

# PRICES AND WAGES IN SEGOVIA, 1571–1807

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## ABSTRACT

This paper deals with the evolution of wages in the construction offices of Segovia, one of the most important Castilian and Spanish manufacturing towns, between 1571 and 1807. Part two deals with the nominal wages earned by the building officials and labourers of the city and part three presents the Segovian prices index between 1571 and 1807. Finally, part four analyses the evolution of the real wages earned in the construction offices of the town. Segovian real wages evolved in line with the local economy; after peaking in the first quarter of the 17<sup>th</sup> century, they experienced a continuous decline, so in 1807 the real wages of Segovian building officials and labourers were 50 per cent of those of the first quarter of the 17<sup>th</sup> century.

**Keywords:** Early Modern Spain, prices, wages

**JEL Code:** N3, N4, N9, N14, N93

## RESUMEN

El artículo analiza la evolución de los precios y salarios reales en los oficios de la construcción en una de las principales ciudades manufactureras de la Castilla Moderna, Segovia, entre 1571 y 1807. La segunda parte analiza los salarios nominales obtenidos por los oficiales y peones de albañil de la ciudad, mientras que la tercera presenta al índice de precios de

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Segovia entre 1571 y 1807. Por último, la cuarta parte analiza la evolución de los salarios reales en los oficios de la construcción de la ciudad. Éstos evolucionaron en línea con la economía local: después de culminar en el primer cuarto del siglo XVII experimentaron un declive continuado, de forma que en 1807 los salarios reales de los oficiales y peones de albañil segovianos apenas llegaban a un 50 por cien de los salarios reales del primer cuarto del siglo XVII.

**Palabras clave:** España Edad Moderna, precios, salarios

## 1. INTRODUCTION

The rise of Castilian cities during the 16<sup>th</sup> century and their subsequent decline during the 17<sup>th</sup> is one of the most important episodes in Castilian and Spanish early modern history. By the standards of the time, 16<sup>th</sup>-century Castile was a highly urbanised region with a complex urban network, especially in the interior plateaus of the kingdom (*Mesetas*) and the Guadalquivir Valley<sup>1</sup>. As one of the small groups of towns represented in the *Cortes* (the Castilian representative assembly), and as a manufacturing centre whose wool fabrics were sold in the rest of the country and the Spanish *Indias*, Segovia was among the most important Castilian cities. At the turn of the century it entered a period of stagnation that became a fully-fledged crisis in the 1630s. During this decade Segovia experienced a steep decline, the effects of which were still visible well into the 18<sup>th</sup> century<sup>2</sup>. This trajectory was very similar to that of most other cities in the interior of Castile, with the well-known exception of Madrid, and by the end of the 18<sup>th</sup> century the urban system of the country had changed dramatically. Most cities still showed clear signs of crisis and decadence—again the exceptions were Madrid, the political and financial centre of the Spanish Monarchy, and ports such as Cádiz, Bilbao and Santander, whose expansion was driven by the growth of the Spanish Atlantic Trade, although it remains to be seen whether the growth of these cities was enough to offset the decadence of the previously flourishing urban network of both *Mesetas*<sup>3</sup>.

Our paper deals with the evolution of prices and wages in Segovia between 1571 and 1807. We have chosen Segovia because of its importance, in political and economic terms, in the Castilian context, and also because of the vast array of documentary sources at our disposal. During

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<sup>1</sup> de Vries (1984, pp. 108, 162 and 167); Fortea (1995); Gelabert (1994) and Vela Santamaría (1997).

<sup>2</sup> García Sanz (1987, 1991a, 1996).

<sup>3</sup> Fortea (1995); Gelabert (1994, 2012); Lees and Hohenberg (1989); Pérez Moreda and Reher (1997); Reher (1997); Ringrose (1998).

the early modern period the city council took care to compile weekly lists with the prices of many foodstuffs sold in the local markets (*Mercurial*). The importance of the *Mercurial* was first emphasised by Anes and Le Flem (1965, 1977) and this source has been completed with the price ceilings (*posturas*) set by the city council for heavily taxed foodstuffs such as wine, meat, olive oil and fish, which can be found in the city records, and with the books of the city's public granary (*Pósito*). Finally, we have also made use of the account books of many Segovian churches, monasteries and hospitals, currently kept at the National Historical Archive of Spain.

These sources have enabled us to fulfil the main purpose of this paper: to compile a Segovian price index, which has been used as a deflator to create an index of the real wages earned in 1571–1807 by those employed in the construction offices of the city. Both indexes enable us to improve our knowledge of the decadence of the Castilian cities and urban industries during the early modern period. As well as addressing a basic episode of Spanish history, this paper can also be included in a broader context. The growing interest in prices and wages during the preindustrial period is well-known, so our indexes are an addition to an already important body of the literature<sup>4</sup>. Although this is not our objective, we think that these indexes will also be of some help for those researchers addressing fascinating and long-range issues such as, for instance, the Great and the Little Divergences, at the top of the research agenda of historians during recent decades<sup>5</sup>.

The second part of our essay focuses on the evolution of the nominal wages of the Segovian building masters, officials and labourers between 1571 and 1807. The sources used in our Segovian price index and the basket of goods used as a deflator are presented in the third part, which also offers the Segovian price index. In the fourth and final part, we present the real wages index in the construction trades of the city.

