



## Economic and Structural Analysis of Equestrian Clubs in Türkiye \*

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Equestrian clubs in Türkiye are the significant part of the horse breeding sector and offer economic, social, and sports contributions. 69 clubs attendant to Turkish Equestrian Federation (TBF) are generally centered in metropolitan cities and create employment by their economic activities. In the present study, 28 clubs that are members of the TBF were sampled and economic and structural analysis was performed using the survey method. The data obtained from enterprises belongs to year 2023. The capacity utilization rate of equestrian facilities was 71.63% and the mean annual profit was 2.2 million TL. 62% of the earnings of the facilities were attained from boarding house and stud management and 25% from equestrian training. Feed and building-equipment amortization were the highest items in the expenses. The study indicates that income diversifying clubs are more profitable. Consequently, the equestrian sector features as an investable area, and the efforts of recently established clubs to institutionalize with federation membership are noteworthy. This research suggests the economic and social potential in the sector.

**Key Words:** Equestrian club, economy, expense items, sources of income, profitability

### Türkiye'deki Binicilik Kulüplerinin Ekonomik ve Yapısal Analizi

Türkiye'deki binicilik kulüpleri, atçılık sektörünün önemli bir parçasını oluşturmakta ve ekonomik, sosyal ve sportif katkılar sunmaktadır. Türkiye Binicilik Federasyonu'na (TBF) bağlı 69 kulüp, genelde büyükşehirlerde yoğunlaşmış olup ekonomik faaliyetleriyle istihdam yaratmaktadır. Araştırmada, TBF'ye üye 28 kulüp örneklenerek anket yöntemiyle ekonomik ve yapısal analiz yapılmıştır. İşletmelerden alınan veriler 2023 yılına aittir. Binicilik tesislerinin kapasite kullanım oranı %71.63, ortalama yıllık karı ise 2.2 milyon TL olarak belirlenmiştir. Tesislerin gelirlerinin %62'si pansiyon ve hara işletmeciliğinden, %25'i binicilik eğitiminden elde edilmektedir. Giderlerde yem ve bina-ekipman amortismanı en büyük kalemlerdir. Çalışma, gelir çeşitlendirmesi yapan kulüplerin daha karlı olduğunu göstermektedir. Sonuç olarak, binicilik sektörü yatırım yapılabilir bir alan olarak öne çıkmakta, yeni kurulan kulüplerin federasyon üyeliğiyle kurumsallaşma çabalarının dikkat çekmektedir. Bu araştırma, sektördeki ekonomik ve sosyal potansiyeli ortaya koymaktadır.

**Anahtar Kelimeler:** Binicilik kulübü, ekonomi, gider kalemleri, gelir kaynakları, karlılık

### Introduction

It is possible to state that the horse has held commercial value throughout history and continues to exist as an economic asset rather than merely an amount. With the Industrial Revolution and technological advancements, mechanization rendered horses obsolete in military, agricultural, and transportation activities. However, modernization has increased the significance of horses and equestrian sports, making them a social necessity in modern societies (1).

The industrial value and economic capacity of the equestrian sector, working like a chimneyless factory with the economic value of the horse, is escalating day after day. As it has an area of activity involving not only equestrian sports but also many sectors, and, the holding of major competitions first and foremost contributes positively to the Turkish economy and the activation of the sector. Equestrian sports are the essential mainstay for horse owners, riders, coaches and grooms. Nevertheless, there are many sectors affected directly or indirectly by horses, i.e. security, tourism, transportation, pharmaceutical sector (2).

Equestrian sports clubs and equestrian facilities attendant to the Turkish Equestrian Federation (TBF) are among the leading contributors to the equestrian sector and economy in Türkiye, and, equestrian facilities make significant contributions to social and individual development in line with sports activities. Furthermore, they have the potential for economic and sectoral growth thanks to the economic opportunities they propose, i.e. horse production, horse riding lessons, horse ownership and hostel service. As of 2023, there are 69 federated clubs affiliated to the TBF. Examining the geographical distribution of these clubs, it is noted that the clubs are clustered in metropolitan provinces, yet not in every metropolitan province, and even if they are, their number is very small, and clubs are located in Western and Central

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Anatolian cities. The reason for this is the lack or inadequacy of facilities in other provinces, the high interest in traditional equestrian sports, geographical disadvantage and the high cost of establishing an equestrian facility (3).

