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Economic Effects of Equestrian Sports The Case of the Province of Lower Austria

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Economic Effects of Equestrian Sports
The Case of the Province of Lower Austria

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Economic Effects of Equestrian Sports

Introduction

In recent years equestrian sports has faced an increasing demand all over Europe. So for example in Austria the number of horses increased from 39.000 in 1973 to 74.200 in 1997. In the same period however the number of horeskeepers and stables has not increased at the same rate: The number of horses per stable grew from a mean of 2,64 horses in 1989 to 3,92 in 1995.

The increasing importance of equestrian sports can even be better underpinned by the development of the demand. The following figure shows the members of horseriding clubs in different Austrian federal states, starting from less than 10.000 (for the whole of Austria) in 1975 and ending up with 38.438 members in 1998. The majority (40)% of all members as well as of all horses and stables is concentrated in the province of Lower Austria.

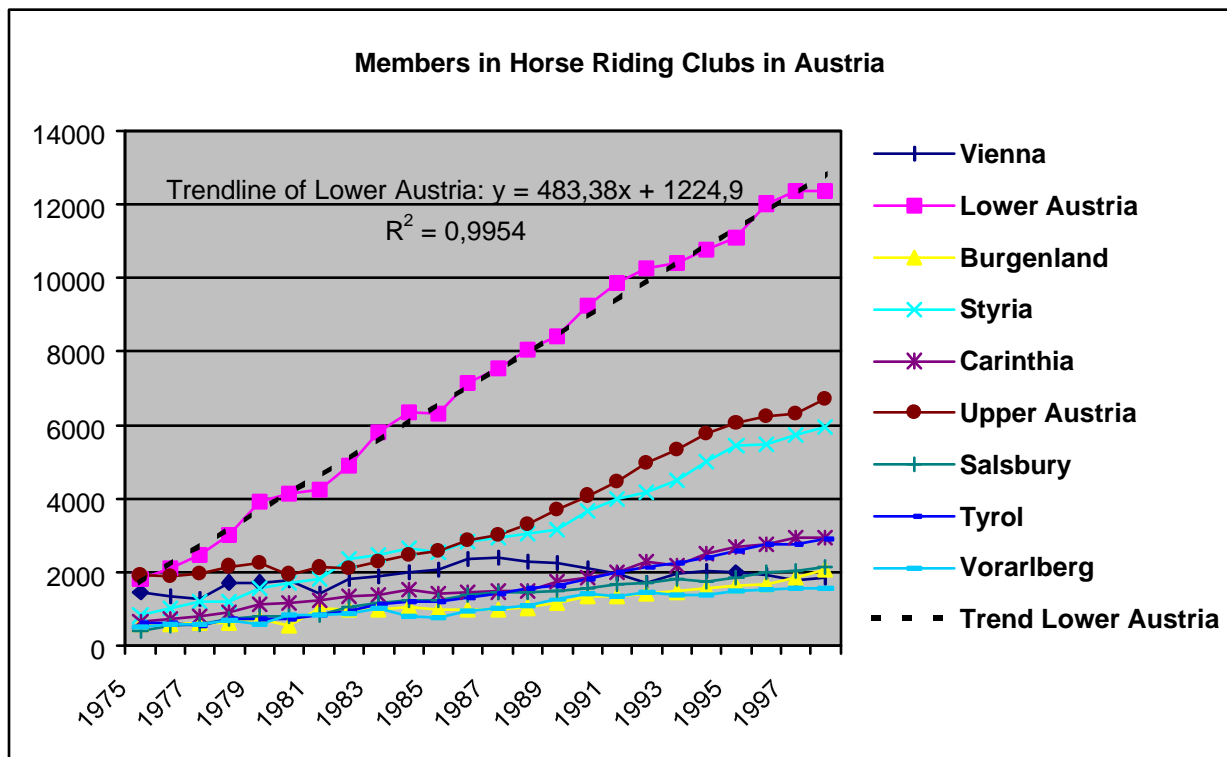


Figure 1: Members in Horse Riding Clubs in Austria, Development from 1975 to 1997
Source: Bundesfachverband für Reiten und Fahren

So horseriding can be regarded as an important means to strengthen economic development in peripheral regions and it is not surprising, that the European Union encourages and sponsors investments into and marketing of equestrian sports facilities within the framework of the "5b-Program" (economic diversification of rural areas). In

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order to profit from those funds, it is however necessary, that local or regional governments cofinance such projects.