## 2. NOMINAL WAGES IN EARLY MODERN SEGOVIA

During the early modern period Segovia was basically a manufacturing city. The population lists (*Padrones*) of 1561 and 1586, which stated the

<sup>4</sup> On Spanish prices and real wages during the early modern period, Llopis Agelán and García Montero (2011); Andrés Ucendo and Lanza García (2014a, 2014b); González Mariscal (2015); González Agudo (2017); Pérez Romero (2018); López Losa and Piquero Zarauz (2016, 2018). On European prices and real wages in the same period, Allen (2001); Humphries (2013); Malanima (2013); Malinowski (2016); Pfister (2017) and Ridolfi (2017).

<sup>5</sup> For a vision of the Little Divergence from the perspective of Spanish real wages, see López Losa and Piquero Zarauz, (2016, 2018). For a general point of view on the Spanish economy during the course of the Little Divergence, see Álvarez Nogal and Prados de la Escosura (2013) and Álvarez Nogal *et al.* (2016).

occupation of about 70 per cent of the local heads of household (*vecinos*), reflect a high level of economic activity. Around 75 per cent of local workers were employed in manufacturing, mainly in the wool industry which together with other textile offices provided employment for more than 50 per cent of the local active population. Between 1561 and 1586 the Segovian wool industry enjoyed a veritable golden age. The city's yearly output of around 16,000 wool pieces (*paños*) made it the foremost manufacturing centre in Castile and indeed the whole of Spain, and also compared favourably with that of some of the main European textile centres such as Florence<sup>6</sup>.

In line with the rise of its textile manufactures during the 16<sup>th</sup> century, the city's population grew from 12,500 inhabitants in 1530 to 17,600 in 1561 and 19,500 in 1586 (García Sanz 1991a, p. 155). Segovians' incomes must also have increased during this period, at least judging by donations (*donativos*) granted by the local guilds for the building of the cathedral. Between 1526, when the donations started, and 1566 the average annual growth rate of the sums offered by the guilds, 1.46 per cent, was higher than that of the city's population. Between 1566 and 1575 the *donativos* fell, probably because demand abroad for Castilian wool fabrics waned as a result of the Flanders War (which started at the end of the 1560s) (García Sanz 1987). During the last decades of the 16<sup>th</sup> century the growth rate of the local population declined, and at the beginning of the 17<sup>th</sup> century there was a period when the population was stable.

Despite the growing difficulty of selling Segovian textile fabrics abroad, the city's manufactures managed to weather the storm during the first third of the 17<sup>th</sup> century thanks to good supplies of cheap raw wool and capital. Segovian fabrics also filled the gap opened by the declining amount of northern European textiles reaching Castilian markets as a result of the Flanders War (Vela Santamaría 1991, p. 641). After the changes and transformations of the first decades of the 16<sup>th</sup> century, Segovia had become specialised in the manufacture of the high- and medium-quality wool fabrics that were still widely demanded by well-to-do consumers in Castile, Portugal and the Spanish Indias. Not surprisingly, therefore, the donations granted by the local guilds for the cathedral between 1604 and 1629, in terms of per capita grams of silver, were still quite close to the peak of 1561–75, as shown by García Sanz (1998 [2016], pp. 207–208).

To some extent the economic evolution of the city during the first third of the 17<sup>th</sup> century remained isolated from the agricultural crisis prevailing in the surrounding countryside (García Sanz 1991a, pp. 163–165). This isolation came to an abrupt end with the famous 1630–31 crisis, which prompted remarkable rises in the prices of basic foodstuffs and substantial

<sup>6</sup> Ruiz Martín (1965), pp. 107–109 and (1965–67), pp. 787–807.

demographic losses, whose effects were still visible well into the 18<sup>th</sup> century. The 1630-31 crisis was a turning point in the history of the city and Castile; the moment when Segovia entered a long decline in which the waning fortunes of its wool industry were the most significant factor (Pérez Moreda 1980; García Sanz 1991a).

Despite its long decline Segovia was still the most important manufacturing city in the interior of Castile during the 18<sup>th</sup> century. As can be deduced from the famous 1752 Ensenada land registry (*Catastro de Ensenada*), nearly 50 per cent of its active population were employed in textile manufacturing (mainly wool fabrics) and the city was the main producer of high- and medium-quality wool textiles not only in Castile but also the whole of Spain (García Sanz 1991b). Segovian textile manufacturing enjoyed a period of modest expansion during the second half of the 18<sup>th</sup> century, although output remained well below the levels of 1551-1600, but then the local industries suffered their final demise during the early part of the 19<sup>th</sup> century. Not surprisingly, therefore, the population of the city hardly grew between 1752 and 1857; it was a little over 10,000 in 1792, for example, and throughout this period it hovered at around 50-60 per cent of the level it had reached during the period of economic expansion in the 16<sup>th</sup> century (García Sanz 1987, 1991a, 1996). The wages of most local workers were settled on a daily basis or, more frequently, through a piece-rate system. The daily wages used in this paper are those obtained by the building masters, officials and labourers hired by the cathedral and other construction sites in the city. Given the prevalence of textile manufactures in the local economy, the number of people employed in construction in Segovia was small (less than 5 per cent of the local active population), especially when compared with cities such as Madrid. This raises an obvious question about the extent to which our wages series are representative of the conditions prevailing in the city.

