Pairedness

Tables 3.13a-3.13c provide the pairedness data, with one table for each of three hand groups: doublepaired, paired, and unpaired. With the doublepaired and paired hands, the primary concern is on the frequency of flopping top, middle, and bottom set. With the unpaired hands the issue is mainly on the variations of one pair and two pair. Table 3.13a includes all 78 doublepaired hands and lists all flop strength possibilities for each. To save space the paired and unpaired tables each omit something. Table 3.12b lists the flopping frequencies for a representative sample of paired hands. The most important piece of data about a paired hand is its frequency of flopping top, middle, and bottom set, and the two factors that matter in determining this are which pair it has and how many overcards it holds – it is easier to flop top set with AKJJ than JJT9 because of our blockers.[24] The listed hands cover all the permutations of a pocket pair and a number (0-2) of overcards. There is no similarly clear way to slice the number of hands in the unpaired table, so instead we omit certain hand strengths which all hands flop with the same frequency. They are: No pair (31.1%), three pair (0.6%), quads (0.02%), tripped board (0.2%), trips (2.5%), overfull (0.3%), and underfull (0.3%).

The database disregards kickers and overcards. Kickers do matter in evaluating the strength of one pair, two pair hands, and trips hands and overcards can add meaningful equity to draws in some situations. The hands that often have high kickers are also the hands that flop top pair and top two pair more often, so to some extent that information is embedded in the data as well.

The text sections before and after the charts provide basic interpretation of the data and some preliminary conclusions about hand strength and playability.

Paired Group 1: Big Pocket Pairs (AA-QQ)

Table 3.13b shows the distribution of top set, middle set, and bottom set for all of the paired hands. AA**-QQ** all flop significantly more top sets than middle sets – 100% of AA**'s sets are top set, ~80-85% of KK**'s are, and ~65-70% of QQ**'s are. Holding overcards to the pair improves the chance of flopping top set by a small amount, as well as improving the hand versus range equity when it flops middle set. Through much of the preflop theory material KK** and QQ** are grouped together, but there are significant differences, both in set-mining value and raw equity value.

KK** is nearly always a profitable set-mining hand; QQ** usually is but there are definitely situations where bad QQ should be open-folded or folded to a raise but bad KK** would be a open raise or a flat. The major danger with QQ** is the higher risk of being over-setted, including the specific risk of KQx flops in multiway, single raised pots. AQx flops are usually a bit less less dangerous because at least one of the players in the pot significantly reduced their chance of having AA by not reraising preflop. A very high percentage of the time that the deck is set for KK** to over-set QQ**, both hands will see the flop and QQ** will lose a big pot.

QQ** is rarely a hand to 3bet/4bet for raw equity. It is dominated preflop by ~5% of starting hands on average and does not have a raw equity advantage against a decent range, a significant percentage of its non-set flops are underpairs, and any flush draws it flops are non-nut. The one thing it does very well is flop sets, the majority of which are top set. KK** is a hand that a lot of people three-bet way more than they should. In a generic six-max setting it is more likely that a mediocre KK should be played like QQ (for multi-way set-mining value) than that it should be played like mediocre AA (looking for an opportunity to 3bet/4bet and get it in). However, they are many more situations where it is correct to three-bet or four-bet decent or better KK** than any QQ**, particularly QQ** with no overcards.

Paired Group 2: Mid-High Pocket Pairs (JJ-TT)

JJ** and TT** are the pocket pairs that flop roughly as many top sets as middle sets. These are the hands with which the domination danger hinted at with QQ** really becomes a serious issue. It is not only that middle set's equity is worse and harder to realize than top set's equity. This much is obvious. An additional problem is that the half of flops on which these hands flop top set are significantly more draw-heavy than the flops on which KK and QQ flop top set. As we

[24] Additionally, middle set has more postflop value on average when we have overcards, because we often will have a blocker to top set.