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## AGRARIAN INSTITUTIONS AND ECONOMIC GROWTH: WAS THE SALE OF BALDÍOS RESPONSIBLE OF THE CASTILIAN AGRARIAN CRISIS AT THE END OF SIXTEENTH CENTURY?\*

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### Abstract

The traditional literature about the Castilian agriculture has interpreted the sale of baldíos as one of the main causes of the decline of Castile during the seventeenth century. The sale obligated the peasant to buy the land if he wanted to continue working on it. Many of these lands were marginal and poor soils, so the growth of production cost would have led many farmers to the ruin and poverty. Many of them had to migrate to other regions, causing a deep fall of agriculture production, the main production activity of Castile's economy at that period of time.

This paper shows that Castile entered in decadence not because the baldíos were sold but because the reasons inviting people to use more land and to increase production during the first half of the sixteenth century disappeared around 1590. Instead of seeing exclusively the new costs faced by the farmer after the sale, this paper explores what happened with revenues from plowing more land.

Baldíos was an institution that helped an increase of production through expansion of land and labor. Who was the owner of these lands seem to be indifferent in order to explain the amount of production factor used on agriculture. If baldíos was not the reason that provoked a huge migration in the Castilian countryside, then, who was the responsible?. Problems to maintain the returns from agriculture, and not the unexpected increase in the price of land, were the real cause of the final crisis at the end of the sixteenth century.

**Key words:** Spanish agriculture, economic institutions, property rights, waste and common lands.

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## Introduction

Traditionally, waste lands (*baldíos*), as part of the rural common property, have been considered a great benefit institution for Castilian population<sup>1</sup>. *Baldíos* allowed the lower levels of rural society to enjoy a considerable measure of economic independence, free from the obligations of tenancy and landownership. It made them a very important piece of the agricultural expansion happened during the sixteenth century. The traditional patterns of *baldíos* must have had great social implications as well because the feeling of community and the spirit of individual self-reliance were involved<sup>2</sup>.

However, the Monarchy saw in these sort of lands a way to solve part of its fiscal problems in the second half of the sixteenth century. The Crown needed to raise more funds to continue paying its bankers in order to maintain its European policy. The fiscal system was not providing enough revenues for the war in Europe. So, the Monarchy decided to sell *baldíos* in order to raise funds. Contemporaries and scholars have considered this process of sale the cause of the agriculture decay by the increasing costs imposed over poor quality lands. The population that worked these sorts of lands could not pay the price and they had to leave the countryside. The problems in the agriculture would have extended to the industry and trade, provoking the collapse of the whole Castilian economy.

This paper tries to explore this issue using some basic ideas from the economic theory of demand. It will help to provide an alternative explanation about the role played by *baldíos* and its consequences on the Castilian agricultural sector.

The literature about this issue accepts some key assumptions. First, Castile had a market for agrarian products but the majority of peasants did not participate on it. Thus, the improvements happened in trade and markets and the developments of new financial instruments and institutions during the late of Middle Age did not have any consequence on the peasants as decision makers. They did not have any incentives from markets to increase production. Nobility and the Church controlled the market and its profits. These groups sold the products that they obtained from lease their lands.

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<sup>1</sup> The word *baldío* had several meanings in sixteenth-century Castile. *Baldíos* were considered to be crown lands ungranted and unused, but they could also be crown lands that had been usurped into the private domain. Because of the free-use privileges associated with crown lands, the *baldíos* were considered to be the public domain, although under royal control. Vassberg (1974), pp. 385-6.

<sup>2</sup> Vassberg (1975), p. 651.

Second, the agricultural expansion took place to feed a growing and hungry population. Peasants increased production just because they have to survive.

Taking these assumptions as starting points, the sale of baldíos carried out by the Crown during the second half of the sixteenth century seems to be at the origin of the Castilian decadence for many authors<sup>3</sup>. It expelled a great part of Castilian population because it meant to increase the costs of many peasants working poor soils and living in subsistence levels permanently. Deserted villages, vagabonds, and the drop of agrarian production have been attributed by many economic historians to the abridgment of labor in agriculture that followed the sale of baldíos in the sixteenth century<sup>4</sup>. Peasants could not continue plowing those lands, so they had to migrate, causing the fall of agrarian production. Many authors see it as the beginning of the ruin of the whole Castile in the seventeenth century because it also affected to the industrial and service sectors.

This paper tries to show that the sale of baldíos had consequences over the distribution of revenues from agriculture and perhaps affected the welfare of many peasants but it was nothing to do with the crisis of the Castilian agriculture at the end of the sixteenth century.

This paper starts from different assumptions. First, there were a development of new markets for agriculture products and the growing population working in the countryside had access to them. Second, the expansion of the agriculture responded to the commercial incentives created for those markets on the Castilian peasants because of the growth of their prices in the sixteenth century.

Baldíos in Castile were a kind of free land for the growing population. The Crown was the real owner of baldíos, but it did not have any interest in plowing or administering these lands by itself, so the king offered them temporarily to the communities and towns of Castile as communal property. Any farmer did not get the property ever, but he could plow the land without paying rent in a lot of cases. Each community organized by itself the use of this sort of land. When the market started to provide clear profits from a higher production because of higher prices, there was a huge incentive to increase production and do it over new lands was the cheaper way.

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<sup>3</sup> Gómez Mendoza (1967), Anes (1970), García Sanz (1980), Vassberg (1978 y 1983), Marcos Martín (2000).

This paper proceeds as follows. Section I explains what means baldíos in Castile and how the sale of baldíos happened during the sixteenth century. Section II explains the arguments used by the historiography so far to link the sale of baldios and the decadence of Castile. Section III presents the model that this paper uses to analyze this issue. Section IV shows the utility of the model to explain the historical evidences before, during and after the sale of baldíos. In the first period (1500-1570), baldíos explains why the cost of land did not increase, even though population working in the countryside and plowing land grew. During the second period (1570-1590), the sale of baldíos by the Crown pushed up the cost of production in that lands, but it did not mean an expulsion of people from their lands or a reduction of land plowed. In the third period (1590-1650), prices of product grew less than cost of production and it caused that people gave up their land, migrating to other areas, and that many land became waste again as it was before 1500. Problems to maintain markets were the real problem for the Castilian agrarian sector at the end of the sixteenth century. Section V presents the conclusions.

### **I. The sale of common land in Castile in the sixteenth century**

The privatization of land in Castile was a long process that occurred between the Middle Age and the nineteenth century. The sale of land by the Crown during the sixteenth century affected mostly a kind of common lands, named *baldíos*. These baldíos, like the majority of common lands, surged in the Reconquest period, when all the land without a clear owner was taken by the Monarchy<sup>4</sup>. The municipalities who governed the rights over their jurisdiction exploited them, coordinating its plowing among everybody inside of the village.

For centuries, most of this land was used as pasture, but when the population started to grow at the beginning of the sixteenth century, crops were planted in them. The communal authorities coordinated the distribution among the peasants that demanded more land. The peasants received access to these lands free or for a nominal fee, for periods of between four or eight years that had to be renovated. The putting of this new land to crops allowed a rapid increase in the agrarian production and population in Castile during the sixteenth century.

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<sup>4</sup> García Sanz (1980), Yun (1987a), pp. 285-305.

<sup>5</sup> Vassberg (1983), p. 27.

From the middle of the sixteenth century, the Crown, faced by the rising costs of its expensive wars in Europe, found it necessary to increase its rents and taxes. The sale of land was one of the easier methods used by the Monarchy to get more revenues. Justifying itself by the lack of titles of ownership for many of these common lands, the Crown was able to sell an important amount of them<sup>6</sup>. In many cases, the initiative for such land sales came from the villages themselves. They had now the opportunity to take control over territories that always have been managed by cities or institutions hierarchically higher to them<sup>7</sup>.

Table 1. Monarchy revenues from the sale of baldíos between 1550-1600 (maravedis)<sup>8</sup>

Periodos	Nominal	%	Real (1550-59=100)	%
1550-59	5.121.145	0.3	5.121.145	0.4
1560-69	126.651.611	6.8	96.242.559	8.7
1570-79	406.768.998	22	278.107.964	25
1580-89	944.744.028	51.3	539.921.212	48.7
1590-99	355.809.491	19.3	184.985.354	16.7
unknown	6.020.547	0.3	6.020.547	0.5
Total	1.839.095.273	100	1.110.398.781	100

Notes: Nominal revenues from Vassberg. Real revenues deflated using Martín Aceña data.

Sources: Vassberg (1983), table 6, p. 242. Martín Aceña (1992).

This extensive sale of communal lands affected different parts of Castile in different periods of time. During the 1560s the Council of Finance administered a pilot scheme in Granada where communal lands were sold off, frequently at prices substantially below the market rate<sup>9</sup>. Sales took off in Castile during the 1570s to reach their peak in the 1580s<sup>10</sup> (table 1). The process ended when Philip II agreed to stop such sales as a condition imposed by the Cortes to approve a new extension of the “millones” tax in 1598.

The common lands sold represented, at least in some areas, a considerable part of the municipalities-hinterlands. Yun estimates that they might well have accounted for 30

<sup>6</sup> Gómez Mendoza (1967), p. 517 y ss. Vassberg (1983), pp. 94-95.

<sup>7</sup> Izquierdo Martín and Sánchez León (1998).

<sup>8</sup> A higher price of land neutralizes the effect of inflation over this process. The table helps to show that the amounts of this table are shown not important as monetary income for the Royal Finance of Castile for the income

<sup>9</sup> Vassberg (1983), pp. 71-79.

<sup>10</sup> Vassberg (1983), pp. 238 y 244. For instance, Cartagena received an offer to sell baldíos in 1563, while the process in Old Castile was especially important between 1585 and 1588, especially the areas of Valladolid and Zamora. Díaz Sanz (1995), p. 149. The sale in Soria started in 1584.

to 40 per cent of the total area of Tierra de Campos<sup>11</sup>, while in the district of Coca the figure was around 28 per cent<sup>12</sup>.