To answer this question we have to consider that the daily wages of the construction offices were settled in what appears to have been a free labour market. Employment contracts in Segovia granted the contracting party (often a building master) the right to freely hire («*al precio que les quisiere dar*») officials and labourers, according to the supply and demand for labour in the local market («*conforme a los tiempos*»). Wage ceilings («*tasas de salarios*»), such as those settled by the Crown in Segovia and the rest of Castile in 1627 and 1680, were exceptional and nearly impossible to enforce (Hamilton 1975, 1988). Our sources reveal that in reality the wages paid in the city in both those years were higher than those settled by the *tasas*, and that local and state authorities preferred to stay away from this arena. In 1620, for instance, a rise in the cost of living prompted the officials of the shearers' guild to ask the town council for an increase in their daily wages, a request the councillors dismissed. The main reason for this refusal was the fact that since the 13<sup>th</sup> and 14<sup>th</sup>

centuries the norm had been to let market forces decide wages, without any kind of public intervention. However, as will be seen later, it was possible for this attitude to change in times of distress<sup>7</sup>.

Our sources give little indication of whether daily wages in the construction trades were representative of wages in general. Nevertheless, a comparison with other sources from that time, such as the *Catastro* (which has information about the wages in construction, textile manufacturing and agriculture in Segovia in 1752), suggests that the daily wages of Segovian building masters, officials and labourers in 1750–55 were similar to those prevailing in most textile offices in the city in 1752, and that they were slightly higher than those of weavers and somewhat lower than those of shearers. There was a similar situation at the beginning of the 19<sup>th</sup> century, as can be deduced from the report on wool manufactures and sheep husbandry in Castile written in 1803 by Tomás Pérez and analysed by Franch (1991). According to Pérez, in 1803 the daily wage of a Segovian weaver was 7 Castilian *reales*, below the 8–11 *reales* earned by building officials, but his report informs us that the wages of the city shearers and fullers were similar to those of the building labourers—and also reveals that, remarkably, the wages of these offices were double those of the female wool spinners and the women employed as auxiliaries at construction sites.

The previous evidence leads us to conclude that during the second half of the 18<sup>th</sup> and the first years of the 19<sup>th</sup> century, the daily wages in construction offices and textile production were very similar. Therefore, our wage data may be considered fairly representative, especially when we take into account that, unlike in other occupations such as domestic service, payment in kind seems to have been uncommon in Segovia both in construction and textile manufacturing. In fact, our documentary sources do not mention any in kind wages, perhaps because as early as in 1514 the local ordinances (*Ordenanzas de la Ciudad y la Tierra*) explicitly forbade its use to pay local masters and officials<sup>8</sup>.

Measured in nominal terms, the wages earned in construction offices in Segovia grew during the second half of the 16<sup>th</sup> century and peaked in 1600–30; they were not much lower than those paid in Madrid, and therefore higher than in many European capitals at the time (Andrés Ucendo and Lanza García 2014a). There were many reasons for these high-nominal wages in the Segovian construction trades during the first third of the 17<sup>th</sup> century.

First, the low life expectancy at that time tended to limit the labour supply. Although of course this was the case everywhere, the effect of low-life

<sup>7</sup> Archivo Municipal de Segovia, AMS, libro 1020.

<sup>8</sup> Larruga (1791) [1995, X, pp. 283–284].

expectancy on wage levels seems to have been particularly significant in Segovia and elsewhere in Castile between 1600 and 1630. As previously emphasised, the rate of growth of the Castilian population slowed during the last decades of the 16<sup>th</sup> century, and fell more dramatically in the wake of the famous 1596–1602 plague (*Peste Atlántica*) whose effects on the Castilian population were little short of catastrophic, creating what seems to have been an acute scarcity of labour during the first third of the 17<sup>th</sup> century<sup>9</sup>.

Second, against the backdrop of the demographic situation described above, public and private construction seems to have experienced a veritable boom between 1560 and 1620 both in Segovia and Castile as a whole, fuelled by the arrival of silver from the Americas reaching a peak and thus contributing to a rise in the demand for labour in the construction offices<sup>10</sup>. This boom was also driven by the decision to turn Madrid, previously just a medium-sized Castilian city, into the capital of the Monarchy in 1561, which also had an impact on Segovia. Measured in grams of silver per capita, the donations for the building of the city's cathedral remained high during the first third of the 17<sup>th</sup> century, which could be considered proof of a high level of activity in the local construction trades<sup>11</sup>.

Third, an increase in taxation must also have contributed to the rise in nominal wages in 1600-1630. In 1601 the Crown and the Castilian *Cortes* introduced the *Servicio de Millones*, the most important Castilian tax after the *Alcabala*, which would be collected by monetary duties and excises on wine, meat and olive oil. As many delegates to the Castilian *Cortes* (*procuradores*) and essayists of the time remarked, this contributed to pushing prices upwards. An awareness of this fact was behind the demands from the local shearers for a pay rise in 1604, 1608 and 1620<sup>12</sup>.