One important argument for local and regional decision makers are the economic (fiscal, employment and value added) benefits from equestrian sports. The paper presented here aims at estimating these effects for the province of Lower Austria.

The empirical evidences have been obtained from two surveys. The first has been directed to the demand side, namely the riders and their expenses in connection with their sports. The second survey has been directed to the supply side, namely the owners of the different facilities (riding stables) in order to figure out the investment costs as well as the expenses for the running of their stables (feed, veterinary costs, etc.).

The following results refer mainly to the first survey. It has been performed on the basis of questionnaires, which were attached to the magazine of the regional equestrian association. Therefore it has to be assumed, that the sample (366 returned questionnaires) mainly consists of experienced and regular riders. Calculating the overall economic effects of equestrian sports in the region of Lower Austria this bias has to be taken into account (in the sample there are much more regular riders than in the population).

Most respondents live in the area of eastern Austria (province of Lower Austria, City of Vienna) and their preferred riding destinations lie mainly in the province of Lower Austria.

Descriptive Statistical Analysis

Way of horse-riding

9% of all respondents declared themselves to be professional riders; 63% non-professional (leisure-time) riders and 28% answered, to be nonprofessional, but to partake sometimes in competitions (semiprofessional).

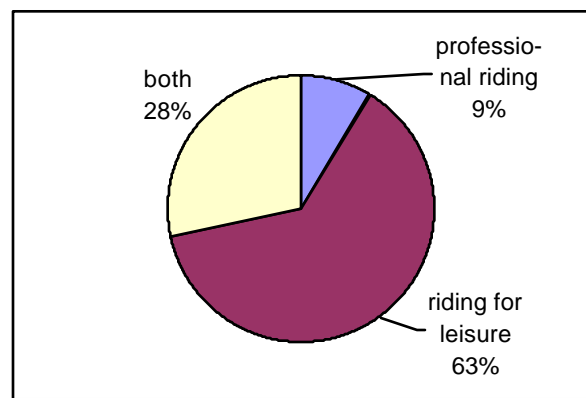


fig. 1: way of horseriding

A more detailed analysis of the different kinds of horseriding is shown in the following table:

Way of Horse Riding	For Leisure	Professional	Sum	Percentage of all asked persons
Dressage	179	76	255	95,9
Jumping	93	61	154	57,9
Touring	91	6	97	36,5
Coatch Riding	34	5	39	14,6
Western Riding	24	6	30	11,3
Volte	16	4	20	7,5
Pony Riding	15	-	15	5,6

Table 1: Way of horseriding (multiple responses)

Dressage is by far the most frequent kind of horse-riding. Nearly every respondent practises this way. Second ranks jumping followed by touring. The least frequent are pony-riding (usually done only by children) and volting.

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Ownership of horses

The ownership of horses is an important indicator for the calculation of the economic effects of horse-riding. Approximately two thirds of all respondents ride their own horse. This high number is certainly due to the special structure of the sample.

Ownership of Horses	Frequency	Percent
own horse	237	64,8 %
rented horse	30	8,2 %
school horse	59	16,1 %
horse shared with others	34	9,3 %
other	6	1,6 %
Total	366	100,0 %

Table 2: Ownership of Horses

Looking at the crosstabulation of "kind of horse-riding" and "ownership of horses" it becomes evident, that nearly all professional and semiprofessional riders ride their own horse.

Frequency of horse-riding

The frequency of horse-riding is a crucial variable in calculating the annual expenses of the riders. One third declared to ride daily and one half to ride several times a week. Again, these high numbers are due to the special structure of the sample. Especially horse owners practise every day, whereas pupils significantly train less.

