

# Economic impact of the horse industry: a special reference to Spain

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## Abstract

The economy of the equestrian sector encompasses all the activities related to the equine world. All activities revolving around the use of a horse as entertainment, sport or business play a role in the 'horse industry'. These activities take place due to the existence of people demanding horses and a variety of goods and services associated with them on the one hand to offer those goods and services on the other. The former obtain the satisfaction they desire from practicing horseback riding or from relating in some shape or form with horses and are willing to pay for it. The latter obtain income from the sale of the goods and services they provide. Studies reveal that as income per capita becomes larger, the equestrian demand increases and, consequently, the global expenditure incurred by those individuals interested in horses. More than 500,000 horses, 9,000 breeders and 50,000 equestrian businesses, show the economic importance of the equestrian sector in Spain. That part of global expenditure that adds to the GDP of a country is what is generally defined as economic impact of the sector. Its relation will depend mostly on: the percentage of the expenditure that adds to national production and the participation in the country's global expenditure of those domestic goods and services associated with the equestrian demand. The different sub-sectors in the equestrian world have a different bearing as a function of the number of horses, the activity that is performed with them and the demand of each specific activity. The activities related to sports are those with most economic impact, about 8,000 € per horse, measured as total expenditure or with respect to the employment that they generate in the economy.

## Introduction

The relationship between horse and man is one of the longest love stories that like all great romances has been full of passion over the more than 30,000 years that has lasted. And in this connection the man has seen the horse as the power source first, to complement their physical limitations after, as a symbol of power in many historical periods, supporting and working tool in the past centuries. But although the relationship has changed over time, which has remained constant is the attraction that men have felt for the horses. So when the horse is no longer considered necessary for some of the work of the past, their relationship with men has changed in this new millennium to be present in our lives as a key element for leisure and sport.

In this new stage in the relationship of horse and man, and the economic consequences of that can be derived particularly interested in the possibility of increasing employment and work in rural areas or in strategic sectors such as tourism.

The central theme of this paper can be summarized in the question: **what contribution can horses make at present to the economy and society?** To answer this question we would have to make some clarifications on the previous conceptual framework that we use not only as an economist but also as horse enthusiast.

Firstly, the equine industry is an industry and as such can and should be analyzed with the tools that economic science provides us. Therefore, it must start on the main economic

variables of the equestrian sector. The second aspect is the potential of the sector that is reflected in a greater or lesser economic impact in terms of the behavior of different economic agents involved in equestrian activities. In countries where the horse is oriented to the needs of leisure and sports fans, there have been fundamental changes in farming and other fields related to equestrian activities to make them more suitable to meet the needs displayed by the users. But the public sector has seen new opportunities in this new approach to promote employment, sustainable rural development, or new tourist offers. In this set of changes I have called the Revolution Equestrian globally. The set of productive activities that have caused these changes are very large from the breeding specialist, to past industries for the horse world. Also teaching riders and other horse-related activities like accommodation, insurance, etc. need to be set up. The whole new set is called the Horse Industry. The evolution of Horse industry is related to the income level of countries, but also in response to business and management in each case to the new demands of horse enthusiasts. In countries where the response has been positive they have increased production and wealth, often through the export of certain goods and services that have been made to countries that have not developed their productive sectors, or has not been able to compete in international markets today. The third aspect that I will try to present, in summary form, is the experience of some countries where the above changes have taken place, with the aim of setting the general framework in which it is easier to insert the Spanish horse industry.

## **The World of the Horse**

The horse world is a complex reality that includes activities such as breeding; equestrian sports, tourism with horses, and many other activities such as equine therapy have been incorporated into the long relationship between man and horse. But sports and pleasure are the main topic in the current times for many of the activities linked with horses.

Participants in the horse industry can be placed along a spectrum of engagement from professional through to leisure. In general, riders/participants whose participation in the industry represents their main source of income are at the professional end of the spectrum. At the other extreme are riders/ participants and horses that are engaged in the industry on a pure leisure basis. In between these two extremities is a plethora of people with semi-professional interest, i.e. participants whose interest is split between generating income and leisure activity (Henley Report 2004).

