB: raise to 3x (3BB)
- 25-50BB: raise to 2.5x
- 15-25BB: raise to 2x
- <15BB: just go all-in or fold. Even though 15BB seems like a lot, it really isn't! Even if you raise to 2x, putting in 2 of your last 15 BB's is such a big portion of your stack that you can't fold when someone re-raises anyway. So you might as well just go all-in.
- Don't be afraid to do this! This is **beginner mistake #2**.



# TOO MUCH OF THIS...





AND THIS...



# NOT ENOUGH OF THIS...





AND THIS...



## BEGINNER MISTAKE #2...

- When your effective stack size is  $<15\text{BB}$ , you only have **TWO** options: go all-in or fold! No calling. No raising to 2BB or 3BB or whatever.





# WHY IS THIS SO BAD



# BUT THIS OKAY?





LEAVE TABLE  
VIEW LOBBY

All In

HJ-1  
\$7900

HJ  
\$7900

CO  
\$7900

BTN  
\$7900

SB  
\$7500

BB  
\$7100

UTG  
\$7900

UTG+1  
\$6300

\$1600

\$7900

\$800

\$400

\$900

Chat  
Notes  
Stats  
Info

Last Action  
HJ-2 is All-in





# ANALYSIS

- Need to call  $\sim 8\text{BB}$  to win a total pot of  $\sim 22.5\text{BB}$   
( $10+10+1+0.5+1$ )
- Only need 36% equity
- You definitely have this with ATcc, so you're basically committed
- Your equity against 66+, AJ+, KQ is 39%  
(Pokerstove)



# THE POINT?

- Recall the “Sweet Spot” Theory:
  - The reason for raising small is to ESCAPE when you have a bad hand. ATs is definitely a “bad hand” in your range: in fact, it’s the worst hand in your range of 77+, ATs+, AJo+, KQ.
  - The reason for raising big is to disallow the Blinds to have such good odds to call and defend against you stealing.
- But we just proved that you CANNOT ESCAPE anyway!
- So you might as well raise AS BIG AS POSSIBLE ie. all-in.



# THE SECOND CASE...





## ANALYSIS

- Need to call  $\sim 17\text{BB}$  to win a total pot of  $\sim 40.5\text{BB}$  ( $19+19+1+0.5+1$ )
- Need 42% equity
- You definitely don't have this, so you can “escape” and fold



## GENERAL “ESCAPING RULE”

- If you put  $1/5$  or more of your effective stack in preflop, then NEVER FOLD the hand preflop. You put in too big a portion of your stack, and too much can change on the flop, for you to ever fold.
- Otherwise, if you put in less than  $1/5$ , you're usually better off folding the hands at the bottom of your range (ie. your “bad hands”).
- When you have 12BB's, technically you could raise to 2BB and “escape” from a re-raise, but it is **still better to just go all-in instead**, whenever you have  $<15\text{BB's}$ .



[illegible]



LEAVE TABLE  
VIEW LOBBY

UTG+1  
\$38300

UTG  
\$7900

BB  
\$7100

SB  
\$7500

BTN  
\$7900

CO  
\$7900

HJ  
\$7900

HJ-1  
\$7900

HJ-2  
\$0

Community Cards: A♣, 10♣, 5♣

Pot: \$900

Chat: BB folds



## CLARIFICATION

- Your **effective stack size** is almost always the same as your **stack size**. It only isn't when you are the big stack at the table by a lot. Sorry, I may have confused a lot of people by making these two terms seem like completely different numbers, when they are always very similar numbers.
- We use this term mostly so that the two previous situations are equivalent, which they should be.



OF COURSE, HERE I CAN FOLD.





## SIZING WHEN RE-RAISING PREFLOP

- When you're "opening" preflop, you don't want to raise too small (or limp), and give the Blinds a cheap (or free) look at the flop.
- The same principle applies when you're re-raising the preflop raiser.





