

Are there any factors would affect the frequency of online gambling?

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Abstract

The income from legal gambling has reached 511 billion US dollar in 2019. The market has increased from 2011 to 2018, especially the online gambling market. It has been enlarged by nearly 90%, which proved its great influence. Although gambling may induce wealth to a country, addiction to gambling could cause severe consequences, no matter in physical or psychological way. We hope to find out some factors related to the frequency of gambling, focusing on three main streams, namely fixed-odd gambling, live-action gambling and casino gambling.



Result and findings

Through doing regression, we can obtain some noticeable result.

For fixed-odd gambling, first, the mean age of the the registrants is 28.96, which shows that the young people are more influential in gambling, especially in online platforms. Next, the aging factor has a p-value smaller than 0.5, which reflected that it is a significant factor. It can be interpreted as teenagers would still gamble when they become older. For the gender aspect, it is not surprising that more than 90% of the participants are male, states that male is more active in gambling than female; but it is rather weird to see that the "male_dummy" variable shows negative value with significance, which implies that the frequency of female participants in online gambling is higher than male. The data also shows that about 47% of participants are German speakers, while other language speakers have higher frequency in online gambling. The factors "Euro per bet factor" has a rather insignificant effective, while the other two factors "bets per days factor" and "percentage loss factor" are having a higher significance.

Conclusion

There are three limitations related to this topic. Some gambling habits, sample sizes and the concentrated age data may affect the result, but overall, we can still obtain some conclusion from it. Firstly, we can conclude that gambling habits may be correlated to the frequency. Secondly, all three models suggested that female addition on gambling may be more severe than male, although the population of female participants is relatively small. Finally, it shows that younger generation is the mainstream of online gambling, since younger generation is more familiar with online gambling platforms.

Method of research

In this research, we use 4 kinds of raw data sets, which is related to some habits of gambling. By the data sets, we condense the following 9 indicators: sum of stakes, sum of bets, sum of active betting days, duration of betting days, frequency, bets per betting days, euros per bet, net loss, and percentage loss. Some raw data sets are being transformed. To reduce the right skewness, possible factors that might affect the frequency of gambling are all square rooted. The followings are the three regression models that would be used in here (Limited to the page edition, only the first equation is listed, the other two are similar, just with different notations):

$$Y(\text{frequency_fixedodds_sqrt_zeros}) = \beta_0 + \beta_1$$

$$(\text{Bets_per_day_fixedodds_sqrt_zero}) + \beta_2$$

$$(\text{euros_per_bet_fixedodds_sqrt_zero}) + \beta_3$$

$$(\text{percentage_loss_fixedodds_sqrt_zero}) + \beta_4$$

$$(\text{age_at_registration_sqrt}) + \beta_5 (\text{male_dummy}) + \beta_6$$

$$(\text{German_dummy})$$



For the live-action gambling part, the result are quite similar to the previous. The only noticeable point is that the factor "Euro per bet factor" becomes significant, but since the coefficient is very small that it will not do a lot of trouble to our analysis.

For the casino gambling part, the result is also quite similar. It is noted that the aging factor is insignificant in this model, therefore implies that casino gambling does not relate to the increase in age. Also, the percentage of male participants is over 90%, means that male keeps on going to the casinos more than female, but the "Male_dummy" factor is still a negative number. The "bets per day factor" is a negative number, which is very different from the former two models. Since the number is rather small, we cannot conclude that gambling in casinos would not make people become addicted.