The fourth and last factor contributing to the rise in nominal wages between 1600 and 1630 was the frequent manipulations of the low-value Castilian copper coin (*maravedí*). From the end of the 16<sup>th</sup> century the Crown resorted to frequent issues of pure copper coins, without any silver content, together with increases in their face value (*resellos*). The *maravedí* was mainly used by Castilian consumers in their daily purchases and the manipulations of this currency, especially after 1621, prompted increases in nominal wages (Domínguez Ortiz 1960; Hamilton 1975; Motomura 1994). During the years 1600-30 this rise was greater than the rise in prices, so real wages increased, but as will be seen later, this was an exception. In

<sup>9</sup> According to Pérez Moreda (1980), the population losses brought by the *Peste Atlántica* were around 10 per cent of the pre-plague levels.

<sup>10</sup> On the arrivals of American silver see Hamilton (1975) and Drelichman (2005).

<sup>11</sup> Based on the data provided by García Sanz (1987).

<sup>12</sup> AMS, *Actas*, libros 1019, 1022 and 1026.

most cases nominal wages lagged behind prices, so during inflationary periods real wages tended to fall.

After peaking in the early 1630s, Segovian nominal wages began a decline that lasted well into the 18<sup>th</sup> century, when they reached the lowest point in our series. This was caused by the well-attested decline of Segovian woollen manufacturing that resulted in the crisis of the local economy. Nominal wages rose again from around the 1750s, with the increases brought about by the 1804 demographic crisis particularly significant, although as will be seen later, at the beginning of the 19<sup>th</sup> century nominal wages were rising much less quickly than prices, and in fact this was the moment when the real wages in the Segovian construction offices plunged to their lowest point during the period covered by our series.

### 3. PRICE LEVELS IN EARLY MODERN SEGOVIA

Although the Castilian authorities were opposed to any involvement in the labour market (with the exception of the 1627 and 1680 wage ceilings introduced by the Crown, and the subsidising of wages by local authorities in times of acute crisis and stress), they were certainly willing to control prices both at the local and state level. As was common in early modern Europe, the Castilian authorities were afraid of sudden price rises, which is the reason for the survival of a vast array of documentary sources that have enabled us to compile the Segovian prices and wage indexes from 1571 to 1807.

The main documentary sources used in this paper are the weekly list (*Mercurial*) compiled by local officials with the prices of many foodstuffs sold in the local markets, the account books of the city granary (*Pósito*), and the price ceilings (*posturas*) for wine, meat, fish and olive oil settled by the city authority<sup>13</sup>. These sources have been completed with data from local convents and monasteries, and thanks to them it is possible to present a price index for Segovia from 1571 to 1807 which includes bread prices and the effect of local and Royal taxes on price levels.

The city *fieles* were the local officials charged with the task of compiling weekly reports on the prices of the wheat, oats, olive oil, soap, legumes, salt, honey and sugar sold in the market held every Thursday in the city. Being subject to sanctions if they failed to compile such reports, the *fieles* usually fulfilled their mission with remarkable diligence, so the *Mercurial* is very complete<sup>14</sup>. Nevertheless, there are some problems. For example, in a few of the years listed the price quotations for some weeks and even months are incomplete or even absent. This might be due to carelessness

<sup>13</sup> For the *Mercurial*, Anes and Le Flem (1965); Le Flem (1977).

<sup>14</sup> AMS, *Libros* 1027-1141.



on the part of the *fieles* or the city's clerks, or even to the disappearance of part of the municipal records. There are also problems of a different sort. Cheese, honey and chickpeas disappear from the *Mercurial* from around the middle of the 17<sup>th</sup> century, while beans are first mentioned at the beginning of the 18<sup>th</sup> century at the same time as the information on sugar prices increases significantly, possibly as a result of changes in the consumption patterns of the city's inhabitants. Finally, the units of measurement in the *Mercurial* are a mixture of those used in bulk purchases (wheat *fanegas*; cheese and olive oil *arrobas*; honey *cántaras*; soap *quin-tales*) and retail sales (olive oil *libra*; oat *celemin*) in early modern Castile. Many local retailers attended the Thursday market to buy supplies for their shops, and this accounts for the use of the units of measurement typical of bulk purchases, although the appeal of the tax exemption granted by local authorities to these markets also prompted many consumers to buy there, and this is why we also find in the *Mercurial* other units of measurement typical of retail sales.

As was the norm in Castilian cities, the town council set price ceilings (*posturas*) for basic foodstuffs such as wine and olive oil (Andrés Ucendo 2011). The main purpose of this policy was to ensure the smooth supply of these products by offering prices that were profitable for producers and retailers but also cheap enough for consumers. These objectives, however, were impossible to achieve simultaneously, among other things because the *postura* included the growing impact of the taxes levied by the city and the Crown, so the rise of these price ceilings was virtually inevitable during the 17<sup>th</sup> century. The prices of other commodities, such as meat, fish and candles, were settled in public auctions (*obligaciones*) closely monitored by the local authorities, in which the winner (usually an individual or a company) made a pledge to ensure the supply of one of these products for a period of time (usually a year) at the price offered in the auction, which again included the impact of the taxes levied on the products in question. As the city council always retained its right to increase or reduce the *obligacion* price of meat, fish and candles when necessary, the *obligaciones* were similar to the *posturas* in that both systems reserved the city council an important role in the setting of the prices of a group of basic commodities.

