tify only those predictive attributes that significantly improved the regression at given level. The method is explained as a combination of forward enter and backward elimination procedures (31). The procedure begins with the choosing an equation containing the single best independent variable and then attempts to build up with subsequent additions of variables as long as these additions are worthwhile (9). Candidate variables and final variables for the current study are presented in Table 1.

The multiple regression model can be formulated as follows,

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \ldots\ldots.. + \beta k X k + \varepsilon$$

Where: Y is the dependant variable, X is the independent or regressor variable, k is the number of independent variables, β is the constant and subsequent β are the coefficients, ε is a term that includes the effects of unmodelled sources of variability that affect the dependant variable (1).

Table 1. Candidate variables and final variables for the constructed regression models

No	Potentially relevant independent variables	Candidate variables	Final variables
1	Annual betting revenue for horse racing	Yes	Yes
2	Online sports betting revenues except horse racing	Yes	No
3	Total number of starts at races	Yes	Yes
4	Number of racing day	Yes	No
5	Number of Thoroughbred and Arabian horses	Yes	No
6	Tax rates related to horse racing	Yes	Yes
7	Annual inflation rates	Yes	No
8	Gross National Income per capita	Yes	Yes
9	Unemployment rates	Yes	No

In the present study, linear relationship between dependent and each independent variable included the regression model was examined by using scatter diagrams. Autocorrelation and multicollinearity were examined by Durbin-Watson statistics and Variance Inflation Factors (VIF), respectively. In this study, some of the candidate variables (number of horses, number of racing day, online sports betting revenues except horse racing, gross national income per capita, and annual inflation rates) were excluded the models due to multicollinearity. In order to reduce the influence of extreme values and make the distribution closer to the normal distribution, logarithmic transformation was applied to the data, such as Turkey's annual prize money payment and revenue for horse racing and Gross National Income per capita (SPSS version 15.0). Thus, the final dependent and independent variables are as follows:

$$LnY_1 = \beta_0 + \beta_1 \ln X_1 + \beta_2 \ln X_2 + \beta_3 \ln X_3 + \varepsilon$$
(1st regression formula)

$$LnY_2 = \beta_0 + \beta_1 \ln X_1 + \beta_2 \ln X_2 + \beta_3 \ln X_3 + \beta_4 \ln X_4 + \varepsilon$$
(2nd regression formula)

where: Y_1 is the Turkey's annual betting revenues for horse racing (United States Dollar–$), Y_2 is the Turkey's annual prize money payment for horse racing (United States Dollar–$), X_1 is the total mumber of starts at races (number/year), X_2 is the tax rates related to horse racing in Turkey (%), X_3 is the Turkey's Gross National Income per capita (United States Dollar–$), and X_4 is the Turkey's betting revenues for horse racing (United States Dollar–$).

Results

The total betting revenue and prize money of the 61 members of IFHA, which submitted their data to the institution in 2011, were nearly $82 billion and $4 billion, respectively. Taking into account of the 61 member contries' total revenue, share of the top 10 countries' betting revenue and prize money were determined as 81% and 94%, respectively.

The top 10 countries with the highest rates of betting turnover between the 2002 and 2011 with the real prices of 2012 can be seen at Table 2. The countries are written in ascending order, with Japan being the first country and Turkey being the last. In 2011, the largest decrease in the index (2002 = 100 points) occurred in the US with 40 points and the largest increase occurred in Ireland with 332 points. In Turkey, it can be seen that the betting revenue index was ranked 10th, after Italy and it dropped to 94 points in 2011. In Table 2, also the highest