It does not seem possible to access precise analyzes or adequate data in which the contribution of TBF and its federated clubs to the economy is measured. On the basis of the proposition "1 horse employs 3 people and supports 11 people" included in the research carried out by TJK (4), it is probable to make an inference regarding the economic impact of TBF, despite it is not certain. Thus, it is required to review the horses whose visas were made in 2023, which is considered as an exact number. The number of horses with visas in 2023 was 767 (5). In accordance with the calculation in 2017, 767 horses provide employment to 2301 people and maintain 8437 people with multiplier effect. Another data attained from the TBF together with the number of horses is about 153 coaches who got their visas in 2023 (6). Besides these, the existence of coaches who do not have a visa or people who still serve as trainers without a coaching certificate cannot be ignored. Taking into consideration the existence of non-federated clubs apart from the 69 clubs affiliated to the TBF, it is estimated that the number of people employed and supported will increase.

This study plays a critical role due to the lack of similar studies on the structural characteristics and economic analysis of equestrian clubs in Türkiye. By offering empirical data and sector-specific insights, this study contributes to the literature by filling a significant gap in the financial and operational understanding of equestrian enterprises in Türkiye. The objective of the study is to provide a comprehensive assessment of the social and economic structure, animal assets, equipment status, and animal movements of clubs affiliated with TBF, along with a detailed examination of their income and expense items.

## Materials and Methods

**Research and Publication Ethics:** This work was approved by the local ethics committee for animal experiments at Selçuk University (Approval number: 2023/072).

The material of the study comprises of primary data gathered by the survey method from enterprises engaged in economic activities such as horse riding training, horse breeding, boarding service and other enterprise activities of equestrian clubs that are members of the TBF in 2023. The questionnaires were applied in October-December 2023 and were based on 2023 data.

Due to the fact that the groups with various characteristics in the research population of the enterprises that are members of the TBF have various sizes, an adequate number of enterprises have been designated to represent the population with the stratified random sampling method, which is one of the probable

sample types. Stratified sampling method was employed to establish the sampling size in order to fully evaluate the various sizes of the data to be collected in the population, as stated by Smith 2013. In the research, the sample volume was specified with a 95% confidence interval and a 5% margin of error. Hereunder, the sampling size of the study was calculated as 28 out of 69 equestrian clubs registered in the TBF system (7).

Stratified Sampling Method and Sample Calculation

$$n_0 = \frac{Nt^2 pq}{d^2(N-1) + t^2 pq} = \frac{69(1,96)^2 0,97 * 0,03}{(0,05)^2 (69-1) + (1,96)^2 * 0,97 * 0,03} \cong 28$$

t table value with 95% probability=1.96

Selection criterion is rare equestrian clubs p=0.97 q=0.03

N= Number of individuals in the population

p= Frequency of the event to be analyzed

q= Frequency of occurrence of the event to be analyzed

t= the theoretical value found in the t-table at a given degree of freedom and at a given level of error.

d= desired deviation according to the frequency of occurrence of the event.

Stratum weight=28/69=0.4057 (whole sample) (7)

Within the extent of the study, a questionnaire form was utilized in face-to-face interviews with enterprise owners in TBF. In order to determine the economic conditions of the enterprises and to evaluate the physical and technical structures of the enterprises, the questionnaire form consist of questions regarding structural state of the enterprises (variety, capacity, size, etc.), equipment conditions, feed storages and restaurant, the investment activity of the enterprise, debt-receivables status, income items, the amount of service produced and the income of hostels and restaurants, along with the quantity and price information of the expense elements creating the cost of the enterprise.

Income, expense items and profitability rates were calculated by assessing the data transferred to the computer media (8, 9, 10). The data were assess in IBM SPSS Statistics Standard Concurrent User V 25 statistical package program (11). Descriptive statistics are given as the number of units (n), percentage (%), and mean values.

## Results

The general features of the equestrian club enterprises, the economic data of the clubs affiliated to the TBF, the income and expense items of the clubs of the same status in 2023, and the data on the net profits or losses of the clubs are analyzed under this heading.