Frequency of Horseriding	Frequency	Percent	Frequency of Horseriding	Frequency	Percent
daily	117	32,0	once a month	2	0,5
several times a week	174	47,5	several times a year	5	1,4
once a week	31	8,5	rarely	1	0,3
only at the weekend	22	6,0	no statement	2	0,5
several times a month	12	3,3	Sum	366	100,0

Table 3: Frequency of Horse Riding

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Horse-riding in winter

The results of the analysis moreover show, that the frequency of riding in winter is almost as high as in the other seasons. Only 16% pretended to ride a little less in the cold season.

Horseriding in Winter	Frequency	Percent
same as summer	304	83,1 %
less	60	16,4 %
not	2	0,5 %
Sum	366	100,0 %

Table 4: Horseriding in Winter

Distance to the riding stable

As we shall see later, transportation costs (as a function of the distance to the riding stable and the means of transportation) make up a great share of the total expenses. The mean of the oneway distance from the place of work or residence to the riding stable is on the average approx. 20 km (std. dev.: 20 km).

Means of transportation

The great majority (84%) uses their own car on the way to the riding stable. Only 13% use public transport. Detailed results are presented in the following table:

Means of transport	Frequency	Percent
Public transport	48	13,11 %
Individual motor traffic	308	84,15 %
Bicycle	41	11,20 %
other	34	9,29 %

Table 5: Means of transport (multiple responses)

Expenses of the riders (except transportation costs)

The following descriptive analysis is subdivided into three main categories:

- **Expenses at the riding stable**
- **Expenses for the riding equipment**
- **Further expenses (beyond the riding stable)**

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Expenses at the riding stable

The first part concerns the costs for riding lessons. The mean for one hour turned out to be 173 ATS (12,57 EUR). 44% of the respondents take regularly lessons at the stable. The second part concerns the consumption of snacks and drinks at the stable. 42% of the respondents declared to do so at a mean of 51 ATS (3,71 EUR).

Expenses for the riding equipment

The average costs for the riding equipment turned out to be 10.795 ATS (784,5 EUR) and they differ considerably according to the frequency of the practice.

Further expenses (beyond the riding stable)

This group is itself subdivided into three categories. They are characterized by the common fact, that the expenses are made beyond the riding stable, but in a near neighbourhood (at the same location/community). In addition to the amount the riders spend on the different categories, they were also asked about the frequency of their demands.

Meals and drinks in restaurants

4% go to restaurants regularly and spend 264 ATS (19,2 EUR) on the average (in the following numerical calculation of the daily expenses "regularly" is assumed to be 80% of the total visits at the riding stable).

25% do this sometimes with average expenses of 166 ATS (12,1 EUR) ("sometimes" means 40% of the visits).

22% do this rarely with average expenses of 75 ATS (5,45 EUR) ("rarely" means 20% of the visits).

49% do not go to restaurants before or after their riding exercises.

Shopping (at local stores or markets)

8% go shopping regularly and spend 109 ATS (7,92 EUR) on the average (the quantification of "regularly", etc. is the same as above).

16% do this sometimes with average expenses of 129 ATS (12,9 EUR).

14% do this rarely with average expenses of 86 ATS (6,25 EUR).

62% do not go to local shops before or after their riding exercises.

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Other leisure activities

2% perform other leisure activities regularly and spend 100 ATS (7,27 EUR) on the average (the quantification of "regularly", etc. is the same as above).

5% do this sometimes with average expenses of 77 ATS (5,6 EUR)

3% do this rarely with average expenses of 12 ATS (0,87 EUR).

90% do not perform other leisure activities before or after their riding exercises.

Social Structure

Designing marketing strategies to further promote equestrian sports makes it necessary to take into account the social and demographic attributes of the demanders.

The mean age (of the riders in our survey) is about 30 years. 84% are female and only 16% are male. The educational level (following table) of the riders is considerably higher than in the population. So it can be stated, that the riders belong predominantly to the group of the younger, well educated (more affluent) girls and women.

Highest graduation	Numbers	Shares
University	44	12 %
High school	163	45 %
Elementary school	85	23 %
No response	74	20 %

fig. 2: educational level

Conflicts

More than other sports horse riding is affected by conflicts with concurrent users. Two thirds of all respondents admitted to have experienced such confrontations at least once.