To analyze the complex world of horse we have to start from the premise that many people today aspire to get any pleasure or satisfaction (what economists call utility) of their relationship with the horse. These people were often referred as "horse keen" and are at the core of the sector, as discussed later. Private leisure horse owners will naturally purchase goods and services relating to the care of their horses, but then may also take riding lessons, go on riding holidays, enter competitions and read magazines. Non-owning riders will spend on other goods categories except those relating to horse care. Other domestic consumers will spend on categories not relating to horse care or riding but may spend money at racecourses or on visiting horse-based domestic tourist attractions (or horse 'rescue' or welfare organization).

But the horse is also important to other people who have a professional relationship or employment with the equestrian industry: grooms, blacksmiths, veterinarians, saddle makers, coaches, teachers and so on, depend on their activity directly on the existence of horses and people who want to ride or care horses. In many cases, those professionals are also fans of the

horse but we should not be confused in the analysis of their economic behavior. The professional and organization also spend money in goods and services, but these purchases are input into production or intermediate consumption as opposed to final consumption and must be separated to avoid double-counting for the value of these inputs.

## **The Horse and economic variables**

People who love horses, who admire those who practice equestrian sports, who make their relationship with this beautiful animal their love and delight, are aware of the important role the horse plays in their lives, and demand, plus horses, certain goods and services to meet the needs they feel in relation to their liking. Thus, you can indicate that the demand or final demand consists of the demand for horses (equine demand) with a range of goods and services that facilitate the use and enjoyment of the horse by users (equestrian demand).

Therefore, we can say that the horse is now an important element to meet the wishes and needs of "consumers" of the equestrian sector. But to meet these needs, a range of goods and services must accompany the horse, without which the horse could not be used. If you offer goods and services that "consumer fans" demand, they will be willing to buy horses and pay for goods and services related to horses. A demand for horses and goods and services related directly or indirectly with the horses, the "equestrian demand". Studies show that as income "*per capita*" increases, "equestrian demand" grows, and consequently, overall spending by those interested in the horse.

The share of overall expenditure to be finished by incorporating GDP of a country is what is usually called **economic impact of the sector**. Their amount will depend primarily on:

1. The percentage of spending that goes to pay the national production. If a percentage is devoted to the purchase of goods and services from outside of the country is bigger, the economic impact will be lower.
2. Percentage in overall spending represents by domestic goods and services associated with the equine demand.
3. Part of the remuneration of factors of production that returns to activities in the horse industry.

The combined effect of the three factors mentioned above could be summarized in what is called the multiplication factor that somehow represents the ratio of the direct economic impact and economic impact of the global world of the horse.

## **Economic effect**

The reason for this dual economic impact is that there are activities related to the horse world directly, such as certain agricultural products (hay, barley, fodder, etc.) or certain transportation companies. But other economic sectors, garment factories, insurance companies, hotels and catering establishments, etc. have an indirect relationship with the horse that spending will depend largely on the activities taking place in the world of horses. If, for example, a City Council decides to promote, within its policy of cultural and sporting the equestrian activities, a new horse jumping competition, the direct cost of the competition leads to an indirect cost that is a multiple of first.

In many cases a small expenditure in the riding sector will have a high multiplier effect, if that spending is linked to certain activities. Therefore, the equestrian sector has a growing

interest to companies that identify new business opportunities related to the world of the horse, and public authorities to appreciate the importance of the sector to generate employment and contribute to sustainable development programs.

## **Circular Flow**

One-way to have a vision and overall summary of the above so far is to present the horse industry through the simple model of the circular flow of income. In this model where we have removed the intervention of the external sector and public sector, it appears that the business will depend on the demand for goods and services that consumer made to the industry.