[illegible]

# GENERAL RULE FOR RE-RAISING PREFLOP

- Raise to 2.5 times the size of the first raise
  - Can go a bit smaller if the effective stack size is smaller
  - Can go a bit smaller if your range is exceptionally strong (eg. QQ+)
- Compare this to the General Rule for Raising Preflop
- Raise to 3 times the size of the big blind
  - Can go a bit smaller if the effective stack size is smaller
  - Can go a bit smaller if your range is exceptionally strong (eg. Raising from under-the-gun)





# DON'T FORGET THE ESCAPING RULE!

- If raising to 2.5 times the size of the first raise puts in 20% of your stack preflop, then just go all-in instead.



=(



[illegible]

## BACK TO BEGINNER MISTAKE #1...

- If the pot hasn't been raised yet, you only have **TWO** options: raise (this includes going all-in) or fold! NO calling.
- Exception: When you're in the Small Blind.
- Examples...





# BAD!



OKAY.





# BAD!





OKAY. (95HH TOO WEAK THOUGH)



# WHY IS CALLING A PREFLOP RAISE OKAY?

- Recall that I said you should never just call preflop, if the pot hasn't been raised yet.
- But, if the pot HAS been raised, like in the previous example, then just calling is okay.
- Why is this?
- The big blind can put in another raise preflop when he has a good hand, even if you limp.
- The first preflop raiser does NOT get to put in another raise preflop if you don't re-raise him.
- While limping has NO advantages, calling a preflop raise has SOME advantages. So it is sometimes a viable option.



BB: “NO CHEAP FLOP FOR YOU!”







# DISASTER!



# HOW TO DEAL WITH CALLERS?

- Even though I've explained why you should never be just calling when the pot has not been raised, people will inevitably still make this mistake.
- We call such people “limpers”, usually a derogatory term.
- Either way, you need to be prepared to punish such people.
- But, you need to be aware that you should change your raise size.





IF YOU FOLLOW THE “RAISE TO 3BB” RULE,  
YOU’RE GIVING THE LIMPERS TOO GOOD A  
PRICE TO CALL!



NOT JUST 3BB...3BB+1BB FOR EACH  
LIMPER = 6BB





ONCE AGAIN, SIZING CAN COME DOWN A BIT IF IT'S SHALLOWER, AND/OR YOU HAVE A BETTER HAND





# BAD...DON'T FORGET THE ESCAPING RULE!



‘ATTA BOY.





# ALRIGHT, LET'S TALK ABOUT SOME POSTFLOP PLAY





NOTE THAT THE RAISE SIZE (2.5BB) IS  
CORRECT, SINCE WE HAVE 40BB



# BOTH BLINDS CALL.





[illegible]



[VIEW LOBBY](#)

UTG+1
\$2000

HJ-2
\$2000

HJ-1
\$1875

UTG  
\$2000

## Check

SB  
1875

CO
\$2000

HJ
\$2000

BTN  
\$2000

Chat Notes Stats Info

### Last Action

BB checks

## CHECKING TO THE PREFLOP RAISER

- This is conventional. The SB and BB, regardless of what cards they have, will usually check to the preflop raiser.
- Why is this?
- The SB and BB cannot really threaten to ever have a big pair on this flop, because if they had AA, they would've re-raised preflop.
- On the other hand, HJ-1 could potentially have AA in this situation.
- So if the SB and BB bet, they leave themselves susceptible to get raised by HJ-1, and they'll usually have to fold, since HJ-1 could have/threaten AA while they can't.



