## Dealers absorbing state profitabilities in blackjack



MANAGERIAL REPORT The following table show the probability of that the ending value of the dealer's hand is 17, 18, 19, 20, 21 or broke for each possible up card assuming the play is 1 deck. It also includes the probability of the dealer's ending a blackjack (BJ). Table 1 displays the dealer's ending value when the dealer stays on soft 17 while Table 2 present the dealer's ending value when the dealer take a hit on soft 17.

Table 1: Dealer's ending Value Probability Table

Source: developed for this report from: http://wizardofodds.

com/blackjack/appendix2b. html

Table 2: Dealer's ending Value Probability Table

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com/blackjack/appendix2b. html

In complex games like Blackjack, the player's advantage can drastically be altered by slight changes in rules or playing strategy. For example when the house rule is for the dealer to stay on soft 17, 'drawing no additional cards and passes play to the player', the dealer wins at the 'conclusion of the hand if his total exceeds the player's total'. The dealer, however, loses if the player obtains a higher total at the 'conclusion of the hand' (Wakin, M. & Rozell, C., 2003).

In cases where the house rule is for the dealer to take hit on soft 17, that is the dealer requests for another card. The dealer may continue hitting until he reaches a total greater than 21, where in the dealer goes broke. This is a benefit for the player, who wins even if the dealer consequently goes broke (Wakin, M. & Rozell, C., 2003).

## Reference

The Wizard of Odds. 06 November 2008 [On-line], Available: , [Accessed 06 https://assignbuster.com/dealers-absorbing-state-profitabilities-in-blackjack/

November 2008].

Wakin, M. & Rozell, C. 05 May 2003 [On-line], 'Markov Chain Analysis of Blackjack Strategy', Available: < http://www.ece.rice.edu/crozell/courseproj/MCBJ.pdf>.