For transactions that are carried out, it is necessary that consumer of goods and services can contact with business and organization that offer this goods and services. This relationship takes place in the markets. A lack of appropriate markets in the equestrian sector transactions reduces the economic impact of the sector.

If, as we have pointed out, the demand for horses is linked with certain goods and services associated with the horse, it is necessary that markets respond to this need for consumers. Trade fairs are a good procedure to increase the economic sector.

But besides the existence of goods and services markets, it is necessary to develop markets for factors. Among these it is important to note the type of professionals associated with the world of horses. In many cases the lack of education and training programs for professionals in the sector is the main barrier that can be found in its economic development.

## **Main economic variables of the Equestrian Sector**

To make it possible for the entrepreneurs in different economics fields to appreciate the opportunities of the new demands in the equestrian sector, or for the public authorities to be interested in including the equestrian sector within their program of action, it is necessary to know the data and economic relations of the different participants in the sector. These studies are essential to the economy as a whole, by adequately assessing the contribution of the equestrian sector to the rest of economic sectors.

Therefore, in many developed countries, research and analysis have been conducted to study the importance of the equestrian sector. These studies have highlighted the economic impact of the equestrian sector and its degree of implementation in society, considering that the best way to reflect this new reality is called the horse economy with the term "horse industry." With this expression we want to recognize the economic importance of the equestrian sector and the impact of their activity throughout the economy.

The transformations of the economy has an impact in the equestrian world, in countries where there have been changes in equestrian demand, breeding and training horses for sports and leisure activities are now a priority. The changes are not only quantitative (a higher level of expenditure) but also qualitative (types of horses and new demands for goods and services). Therefore, we believe that the equestrian industry in some countries has suffered and is suffering in others great changes that allow us to name this change as "Equestrian Revolution."

## **Equestrian Revolution**

Ultimately, the role of the horse as fundamental to the sport and / or entertainment has dramatically surpassed its role for job or food. And these new features have attracted to the horse sectors new population that expands the demand to new horses activities (i.e. horses therapy or equestrian tourism) and broad the scope of horse industry in terms of social and economic potential.

These social changes and transformations need to be well know for understand the "economic potential" of the equestrian sector. Studies show that many of the new activities related to the horse (sports, recreation, tourism products, etc.) can be commercially profitable.

Studies on the economic impact of the equestrian sector have been held in countries with more equestrian tradition, where demand has changed more rapidly. The findings and conclusions of major studies can give us a clear idea of the need to provide and incorporate research on the economics of the horse world

### **Components of the horse industry**

The variety of industry sectors of the horse has already been revealed previously. Also acknowledged is the importance of having a domestic production to meet the needs of the equestrian demand and a better economic impact. In this sense the challenge of enhancing domestic production has to consider the different possibilities that arise in addressing the needs highlighted by the equestrian demands. The comparative advantages of the components of the second block requires an adequate reflection to overcome foreign competition

### **U S economic impact.**

One of the most traditional departments in economic research of the horse world is, without doubt, the U.S. The American Horse Council that has conducted two major surveys (2003 and 2005) on the impact of the horse world in United States (Deloitte 2005). The general conclusion of their work is that the horse industry is widely spread across the nation and has a degree of impact that explains the attention it receives from the public, and from authorities local, state and federal. There is a census of 9.2 million horses and 4.6 million people are involved with the equestrian industry, as horse owners (2 million), service providers of the equestrian industry, workers or volunteers, as well as 10 million who participate as spectators in all the variety of horse shows.

The horse industry in the U.S. has a direct effect of 39 billion dollars a year and an overall \$ 102 billion taking into account the multiplier effect. This represents an overall impact on horse year and 8.738 € (3.341 € direct impact). It employs 460.000 direct workers and to 1,4 million accounted for all sectors related to the equestrian industry, valued as full-time equivalent.

