On playing draughts at odds

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The history of board games played at odds is full of facts and anecdotes that occurred during many centuries. It so happened, even though a typical characteristic of most board games is the exact equality of the two forces, to such a degree that the right of the first move is often considered as the only existing bias. In the past, however, either the ambition to accept severe challenges or simply the wish to play an equal game between players of different strength level, has sometimes induced games at odds to be played too.

The fashion of giving odds changes from game to game and from time to time. However, even the most important games did not escape that tendency. The Japanese, so renowned for their ability to introduce rating systems in every sport and game, have been using for a very long time a complex system of odds in the game of go, so that an "equal" game can be obtained between two players of very different skill level. As known, in this game there are no moves, the play consists in placing one piece at a time by the two players in turn. The basis of the system of odds is simply the number of handicap pieces. Receiving odds, the weaker player begins the game by placing 3, 6, 9 or more pieces on the board, before the alternate turns begin.

In chess, the situation is more difficult to trace, since there are different pieces and exchange odds can be given, such as playing without a rook, while the opponent plays without a knight or bishop. In spite of the apparent difficulty to balance a chess game with such kinds of odds, many games were played in this way in the past. In some regions, they were even the rule and whole books devoted to the theory of chess odds have been handed down. At present, in chess other kinds of odds are preferred, such as simultaneous games or other instances of different playing conditions.

What about draughts? Certainly, in this game it looks as though playing at odds is much simpler than in chess, given that all pieces are of equal strength. However, the problem of the evaluation of odds turns out to be more difficult than it seems on first sight. In particular, the

value of the odds will depend on the value of the promotion from man to king. If king and man differ much in strength, an attacking player can trust in compensating the sacrificed material as soon as he obtains the first king. If the difference in strength is not so great, less pieces will be needed, in general, to balance the game. Therefore, the balancing odds will be different for each of the national varieties of the game.

I have not yet found significant information about games of draughts, played at odds.

In analogy to chess, I guess playing at odds in draughts was particularly tried during the last century, and especially in non-competitive games, of which probably only very few have been recorded. Towards the end of the century, the Tonard's handicap was used in England, but I was not able to find out how this handicap worked.

From the specific treatises I could consult, no idea could be obtained of the expected results when playing draughts at odds. Certainly, one may suppose that a player accustomed to give odds, may obtain better results than a player of exactly equal strength who never played at odds before. A fact to be taken into account if some test games should be played in order to establish the value of different odds.

Which may be the scores of games played at odds? If two players of the same skill play without odds, one may expect a fifty-fifty score. I expect one piece less approximately changes that result to 20 - 80 and two pieces less to 5 - 95 or even 1 - 99. From a practical point of view, I consider that three-piece odds is sufficient to reach 0 - 100, at least for any variety of 12-man draughts. Obviously, the score will be symmetrically reversed if giving odds changes into receiving odds. Independent from the actual figures, the effect of removing pieces is not necessarily proportional to their number, and it should follow some sigmoidal curve, as shown in the figure. The slope and the particular shape of this curve would be different for different draughts varieties. If the actual strength of the two players would be different, the whole curve would shift around a new central point, corresponding to the odds giving a 50 % score.

I am not accustomed to play at odds, nor am I particularly experienced in draughts. During the spring of 1983 I purposely played five matches, of 12 games each, in Italian draughts with my son Lorenzo, then a rather good player, considering his age. He was not yet six years old and played draughts better than today, even though he could not understand the reason of my test. Lots were drawn for getting white and

the first move in the first game, and then each player had it in turn for the following 11 games. I was evidently very lucky to obtain white in the first game in four or the five matches. We played one or two games each day, up to 3-man odds; but we played four games a day in the case of 4-man odds, this case being less worthy of particular attention.

In our case the final scores were very simply related to the odds, as can be seen in the figure.
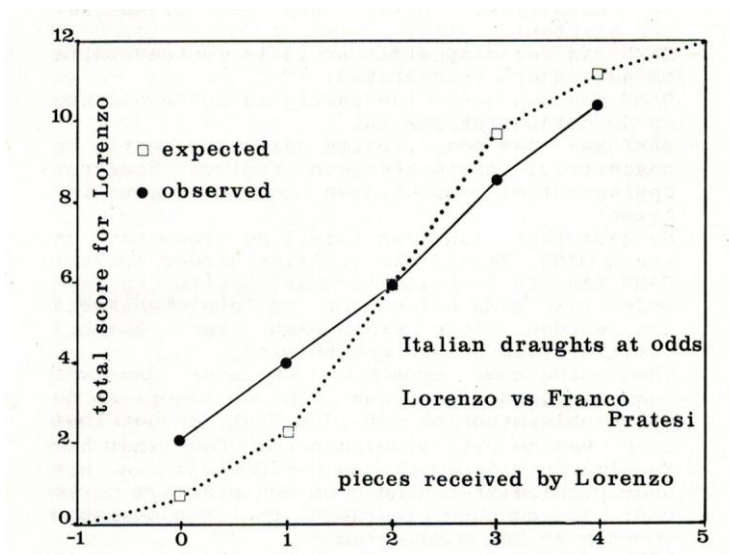
In conclusion, the observed line of the figure may be taken as a first approximation of the effect of odds in Italian draughts. It appears to be of almost linear shape in the examined range. If the curve could be transferred to the case of players of equal strength, the result is that the score would change from 50 to 33 and 16 percent by giving 1-piece odds and 2-piece odds, respectively. These figures seem to be rather high and need confirmation.

If anybody interested in this matter has the opportunity of gathering some friends and checking the effects of different odds, I would be happy to be informed. And I am wondering about the actual difference between the curves for international draughts and the national Italian variety.