This process of communal land sales at least in the North Castile, actually contributed to the expansion of small and medium sized properties instead of to land concentration<sup>13</sup>. Much of the land sold was bought by the peasants who had previously been farming it or by the municipalities themselves<sup>14</sup>. For instance, in the privatization of the baldíos in the Land of Soria almost all the members (vecinos) of a village bought land. Many times, the purchase was made collectively, instead of individually<sup>15</sup>. It helped to reduce transaction costs and the Crown could receive its price more easily.

This sale of common lands took place at the same time that the sale of lands and jurisdiction from the church and the royal patrimony. It was another way to increase the revenues of the Monarchy after 1578<sup>16</sup>. Many villages and small towns also took advantage of these sales to buy their own lands of their jurisdiction in order to gain autonomy from the city or institution, which owned them before. To be able to pay the price of their freedom, they sold or rented baldíos and commons lands with permission of the Crown.

A general increase of fiscal pressure from the Crown also affected the sale of common lands because the municipalities asked permission to the king to sell or rent their common lands in order to pay the new taxes<sup>17</sup>. The disadvantage of this process was that it caused an increase in the cost of production. Peasants had initially been working free lands, now they had to pay for the use of them. Many scholars have seen in these payments the root of the indebtedness of the Castilian peasant, because councils and farmers had to take out heavy mortgages to pay for the properties in the first place. These rents paid by the peasants from the 1580s onward significantly narrowed their profit margins and created even further hardship as their payments coincided with the end of a period of expansion in agricultural demand and the beginning of a economic recession.

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<sup>11</sup> Yun (1983), p. 267.

<sup>12</sup> García Sanz (1980), pp. 117-118.

<sup>13</sup> Bernal (1979), p. 104.

<sup>14</sup> Vassberg, (1983), pp. 234-6. Vassberg (1978), pp. 145-167. Alvar (1990), pp. 97-131.

<sup>15</sup> Díaz Sanz (1995), p. 169.

<sup>16</sup> Faya Díaz (1992, 1998). Bernardo (1996).

<sup>17</sup> Bilbao (1990), pp. 45-63.

Viñas y Mey' asserted that small and medium-sized peasants relied on the extensive use of land mortgages (*censo al quitar*) to finance expansion during the growth period of the economy<sup>18</sup>. When the boom collapsed, they could no longer make their payments and were ruined. But there is not evidence to support this claim. In fact, Nader did not find the heavy indebtedness essential to the Viñas model when she studied the province of Guadalajara<sup>19</sup>. Vassberg also denies this hypothesis as true for the whole Castile, although he recognizes that there was a decline in the quality of life of the peasants due to a sharp fall in production and the increase of costs as a consequence of the sale of common lands by the Crown<sup>20</sup>.

## **II. A very old argument: the sale of baldíos and the peasant indebtedness as the origin of the Castilian economic crises**

The sale of baldíos and common lands during the second half of the sixteenth century as one of the main causes of Castile's economic decline has been a hypothesis very resistant to the passage of the time.

The first to criticize these land sales were many of the contemporaries of this process. Several sectors of the society acted together in order to convince the Monarchy that the sale of baldíos had to be stopped. The most affected by the process of selling land adopted a frontal opposition. The Cortes, the Parliament where the most important cities of Castile had representation, and other institutions with prior access to the common lands, such as the Mesta, was opposed to the sale<sup>21</sup>. At the same time, the *arbitristas*, a leading group of writers that analyzed the economy and society of Castile in this period, denounced the selling of baldíos as an attack on the small farmer, on the national agriculture and on the whole Castilian economy.

Caxa de Leruela, the defender of the cattle industry, condemned the sale of baldíos as the main reason for its decadence because without pasture, the cattle had decreased, when it had been one of the richest resources of the Castilian economy<sup>22</sup>. It had led to a sharp rise in the cost of meat and wool.

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<sup>18</sup> Viñas y Mey (1941).

<sup>19</sup> Nader (1981).

<sup>20</sup> García Sanz (1989), pp. 206-226.

<sup>21</sup> Gómez Mendoza (1967), García Sanz (1980).

<sup>22</sup> Caxa de Leruela (1631), chapter 3º, p. 2.

Cellorigo, writing in 1600, called the high cost of renting land the most active cause of peasant misery<sup>23</sup>. Some ministers of the Monarchy also shared the idea that the sale of common lands was one of the worst things that the king had permitted. For instance, *La Junta de Reformación*, the commission created by the Crown to find solutions to the economic problems of Castile in the seventeenth century, thought that the sale of baldíos:

“The sales of baldíos have caused the destruction of many villages and small towns, because the majority of vassals do not have land to sow or any pasture to feed their oxen and mules. Their only way to get land is renting it from landowners. These have bought all the common land because they are rich and now they lease it at the highest prices they can. The poor peasants, are so burdened, that even if they pay the first and the second year of rent, they are overwhelmed by the third year, so they give up their work, becoming so poor that they see themselves forced to leave their homes”<sup>24</sup>.

This text shows how many contemporaries saw the problem. They linked emigration from the Castilian countryside with the higher land cost that have been caused by the sale of baldíos. However, it is difficult to figure out how an increase of the supply of land in the market could increase its price. Actually, the data available show clearly that the rents were declining right after 1580, when the most important volume of sales started. As García Sanz has calculated, the rent followed the same downward movement of the population. In the case of the lands of the Cabildo of the Cathedral of Segovia rents went down by 30 per cent between 1570-1659<sup>25</sup>. In Segovia and Tierra de Campos, the production of wheat and barley decreased more than 40 per cent between 1580 and 1630-1640. In a representative group of villages of Valladolid a similar process occurred, with rents dropping around 50 per cent. In Soria, for instance, the Crown did not meet its goals with the sales because “the land was sold at excessively cheap prices”<sup>26</sup>.

Then, when the contemporaries were speaking about “expensive prices”, it means that after the sale, the peasants had to pay for working a land that had been free

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<sup>23</sup> González de Cellorigo (1600), fol. 24. See chapter 2, n.3

<sup>24</sup> “Discurso breve y sumario de las causas porque se ha disminuido la población” 1621. *La Junta de Reformación*, document XLII, n. 15. quoted by Domínguez Ortiz (1987), p. 91.

<sup>25</sup> García Sanz (1979), p. 308.

<sup>26</sup> Díaz Sanz (1995), p. 177.



before. This is very different than to assert that the price of land in Castile increased from the process of sale.

The Cortes, the arbitristas, and the clergy from the pulpit deplored the increasing peasant indebtedness. The Cortes of Madrid (1592-8) declared that the peasants were so burdened with debts that they were unable to make their payments<sup>27</sup>. Sancho de Moncada, another *arbitrista*, wrote, “ The countryside is deserted, the *labradores* having fled their poverty, overburdened with debts and foreclosures”<sup>28</sup>. Fernandez Navarrete compared the peasant debts to a voracious insect, which devoured everything the workers could produce<sup>29</sup>.

Curiously, many of these old arguments against the privatization of land have been repeated over and over again including the most recent studies about Castilian economic history<sup>30</sup>. They stay in the literature as unquestioned premises. The privatization of a significant part of the municipal lands, spurred on by the considerable increases in the cost of pasturage and municipal spending, contributed to the decline of the basic unit of agrarian production in Castile: the small farmer<sup>31</sup>.

The sale is criticized as the old arbitristas did, blaming the Crown and its growing fiscal pressure for the Castilian crisis<sup>32</sup>. The sale of common land is considered an indirect tax on the peasants, the weakest link in the production chain. Moreover, it also implied the destruction of the main social security system at that time and the proletarianization of the smallholder.

Historians have considered the Castilian peasant as an economic agent permanently outside of the market. Hence, the peasant did not respond to the economic incentives created by the expansion during the first half of the sixteenth century. According to this traditional vision, agricultural production was just oriented to feed the population growth, which always was close to subsistence levels<sup>33</sup>. The self-sufficiency was the dominant characteristic of the Castile agriculture from this point of view. Due to

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<sup>27</sup> Actas (1869-1918), vol. XIII, p. 136.

<sup>28</sup> Vassberg (1984), p. 205.

<sup>29</sup> Fernández Navarrete (1626), p. 270. Vassberg (1984), p. 205.

<sup>30</sup> Braudel (1953) vol. II, p. 201. Bennasar (1967), pp. 317, 318, 327 y 328, Gómez Mendoza (1967), Anes (1970), García Sanz (1980). Vassberg (1984), p. 174. García Sanz (1989), p. 220. Yun (1989), p. 565. García Sanz (1994), p. 22. The same argument in Soria: Díaz Sanz (1995), p. 177. Marcos (2000).

<sup>31</sup> Yun (1990), p. 565.

<sup>32</sup> Larraz (1943), p. 75. Wilson and Parker (1985), p. 60.

<sup>33</sup> Vassberg (1984), p. 166 and 188.

the little money that they used, just to pay rents and taxes, the peasants would not have enough coins for regular purchases in the market.

In this scenario, the Malthusian crisis was a permanent threat because the growth of production was based just on free marginal lands of doubtful quality. Serious stresses soon appeared in the Castilian economy as population and urban development outstripped its economic potential<sup>34</sup>.

According to this argument, there is no space to consider that many times, the peasant's expansion into new land was a move to increase their profits by benefiting from higher prices in the markets. That profits could be made from working marginal and poor soils, once the price was right. In spite of the strong presence of the indebtedness hypothesis in the literature, during the last years new data has been published suggesting that there are other ways to analyze this issue. These data open the door to new research and new interpretations about the process of growth and decline of the agrarian sector in Castile. Tools provided by economic theory, especially from the marginal analysis of production factors, help to understand better the whole process.

