## **Flop Equity**

If someone only had time to study one street of equity calculations, the street to choose would easily be the flop. Raw preflop equity is directly important in only a handful of specific situations and raw turn equity, particularly hand versus hand calculations, is often only a matter of counting outs. We still saw plenty of useful information in the preflop section and will see more in the turn portion of the hand versus range calculations on various board textures. Overall, however, flop equity is more important than preflop equity and more difficult and interesting to study than turn equity, because so many interesting flop matchups hinge on marginal pieces of equity that only exist with two cards to come, such as backdoor outs and redraws against an opponent with outs.

Flop equity permeates every aspect of PLO strategy, including determining our preflop strategy and setting the stage for all of our turn and river calculations and decisions. The majority of our preflop strategy will depend not on preflop equity but on the distribution of flop equities. Our flop strategy relies heavily on two things - the ability to interpret board texture as defined by the mix of equity matchups and the ability to design a plan based on how equity distributes over possible turns and rivers. Because the flop provides such a large percentage of the information that will determine final hand values, much of the context for turn and river strategy is determined by the flop texture. In other words, after the flop we have enough information about how the rest of the hand will play out (over the range of turn and river contingencies) to approximate a complete game plan. To do this well, we need to know not only what equity we have and how many turn cards we like, but also what the set of possible equity matchups and turn contingencies looks like on the particular flop texture we are facing. As we will see in Chapter 8, flop equity calculations are one of three key complementary tools we have to classify flop textures.<sup>3</sup>

Classifying flop textures is necessary because it is what gives us insight into the frequencies with which our opponents can and will use their various strategic options. For example, there are some boards, such as JhTc6h, where we will rarely get "bluff-raised." This is not because we don't have opponents who get out of line on that board, but because an inherent aspect of that board texture (and its relationship with typical preflop ranges) is an extremely smooth distribution of equities, and so what "getting out of line" means on that board is better characterized as "semi-bluffing too wide" than "bluffing too much."

In dealing with the opponents who get out of line on this board, we have to account for the fact that the hands they are raising light with have equity and are rarely raise/folding (assuming 100BB stacks and a raised pot, i.e. SPR < 15), which means we have to choose which of our hands to shove based on how they do against a weighted range that is over-weighted toward hands our range beats but has relatively few hands that are crushed by our range. Ideally we would find a subset of our medium-strength hands that does particularly well against the bottom of the loose-raising opponent's range and go to them first when we need to respond by increasing our reraising frequency. On this board texture, what we would look for are the medium-good, usually non-nut combo draws (e.g. KcTh9h8s) which dominate the weaker non-nut combo draws (e.g. 8h7h6c5d) that our opponent is overplaying.

To begin this process we will study the hand versus hand equity calculation data in sections divided by matchup type. The broadest main connectedness class is unpaired boards where no straight is possible, ranging from the Category 0-0 boards (no straight draw, e.g. K82) to the Category 0-6 boards (3 OE/6 GS, e.g. JT6). For each class we will set the rainbow and flush draw versions side by side and consider how adding a flush draw to each type of matchup changes things.

Within each category, there are two main classes of equity: **primary equity** and **secondary equity**. Primary equity is essentially that which is derived from the most obvious part of a hand's flop value: sets, straights, wraps, two pair, flush draws, etc. In other words, primary equity comes from the way we would normally expect to win a pot. Conversely, secondary equity is the value we gain from the hidden or unlikely ways that we can win. This includes ways to back into a hand ourselves, such as backdoor flush and straight draws, pairs, and minor redraws, as well as blockers which cut our opponent's equity. Often one piece of a hand can function as either or both kinds of secondary equity,

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<sup>&</sup>lt;sup>3</sup> Together with the basic connectedness, suited and rank combinatorics we looked at in Chapters 1-3 and adjustments that account for preflop range-weighting