The desire of Castilian cities to ensure the supply of basic foodstuffs was particularly visible in the case of bread, the basic staple of the Castilian diet. Bread prices do not appear in the *Mercurial*, which only lists the price of wheat, and the city council did not resort to *obligaciones* to monitor the supply of this basic commodity either. It would be futile, therefore, to look for bread prices in the *Mercurial*, or in the ledgers of the city clerks, which include the meat, soap and olive oil *obligaciones*. Another option would have been to scan the account books of the Segovian convents and monasteries, but the problem here is that in most cases these

institutions baked their own bread with the wheat obtained from their rents, or resorted to agreements in which they provided wheat to local bakers in return for a given number of loaves.

In search of an alternative, we have decided to estimate the evolution of bread prices in Segovia on the basis of the data provided by the *Mercurial*, which informs us about the market price of wheat; the deliberations of the city council, which include many bread *posturas*, and the account books of the city's *Pósito* (or *Alhóndiga*), which mention the price at which the *Pósito* sold its wheat to local bakers. All this reflects the deep concern of the town council, typical of early modern Castile and Europe, with the supply of good quality bread at cheap prices. In times of plenty this was left to market forces and the town council did not interfere, but during the frequent runs of bad harvests the local authorities took a much more direct approach and the city's *Pósito* bought, with city funds, as much wheat as possible in order to sell it to the local bakers (frequently women), who then baked it. In these times, the city council settled the prices of the wheat sold by the *Pósito* to the local bakers and the *posturas* of the bread then sold by the latter to the general public, using the market prices of wheat of the *Mercurial* as a reference<sup>15</sup>.

The deliberations of the city council and the account books of the *Pósito* enable us to know the rule followed by the city for fixing the bread *postura*. This method was modelled on the so-called «Old System» used by every European city during the medieval and early modern periods (De Vries 2008). In the Castilian case the basic norm was what our sources call the rule of one *maravedí* per *real* («la regla de un maravedí por real»): as, on average, 34 loaves of bread (*cuartales*) were baked from a *fanega* (55.5 liters) of wheat and the Castilian *real* was equal to 34 *maravedís*, then the price of a loaf of bread was, at least in theory, 34 *maravedís*. Another way of saying this is that in early modern Segovia and Castile the *postura* of a loaf of bread (in *maravedís*) was, again in theory, equal to the market price of the *fanega* of wheat (in *reales*), so if the price of a wheat *fanega* rose, for instance, to 38 *reales*, the price of the loaf increased to 38 *maravedís* (Lanza García 2017). Nevertheless, it must be stressed here that, while there is little doubt that the local authorities always tried to adhere to the one *maravedí* per *real* rule when settling the *posturas* of bread, its effective implementation did not escape to some deviations from the pattern we have just mentioned.

The Segovian city council, firstly, decided upon the minimum number of loaves of bread that should be obtained from a wheat *fanega*. As was normal everywhere in pre-industrial Europe, however, the number of loaves

<sup>15</sup> On the rule followed by the Segovian city council to settle the *postura* of bread, see Lanza García (2017).

really baked was usually above this minimum, and this was one of the most important sources of profit for local bakers. To this it should be added, secondly, that there were times when the *postura* of bread was less than one *maravedí* per *real*, while in others it could be 2 or even 4 *maravedís* more; depending on circumstances such as the success or failure of the harvests or the indebtedness of the city (closely related to the health of the local finances). During the shortages of the first decades of the 17<sup>th</sup> century, a time when the local economy still retained its momentum and real wages reached their peak, the town council authorised Segovian bakers to sell the 2.5-pound Castilian loaf (*cuartal*) at a price two or even four *maravedís* higher than that of the *fanega* of wheat (in *reales*). In this way local bakers were able to pay the *Pósito* back for their purchases of wheat. Given that the number of loaves baked from each *fanega* was higher than the minimum set by the town council, they could also earn substantial profits. However, during the worst inflationary years between 1625 and 80, in a period of falling real wages, this was impossible. At those times, in an effort to relieve the plight of the local consumers, the authorities adopted the opposite policy: one of artificially low-bread prices based on the rule of one *maravedí* per *real*, and sometimes even less. Needless to say, this must have imposed a heavy strain on the local bakers, forced to buy wheat at high prices in periods of scarcity and then sell bread at artificially reduced prices. During the 18<sup>th</sup> century the city council decided again to provide some relief to the local bakers, enabling them to sell the *cuartal* one *maravedí* higher than the *fanega* of wheat for most of the time, although in times of crisis the price of the loaf was reduced (Lanza García 2017).

To sum up, the bread prices of our index are those of the *postura* of bread, which may be found in the deliberations of the city council and the account books of the *Pósito*. We have found the *posturas* of 128 years (more than 50 per cent of the years of our index) and our sources have also enabled us to estimate the wheat prices/bread *postura* ratio in these 128 years. Then we have resorted to lineal interpolations of this ratio to estimate the prices of bread in those years in which we only have, thanks to the *Mercurial*, the prices of wheat at our disposal<sup>16</sup>.