### **III. Analysis of variation in the marginal revenue of land without any technological change**

Before considering the available data, it is necessary introduce the basic ideas and principals used to study the production function in marginal terms. Output can be expressed as a function of inputs combination used in the production process, and therefore output price may be expressed as a different function of the combination of these inputs. Consider constant the capital factor, so the production function uses land and labor. Consider also that there is not any technical change. Historical studies have shown that there was not any revolutionary technological change during the sixteenth century in Castile. Economic historians agree that the Castilian agrarian growth was basically based on an expansion of land, requiring more and more workers.

Total revenue (TR) from agriculture activity will be its price times output for any combination of inputs.

$$\text{Total Revenue (TR)} = \text{Price (P)} \cdot \text{Quantity of output (q)} \quad (1)$$

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<sup>34</sup> Gentil da Silva (1967), pp. 19-26. Salomon (1964), pp. 42-49.

### a) The Revenue effect

Marginal revenue product of a factor is defined as the change in total revenue per unit change in the use of that factor. For example,  $\Delta R/\Delta \text{land}$ , is the marginal revenue product of factor "land" (MRP<sub>land</sub>). As both price and output may change due to an increase in the use of factor "land", we must use the product rule to determine the MRP<sub>land</sub>:

$$\text{MRP}_{\text{land}} = \Delta R/\Delta \text{land} = P \cdot \Delta q/\Delta \text{land} + q \cdot \Delta P/\Delta \text{land} \quad (2)$$

The term  $\Delta P/\Delta \text{land}$ , the rate at which price varies with the use of factor "land" may itself be broken down into two effects: the change in output occasioned by the use of more of the factor "land",  $\Delta q/\Delta \text{land}$ , and the change in price due to the offering of more output for sale,  $\Delta P/\Delta q$  (when the farmer is a price searcher).

$$\Delta P/\Delta \text{land} = \Delta P/\Delta q \cdot \Delta q/\Delta \text{land} \quad (3)$$

If (2) is substituted into equation (1) and factoring out gives:

$$\text{MRP}_{\text{land}} = \Delta q/\Delta \text{land} \cdot [P + q \cdot \Delta P/\Delta q] = \text{MP}_{\text{land}} \cdot \text{MR} \quad (4)$$

The term inside the brackets is the farmer's marginal revenue. Marginal revenue product is simply  $\Delta q/\Delta \text{land}$  times marginal revenue itself. The change in output per unit change in the use of factor "land" ( $\Delta q/\Delta \text{land}$ ) is the marginal physical product of that factor (MP<sub>land</sub>). Marginal revenue product (MRP<sub>land</sub>) is therefore simply the marginal physical product of the factor times marginal revenue. When the farmer is a price taker, the marginal revenue product is simply  $\Delta q/\Delta \text{land}$  times the price of output.

$$\text{MRP}_{\text{land}} = \Delta q/\Delta \text{land} \cdot P = \text{MP}_{\text{land}} \cdot P \quad (5)$$

An increase in the use of a factor of production will increase revenue in the following way. It will increase output at a rate equal to MP<sub>land</sub>. The effect of this output change on total revenue is reflected by marginal revenue. Marginal revenue gives us the rate of change in revenue per unit change in output.

Holding constant the use of all other factors, we may identify a MRP<sub>land</sub> curve that relates the use of the varying factor "land" to the value of its marginal revenue. Marginal revenue product must decrease with the expansion of factor "a" due to the law of diminishing returns. Marginal revenue either diminishes with output when the

elasticity of demand is not infinite. Increases in the use of other factor will typically increase  $MP_{land}$  and therefore shift curve  $MRP_{land}$  upward at each quantity of factor "land". In Castile during the sixteenth century, we consider that the production factors that grew were land and labor. A change in prices of output also can shift the curve  $MRP_{land}$  upward at each quantity of factor "land".

**b) The cost.**

To increase the use of a production factor will affect cost in a more straightforward way. The cost of a resource is typically the total spending for its use. Spending on any quantity of factor "land" is simply that quantity times its price. Total spending on "a" is therefore given by the following expression:

$$\text{Spending on land (C)} = P(\text{land}) \cdot q(\text{land}) \quad (6)$$

Increased use of factor "land" will therefore increase spending at the following rate per unit change in "land". This rate of change in spending on factor a per unit of its use is defined as the marginal factor cost of "land" ( $MF_{Cland}$ ):

$$\Delta C / \Delta \text{land} = MF_{Cland} = P_{land} + \text{land} \cdot \Delta P_{land} / \Delta \text{land} = P_{land}(\text{land}) (1 + 1/\epsilon) \quad (7)$$

We may also relate this expression to an elasticity ( $\epsilon$ ). The marginal factor cost curve will have a slope equal to or greater than zero. Consider the case where the elasticity of supply of factor "land" to the firm is infinite, it means that the supply curve is horizontal. In this case  $MF_{Cland}$  can be expressed as simply

$$MF_{Cland} = P(\text{land}) \quad (8)$$

Marginal factor cost will simply be the constant factor price,  $P_a(a)$ . In all other cases supply curves will slope upward.

We can consider that Castilian peasants faced an almost horizontal supply curve of land since the end of fifteenth century. Marginal cost in terms of rent did not increase when they plowed new areas. Baldíos represented free land available to those willing to work on it.

### c) Net Profits.

Varying the amount of a factor affects revenues and costs. If a factor contributes more to increase revenues than costs at the margin, increasing its use will increase profits. If hiring an extra unit of a factor increases costs more than it adds to revenue, then obviously its use should be curtailed. Profits from the use of a factor will be maximized when the gain from its employment at the margin is just equal to its cost.

$$MRPland = MFCLand.$$

The determinant of the profits-maximizing level of land employment in the agriculture is the production function for the peasant, the demand function for its output, and the supply function of the land itself. If we consider that the peasant is a price taker in both input and output markets, his demand for factors of production will be inversely related to price.

Curve  $MRPland$  itself is the peasant's demand curve for factor land and it must slope downward. If the price of the land goes up, the peasant will reduce the quantity used. Quantity demanded will be negatively affected by a factor price increasing.

Consider the case where the peasant is a price taker in the output market with a perfect elastic demand curve for his output. In this case:

$$MRPland = MPPland \cdot P(\text{land}) (1+1/\text{infinite}) = MPPland \cdot P(\text{land}) \quad (9)$$

Now let us also assume that the farmer is also a price taker in the demand of land. The  $MFCLand$  in this case is simply the constant factor price,  $P(\text{land})$ , which curve is horizontal at this level. The intersection of  $MRPland$  and  $MFCLand$  is the point where the peasant is maximizing profits.

Any increase in the price of the output without changes in the cost of land will increase the amount used of this factor of production because it will increase the marginal revenue product of the farmer. When the marginal cost of the land is flat because land is free, the shift to the right of the  $MRPland$  curve does not imply an increase in the cost of land, so any new profits go to the worker.

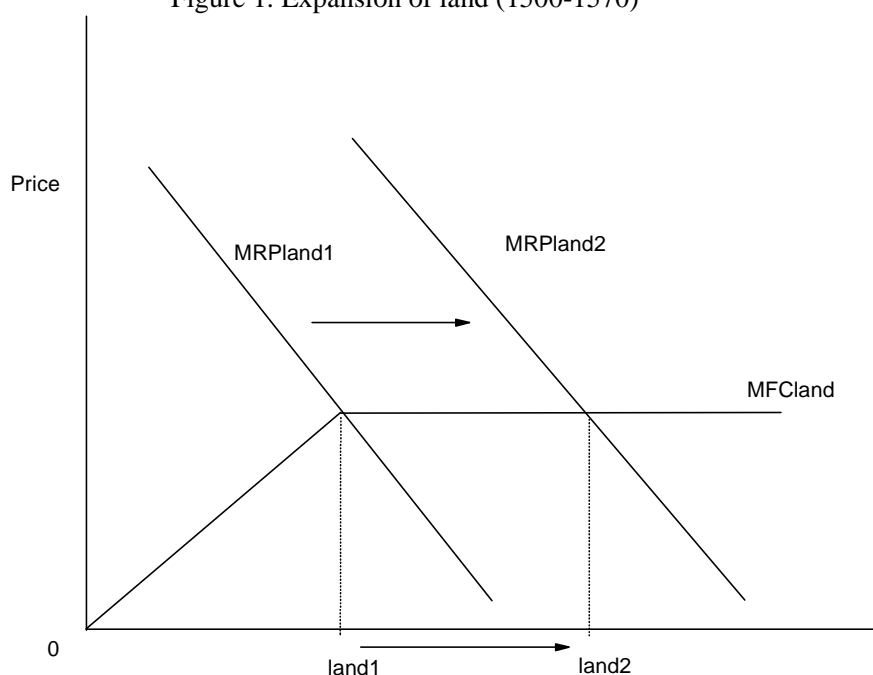
Could this model be applied to the Castilian agriculture expansion of the first half of the sixteenth century? Historical evidence seems to permit this approach and it shows that institutions of property rights played a crucial role.

#### IV. The sale of baldios was not the origin of the Castilian agrarian crisis

##### a) The expansion of the agriculture in Castile: (1500-1570)

Castilian agriculture did not experience any important improvement in productivity during the sixteenth century, because the traditional techniques used to work the land, did not change, except the spread of the mule instead of the oxen<sup>35</sup>. However, a lot of evidences show a great expansion of this economic activity.

Figure 1. Expansion of land (1500-1570)



An increase in the amount of land factor without any technological change means a parallel increase of factor labor too, because it is necessary to have the same proportion of land and labor to maintain at least the same marginal physical product (MPPLand). It also implies that the supply of labor is perfectly elastic.

An increase in the prices of output could be the engine to shift the curve MRP of land upward. When the availability of land and labor can be considered infinite because there are land free and a growing population, as it was in Castile at that period of time,

<sup>35</sup> Anes (1970) Vassberg (1984).

the amount of land and labor employed in agriculture increases but the price of rental lands remains constant.

The increase of product prices could be enough not only to compensate for any fall of productivity as consequence of the expansion even into marginal lands and poor soils (figure 1). The agriculture returns were higher than before even with an increase in the land and the number of people working on it.