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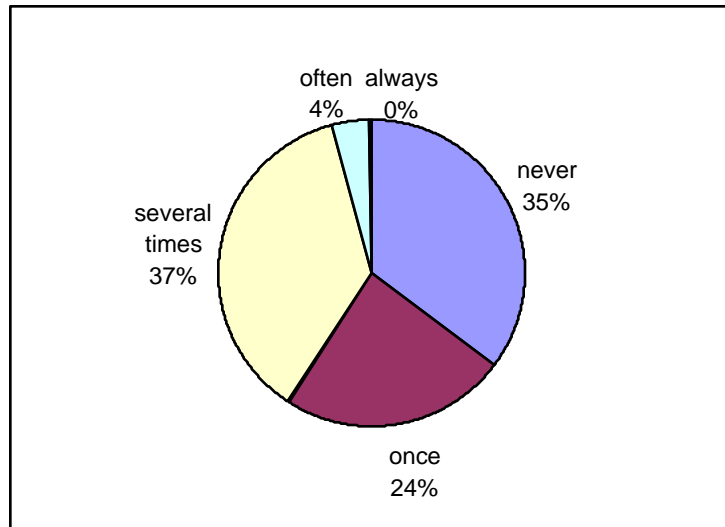


fig. 3: frequency of conflicts

Opponents are mainly huntsmen, farmers and rangers and the ways of confrontation range from verbal arguments to assaults.