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<sup>16</sup> This method has another advantage. Because of the lack of reliable sources, in his seminal article on European wages and prices Allen (2001) developed a bread equation which included the prices of the cheapest grain available (wheat, rye), plus wages and a dummy. Allen's equation is frequently employed by researchers in this kind of exercise, but its use for the purposes of this paper is open to question, we believe, on account of the changes in the rules followed by the Segovian city council when settling the bread *postura* we have just outlined; the simple method we have described, based on the accurate information filed in our sources and the knowledge of the patterns employed by the local authorities when settling bread *posturas* is preferable. There is another problem with Allen's bread equation. In a previous paper (Andrés Ucendo and Lanza García, 2014a) we presented

**TABLE 1**  
BASKET OF COMMODITIES. SEGOVIA, 1611–1620

	Individual yearly expenditure				Daily calories	
	Quantities	Grams of silver per unit	Grams of silver per year	%		
<b>Bread</b>	168	kg	1.28	215.33	20.25	1,197
<b>Wine</b>	110	litre	1.75	192.99	18.15	160
<b>Meat</b>	42	kg	3.54	148.94	14.00	270
<b>Salt Pork (Tocino)</b>	7	kg	3.96	27.75	2.61	27.75
<b>Oil</b>	6	kg	5.40	32.39	3.05	32.39
<b>Chickpeas</b>	50	kg	2.51	125.54	11.81	125.54
<b>Eggs</b>	6	Dozen	5,20	31.23	2.94	31.23
<b>Fruit</b>	25	kg	3.11	73.94	6.95	40
<b>Fish</b>	9	kg	3.09	27.81	2.62	17
<b>Cheese</b>	2	kg	5.95	11.90	1.12	20
<b>FOODSTUFFS</b>				887.81	83.50	1,974
<b>Charcoal</b>	95.0	kg	0.36	34.48	3.24	
<b>Candles</b>	1.8	kg	6.67	12.01	1.13	
<b>Soap</b>	1.0	kg	5.92	5.92	0.56	
<b>Footwear</b>	2.0	Pairs	20.52	41.04	3.86	
<b>Woollens (Estameña)</b>	4.5	Metre	11.35	51.08	4.80	
<b>Linen</b>	3.5	Metre	8.83	30.92	2.91	
<b>MANUFACTURES</b>				175.45	16.50	
<b>TOTAL</b>				<b>1.063,26</b>	<b>100.0</b>	

Sources: see text.

The prices of the other commodities in our basket (Table 1) come from the account books of Segovian convents and hospitals. These sources usually start at the end of the 16<sup>th</sup> century, decades later than the *Mercurial*

the bread prices in Madrid between 1596 and 1700. These prices are those of the bread purchased by two well-known Madrilian institutions (the Santa Isabel College and the Royal Foundling House) and have the advantage of being market prices. The R<sup>2</sup> between our Madrid bread prices and those estimated by Allen’s equation is 0,475. On the shortcomings of Allen’s methodology to estimate bread prices, see also Drelichman and González Agudo, (2019, pp. 42-43).

and the *posturas* filed in the city records, and to fill this gap we have resorted to the account books of institutions in other cities. The prices of linens and woollens before 1590 are those bought by the Monastery of Sandoval (in the province of León). These textiles were bought at the nearby Medina fairs and their prices were very similar to those in Segovia, mainly because the impact of transportation cost on the prices of these commodities was reduced.

During the early modern period the main staple of the Castilian diet was white bread together with legumes, wine, pork, beef and mutton meat, olive oil, some fish during Lent, cheese, eggs, fruit and vegetables. The main daily dinner consisted of bread with a stew of meat, legumes and vegetables, with the precise ingredients depending on household income. The picture of the Segovian diet that emerges from our sources is a bleak one. According to a well-informed observer in the middle years of the 18<sup>th</sup> century, the parish priest of the small Segovian village of Fuentelcésped, the day-to-day diet of the agricultural daily workers at that time consisted of little more than an egg and a coarse fat soup (García Sanz 1998 [2016, p. 108]). As the income of the average Castilian family was low, the lion's share of their expenditure was concentrated on food, leaving little for the purchase of manufactures: some wool and linen textiles for the yearly replacement or mending of their clothing, charcoal and wood for fuel, a pair of shoes, and some soap and candles. Not surprisingly, therefore, the few consumption budgets from that period that we have been able to obtain show that about three-quarters of family expenditure was on foodstuffs: roughly the same figure as in the budgets of the Spanish daily labourers during the middle of the 19<sup>th</sup> century and the workers in Madrid at the beginning of the 20<sup>th</sup> century<sup>17</sup>.

Consumption data for the inhabitants of Segovia during the early modern period are scarce, but this problem can be solved, when necessary, by using data from Madrid. There are two reasons for this. First, the Madrid records are highly reliable, especially those from the 18<sup>th</sup> century, and second, the consumption patterns in the capital seem to have been very similar to those in Segovia. The daily average bread consumption in Segovia was one Castilian pound, although the inmates of the city jail enjoyed a slightly higher ratio of one and a quarter pounds and agricultural labourers received two. As for wine, the Segovian tax records suggest an average consumption of 106 litres per person per year between 1699 and 1701—a figure that more than a century later, in 1819, had fallen to 72 litres. These records also indicate that the average consumption of meat was lower in Segovia than in Madrid, and that beef was more in

<sup>17</sup> Arriquibar (1779) [1987]; García Sanz (1980, p. 66); Andrés Ucendo and Lanza García (2014a).

demand than mutton. We only have broad estimates of the consumption levels for the other components of our basket of goods, and it is noteworthy that some products about which there is a growing literature because of their role in the Spanish and European trade during the early modern period, such as sugar and chocolate, are not included in our basket, given that their consumption in early modern Castile was mainly concentrated among sick people and the most affluent groups in the country.