The data regarding the activity periods of the equestrian clubs involved in the research and the TBF membership periods of the clubs are presented in Table 1 below.

**Table 1.** Activity periods of equestrian enterprise facilities and TBF membership periods

Equestrian Facilities Activity Year			Equestrian Facilities Federation Year	
Year Range	Number	Percentage	Number	Percentage
Less than 5 years	10	35.71%	12	42.86%
5-10 Years	5	17.86%	9	32.14%
11-20 years	5	17.86%	3	10.71%
More than 20 years	8	28.57%	4	14.29%
<b>Total</b>	<b>28</b>	<b>% 100</b>	<b>28</b>	<b>% 100</b>

In Table 1, evaluating the activity periods of the enterprises participating in the study, it is seen that 35.71% of them have not completed their five years yet. It is realised that 28.57% of equestrian clubs have been operating for more than 20 years, whereas 17.86% of them have been operating for between 5 and 20 years. It is noted that 42.86% of the equestrian clubs where the study participants operate have been serving as a federated club for less than 5 years, 32.14% for 5 to 10 years, 10.71% for 11-20 years, and 14.29% for more than 20 years. The total number of horses of the equestrian clubs involved in the research and the utilization data regarding the box capacity of the facilities are given in Table 2.

**Table 2.** Box capacity utilization data of the total number of horses and facilities in equestrian clubs

Total Number of Horses	Total Number of Boxes	Capacity Utilization Rate
798	1114	71.63%

In the light of the data gained based on the total number of horses and the total number of boxes, it has been established that the capacity utilization rate in equestrian facilities affiliated to TBF in Türkiye is 71.63%.

The employment data of the equestrian clubs in the study are presented in Table 3.

**Table 3.** Personnel information employed in equestrian enterprises

Employee Type	Number of Employees	Percentage (%)
Foreign Employee	13	5 %
Groom	123	47.50 %
Driver	2	0.80 %
Rider	6	2.30 %
Coach	57	22%
Watchman	26	10%
Janitor	16	6.20 %
Administrative Personnel	16	6.20 %
<b>Total</b>	<b>259</b>	<b>100%</b>

Examining Table 3, it was noted that 69.50% of the equestrian club employees consisted of groom and coaches.

Findings regarding the distribution of feed supply methods in equestrian facilities included in the research are presented in Figure 1.

The majority (78.6%) of enterprises use commercial feed, while 21.4% use both commercial feed and feed produced by themselves.

The distribution of the cost items of the enterprises in the study is presented in Table 4.

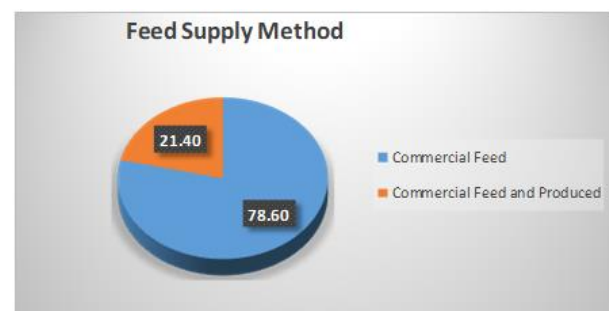
In Table 4, examining the expense items of the facilities, the highest expenses are Feed with 21.33%, Building Equipment Amortization with 16.68%, Litter with 15.1% and Equestrian Cost with 8.82%, respectively.

The distribution of income activities of the enterprises involved in the study is presented in Table 5.

Based on the income statement of the facilities, the facilities gain 62.11% of their income from the Boarding House-Stud Management. Afterward, the income is gained via equestrian training with 24.71% and restaurant-social facility with 11.76%. The lowest income is gained from the sale of horses.

The profit/loss data of the enterprises involved in the study are presented in Table 6.

In Table 6, examining profit and loss distribution of the facilities involved in the study, it is seen that the facilities obtained an average profit of ₺2,557,050.16.

