

Statistical Baccarat Analyzer Release Notes

Eliot Jacobson, Ph.D.

Introduction

The game of baccarat is the most lucrative and commonly played casino game internationally. It is typically played from an eight-deck shoe, with from 4 to 6 cards being played each round. A shoe typically consists of between 75 and 85 coups (hands). The base wagers available to the gambler are the “Player” and “Banker” bets, which are even money wagers, with the “Banker” wager charging a 5% commission (properly speaking, Banker pays 19:20). There are some common non-commission variants, including the following:

- Banker winning 6 pays 1:2
- Banker winning three card seven is a push

This paper assumes that the reader is familiar with the rules and operation of the base game.

The Tie bet has two common payouts, either 8-to-1 or 9-to-1. The 8-to-1 payout is far more common than the 9-to-1 payout, however both are seen.

The most common side bet is the so-called “Pairs” or “Lucky Pairs” bet. The gambler can wager on either a Player pair or Banker pair. This wager wins if the first two cards dealt to that position are a pair. This side bet typically pays 11-to-1.

Beyond the Player/Banker/Tie/Pair bets, there are a number of proprietary side bets. These side bets are constantly being created, but few have gained long-term or wide-spread popularity. It would be a herculean task to attempt to discuss or implement the library of proprietary side bets. As of this writing, we include only two such wagers, described as following:

- Dragon 7 (aka Fortune 7 and others). This side bet pays 40-to-1 if the Banker hand wins with a three-card total of 7.
- Panda 8. This side bet pays 25-to-1 if the Player hand wins with a three-card total of 8.

Origins of the Statistical Baccarat Analyzer

In September 2020, in the midst of the COVID crisis, the author decided to create a very simple Excel macro spreadsheet that would accomplish real-time combinatorial analysis for these wagers. This product is explicitly designed to be free for educational use.