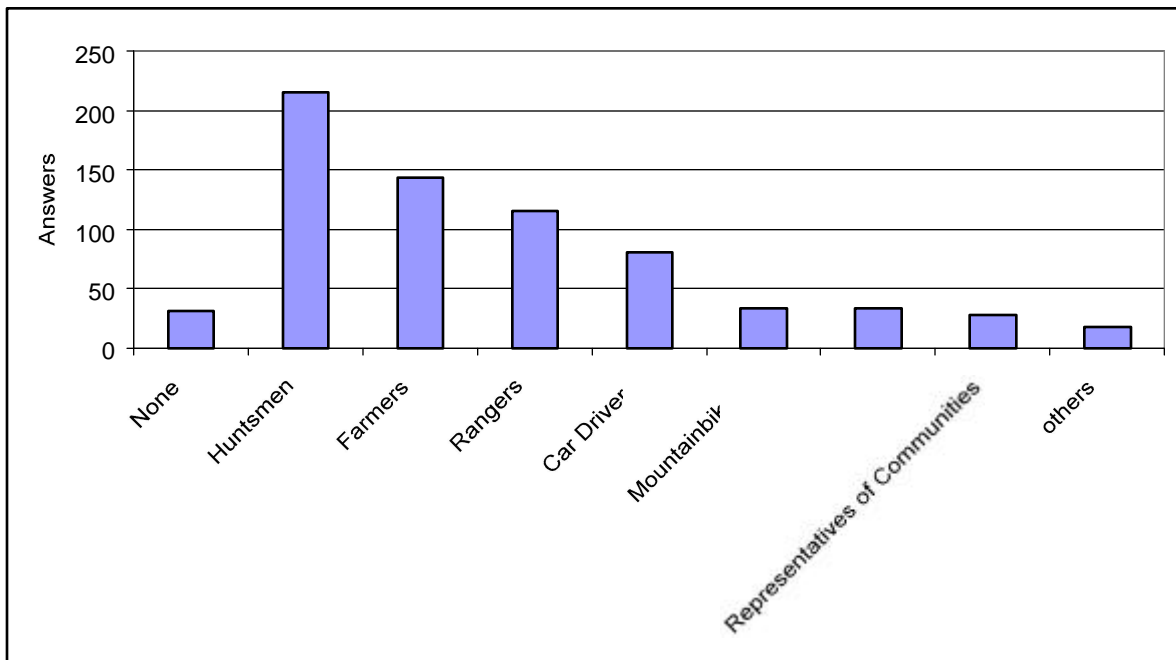


fig. 3: opponents

Economic Effects of Equestrian Sports

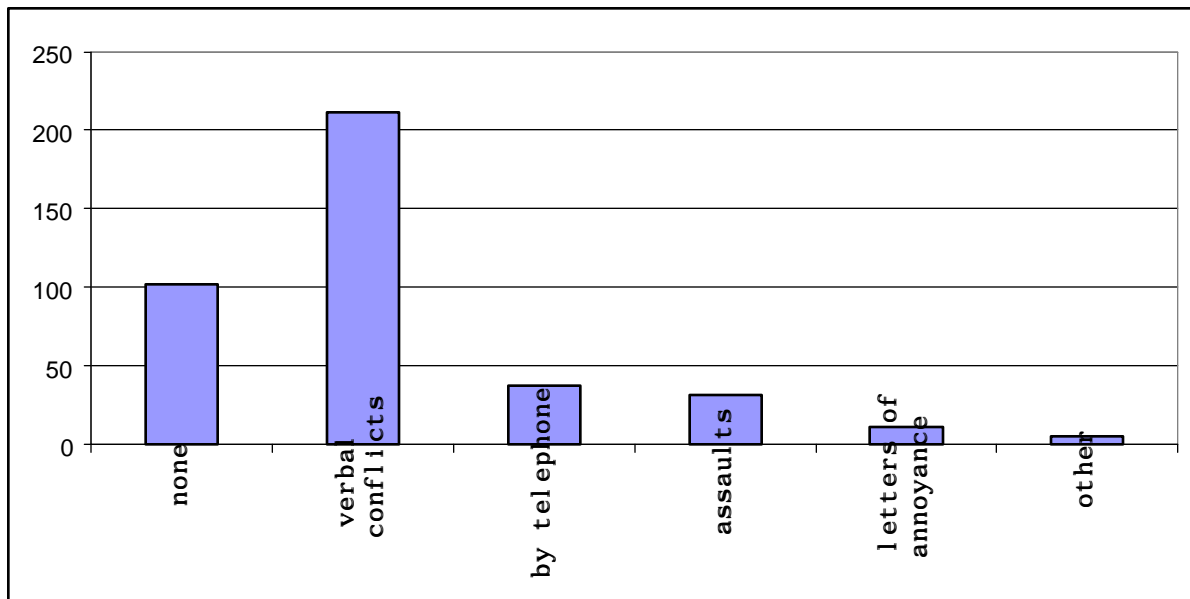


fig. 4: way of confrontation

Therefore future riding facilities should be planned and regulations should be established in order to avoid or reduce such conflicts. A special part of our study is dedicated to that issue.

Individual annual expenses

The next part of our paper deals with the calculation of the overall expenses of the riders in the different categories. From the descriptive analysis we have seen, that these expenses differ considerably with the frequency of the individual riding exercises. Therefore three categories of riders are defined due to their frequency of riding. The average expenses are then calculated for each group separately:

- 1. Frequent riders: they ride daily or several times a week**
- 2. Weekly riders: they ride once a week or only on weekends**
- 3. Occasional riders: they ride less than the previously defined groups**

In our sample the first group (frequent riders) makes up 79%, the second 15% and the last 6%.

First of all average expenses (per day at the stable) are calculated for the three groups and the following categories:

frequent riders	weekly riders	occasional riders
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22,42 ATS	32,36 ATS	21,82 ATS
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table 6: average daily expenses for snacks and drinks at the riding stable

frequent riders	weekly riders	occasional riders
65,39 ATS	133,90 ATS	86,5 ATS

table 7: average daily expenses for riding lessons

frequent riders	weekly riders	occasional riders
38,50 ATS	19,1 ATS	41,00 ATS

table 8: average daily expenses for meals and drinks at restaurants

frequent riders	weekly riders	occasional riders
29,2 ATS	8,6 ATS	15,7 ATS

table 9: average daily expenses for shopping

frequent riders	weekly riders	occasional riders
12,7 ATS	3,9 ATS	8,5 ATS

table 10: average daily expenses for other leisure activities

frequent riders	weekly riders	occasional riders
133,1 ATS	151,4 ATS	253,3 ATS

table 11: average daily expenses for transportation

In order to end up with average annual expenses the following additional assumptions have to be made:

Frequent riders perform their sports 200 days a year, weekly riders 50 days and occasional riders 20 days a year. Combining these assumptions with the average daily expenses and considering the smaller frequency in winter the following results are obtained:

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Frequent riders:

Snacks and drinks at the riding stable	4.446.-ATS (323,10 EUR)
Riding lessons	12.967.-ATS (942,35 EUR)
Meals and drinks at restaurants	7.635.-ATS (554,86 EUR)
Shopping	5.790.-ATS (420,78 EUR)
Other leisure activities	2.518.-ATS (182,99 EUR)
Transportation costs	26.393.-ATS (1918,1 EUR)
Riding equipment	2.274.-ATS (165,26 EUR)
<hr/>	
<i>Total expenses per person and year</i>	62.023.-ATS (4507,4 EUR)

Weekly Riders:

Snacks and drinks at the riding stable	1.604.-ATS (116,57 EUR)
Riding lessons	6.638.-ATS (48240 EUR)
Meals and drinks at restaurants	947.-ATS (68,82 EUR)
Shopping	426.-ATS (30,96 EUR)
Other leisure activities	193.-ATS (14,03 EUR)
Transportation costs	7.506.-ATS (545,48 EUR)
Riding equipment	895.-ATS (65,04 EUR)
<hr/>	
<i>Total expenses per person and year</i>	18.209.-ATS (1323,30 EUR)

Occasional riders:

Snacks and drinks at the riding stable	433.-ATS (31,47 EUR)
Riding lessons	1.715.-ATS (124,63 EUR)
Meals and drinks at restaurants	813.-ATS (59,08 EUR)
Shopping	311.-ATS (22,60 EUR)
Other leisure activities	169.-ATS (22,60 EUR)
Transportation costs	5.023.-ATS (365,03 EUR)
Riding equipment	743.-ATS (54,00 EUR)
<hr/>	
<i>Total expenses per person and year</i>	9.207.-ATS (669,10 EUR)

The riding equipment has been written off due to a period of 5 years (frequent riders), 8 years (weekly riders) and 10 years (occasional riders).

Economic Effects of Equestrian Sports

Projection of the overall annual expenses at the equestrian facilities in the province of Lower Austria

It should be noted, that some components, which also contribute to the economical effects of equestrian sports are so far not included in the analysis:

1. *All expenses that come from equestrian tourists (riders staying overnight and/or coming from other parts of Austria or from foreign countries)*
2. *All costs induced by the running of the riding stable including*
 - *investments into the equestrian infrastructure (stables, arenas, bridle paths, etc.)*
 - *the horse keeping in general (feed, veterinary costs, breeding, etc.)*

As we know from the descriptive analysis, that most of the respondents come from the region of eastern Austria and practise mainly in Lower Austria, the inhabitants of eastern Austria make up the basic population for the overall estimation (projection). What is still necessary, are the shares of the different categories of riders in that population.

These numbers are obtained from a "microcensus-survey" of the "Austrian Central Statistical Office" on the leisure activities of the Austrian population. Due to that survey, that has been conducted in 1992, 1,2% of all inhabitants of eastern Austria are regular riders, while 1,4% are reported to be occasional riders.

It is obvious, that the categories "occasional" both in the microcensus-survey and in our survey can be regarded as identical and that our two categories "frequent" and "weekly" refer to the category "regular riders". For the following calculations it has been assumed, that the group of regular riders equally consists of frequent and weekly riders. If we take 3 million inhabitants as the basis for the regarded region, we can assume 18.000 frequent, 18.000 weekly and 42.000 occasional riders, who make up the total demand for equestrian sports in the eastern region of Austria (except equestrian tourists).

Multiplying these numbers with the average individual annual expenses yields an overall sum of

1.830.870.000 ATS (133.054.512 EUR)

as gross expenses resulting from equestrian sports in Lower Austria.

Distinguishing between the different categories of expenses we get the following results (in mill.):

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Snacks and drinks at the riding stable	127,09 ATS (9,24 EUR)
Riding lessons	424,92 ATS (30,88 EUR)
Meals and drinks at restaurants	188,62 ATS (13,71 EUR)
Shopping	124,95 ATS (9,08 EUR)
Other leisure activities	55,90 ATS (4,06 EUR)
Transportation costs	821,15 ATS (59,68 EUR)
Riding equipment	88,25 ATS (6,41 EUR)

The calculation of these expenses does not take into account, that some of the expenses would have also been done beyond the context of the equestrian sports (shopping, meals or drinks). Therefore those expenses can only be considered as substitutions and not as additional expenses.