9.222.847 horses registered in the U.S. are distributed in the following: 844.531 horse racing; 2.718.954 competition horses; 3.906.923 leisure and tour and 1.752.439, other equestrian activities. (Deloitte 2005)

## **The horse industry in Canada**

Although Canada has conducted several studies of the economic impact of the equestrian industry, the entitled "National Study of the Horse Industry (1998). Conducted through surveys and preparation of statistical data assesses the equine census figure of 886.431 horses, which is double the census of horses, associated with agricultural enterprises (443.889).

The more accurate estimate of the economic impact of the horse in Canada, with an overall figure of some 6.785 million Euros (9.600 Canadian dollars) and an average economic impact of horse € 3.365 per year, although the range, depending on the activities where horses are involved, varies between €1.800 and € 5.000 per year. (Johnson, F and Bellavance, E. 1996)

## **The horse industry in Australia**

Australian horse racing industry has experienced strong growth in recent years. The overall estimate of a survey conducted in 2000 for the Australian Horse Industry Council, estimated at 4.889 million Euros (\$ 6.2 trillion) the annual contribution of the horse world. Contribution of more than 50% originates in the subsector of horse racing, with 3.000 million Euros (\$ 3.9 trillion).

The calculations were based on estimates of the number of horses that range between 900.000 and 1.500.000. Although more precise estimates believe the figure of 1.200.000 horses, of which about 300.000 are wild horses, with a high percentage of horses that are not included in any record. Nevertheless, the study has made estimates of the total number of horses according to data provided by the breeder associations, or registration of the different breeds.

## **The horse industry in Europe**

The integration of Spain into the EU provides a framework that is necessary to acknowledge. Any analysis that does not take into account the intense economic relations between EU member states is out of reality. The horse world is no exception. The progressive integration of the equestrian market makes demands of the equestrian sector in one country can be met by production from another. Therefore it is necessary that the supply of equestrian goods and services be developed to keep pace with demand. If not, imports from other countries will be growing at the expense of domestic production. That does not mean every country has to make a policy-oriented equestrian autarky. The real challenge is to exploit both the advantages of economic integration such as those arising from growing demand equestrian.

The reality of European equestrian sector is not uniform and differences between countries can be significant. The core has taken place where the most important sector of the horse is in good correspondence with the central core of the EU (Germany, France, Belgium, Sweden, Denmark, Netherlands and United Kingdom). In each of these countries there have been structural changes to the equestrian sector adept to the demands to the change for leisure and sport.

Given the problems inherent with the available data, the overview about the horse industry in some of the most important European countries, only pretend a general approaching to the sector that can help to understand the main change and the "new approach" to the impact on the economy-

## **France**

France has made a significant transition from a sector closely linked to the equestrian military world, to a sector where companies find financial support from the administration, thanks to the important incomes of horse betting. It is also important the role of the "Haras National" which, among other functions, is responsible for developing the main economic sector of the horses.

The strategy to make compatible the sector of competition and the sector of leisure riding, make France one of the first countries in the practice of horse riding.

## **Sweden**

Sweden began the transformation of the equestrian sector in 1945, with clear links to horse sport and leisure, creating a breed of horse sports Swedish (Swedish Warmblood (SWB)), which has achieved remarkable success in dressage, jumping and eventing. The 2004 data made by the Swedish Institute of Statistics estimated, through a survey, census, 283.100 horses, 56.000 establishments located in riding horses with a ratio / thousand inhabitants. 31. Economic research at the University of Uppsala for the Foundation of the Swedish Equestrian (Swedish Horse Council Foundation) estimated an overall figure of 403 million Euros of equestrian sector spending.

## **United Kingdom**

The modernization and development of the equestrian sector in the United Kingdom has been steady in recent year. In 1998, the British Equestrian Trade Association (BETA) commissioned Produce Studies Research to carry out the National Equestrian Survey. The survey suggested that in 1999 there were close to one million horses in Britain. In 2004 DEFRA and the BHIC (British Horse Industry Confederation) appointed The Henley Centre to carry out a review of research on the Horse Industry in Great Britain This study suggested the best estimate of the total horse population in Britain for 2004 was between 600,000 and 975,000. More recently, BETA produced an updated report compiled by SportsWise, The National Equestrian Survey 2005/06, which suggested the total number of horses in Great Britain was now above 1.2 million.