**Figure 1.** Distribution of feed supply methods in equestrian facilities

**Table 4.** Distribution of cost items of equestrian clubs

Row	Region of Survey	Feed	Total Workforce	Veterinary Health	Transportation	Electricity Water	Litter	Blacksmith	Equestrian Cost	General Administrative Expenses	Building Equipment Amortization	Live Fixture Amortization	Building Equipment Maintenance Expenses
1	Marmara (13)	20.66 %	2.40%	5.42%	3.52%	8.34%	17.00%	5.55%	8.61%	2.27%	14.35%	2.12%	8.19%
2	Central Anatolia (8)	22.01%	3.40%	2.50%	1.02%	7.81%	10.38%	2.61%	7.82%	1.71%	22.05%	6.60%	13.02%
3	Mediterranean (3)	20.37%	4.05%	5.53%	2.77%	5.60%	11.97%	12.87%	12.48%	2.25%	13.27%	2.08%	7.42%
4	Aegean (2)	24.48%	3.00%	5.15%	3.97%	8.93%	20.91%	3.16%	11.93%	2.46%	12.31%	1.19%	7.05%
5	Southeastern Anatolia (2)	19.14%	3.89%	2.53%	0.00%	10.74%	15.29%	4.42%	5.67%	1.82%	21.42%	3.53%	12.58%
	<b>Mean</b>	<b>21.33%</b>	<b>3.35%</b>	<b>4.23%</b>	<b>2.26%</b>	<b>8.28%</b>	<b>15.11%</b>	<b>5.72%</b>	<b>9.30%</b>	<b>2.10%</b>	<b>16.68%</b>	<b>3.10%</b>	<b>9.65%</b>

**Table 5.** Distribution of income items of equestrian clubs

Row	Region of Survey	Restaurant-Social Facility Income	Boarding House-Stud Management Income	Horse Sales Earnings	Equestrian Training Earnings
1	Marmara (13)	13.39%	56.45%	3.55%	26.61%
2	Central Anatolia (8)	17.44%	60.67%	1.79%	20.10%
3	Mediterranean (3)	5.29%	57.84%	1.52%	35.35%
4	Aegean (2)	22.69%	60.35%	0.00%	16.96%
5	Southeastern Anatolia (2)	0.00%	75.26%	0.21%	24.53%
	<b>Mean</b>	<b>11.77%</b>	<b>62.11%</b>	<b>1.41%</b>	<b>24.71%</b>

**Table 6.** Profit/loss data of equestrian clubs

Row	Region of Survey	Total Average Income	Total Average Expense	Profit / Loss
1	Marmara (13)	₺10.499.123,08	₺7.048.006,98	₺3.451.116,10
2	Central Anatolia (5)	₺7.985.375,00	₺5.392.886,58	₺2.592.488,42
3	Mediterranean (3)	₺9.062.000,00	₺8.227.537,23	₺834.462,77
4	Aegean (2)	₺15.419.000,00	₺8.130.942,69	₺7.288.057,32
5	Southeastern Anatolia (2)	₺1.982.700,00	₺3.363.573,83	- ₺1.380.873,83
	<b>Mean</b>	<b>₺8.989.639,62</b>	<b>₺6.432.589,46</b>	<b>₺2.557.050,16</b>

## Discussion

Reviewing the foundation years and federation years of the enterprises (Table 1), it is comprehended that the recently established facilities became members of the federation more quickly, which might indicate that the participation of the facilities operating over a period of 1-10 years is high. The period of membership to the federation of enterprises operating for 10 years or more is less compared to their period of activity, which might indicate that some of the long-term operating facilities joined the federation later. As enterprises that are members of the federation have sports club status, they have sponsorship agreements, race organizations and fundraising rights (12). These rights may lead enterprises to have a longer-lasting structure (13).

Analyzing the employment capacities of equestrian clubs per horse (Tables 2 and 3) (total number of horses/ Total Number of Employees =  $798/259/798 = 3.08$ ), it was noted that 3.08 horses directly employed 1 person. In accordance with the research carried out in 2017, it was determined that 1 horse created employment for 3 people with its indirect and multiplier effects, and 11 people made a living (4). Examining the findings of this research, which focuses on the equestrian clubs and facilities affiliated to TBF, it is comprehended that the relationship between horse and employment in TJK is the opposite. The fundamental reason for the alteration here might be due to the differences in the fields of activity, enterprise models and economic dynamics of equestrian clubs and facilities affiliated with TJK. Hence, these fundamental differences in the economic model and employment requirements of two different types of facilities may have led to a contrasting relationship.