The following rates of substitutions have been assumed for the different categories:

Snacks and drinks at the riding stable	50%
Riding lessons	20%
Meals and drinks at restaurants	50%
Shopping	90%
Other leisure activities	50%
Transportation costs	20%
Riding equipment	20%

That means for example, that only 10% of the shopping purchases are due to the equestrian sports, or that 80% of all transportation cost relate to the riding exercises (the other 20% may be considered as substitution for some other sports, as tennis or golf).

So the **additional** gross expenses due to the equestrian sports have to be recalculated: (in mill.)

Snacks and drinks at the riding stable	63,55 ATS (4,62 EUR)
Riding lessons	339,94 ATS (24,70 EUR)
Meals and drinks at restaurants	94,31 ATS (6,86 EUR)
Shopping	12,50 ATS (0,91 EUR)
Other leisure activities	27,95 ATS (2,03 EUR)
Transportation costs	656,92 ATS (47,74 EUR)
Riding equipment	70,60 ATS (5,13 EUR)

Total additional expenses **1.265,77 ATS (91,99 EUR)**

Economic Effects of Equestrian Sports

Fiscal effects

The calculation of fiscal effects (as well as value added or employment effects) requires the assignment of the different categories of expenses to the categories (economic sectors) of the official Austrian statistics, for which input-output coefficients, employment coefficients and VAT-rates exist or can be derived.

Therefore "snacks and drinks at the riding stable" as well as "meals at restaurants" are assigned to the sector "services of hotels and restaurants". "Riding lessons" as well as "other leisure activities" are assigned to "services of sports facilities". Transportation costs are split up into four groups: Considering the results of the survey, that 20% of all transport is public, this share is assigned to the sector "services of public transport". On the other hand 50% (of the remaining 80% of individual transportation expenses) are assigned to "production of cars", 15% to "services of garages" and 15% to "insurances and taxes", whereas the fuel costs (20% of the total expenses on individual transport) are assigned to the "retail services. Shopping expenses and the costs for the riding equipment are also assigned to that category.

In Austria at the moment we have a general VAT-rate of 20%. Exceptions are for some kinds of food and public transport with 10%.

So for the different categories of goods the following VAT-rates are used:

<i>categories of goods</i>	<i>VAT-rate</i>	<i>gross expenses</i>	<i>net expenses</i>	<i>VAT</i>
<i>services of restaurants and hotels</i>	15%	157,853	137,263	20,590
<i>services of sports facilities</i>	20%	367,884	306,570	61,314
<i>public transport</i>	10%	131,384	119,440	11,944
<i>services of garages</i>	20%	78,830	65,692	13,138
<i>insurances and taxes</i>	0%	78,830	78,830	0
<i>production of cars</i>	20%	262,767	218,972	43,795
<i>retail services</i>	18%	188,655	159,877	28,778

Therefore it can be assumed, that a total of

179,56 mill ATS (13,05 mill. EUR)

additional VAT is annually induced by equestrian sports in the region of Lower Austria.

Input-Output Analysis

Economic Effects of Equestrian Sports

(Employment and value added effects)

The production of goods and services has not only an impact on the factors of the production function, but also on the goods and services, that are necessary to produce the input factors and so on. These "multiplier effects" can be analysed by the methods of Input-Output analysis.

For the calculation of these effects in our case of equestrian tourism a 57 x 57 matrix of 57 economic sectors and 57 goods (aggregated from a 171 x 171 matrix of the Austrian central statistical office) is used.

Firstly the production values of the 57 sectors are calculated by multiplying the final demand (annual expenses of the riders in the different categories) by the inverse of the matrix $(I-A)$, where I is the unity-matrix and A the matrix of the input coefficients.

Finally this vector of the production values is divided by the employment coefficients, to get the number of jobs, which are induced by equestrian sports. In the same way the production values are divided by the value-added coefficients to calculate the induced value added.

The results show, that approx. 5.200 additional jobs and a value added of 1,775 billion ATS (128.994 mill EUR) are induced by the expenses of the riders in Lower Austria.