The report, conducted in 2004 on the horse industry, highlights the importance of riding with more than 50.000 direct jobs and around 250.000 direct and indirect. The world of horse raised an interest in the UK population, with more than 5 million people actively involved in the horse world, of which almost half (2.4 million) practices riding. But perhaps more importantly highlight the notion, widely held, using the horse as a means of promoting sustainable development. This idea has helped to develop a plan for cooperation, developed by all the institutions related to the horse world, to build on the momentum of future Olympic Games of 2012, and a real transformation of the equestrian industry, through a Strategic Plan recently approved for a period of 10 years.

The Strategic Plan for England and Wales (BHIC 2005), pointed out the contribution of the horse industry to the economy and the important role the horse has on the lives of many people, both in cities and in the rural world. But the current contribution can and should be increased in future and with that idea is the Strategic Plan to enable the horse industry has a robust and sustainable development, increasing its economic impact and welfare of horses, and raising the level of cultural, sport and education in the nation. For this, eight major goals

set by them reveal the interest and importance to individuals, companies and organizations involved to give the horse industry. These broad objectives are:

1. Bring the Horse Industry together and develop its national, regional and local impact.
2. Increase participation in equestrianism and develop the social contribution of the Horse Industry.
3. Boost the economic performance of equestrian businesses.
4. Raise equestrian skills, training and standards.
5. Increase access to off-road riding and carriage driving.
6. Consider the environmental impact of the horse.
7. Encourage sporting excellence.
8. Improve the quality and breeding of horses and ponies

Through the action lines in which breakdown of the major objectives of the Plan is intended that, by 2015, opportunities to practice riding accessible to a large and diverse, which eliminates the idea of elitist and prohibiting riding, thanks to the growth of insurance and equestrian centers run by qualified professionals. The horse industry will present a unified front to be recognized for their significant contribution to the national economy, regional, local and rural, and for his cultural contribution and positive impact on the environment. The equestrian sports have a central place within the sporting scene, thanks to the results of national and international competitions, including the 2012 Olympics, as reflected in the media. Production and breeding of horses is recognized globally for both product quality and by the same high standards of health and wellness.

## **Spanish Horse Industry**

The long tradition and importance of the Spanish Horse Industry change dramatically in the second half of 20<sup>th</sup> century. The industrialization of the agriculture and migration of population from rural areas to the cities cut down the number of horses that don't start to grow again until the last decades of the past century.

But change was also taking place for the broken relation between production and consumers demand for sport horses. Until 1970's was very few the breeders who has change his mind looking for new type of horses.

A third factor for the decline of horse industry was the lack in the productions of goods and services linked with horses activities. In this topic, is outstanding the gap between breeding and final consumers who wants horse ready for used in sports and pleasure ridings. If no appropriates horses where find very few riders was able to go into the new activities of modern horses industry at Spain.

Changes in the economic background of the Spanish economy and the growth of income level bring new forces to the equestrian sector. Some business people wants go into the sector as breeders, looking to invest profits earns in other activities. In the household sector rise in the income level make possible the starts with horses activities for sports or pleasure. The picture began to change very fast. New equestrian business arise, and old breeders sold his mare to the new ones; prices rise every year and the equestrian sector know a real boom at the end of 20<sup>th</sup> century an the beginning of the 21<sup>th</sup>. Riders also grow, but much more slowly, the bottle neck was, in many cases the scarcity of good ridings teachers and sports facilities and activities where makes practices.