Baldíos in Castile made possible that the price of land did not changed. A growth of returns from the increase of agrarian product prices in the Castilian markets and the parallel freeze costs of land permitted the plowing of new lands (baldios) with little capital investment and a great expansion of agriculture in products and workers. Historical data confirm the predictions of this model.

The growth of the urban population in the sixteenth century created a bigger market for the agriculture products. In the Middle Age, the interior of Castile had been a region poorly articulated, both, locally and with the rest of Europe. Any movements of products had a high cost, so an important part of the output had been produced exclusively for home consumption. However, the market expanded at the end of the fifteenth century, with the necessity to provide enough food for increasingly larger cities like Valladolid, Seville, Burgos or Madrid. Twenty Castilian cities grew 84 per cent between 1530 and 1594<sup>36</sup>. Castile's population expanded from 4.4 to 6.6 million between 1528-36 and 1591. The most rapid increase took place in the earlier decades<sup>37</sup>.

The development of a more integrated market permitted farmers greater security of supplies, but also gave them the possibility of specializing in the crops most suited to local climatic and soil conditions, especially those which prices showed to be most profitable, like olive groves and vineyards<sup>38</sup>. The "Topographical Relations" of Philip II show this tendency to specialization in some products like wine<sup>39</sup>.

To the increase in urban demand must also be added the increase and diversification of overseas demand, especially in areas from which it was profitable to export. Actually, the rise in the price of wine and oil was much more intense in Andalusia in the first half of the sixteenth century than in the North and Center of

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<sup>36</sup> Carande (1943), vol. I, p. 60. Anes (1994), p. 61.

<sup>37</sup> Ruiz Martín (1967), p. 197.

<sup>38</sup> Carande, (1943), vol. I, pp. 135-6. Bernal (1988), pp. 39-40.

Castile, increasing by 179 per cent for wine and 139 per cent for oil between 1501-10 and 1540-50<sup>40</sup>.

The incentive to increase agricultural production was helped by the well-known growing trend of prices. For example, the cereal prices tended to rise from the beginning of the sixteenth century. Between 1540-50 and 1590-1600 the price of wheat in Castile rose by 114 per cent, before stabilizing during the next half century. The production of wheat in many villages of Castile exceeded the barley output and the difference grew in the second half of the sixteenth century. In some towns, wheat, which was 59 per cent of both grains in 1557-1560, reached 68 percent in the last decade of the century. This was caused not only by the increase of population, but also by the development of new markets where the cereal could be sold<sup>41</sup>. The importance of the market in the agricultural expansion can be seen also in the growth of the population. The areas with the highest growth were those closest to big cities like Palencia and Valladolid in the first half of the sixteenth century and Madrid in the second half<sup>42</sup>.

The increase in production was parallel by the growth of the extension ploughed. The repeated complaints about the lack of grazing and wood due to the expansion of agriculture, forced the Crown to issue laws to protect the woodland. However, these efforts were very little effective and the expansion of the agriculture did not find any serious obstacle. Collective institutions protected the peasant in his effort to get new lands and led agriculture to a great expansion. A great part of this movement was possible thanks that the new land incorporated to the agriculture during the initial phase was free, allowing to peasants to increase their revenues from land quickly while a higher competition increased production and worked to reach a new equilibrium.

The increase of profits in the countryside contributed to raise the quality of life and the size of the peasant's family. The level of life can be observed by the amount of meat and fish consumed. Old Castile had a higher consummation level of these products than the average in other areas of Europe<sup>43</sup>.

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<sup>39</sup> Anes (1994), p. 64. Viñas y Mey (1949-71), Toledo, I, pp. 87.

<sup>40</sup> Anes, (1994), p. 69. Hamilton (1975).

<sup>41</sup> Yun (1987), p. 168.

<sup>42</sup> Yun (1987), p. 160.

<sup>43</sup> Yun (1987), pp. 160-161.



These benefits also could be explained by the kind of contracts that many peasants had. For example, the *censo enfitéutico* was permanent, non-negotiable leasehold originally designed to attract farmers to new lands or to newly enclosed land. The tenant had to pay an annual rent in perpetuity, but he possessed the lease with full legal right (he could sell it, trade it, mortgage it and will it to his heirs). With the censo fixed at the relatively low rates of the late fifteenth century, it was a great advantage to have such a fixed price during the sixteenth-century price rise for the farmer<sup>44</sup>. Originally payable in kind, by the early modern period most censo enfitéutico payments had been commuted partly or wholly to coin. In other parts of Spain, for example Galicia, the *foro* was very extended. It was a kind of contract very similar to the *censo*. The large landowners used to lease their lands with *foro*, contracts rather than using the regular rental contract. For example, the monastery of San Martín Pinario made a rental contract for each 100 *foros*<sup>45</sup>.

Even so, the landlords who received the rent in specie had also great benefits during this period because the increasing price of the products allowed them to get more revenues. In fact, the raw income of the nobility houses grew during the sixteenth century. The most important patrimony in the region of Madrid was the dukedom of Infantado. This house multiplied its income by 2,4 between 1530 and 1597, passing from 50.000 to 120.000 ducats per year<sup>46</sup>. The duke of Medina Sidonia multiplied by four his income between 1510 and 1597<sup>47</sup>.

By the most widely used figure, noble incomes doubled from 1530 to 1595, while prices, according to Hamilton also doubled<sup>48</sup>. In the case of the county of Puñoenrostro, its most important resource was the rent of land and mills, accounting for 87 per cent of its income. Between 1530 and 1577, the count-received the double his original 1530 income, reaching 15.000 ducats. This good period is explained by the increase of grain production and the sale of this product in Torrejón. The growth can be observed in his

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<sup>44</sup> Yun (1993), pp. 21-22.

<sup>45</sup> Gelabert (1982), p. 106.

<sup>46</sup> In the Segovia countryside, the growth of the rental land prices has been calculated around 7 percent between 1560 and 1575-80. García Sanz (1986), p. 304. The growth of owners of "predios rústicos" in Madrid was around 20-25 percent between 1560-1580. The income from "tercias de pan mediano" in the condal arcs grew by 23,7 percent between 1557-61 and 1576. López García (1998), p. 128.

<sup>47</sup> Ulloa (1977), p. 45.

<sup>48</sup> Hamilton (1975). Nader (1977), p. 415.

lands of Segovia and Madrid<sup>49</sup>. Similar trends were followed by the nobility economies in Aragon<sup>50</sup> and Catalonia<sup>51</sup>. 1577 was the last good year. After this date, the numbers were maintained for two decades before a general drop. Actually, the acquisitive power fell in real terms for many patrimonies at the end of the sixteenth century.

The accumulation of capital in the countryside and the city allowed an increase in the heads of local sheep owned by merchants and small farmers between 1526 and 1578<sup>52</sup>. It represented a great change in cattle raising, inducing also a transformation of the Mesta.

The population grew not only in the urban centers, but also in the countryside. The figures for baptisms in rural parishes confirm the growth of population until 1570-80. The evidence for the extension of cultivation related to the increase of population is abundant. In Valdaracete (Madrid), the increase of population was explained in 1580 "by the plowing up of the land in the town's district, which has therefore been able to feed and support more people"<sup>53</sup>. The studies made for the east of Old Castile show a rhythm of growth in the rural population by 0,26 per cent annual between 1530 and 1586. It is not less intensive in the western area<sup>54</sup>.

Historical evidences also confirm or at least did not deny that the price of land did not grow in the same proportion than prices of output during this period. It is very difficult to find price of land but looking at rents. They were frozen until 1550 in spite of an increasing demand of land, the increase of population in the countryside and the increase of agricultural product prices. Bartolomé Yun has shown that the rent per unit of land did not suffer any important change during this period<sup>55</sup>. The Church of San Cebrián de Villacreces' land were rented for a price around 1 Hl. of wheat per hectare during the first 40 years of the sixteenth century, and its variation was between 0,5 y 1 Hl./ha. A similar trend can be observed in Tierra de Santiago de Compostela (table 2). It

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<sup>49</sup> Hernanz Elvira (1998), p. 410.

<sup>50</sup> Abadía (1993), p. 55. In Aragón the seven more important nobility houses increased continuously its income during the sixteenth century.

<sup>51</sup> Duran (1985), pp. 12-13. The Catalan nobility income grew through the fifteenth century, reaching its higher point in 1580-85. There was a faster growth between 1550 y 1585.

<sup>52</sup> Ruiz Martín (1974), pp. 271-285.

<sup>53</sup> Viñas Mey (1949), p. 627.

<sup>54</sup> Brumont (1978), pp. 249-268. Yun (1987), pp. 152-159.

<sup>55</sup> Yun (1987), pp. 171-172.

is observable also that the years of rent passed in the contracts from an average of 11.4 years in 1513-28 to 6.9 in 1612-19.

Table 2. Evolution of average rent prices in Tierra de Santiago. (1510-19= 100)

1510-1519	100	1570-79	139.6
1520-29	98.7	1580-89	133.9
1530-39	98.7	1590-99	138
1540-49	103.4	1600-09	143.5
1550-59	112.9	1610-19	125.6
1560-69	129.1		

Source: Gelabert (1982), p. 104.

The rents in Tierra de Santiago started to grow after 1550. Someone could assert that Galicia is a very different area. Actually, the Crown was not able to sell there the same amount of baldíos than in Castile. However, people could move to other regions and Castile received people from the North of Spain during the sixteenth century<sup>56</sup>. Free land at some hundreds of kilometers is not a great obstacle to people willing to start a new life.

#### **b) The sale of baldíos by the Crown (1570-1590)**

When the Crown decided to sell the baldíos, it changed immediately the costs faced by many Castilian peasants, especially on those working in the formerly free lands that will be sold. Although this process started in the 1550s, the most important phase took place between 1570 and 1590 (table 1).