Analyzing the data on feed supply, it is seen that the majority of equestrian facilities prefer to purchase ready-made feed from outside, which is a practical and time-efficient method in feed supply. According to a study based in England and Germany, the feed supply channels of the animals vary based on the type of feed desired, the labor force of the horses and the regions where the enterprises are located (14). Nonetheless, a minority that also produce their own feed choose this path in order to respond to more specialized needs or to keep costs under control. This diversity indicates that facilities have different requirements.

Feed costs and bedding costs are among the most substantial expense items of equestrian clubs and the share of our study in total expenses was noted to be 36.43%. In a similar study performed in the northwest of Poland, the share of feed and bedding costs in total expenses was noted to be 33.8%. The values found are similar to the values reported by (15). Moreover, in a study carried out in southwestern Poland, it was reported that the ratio of litter and feed cost was 50% (16). Assessing this proportional difference, the increase in costs in recent years in Türkiye and the increase in expenses such as building-equipment amortization and electricity water due to the effects of the inflationary period can be demonstrated as the reason for this conclusion. In a study performed in Türkiye in 2019, the litter cost item in horse breeding enterprises was

established as 14.55%. Similar base data can also be considered as a significant finding in terms of indicating consistency and standardization in the overall cost structure of the sector (17).

Reviewing the expense items of the facilities (table 4), it is important to take into consideration the economic conditions of the various regions, the size and capacities of the facilities, as well as the local market conditions. In general, the fact that expenses vary so much demonstrates that facilities diversify their operational efficiency and cost management strategies (18). This type of economic analysis may suggest what areas facilities should focus on for more efficient cost management.

In a similar study performed in northwest Poland, the distribution of income from restaurants and social facilities was reported to be 28% (15). In this research, this rate was calculated to be 11.76%. Evaluating the causes for the main differences between the two studies, it is believed that the lack of restaurant service, socioeconomic conditions and differences in the variety of services are efficient in some of the enterprises providing data to our study.

The distribution of income activities in enterprises reveals that the fundamental source of income of many facilities is accommodation and horse care services (Table 5). It may also suggest that social facilities and restaurants are being utilized more or made more attractive in areas with large cities. The horse sales income rate is higher in the provinces in Marmara region, demonstrating that the horse trade is more active in this region. Equestrian training is understood to procure a sustainable and regular source of revenue for facilities. Information involving this type of income distribution might provide facility owners and investors with valuable insights to better guide and optimize their enterprise. Besides, in a study carried out in Germany, the contribution of sponsorship agreements of federated equestrian clubs to revenues was assessed. Consequently, analyzing the income items, it was reported that sponsorship revenues contributed 25% to 55% (19).

Examining the profit/loss data of equestrian clubs (Table 6), the performance of equestrian clubs varies greatly based on geographical location, management skills and local economic conditions. Profitability varies depending on factors such as effective cost management and strategic positioning, high competition and low demand in some regions may have caused losses as well. In case we made a general assessment according to the regions, the Marmara, Aegean and Central Anatolia regions were generally profitable, whereas the Southeastern Anatolia region encountered losses. Enterprises in the Mediterranean region faced low profitability. Additionally, box/horse capacity utilization rates (Table 2) may be escalated and profitability rates may be escalated (20).

Based on the profitability data gathered from the study results, it was established that the average profitability figures of enterprises that have restaurants and social facilities, that is to say, diversify their income

sources, are higher. This highlights that to taketaking risks is required and diversifying income paths instead of generating income from traditional ways are required. In a study carried out in Poland, 360 annual reports of sports facilities were reviewed. In conclusion, similar to our research, it is stated that many clubs try to earn income through 'traditional' ways and avoid risk instead of taking risks when it comes to income diversification (21).

It is observed that approximately half of the equestrian clubs involved in the research have been operating for less than five years, whereas the other half have a longer history. Evaluating the outcomes of the operating periods of equestrian facilities, it is revealed that equestrian, which has been an essential sector since the past, has found a place as an investment area. The establishment of new enterprises demonstrates that the equestrian sector is still worth investing in today. Meanwhile, it is understood that the recently established clubs are more willing to receive the title of federation during the institutionalization process. Thereby, equestrian clubs aim to ensure the sustainability of the enterprise by transferring to a more qualified level of institutionalization.

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