# HOW BIG TO BET?





## SAME “SWEET SPOT” PRINCIPLES...

- Betting small always allows your opponents to call profitably.
- Betting big risks a lot.
- Good rule of thumb: bet **half the pot** (regardless of whether it's the flop, turn, or river)



LEAVE TABLE  
VIEW LOBBY

UTG+1  
\$2000

UTG  
\$2000

BB  
\$1875

SB  
\$1525

CO  
\$2000

BTN  
\$2000

HJ  
\$2000

HJ-1  
\$1825

9 of Clubs, 2 of Diamonds, 8 of Spades

Pot: \$375

Blinds: \$2000/\$350

HJ-1 Hand: A♦, Q♣

Chat | Notes | Stats | Info

Last Action  
SB raises to 350\$



## “CHECK-RAISING”

- Betting small never forces your opponent to fold, but even worse, it gives them the opportunity to check-raise!
- You just denied yourself the chance to see a turn card and potentially hit one of your 6 cards.
- Remember – just because they checked doesn't mean they have bad hands! They're ALWAYS checking regardless of what they have, for reasons I described earlier.





IN THIS SITUATION, BOTH BETTING 200  
AND CHECKING ARE FINE PLAYS



# COMPARISON

- Advantages of Betting 200:

- Don't give some "garbage" like KJ a chance to outdraw you

- Advantages of Checking:

- See the turn card for sure; no risk of getting check-raised.
- When you bet, you are only called by hands that beat you.



BUT IF WE CHANGE OUR ACE TO A KING...





# COMPARISON

- Advantages of Betting 200:
  - Don't give some “garbage” like KJ a chance to outdraw you.
  - Get hands like AJ, A7 to fold!
- Advantages of Checking:
  - See the turn card for sure; no risk of getting check-raised.
- The correct play is **clearly to bet 200**.



## NOW CHANGE OUR KING TO A QUEEN...



# COMPARISON

- Advantages of Betting 200:
  - Don't give some “garbage” like KJ a chance to outdraw you.
  - Get worse hands like 55, T9, A8 to call you!
- Advantages of Checking:
  - Essentially none.
- The correct play is **clearly to bet 200**.





# FUNDAMENTAL THEOREM OF POKER

- With the top hands in your range, you should bet, to get them to call worse (but still good) hands
- With the bottom hands in your range, you should bet, to get them to fold better (but still weakish) hands
- With the middle hands in your range, you should check, because by betting you fold out all weaker hands and keep in all stronger hands



AQ IS STILL A BIT WEAK ON THAT FLOP, SO I SAID BETTING IS FINE. BUT SAY WITH 77, YOU SHOULD DEFINITELY CHECK.



A screenshot of a Texas Hold'em poker game interface. The game is in progress on a green felt table. The community cards are the 9 of Hearts, 8 of Hearts, and 7 of Hearts. The pot is \$375, consisting of a 100 chip and a 25 chip. The dealer button (D) is at the bottom center. The players and their stacks are:

- UTG: \$2000
- UTG+1: \$2000
- HJ-1: \$1875 (Holding Ace of Spades, Queen of Clubs)
- HJ: \$2000
- CO: \$2000
- BTN: \$2000
- SB: \$1875

The action is currently on the SB player, who has chosen to "Check". The "Last Action" log at the bottom right shows "BB checks". The interface includes a chat window at the bottom left with tabs for Chat, Notes, Stats, and Info. In the top right corner, there are buttons for "LEAVE TABLE" and "VIEW LOBBY".





DON'T TRY TO BLUFF  $\geq 3$  PEOPLE, EVEN IF  
THE FLOP LOOKS SAFE



# CHECK-POINT

- We just learned:
  - General theory of when to bet postflop.
  - How big you should be betting postflop (half pot).
- Now let's look a bit at calling bets postflop...too many people are calling with hands way too weak!
- Unless your opponent bets extremely small (which they should not do), you should fold MOST of your hands to a half-pot bet.



# EVERYONE FOLDS TO BTN, WHO RAISES TO 125





# SB FOLDS, BB CALLS 75



# BB CHECKS FLOP





BTN BETS HALF-POT. IF YOU'VE GOT NO  
PAIR NO DRAW, JUST **FOLD**...