The traditional literature has interpreted the sale of baldíos as the main cause of peasant indebtedness. Figure 2 can explain this argument. Any increase in the price of land (MFCa) without changes in the use of factor labor will move the equilibrium point up through the MRPa curve, reducing the quantity of factor land that peasants want to work, but non-necessary expelling people from the agriculture because the movement is along the curve of marginal revenue of land (MRPland). This process will decrease dramatically the income of many families working the poorest soils. The peasant working in bad soils could not afford such increases in these costs and had to sell the land and work for others. Furthermore, there was an increase of fiscal pressure by the Crown during this period. In 1576, records of some villages of Castile show an increase

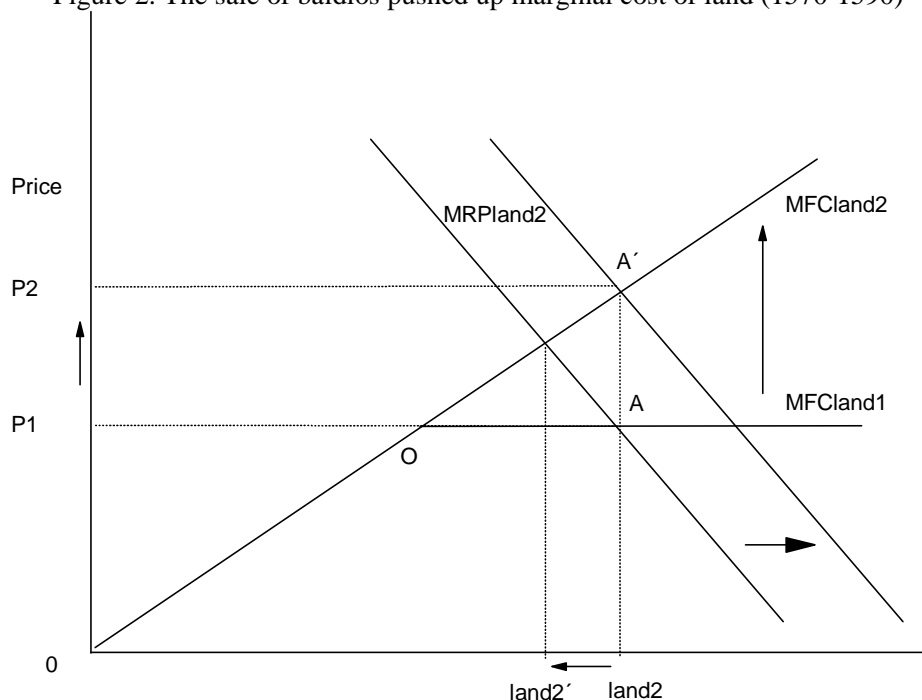
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<sup>56</sup> Vassberg (1998).

in the level of tax payments by 100 per cent on *tercias* and *alcabalas*, two of the most important taxes. It means that from 1561 until 1591, the amount paid by the small villages grew by 5 per cent, much faster than inflation<sup>57</sup>. All this led to a fast growth in the costs of production.

However, this hypothesis has two problems. First, without any improvement in productivity, less land plowed will mean a reduction of total product, and historical data do not show any strong decrease in production. Second, why did people buy land when it was not profitable? Why did people invest on land that right after they abandon? Why did the price of baldíos increase through time when people is leaving the land? All these questions have the same answer: the process of land sale by the Crown took place at the same time that marginal revenue product of the farmer continued growing.

Figure 2. The sale of baldíos pushed up marginal cost of land (1570-1590)



Given the lower returns that baldíos could have, the expansion into poor soils ended, but this did not affect the demand for fertile lands because prices of product remained growing (table 3). It means that the MRPland curve was moving to the right in the figure 2 during the whole sale. The sale of baldíos did not provoke any hard

<sup>57</sup> Yun (1987), p. 277.

decrease of land plowed, or at least, if there was such a process of leaving land, it did not happen in the baldíos sold by the Crown.

This increase of marginal revenue in the countryside explains why land prices increase during the process of sale and not before (P1 to P2). Data show that rents, avoided the competition of free soils, started to grow during this period. Actually, the demand for lands of good quality tended to increase, but now it was necessary to pay a higher price. There was also a fall in the time of the contracts from eight and four harvest to six and three or even less. The landowners reserved for themselves the opportunity to increase the price more frequently<sup>58</sup>. Data from the Cathedral of Segovia show that the price of rent on its land grew until the 1580s. The same happened in the plains of Zamora o Leon<sup>59</sup>. According to Bartolomé Yun, this increase in land rents rose to as much as 40 per cent of the gross output of certain farms in Tierra de Campos<sup>60</sup>.

Table 3. Price index of Old Castile (1520-1650). Base 100: media 1601-1625.

Years	prices
1521-1530	34,429
1531-1540	35,288
1541-1550	42,076
1551-1560	54,694
1561-1570	62,163
1571-1580	75,197
1581-1590	82,131
1591-1600	95,489
1601-1610	107,313
1611-1620	94,239
1621-1630	106,279
1631-1640	115,115
1641-1650	119,707

Source: Llopis Agelán, E. Jerez, M. Álvaro, A, Fernández E. (2000).

The high dependence of the land sale on growing product prices is coherent with data from the areas where baldíos were sold. The Crown was able to sell more land in those regions close to huge and dynamics markets as Valladolid, Madrid and Sevilla<sup>61</sup>.

That increase of marginal revenue also explains that during this period there was not any strong exit of population from the countryside, but a deterioration of its welfare. Figure 2 shows that the marginal revenue inside of triangle (O,A,A') was going to the

<sup>58</sup> Yun (1987), p. 284. About increases of rent prices for 1570s and 1580s see López García (1990).

<sup>59</sup> García Sanz (1986), p. 304, Álvarez Vázquez (1984), pp. 614-617, Sebastian Amarilla (1989).

<sup>60</sup> Yun, "Producción agrícola en Tierra de Campos y Segovia", p. 8.

<sup>61</sup> Vassberg (1975), pp. 650-654.

peasant's pocket before the sale of baldíos, and after that it went to the Crown or to the new owners of those lands.

Now, people working old baldíos got less returns from land than the rest of farmers. Many were able to keep their property but reducing their standard of living, which was going very close to the level of subsistence. It reduced the quality of life of the peasants and contributed to end the growing trend in the population. The figures for baptisms show a clear downward trend in every rural parish that has been studied<sup>62</sup>. According to Reher, the growth of population in Old Castile finished between 1575 and 1590<sup>63</sup>.

Figure 2 also shows that the sale of baldíos was not the reason why people leave the Castilian countryside. Historical evidence shows that there was not a great expulsion of population from the countryside in this period. In fact, from the last decades of the sixteenth century, the population of Castile was undergoing a process of dispersal, or rather realization<sup>64</sup>.

The model explains that it is possible to avoid a drop in the amount of land plowed when its marginal cost also increased. A shift of the MRPland curve to the right could compensate for the new higher costs, but it depends on an increase in the level of MPPland or higher prices of the output. Data show that there was such a rise in the prices, so returns from the agriculture still went up. The growth of product prices was less intense during this period, but they grew enough to keep people working in the countryside and even poor soil. The rise of wine and oil prices also continued during the second half of the sixteenth century and the first half of the seventeenth.

Price control and other problems of the markets at the end of the sixteenth century were blocking the possible solutions of peasants to maintain their returns from agriculture. This period was especially sensible to the policy of price control (*tasa*) due to the downward trend of the marginal revenue in the farms. The general opinion against the *tasa* increased because the legal higher price for wheat and barley did not include the higher production costs, discouraging arable cultivation.

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<sup>62</sup> Bennassar (1967), pp. 162 y ss. Ruiz Martin (1967), pp. 189-202. Salomon (1964), pp. 45-49.

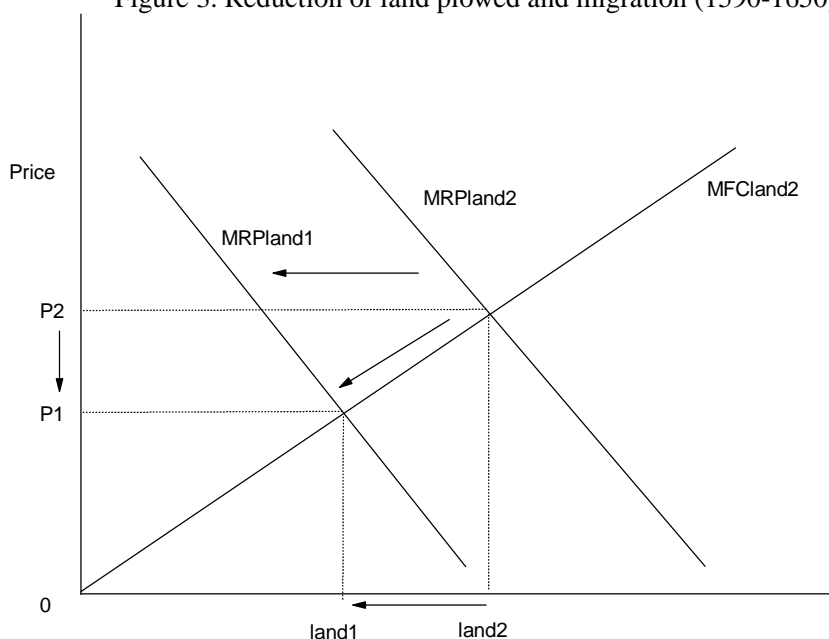
<sup>63</sup> Reher (2000), p. 354.

<sup>64</sup> Gelabert (1994), p. 188.

### c) The decline of product and population: crisis in Castilian agriculture (1590-1650)

If the sale of baldíos was not the cause of Castilian decline at the end of sixteenth century, which was the real reason of that collapse? There was not an only cause and many of them were exogenous to the agrarian sector. Given that the roots of the agrarian expansion in Castile were in the market as this paper has showed in section IV, a, the reasons to decline probably come from the market. The expansion had happened when the curve of marginal revenue moved forward because of higher prices in agrarian products. The decline of countryside came because those prices went down and not only prices. There was also a destruction of marketplaces that had permitted to many peasants to sell their surplus close their lands. Without those markets, facing high transport cost, Castilian farmers were not ready to sell their products far away. In this context, a small farm producing just to consume had better opportunities to survive than other with a great production that could not be sold.