Although it would have been desirable to include house rents in our index, this was impossible on account of the shortcomings of our sources. Nevertheless, there are grounds for asserting that had we been able to do so, the results of our research would not have been very different. Recent studies suggest that house rents amounted to only 8–10 per cent of family budgets in some Castilian cities at the time, such as 16<sup>th</sup>-century Toledo; rather less than what was spent on bread, for example<sup>18</sup>. To this it should be added that a substantial part of the Castilian population appears to have owned their own houses, at least according to the Castilian government. In a 1638 report by the State Council (*Consejo de Estado*), the most important government institution in the country, the councillors explicitly stated that house owning was widespread among the different sections of the Castilian society («*en estos reinos tienen casa propia todos, pobres y ricos; caballeros y labradores*»)<sup>19</sup>.

All these data have enabled us to compile our index. We have multiplied the amounts of each of the commodities in our basket by their yearly price, so ours is a Laspeyres index in which the weight of the components does not change. The index is presented both in low-value copper currency (*reales de vellón*) and, with the idea of measuring the impact of the currency manipulations of the period, also in grams of pure silver.

Our index starts at a relatively advanced date<sup>20</sup>. This makes it difficult to measure the real extent of the price rises which took place in the city during the 16<sup>th</sup> century as a result of the influx of American silver and the policy of monetary stability enforced by the Crown<sup>21</sup>. The latter factor accounts for the similarity between our price indexes, both in nominal and grams-of-pure-silver terms, until 1621. The 16<sup>th</sup>-century price rise peaked in 1598–99 as result of the plague, and then it was followed by a phase of price stability in *vellón* and silver terms, interspersed with some short-term oscillations such as the 1604 and 1615 increases due to bad harvests,

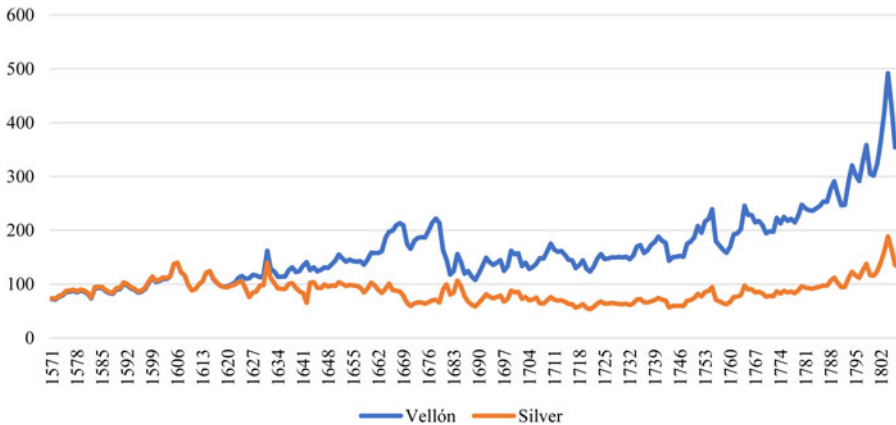
<sup>18</sup> Drelichman and González Agudo (2014) and (2019). In the small town of El Burgo de Osma, (in the province of Soria), house rent in the eighteenth century was as much as 4 per cent. Pérez Romero (2018).

<sup>19</sup> AHN, *Estado*, libro 806.

<sup>20</sup> For the evolution of prices and wages in another Castilian city (Seville) during the sixteenth century, see González Mariscal (2015).

<sup>21</sup> Domínguez Ortiz (1960); Hamilton (1975); Motomura (1994) and Drelichman (2005).

**FIGURE 1.**  
SEGOVIAN PRICES INDEX, 1571–1807 (1616–20 = 100).



Sources: see text.

or the falling levels of 1616-29 caused by low-wheat prices. Figure 1 shows that the divergence between the price trends in *vellón* and silver terms started from around the beginning of the 1620s. This was due to the *vellón* manipulations during the first years of the reign of Philip IV (Hamilton 1975; Motomura 1994). Philip IV ruled between 1621 and 1665 and during his long government the annual growth rate of our index, in *vellón* terms, was 1.8 per cent. This rise was driven by the frequent manipulations of the copper currency of the period, which provided the beleaguered Castilian Crown with important revenues in the short term, and peaked in 1678, when prices reached a 222 index (when compared to 100 in 1616-20). There is little doubt that such manipulations had a significant negative impact on the country's economy, compounded by the failures of the government's frequent monetary-reform projects, and that they bear substantial responsibility for the Castilian crisis of the 17<sup>th</sup> century. This accounts for the rise of our price index in nominal terms and its simultaneous decline in terms of grams of pure silver between 1630 and 1660, only interrupted by the rise in silver terms of 1631, driven by the agricultural crisis of that year. Then, between 1661 and 1681, during the worst moments of the Castilian 17<sup>th</sup>-century crisis, the pace of the decline of our index in grams of pure silver quickened, while in nominal terms prices continued to rise.