# FOLD (ACE HIGH ON SCARY BOARD)



# FOLD (ACE-HIGH ON SCARY BOARD)





## FOLD (BOTTOM PAIR ON 3-HEART BOARD)





# FOLD (JUST A 4-OUT STRAIGHT DRAW “GUTSHOT”)



# FOLD (8-OUT STRAIGHT DRAW, BUT THOSE OUTS ALL SUCK)





# FOLD (SMALL PAIR ON SCARY BOARD)





## IN THESE “FOLD” SPOTS, WHAT IF I THINK BLUFF-RAISING WILL WORK?

- When you are bluffing on the flop, it's usually because you have some kind of draw, that has a small % chance of turning into a very good hand
- In all of the above hands, we basically had complete junk, without any draws, so we should ALWAYS just fold



# CALL (ACE-HIGH ON PAIRED BOARD)



# CALL (BOTTOM PAIR ON SAFE BOARD)





## CALL (SECOND PAIR ON SCARY BOARD)



# CALL (SECOND PAIR ON SAFE BOARD)





# CALL (GOOD PAIR)





# CALL (TOP PAIR WEAK KICKER)



# CALL (TOP PAIR TOP KICKER ON SCARY BOARD)





# CALL (SMALL OVERPAIR)





## NOTE

- NONE of these “Call” hands are good enough to raise!
- Let’s scroll through them again
- If you raise, you give BTN an opportunity to re-raise all-in, and you either have to fold a good hand, or call and have your hand not be good enough – both terrible situations.
- By calling, you keep the pot size under control, with your medium-strength hands.
- On a similar note, with these “call” hands, if he keeps betting (turn + river), assuming you don’t improve by the river, you should fold by the river!



# JUST HOW GOOD DOES MY HAND HAVE TO BE TO RAISE!?

- A reasonable rule or thumb is: raise whenever you have two-pair or better.



OF COURSE, THIS DOESN'T COUNT AS TWO-PAIR...





# THIS TWO-PAIR IS COMPLETE TRASH...



AS IS THIS...





# RAISE (DREAM SITUATION...)





# RAISE (ANOTHER 3-OF-A-KIND; ALTHOUGH YOU COULD JUST CALL)



# RAISE (NUT FLUSH...ALTHOUGH YOU COULD JUST CALL)





# RAISE (BABY FLUSH, MUST RAISE)





# RAISE (STRAIGHT ON SCARY BOARD)



# RAISE (TWO PAIR)



# DO I REALLY NEED SUCH A GOOD HAND TO PUT ALL 40BB IN?

- There are some situations when your one-pair hand is good enough.





RAISE (IF YOU DIDN'T RAISE AA  
PREFLOP...AGAIN YOU COULD JUST CALL THE  
FLOP TOO)



# RAISE (TOP PAIR TOP KICKER ON A RELATIVELY SAFE FLOP)





# RAISE (TOP PAIR PLUS GOOD FLUSH DRAW)





WHEN YOU HAVE ONLY 25BB, ANY TOP PAIR  
(OR OVERPAIR) IS USUALLY GOOD ENOUGH



RAISE TO 350 AND BE PREPARED TO GO ALL-IN!





# SAME THING! RAISE TO 350!





# SAME THING AGAIN!



## NEXT CLASS

- Playing draws, Bluffing (with draws), Implied Odds, Reverse Implied Odds



# DEALING WITH “BOREDOM”

- In general, people are playing too high a % of hands. Not folding enough both preflop and postflop. Putting their money in with hands not worthy of all their money.
- Chat with people about all the hands, multitable (cash games!), multitask, read the slides, don't play a bad hand because “you're bored”
- Don't go all-in with a random hand because “you're bored”. Pretend this is real money you're wagering!
- Yes, you don't get punished for playing a tournament and being stupid (as opposed to not playing), but in the end there will be some prizes for people with the highest Point Per Game (assuming # of Games > N)