Figure 3. Reduction of land plowed and migration (1590-1650)



When the sale of baldíos ended around the 1590s, Castilian agriculture was already involved in a huge economic crisis also affecting the rest of economy sectors. The production costs due to an increase in land prices and taxes were growing, while the profits dropped because the product price did not rise at the same rhythm and many markets disappeared.

Figure 3 explains this process very clearly. In this period, the marginal physical product in many farms fell, showing a reduction of returns per acre and per worker. It could be explained by a reduction of physical product (decreasing returns) or by a reduction of product prices. The consequence was the shift of MRPland curve to the left (MRPland1). The model shows two effects. First, reductions of the amount of land used in the agriculture sector and second a fall of its price. Moreover, now, on the contrary that in the period before (1570-1590), the reduction of land was followed by a parallel reduction of factor labor. Data of Castile confirms both hypotheses.

The situation of farmers was harder in some old baldíos for their less quality of soil. The agriculture expansion was built on the opening up of low-quality lands and incorporating more and more workers using the same archaic techniques<sup>65</sup>. As an example among many others, the inhabitants of Chamartín (Madrid) recognized this problem in 1579 when they said that the village had decayed because of the cultivation of "very poor and thin soils"<sup>66</sup>. There is considerable evidence that yields were declining in the last decades of the sixteenth-century<sup>67</sup>. Settlements in areas where the soil was poor therefore tended to lose population, or even to disappear. It was hard to maintain a family working in this kind of land, which carried proportionally the same burdens of dues, taxes and rents as the more fertile land. Almost all the baptismal records show a downward trend in the first forty years of the seventeenth century<sup>68</sup>.

Only places, like Frentes and Vinuesa in Soria, increased the number of inhabitants even after 1580, because they had been working in other sectors such ranching and transport, increasing productivity while their population grew<sup>69</sup>. Now, even with the same problems of higher taxation and production costs of other villages, these sectors were productive enough to sustain the local population in those places.

Why did people leave not only the countryside but also the cities of Castile? The population could have responded to this increase of costs by changing the countryside and agriculture for the city and a job in the industrial or commercial sector, but it was not a good option after the 1570s. The cities had entered in a period of deep crisis, which

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<sup>65</sup> Anes (1970), chapter 6. García Sanz (1977), chapters 2 and 5.

<sup>66</sup> Viñas y Mey (1949-71), p. 214. Anes (1994), p. 62.

<sup>67</sup> Weisser (1976), pp. 64-65. Brumont (1978), pp. 72-73. García Sanz, (1977), p. 94.

<sup>68</sup> Llopis (1994), p. 79.

<sup>69</sup> Díaz Sanz (1995), p. 39.



aggravated over time. The fiscal pressure was more intense there and the high expensive prices of agriculture products made it difficult to live in the urban centers. The population of Medina de Rioseco and Palencia did not grow after 1560<sup>70</sup>. The records of baptisms in Medina del Campo show a tendency to decline<sup>71</sup>. The population of Salamanca dropped by 13,2 percent between 1569 and 1598<sup>72</sup>. The same can be observed in Avila, Zamora, Leon and other Castilian cities<sup>73</sup>. These urban problems forced people working in the countryside even when net profits per unit of land were decreasing.

Because there was neither place in other nearby villages or in the cities, the Castilian emigrants chose areas of the peninsula more dynamic economically than the Meseta. The periphery of the Peninsula, outside and inside Castile, attracted population because agriculture was not the only economic activity and markets worked better. There was a major movement of population from the center to the southern regions<sup>74</sup> and the coast of Mediterranean<sup>75</sup> since the end of the sixteenth century.

Cartagena is a great example of this process inside of Castile. This city located in the Mediterranean coast and its land grew continuously during the second half of the sixteenth and the first quarter of the seventeenth century<sup>76</sup>. Its growth, as the rest of Murcia, was stimulated by several economic sectors acting at the same time: fishing, agriculture, transport, trade, building, and small industries.

On the contrary, in the hearth of Castile, that was expelling population, the amount of land under cultivation tended to fall. The poorest land was given over to pasture and the price of the land dropped.

The movement of this curve also affects the cost of renting. Many landlords decided to reduce the price of rent in order to keep as many workers was possible in their lands. It pushed down the price of the land during the first half of the seventeenth century. Data available from rents also show that decline of prices. Rents of seven properties belonging to the monastery of El Escorial fell by 64,9 per cent between 1575 and 1660, while the grain-lands of the Chapter of Segovia fell by 30 per cent only

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<sup>70</sup> Herrero (1984), p. 74. Figure.

<sup>71</sup> Marcos Martín (1978), pp. 92-93.

<sup>72</sup> Vela Santamaría (1983), pp. 281-322.

<sup>73</sup> Serafín de Tapia (1984), Fernández Vargas (1968) and Rueda (1981).

<sup>74</sup> Castillo (1965), pp. 719-733.

<sup>75</sup> Chacón Jiménez (1978), pp. 174-179. Pérez Moreda (1980), p. 246. Nadal (1984), pp. 33-35.

between the last years of the sixteenth century and the 1650s<sup>77</sup>. In the case of Sandoval can be observed a sharp decline from the period 1588-1593, explained as a reaction against the high price of the land rent<sup>78</sup>. (Table 4)

Table 4. Trend of the rent of 14 lands of the monastery of Sandoval (1510-1691).  
Annual average of wheat.

Periods	Annual Average	Index	Ratio
1510-1540	1920.7	100.00	
1569-1574	2237.0	116.47	0.49 (1540-1571)
1588-1593	2572.0	133.91	0.79 (1571-1590)
1684-1691	809.3	42.14	-1.17 (1590-1688)

Source: Sebastian Amarilla (1990), tables 1 and 2. pp. 60 y 64.

The same happened in other places. The monasteries or the aristocracy incomes from land rents suffered the same process of decadence after 1590, even when in those cases the problems were not related to indebtedness of peasants from “expensive” land purchases. The data collected from the monastery of Santa Espina show a similar trend. The rent in Benafarces, between 1567 and 1610, was cut by 50 per cent, and by 31 per cent in Villalonso. In Vegamayor and Monreal the fall started later<sup>79</sup>.

In this third period, the agricultural sector suffered just the contrary effect to what happened during the first years studied here. Now, the marginal revenue of the land (MRPland) shifted to the left because of reductions in the marginal physical product, but especially in the agriculture prices. It expelled many workers from the countryside. Sometimes, it was not necessary a reduction of prices but a growing difficulty to sell the product in the markets. At the end of sixteenth century transaction costs were growing in the Castilian commercial sector. In fact, many local markets disappeared. It happened at the same time that many cities of Castile were in a process of collapse. The only city that did not suffer this process was Madrid as center of the empire.

Without any new technology, the reduction of land cultivated implied a decline in the production too. There was a sharp drop in the production of the most important cereals (wheat and barley) between the 1580s and the 1630s. This fall in cereal

<sup>76</sup> Montojo (1993), p. 37. Torres Sanchez (1987), pp. 250-251. The trend of annual increase was by 1.7 percent in 1560-1580, 1.5 percent in 1580-1600 and 0.6 in 1600-1620.

<sup>77</sup> Llopis (1994), p. 87. López García (1990), p. 287.

<sup>78</sup> Sebastian Amarilla (1990), p. 61.

production has been estimated at almost 40 per cent<sup>80</sup>. By the latter date average yearly cereal production barely exceeded half of what it had been around 1570<sup>81</sup>. Average annual grain tithes in the province of Palencia fell by approximately 50 per cent between the 1580s and the 1660s<sup>82</sup>.

## V. Conclusions

Traditionally, the evolution of the agriculture in Castile during the sixteenth century has been studied only from the point of view of production costs. A small farmer outside of market has been taken for granted. Markets would be controlled exclusively by the most powerful sector of the society, the nobility and the church, because they received most of the surplus through rents and tithes. Any development of the market would not affect the incentives of the small peasant to produce more. The Castilian structure of land ownership avoided any changes of this picture over time.

From this point of view, the expansion of agriculture that took place in Castile between 1520 and 1570 was caused by the necessity to feed a growing population, always close to the level of subsistence, as many scholars explain. The baldíos and common lands were a great relief for the population and one of its best allies because it allowed them to plow more land without paying rents. Baldíos were free land for hungry peasants.

The situation changed when Philip II became king and his European policy demanded higher funds. The Monarchy decided to increase taxes and to sell part of its patrimony in order to expand its revenues. The baldíos and other common lands managed by the municipalities were suddenly put in the market. Higher taxes and the increase of the land price meant a steady rise in the production costs faced by many peasants, many of them plowing poor and marginal soils. It represented the decline of the small farmers and their deep indebtedness.

The sale of baldíos has been seen as the key in the general crisis that affected Castile from 1590 onward, because it caused the ruin of a major part of the population. For that, the sale of baldíos has been frequently used to explain the decadence of the

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<sup>79</sup> López García (1990), pp. 110-111.

<sup>80</sup> García Sanz (1994), p. 22.

<sup>81</sup> Llopis (1994), p. 79. López-Salazar (1981), pp. 56-101.

<sup>82</sup> Marcos Martín (1985), vol. I, p. 234.

whole Castilian's economy. According to many authors, many peasants lost the land that they had been working. The unemployment in the countryside spread the poverty over Castile during the 1580s and the 1590s. As a consequence, many peasants had to migrate to other regions, provoking a sharp decline in agricultural production. It is easy to draw from this theory that the responsibility of the agrarian crisis at the end of sixteenth century lies in a conspiracy formed by the rich and the Crown against the small farmer.

This paper tries to analyze this issue from another perspective. Instead of focusing attention only on the negative effects derived from the changes in the production costs, this paper pays attention to the incentives of the small farmer to increase production. Why did the population want to work in the countryside invading marginal lands? Why did the expansion take place through increasing the land ploughed? Maybe, it happened because profits from the agriculture did not go only to the highest sector of the society.