<b>Table 1. REGA Data. (MAPA)</b>			
<i>Type equine center</i>	Dates		
	<i>1/9/07</i>	<i>1/9/08</i>	<i>1/7/09</i>
Total Center	106.646	125.603	138.744
Breeding Center	7.906	9.351	9.278
Ridding Center	4.484	5.299	6.272
Private Center	38.788	49.862	56.386
Meet production	5.688	7.648	9.311
Non profit	3.813	5.057	6.790
Un classify	45.969	48.406	49.865
<b>Numbers of horses</b>	<b>435.598</b>	<b>549.109</b>	<b>*624.348</b>

\*Estimation

The Table 1 shows data in the last three years. Data are collected from the Register of Livestock Farming (REGA Agriculture Department). The increase number is clear in all categories, but it also reflects the better working rules of the register for the horses industry.

The total numbers of horses is near to the 700.000, but the average size of horse per Center is very low (5 horses), and no information is provide about the activities of more of 50% of the horses. As we mentioned above, many of the new equestrian activities has been linked with breeding and production of horses, but also riding pleasure has increase during past year. Special activities like fairs and traditional celebrations used horses for riding or carriage, like the Seville Fair or the “Rocio” celebration.

The category of private center is not very clear, but reflect some of the equestrian business created by “interest/hobby” for people who want combine ridings activities with small business services. Thus can be including into the number of regular raiders or riders who ride at least once a month, as happened in other countries like Great Britain (Turner et al, 2002, pp 124)

Equestrian sport (jumping, dressage, raid, etc) still are equestrian activities for minorities, as show the numbers of licensees riders of the Spanish Equestrian Federation on table 2.

<b>Table 2. License of Spanish Equestrian Federation (2008) by Regions</b>	<b>Nº</b>	<b>%</b>
Madrid	8.713	22,06%
Andalucía	5.399	13,67%
Cataluña	5.394	13,66%
País Vasco	3.950	10,00%
Galicia	3.152	7,98%
Castilla y León	2.704	6,85%
Valencia	1.737	4,40%
Castilla - La Mancha	1.524	3,86%
Navarra	1.212	3,07%
Aragón	961	2,43%
Asturias	895	2,27%
Canarias	886	2,24%
Extremadura	855	2,16%
Baleares	816	2,07%
Cantabria	557	1,41%
Murcia	518	1,31%

<b>La Rioja</b>	<b>218</b>	<b>0,55%</b>
<b>Melilla</b>	<b>4</b>	<b>0,01%</b>
<b>TOTAL</b>	<b>39.495</b>	<b>100,00%</b>

Any way, people involved in horse's activities can be estimated around 150.000 taking into account all type of riders.

### **Economic Impact**

There is not a global analysis of the horse Industry in Spain. After the World Equestrian Games of 2002, the University of Cordoba makes a report for the Tourism and Sport Department of the Andalusia Government with the general objectives of analyze the total production generated by each activity developed in Andalucía in 2002, in which the horse is the main element of operation (Rodriguez Alcaide et al, 2005). The results show that, in 2002, this sector produced 478 million of € of which 320 millions proceeded from productive and selection activities of horses; 50 millions from sport activities; 31.3 millions from activities of leisure; 15 millions of recreational activities with participation and 26.4 millions were specific from the World Equestrian Games.

In 2005 MR Consulting make an estimation of global impact of Horses Industry in Andalusia. The total amount was near 700 million Euros. This report is more accurate and covers most of the equestrian activities and inversion in the sector. Table 3 resumes the principal component.

Table 3. Summary Table of Economic Impact of Horse Industry in Andalusia		
		%
Breeding exploitations	454.396.000,00	65%
Sports and Horse Salons	100.488.730,00	15%
Leisure and Fairs	43.580.612,80	6%
Business Tourism	94.103.332,00	14%
<b>Total</b>	<b>692.568.675,66</b>	<b>100%</b>

As above estimation are limited to Andalusia region where is 40% of horse production, would not be very unreasonable to extrapolate to twice the total for the whole impact Spanish Horse Industry. It could be the figure of 1.200 to 1500 million Euros My own research, only for jumping competitions al 2005/06 calendar, summaries the amount of 166 million Euros, and was a very conservative one.

Any case, this is a field were real data are very necessary and improve research project are of great urgency

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