The economic sectors which are concerned primarily, are services of sports facilities (1990 jobs), retail services (445 jobs), public transport (432 jobs) and services of restaurants (403 jobs).

As the input-output matrices have been derived for the whole of Austria and as there do not exist any regionalized tables, the induced economic effects relate to the entire country.

In order to get some evidences for the local economic effects, only these expenses have been taken into consideration, that are spent at the locations of the equestrian sports. These include all meals and drinks, the riding lessons and other leisure activities as well as the purchases at the local shops. Not included are most of the transportation costs and parts of the riding equipment. These locally or regionally effective expenses add up to approx. 520 mill. ATS (37,8 mill EUR). Neglecting multiplier effects, which cannot be calculated at the regional level, this means approx. 1520 additional jobs at the locations of the equestrian sports.

Literature

Economic Effects of Equestrian Sports

- Bundesfachverband für Reiten und Fahren in Österreich, Österreichische Turnierordnung 1996, Wien
- Brezina, B. u.a., Die Bedeutung des Fremdenverkehrs in der Regionalentwicklung des Bregenzerwaldes, Schriftenreihe Wiener Beiträge zur Regionalwissenschaft, Institut für Stadt- und Regionalforschung, Band 8, Wien, 1986
- Hutter, H., Reitsport im Waldviertel, eine wirtschaftsgeographische Analyse am Beispiel der Reitbetriebe "Haus der Pferde" in Langschwarza und Wühl in Kautzen, Diplomarbeit, Wien, 1996
- Aufhauser-Pinz, M., Aichhorn, F., Pferderegion Voralpen, Bestand und Analyse, unveröffentlichte Studie, Herzogenburg, 1995
- Aufhauser-Pinz, M., Aichhorn, F., Pferderegion Voralpen, Leitbild und Leitziele, unveröffentlichte Studie, Herzogenburg, 1995
- Aufhauser-Pinz, M., Aichhorn, F., Pferderegion Voralpen, Impulse von und für die Region, Tagungsbericht, Herzogenburg, 1996
- Aufhauser-Pinz, M., Aichhorn, F., Pferderegion Voralpen, Konzept und Umsetzungsschritte, unveröffentlichte Studie, Herzogenburg, 1996
- Feilmayr, W., Theorie des Regionale Fremdenverkehrs, Schriftenreihe Wiener Beiträge zur Regionalwissenschaft, Institut für Stadt- und Regionalforschung, Band 13, Wien, 1992
- Bauer, Alfred E., Tourismus und Regionalplanung, Die Bedeutung von Heilbädern für den ländlichen Raum, dargestellt am Beispiel des Heilbades Bad Soden-Salmünster, in Rhein-Mainsche Forschungen, Frankfurt am Main, 1993
- Habermehl, Werner, Angewandte Sozialforschung, R. Oldenbourg Verlag München Wien, 1992
- Hahne, Ulf; 1985, Regionalentwicklung durch Aktivierung intraregionaler Potentiale
- Edinger, J.; 1990, Marktorientierte Pferdewirtschaft (unveröffentlichte Studie f. BM f. Land- und Forstwirtschaft)
- Haase, Brigitte; 1995, Reittourismus – Eine Chance für Ostösterreich, Semesterarbeit aus Fremdenverkehrslehre
- Berger, W.; Überblick über Haftung bei Reitunfällen
- Berger, W.; Rechtliche Beurteilung des Reitens und Führens von Pferden im öffentlichen
- Berger, W.; Frage der Abgrenzung zwischen Gewerbebetrieb und Landwirtschaft
- Berger, W.; Die Besteuerung der Reitvereine

Economic Effects of Equestrian Sports

- Luptacik, M, Wagner, K.; Wirtschaftliche Folgen der Öffnung Osteuropas für Österreich: Die Effekte der österreichischen Exporte auf Produktion, Beschäftigung und Zahlungsbilanz; Ludwig Boltzmann Institut, Wien 1998
- Zins, A.H., Reiseausgaben im österreichischen Tourismus, Schriftenreihe für Empirische Tourismusforschung und Hospitality Management, Band 9, Wien 1996, Österreichischer Wirtschaftsverlag
-
-