In order to understand the decadence of Castilian agriculture and look for its causes, it is necessary first to forget some extended clichés about the style of life in the Castilian countryside. Now we have historical evidence to think that Castilian peasants were not continuously at the level of subsistence.

The growth of Castilian cities, the improvements in the Castilian farmer's level of life, the great development of all sort of markets, especially those related to the rural sector like the fairs, the increasing demand of agricultural products from overseas enterprises like America, the continuous tendency of agrarian prices to increase, maintained for years. All these facts invite one to think that the small farmer had strong incentives on improving his revenues from agriculture just by increasing the amount produced using more land. Baldíos, as Castilian agrarian institution, made it easy, because the cost of land remained frozen until the 1570s.

The sale of baldíos from 1570 and the parallel increase of fiscal pressure, delayed during years, pushed up the production cost curve faced by many peasants. In some cases, it was just an adjustment to the real cost that the land had suddenly. The Crown wanted its part of profits derived from the successful agriculture sector. Many peasants

worked on marginal soils because they did not have to pay the cost of use of these lands. This group was the more affected by the sale of baldíos.

However, while the demand of agrarian products remained strong, many peasants could stay in their land even paying more or borrowing to pay the new highest costs. The sale of baldíos was not the reason why the Castilian agriculture entered in a deep decadence after 1590s. If baldíos were not profitable for peasants they would not be profitable for buyers either. The sale of land by the Crown only change who got the revenues from land plowed. Before the sale, peasants benefited from those free lands and after the sale, new buyers did. Some of them were the same workers and others were nobility, church and businessmen. But nothing change able to expel people from the countryside. Neither the sale of baldíos nor the increase of fiscal pressure can explain why people leave Castilian countryside at the end of sixteenth century.

The real problem arrived when the same causes that had provoked the agricultural expansion disappeared. Problems surged in the Castilian markets, reduced the benefits of peasants, making it impossible for many to obtain profits from their work in poor and now expensive lands. The decadence of small fairs and local markets during the 1570s and 1580s kept prices high in the cities while farmers had fewer opportunities to sell their surplus. Many peasants became more self-sufficient.

Also the downward trend of the agrarian yields (MPPa) made it impossible for many to keep working in the countryside. This group had to migrate. As a consequence of the exit of many people from agriculture, total production dropped sharply. The loss of population affected the demand over the whole Castilian economy, starting a trend of decadence that did not end until the second half of the seventeenth century.

A great part of the Castilian agrarian expansion was due to external factors. They were responsible to the great incentives to increase output quickly. In the same way, when those factors entered in crisis, they had a rapid influence over agrarian demand. The reason why the crisis was so hard and permanent, lasting almost a century, seems to be more related to the way that the initial expansion took place than to the problems in the cost of production at the end of the century.

## VI. Bibliography

- Abadía Irache, A. (1993). *Señoría y crédito en Aragón del siglo XVI*. Institución Fernando el Católico, Zaragoza.
- Actas de las Cortes de Castilla*, (1869-1918). 45 vols. Madrid: Imprenta Nacional.
- Alvar Ezquerro, A. (1990). *Hacienda real y mundo campesino con Felipe II. Las perpetuaciones de tierras baldías en Madrid*. Madrid.
- Álvarez Vázquez, J. A. (1984) "Evolución de los arrendamientos agrícolas de 1450 a 1850 en Zamora" in *Actas del I Congreso de Historia Rural, siglos XV al XIX*, Madrid, pp. 613-623.
- Anes, G. (1970). *Las crisis agrarias en la España moderna*. Madrid.
- Anes, G. (1979). "Comercio de productos y distribución de rentas" en *La Economía Agraria en la Historia de España*, Ediciones Alfaguara, Madrid, pp. 275-300.
- Anes, G. (1994). "The agrarian "depression" in Castile in the seventeenth century" in Thompson, I.A.A. and Yun, B (ed.). *The Castilian crisis of the seventeenth century*. Cambridge University Press., pp. 60-77.
- Bennassar, B. (1967). *Valladolid au siècle d'or, une ville de Castille et sa champagne au XVIe siècle*, Paris.
- Bernal, A.M. (1979). "La propiedad de la tierra: problemas que enmarcan su estudio y evolución" en *La Economía Agraria en la Historia de España*, Ediciones Alfaguara, Madrid.
- Bernal, A.M. (1988). *Economía e Historia de los latifundios*. Madrid.
- Bernardo Ares, J.M. (1996). "Jurisdicciones y villas de realengo en la Corona de Castilla." en *Instituciones de la España Moderna. Las jurisdicciones*. Madrid.
- Bilbao, L.M. (1990). "Ensayo de reconstrucción histórica de la Presión Fiscal en Castilla durante el siglo XVI" in Fernande de Pinedo, E. (ed.) *Haciendas forales y Hacienda Real*, Bilbao, pp. 37-63.
- Braudel, F. (1953). *El Mediterráneo y el mundo mediterráneo en la época de Felipe II*, 2 vols. México.
- Brumont, F. (1978). "L'évolution de la population rurale pendant le regne de Philippe II. L'exemple du nord-ouest de la Vieille-Castille" in *Melanges de la Casa de Velázquez*, t. XIV, pp. 249-268.
- Brumont, F. (1984). *Campo y campesinos de Castilla la Vieja en tiempos de Felipe II*. Siglo XXI, Madrid.
- Carande, R. (1943). *Carlos V y sus banqueros*, Madrid,
- Castillo, A. (1965). "Population et "richesse" en Castille durant la seconde moitié du XVIe siècle" en *Annales*, E.S.C., pp. 719-733.
- Caxa de Leruela (1631). *Restauración de la antigua abundancia de España, o prestantísimo único y fácil reparo de su carestía presente*. Nápoles.
- Chacón Jiménez, F. (1978). *Murcia en la centuria del Quinientos*. Universidad de Murcia. Murcia.
- Derridge, E. (1969). *Agrarian Problems in the Sixteenth Century and After*. London.
- Díaz Sanz, E. (1995). *La Tierra de Soria. Un universo campesino en la Castilla oriental del siglo XVI*, Editorial Siglo XXI, Madrid.
- Domínguez Ortiz, A. (1987). "La comisión de D. Luis Gudiel para la venta de baldíos en Andalucía" en *Estudios de Historia Económica y Social de España*, Granada, pp. 80-103.
- Duran I Pujol, M. (1985). "L'evolució de l'ingrés senyorial a Catalunya (1500-1799)", *Recerque*, 17, pp. 7-43.

- Faya Díaz, M.A. (1992) *Los señoríos eclesiásticos en la Asturias del siglo XVI*. Oviedo.
- Faya Díaz, M.A. (1998) "La venta de jurisdicciones eclesiásticas en la Corona de Castilla durante el reinado de Felipe II" en Martínez Millán (Dir.) *Felipe II (1527-1598)*. Madrid, Parteluz, pp. 239-305.
- Fernández Navarrete, P. (1626) *Conservación de Monarquías; Discursos políticos sobre la gran consulta que el Consejo hizo al Señor Rey don Felipe tercero*. Madrid: Imprenta Real.
- Fernández Vargas, V. (1968). *La población de León en el siglo XVI*. Madrid.
- Forteza Pérez, J.I. (1990). *Monarquía y Cortes en la Corona de Castilla: Las ciudades ante la política fiscal de Felipe II*. Junta de Castilla y León, Salamanca.
- García Sanz, A. (1977). *Desarrollo y crisis del Antiguo Régimen en Castilla la Vieja: Economía y sociedad en tierras de Segovia, 1500-1814*, Akal, Madrid.
- García Sanz, A. (1979). "La crisis del XVII en el medio rural de Castilla la Vieja: El caso de Tierras de Segovia" en *La Economía Agraria en la Historia de España*, Alfaguara, Madrid, pp.
- García Sanz, A. (1980). "Bienes y derechos comunales y el proceso de su privatización en Castilla durante los siglos XVI y XVII: el caso de las tierras de Segovia", *Hispania*, 144, pp. 251-299.
- García Sanz, A. (1989). "El sector agrario durante el siglo XVII: depresión y reajustes" in A. Domínguez Ortiz, A. (ed.). *La crisis del siglo XVII. Historia de España dirigida por D. Ramón Menéndez Pidal*, Madrid, vol. XXIII, pp. 161-235.
- García Sanz, A. (1994). "Castile 1580-1650: economic crisis and the policy of "reform" in Thompson, I.A.A. and Yun Casalilla, B. (ed.) *The Castilian crisis of the seventeenth century. New perspectives on the economic and social history of seventeenth-century Spain*. Cambridge University Press, Cambridge, pp. 13-32.
- Gelabert, J. E. (1982). *Santiago y la Tierra de Santiago de 1500 a 1640*. Edicions Do Castro. La Coruña.
- Gelabert, J. E. (1994), "Urbanisation and desurbanisation in Castile, 1500-1800" in Thompson, I.A.A. and Yun Casalilla, B. (ed.) *The Castilian crisis of the seventeenth century. New perspectives on the economic and social history of seventeenth-century Spain*. Cambridge University Press, Cambridge, pp. 182-206.
- Gentil da Silva, J. (1967). *Desarrollo económico, subsistencia y decadencia en España*, Madrid, Ciencia Nueva.
- Gómez Mendoza, J. (1967). "La venta de baldíos y comunales en el siglo XVI. Estudio de su proceso en Guadalajara", *Estudios Geográficos*, 109, pp. 499-559.
- González de Cellorigo, M. (1600). *Memorial de la política necesaria, y útil restauración a la República de España, y estados de ella, y del desempeño universal de estos Reynos*. Valladolid.
- Hamilton, E.J. (1975). *El tesoro americano y la revolución de los precios en España, 1501-1650*, Barcelona.
- Hernanz Elvira, J.L. (1998). "Contribución al Estudio de las economías nobiliarias en Castilla: los condados de Puñonrostro y Barajas durante el reinado de Felipe II" in Martínez Millán, J. (dir.) *Felipe II (1527-1598). Europa y la Monarquía Católica*. Editorial Parteluz S.L. Madrid, pp. 401-434.
- Herr, R. (1989). *Rural Change and Royal Finances in Spain at the End of the Old Regime*, Berkeley and Los Angeles.
- Herrero, G. (1984). "La población palentina en la Edad moderna", *Historia de Palencia*, tomo II, Palencia.

- Izquierdo Martín, J. and Sánchez León, P. (1998) "Orden Absolutista y conflicto agrario: una interpretación institucional de la "venta de baldíos" durante el reinado de Felipe II" in Martínez Millán, J. (dir.) *Felipe II (1527-1598). Europa y la Monarquía Católica*. Editorial Parteluz S.L. Madrid, pp. 453-470.
- Larraz, J. (1943). *La época del mercantilismo en Castilla (1500-1700)*. Madrid.
- López García, J.M. (1990). *La transición del feudalismo al capitalismo en un señorío monástico castellano. El abadengo de La Santa Espina (1147-1835)*. Junta de Castilla y León. Valladolid.
- López García, J.M. (dir.) (1998). *El impacto de la Corte en Castilla. Madrid y su territorio en la época moderna*. Editorial Siglo XXI. Madrid.
- López-Salazar, J. and Martín Galán, M. (1981). "La producción cerealista en el Arzobispado de Toledo, 1463-1699". *Cuadernos de Historia Moderna y Contemporánea*, 2. pp. 56-101.
- Llopis Agelán, E. (1994). "Castilian agriculture in the seventeenth century: depression, or "readjustment and a adaptation"?" in Thompson, I.A.A. and Yun Casalilla, B. (ed.) *The Castilian crisis of the seventeenth century. New perspectives on the economic and social history of seventeenth-century Spain*. Cambridge University Press, Cambridge, pp. 77-101.
- Llopis Agelán, E. Jerez, M. Álvaro, A, Fernández E. (2000). "Índices de precios de la zona noroccidental de Castilla y León, 1518-1650" *Revista de Historia Económica*, XVIII, 3, pp. 665-684.
- McCloskey, D. N. (1975). "Economics of Enclosure: A Market Analysis", in Parker, W. N and Jones, E.L. *European Peasants and Their Markets*, Princeton University Press, Princeton, pp. 123-161.
- MacClosky, D. N. (1989). "The open fields of England: rent, risk, and the rate of interest, 1300-1815". in Galens, D.W. *Markets in History: economic studies of the past*, Cambridge University Press, Cambridge, pp. 5-51.
- Marcos Martín, A. (1978) *Auge y declive de un núcleo mercantil y financiero de Castilla la vieja. Evolución demográfica de Medina del Campo durante los siglos XVI y XVII*. Valladolid.
- Marcos Martín, A. (1985). *Economía, sociedad y pobreza en Castilla: Palencia 1550-1814*, 2 vols. Palencia.
- Marcos Martín, A. (2000). *España en los siglos XVI, XVII y XVIII. Economía y sociedad*. Crítica, Barcelona.
- Martín Aceña, P. (1992). "Los precios en Europa durante los siglos XVI y XVII: Estudio comparativo". *Revista Historia Económica*, X, 3, pp. 359-395.
- Montejo Montojo, V. (1993). *El Siglo de Oro en Cartagena (1480-1640)*, Ayuntamiento de Cartagena, Murcia.
- Nadal, J. (1984). *La población española (siglos XVI a XX)*. Ariel. Barcelona.
- Nader, H. (1977). "Noble Income in Sixteenth-Century Castile: The Case of the Marquises of Mondejar, 1480-1580", *Economic History Review*, 30, pp. 411-428.
- Nader, H. (1981). *Rural credit in early modern Extremadura*. Paper presented 12<sup>th</sup> Annual Conference of the Society for Spanish and Portuguese Historical Studies.
- Pérez Moreda, V. (1980). *La crisis de mortalidad en la España interior*, Siglo XXI, Madrid.
- Pérez Moreda, V. (1985). "La modernización demográfica, 1800-1930. Sus limitaciones y cronología" in Sánchez Albornoz (ed.) *La modernización económica de España*, Madrid, pp. 25-62.
- Pérez Moreda, V. (1988). "La población española" in M. Artola, (ed.) *Enciclopedia de Historia de España*, Madrid, pp. 345-431.



- Reher, D.S. (2000). "Castilla y la crisis del siglo XVII: contextos demográficos para un ajuste de larga duración", in Martínez Ruiz (dir.). *Madrid, Felipe II y las ciudades de la Monarquía*. Vol. II. Editorial Actas. pp. 347-374.
- Robledo, R. (1984). *La renta de la tierra en Castilla la Vieja y León, 1836-1913*, Madrid.
- Rodriguez Silva, A. (1986). "Venta de baldíos en el siglo XVII. Una aproximación a su estudio. La Comisión de Baldíos de las Cuatro Villas de la Costa del Mar en Cantabria", *Jornadas de Desamortización y Hacienda Pública*, Madrid, pp. 137-153.
- Rueda Fernández, J. (1981). "Evolución de la población de la ciudad de Zamora en los siglos XVI y XVII: estudio demográfico", *Studia Zamorensia*, 2, pp. 116-34.
- Ruiz Martín, F. (1967). "La población española al comienzo de los tiempos modernos" Cuadernos de Historia. *Hispania*, 1, Madrid, pp. 189-202.
- Ruiz Martín, F. (1974), "Pastos ganaderos en Castilla. La Mesta (1450-1600)", *I Semana de Estudios de Prato*, pp. 271-285.
- Salomon, N. (1964). "La campagne de Nouvelle Castille à la fin du XVIe siècle d'après les "Relaciones topográficas", *SEVPEN*, París, pp. 97-132.
- Salomon, N. (1973). *La vida rural castellana en tiempos de Felipe II*, Barcelona.
- Sebastian Amarilla, J.A. (1990) "La renta de la tierra en León durante la Edad Moderna. Primeros resultados y algunas reflexiones a partir de fuentes monásticas", *Revista Historia Económica*, 1, pp. 53-80.
- Serafín de Tapia, (1984). "Las fuentes demográficas y el potencial humano de Avila en el siglo XVI", *Cuadernos Abulenses*, 2, pp. 31-88.
- Simpson, J. (1995), *Spanish agriculture: the long Siesta, 1765-1965*, Cambridge University Press, Cambridge.
- Torres Sánchez, R. (1987). "La población de Cartagena durante el siglo XVI: cuantificación de efectivos humanos" in *Nuestra Historia: Aportaciones al Curso de Historia sobre la Región de Murcia*. Caja de Ahorros de Alicante y Murcia. Ayuntamiento de Cartagena, pp. 239-254.
- Ulloa, M. (1977). *La Hacienda Real de Castilla en el reinado de Felipe II*, Madrid.
- Vassberg, D.E. (1974), "The Tierras Baldías: Community Property and Public Lands in 16<sup>th</sup> century Castile", *Agricultural History*, XLVIII, 3, July, 1974, pp. 383-401.
- Vassberg, D.E. (1975). "The sale of tierras baldías in sixteenth century Castile" *Journal of Modern History*, 47, 4, pp. 629-54.
- Vassberg, D. E. (1978). "El campesinado castellano frente al sistema comunitario: usurpaciones de tierras concejiles y baldíos durante el siglo XVI" *Boletín de la Real Academia de la Historia*, CLXXV, pp. 145-167.
- Vassberg, D. E. (1983). *La venta de tierras baldías. El comunitarismo agrario en la Corona de Castilla durante el siglo XVI*, Madrid.
- Vassberg, D. E. (1984). *Land and Society in Golden Age Castile*. Cambridge University Press, Cambridge.
- Vela Santamaría, F.J. (1983). "Salamanca en la época de Felipe II", *El pasado histórico de Castilla y León*, Burgos, pp. 281-322.
- Viñas y Mey, C. (1941). *El problema de la tierra en la España de los siglos XVI-XVII*. Madrid.
- Viñas y Mey, Carmelo, and Paz, (1949-71). *Relaciones histórico-geográfico-estadísticas de los pueblos de España hecho por iniciativa de Felipe II. Provincia de Madrid; Reino de Toledo; Ciudad Real*. Madrid, CSIC.
- Weisser, M. (1976). "Les marchands de Tolède dans l'économie castillane, 1565-1635.", *Mélanges de la Casa de Velázquez*, 7, pp. 223-236.

- Wilson, H. and G. Parker. (1985). *Una introducción a las fuentes en la Historia Económica, 1500-1800*. Madrid.
- Yun Casalilla, B. (1983). "La crisis del siglo XVII en Castilla: indicadores, cronología y factores en la Tierra de Campos (1580-1640)" in *El pasado histórico de Castilla y León*, Burgos, vol. II, pp.
- Yun Casalilla, B. (1987). *Sobre la transición al capitalismo en Castilla. Economía y sociedad en Tierra de Campos (1500-1830)*. Junta de Castilla y León. Valladolid.
- Yun Casalilla, B. (1989). "Estado y estructuras sociales en Castilla. Reflexiones para el estudio de la "crisis del siglo XVII" en el valle del Duero (1550-1630)", *Revista de Historia Económica*, pp. 549-574.
- Yun Casalilla, B. (1990). "Poder y economía. Algunas propuestas para el estudio de la historia agraria de Castilla la Vieja y León durante la edad moderna" in Reyna Pastor (ed.) *Relaciones de poder, de producción y parentesco en la Edad Media y Moderna*. Madrid, pp. 375-409.
- Yun Casalilla, B. (1993). "Consideraciones para el estudio de la renta y las economías señoriales en el Reino de Castilla (s. XV-XVIII) en Sarasa Sánchez, E. and Serrano Martín, E. (dirs.). *Señorío y Feudalismo en la Península Ibérica (ss. XII-XIX)*, Zaragoza, pp. 11-49.