The decline of Segovian prices in grams of pure silver was momentarily interrupted by the deflationary measures implemented by the Crown at the beginning of 1680, which contributed to restoring some degree of stability

to the Castilian monetary system (Hamilton 1988). By reducing the face value of the Castilian copper *maravedís* the government simultaneously reduced the value of the silver *premio*—the extra amount(s) that anyone had to pay when exchanging copper *maravedís* for pure silver *reales* (Mariana 1609 [1987]). For this same reason our index, in silver terms, experienced a significant recovery, regaining the levels of 1640–50. As prices in nominal terms also experienced a remarkable fall at the beginning of 1680, during the years 1680–85 the difference between our index in *vellón* and silver terms was smaller than at any other point in the period 1640–1807. The recovery of silver prices, however, did not last, and from the end of 1686 onwards our index returns to its previous declining trend, after the devaluation of the Castilian *real* in the same year and the consequent fall in its silver content which tended to increase again the silver *premio*.

Between 1686 and 1740–50, prices remained stagnant in *vellón* and grams-of-pure-silver terms, and it is notable that in 1720 Segovian prices in grams of pure silver plunged to their lowest level in the whole series. The estimates by García Sanz (1987) suggest that in 1720 the city's population was a little more than 10,000—less than half of the figure in 1591, 23,000, which had represented the city's peak population in the early modern period. From having been a vibrant manufacturing centre in the 16<sup>th</sup> century, a magnet for workers from the rest of Castile and the nucleus of an important textile district, by 1720 Segovia had become a dormant provincial outpost (Ruiz Martín 1965–67). In this environment of stagnation, levels of demand and consequently prices, in nominal and silver terms, evolved in a very similar way, and the fact that our price index in grams of pure silver must have fallen to its nadir in the years around 1720 becomes more understandable.

The first signs of economic recovery were visible from the middle decades of the 18<sup>th</sup> century, and they became more evident with the passing of time. This explains the price rises from 1750–55, both in nominal and silver terms, shown in Figure 1. There were also, however, other factors at play. Firstly, an expanding money supply, driven by new issues of silver and *vellón* currency, must also have exerted an inflationary influence during the period, especially after the massive issues of banknotes that began in 1782 (Hamilton 1988). Secondly, levels of production appear to have struggled to keep up with the money supply, a problem compounded by the shortcomings of the famous liberalisation programme promoted by Carlos III, two of main components of which were the 1765 liberalisation of the internal grain trade and the opening of the American trade to many Spanish ports in that year and 1778 (Anes 1970). Although the promotion of grain production was the main objective of the 1765 liberalisation, this measure inadvertently promoted the hoarding of grain for speculative purposes on a huge scale, to the detriment of cities such as Segovia that were



located in poor agricultural areas and dependent on the arrival of grain from richer areas. Simultaneously, the opening of many Spanish ports to the American trade in 1765 and 1778, together with the need to supply the vast armies and fleets mobilised in 1779–83 and from 1794 onwards, increased demand levels and therefore also prices and the cost of living in Castile and Spain, once again to the detriment of the inhabitants of cities such as Segovia (Martínez Ruiz 2005; Dobado *et al.* 2012). Remarkably, the trend of Segovian prices during the 18<sup>th</sup> century is similar to that of other Spanish cities. Between 1701–1710 and 1791–1800, for instance, our prices index rose from a 100 level to 205; slightly less than in Palencia and Pamplona, but more than in El Burgo de Osma, Madrid, Seville and Toledo during the same period<sup>22</sup>.

Prices became less volatile during the economic expansion of the 18<sup>th</sup> century and there was even some price convergence in Castile and Spain, although this trend was short-lived and it came to an end in the last years of the century. This was partly the result of the difficulties in international trade caused by the continuous wars of the period, but from a Segovian perspective it was particularly because of agricultural crises, such as that of 1803–1804, whose effects resembled those of the crises of 1598 and 1631 (Llopis Agelán and Sánchez Salazar 2016). Although in 1805 and 1806 the situation improved and price levels declined, the start of the Independence War (Peninsular War) in 1808, which had a destructive effect on the Segovian, Castilian and Spanish economies, prompted surges in prices that were compounded by the scarcity of means of payment.

#### 4. REAL WAGES IN EARLY MODERN SEGOVIA

During the last decades of the 16<sup>th</sup> century, nominal wages and price levels went hand in hand in Segovia, so real wages were basically stable and any improvement was hidden by the presence of high-volatility levels, driven by huge yearly fluctuations of wheat and bread prices. This changed in the first decades of the following century, when wages increased at a faster rate than prices in the context of the demographic slump brought about by the 1596-1602 plague, so in the years 1615-1625 the real wages earned in the city by those enlisted in the construction trades reached their peak. As real wages also peaked in Madrid during these same years, this lends credibility to Ruiz Martín (1965-1967, p. 795) view that during this period the Segovian and Castilian economy went through the last stages of their golden age, although the symptoms of difficulties in Segovian manufacturing were already present in the form of high-labour costs (Andrés Ucendo and Lanza García 2014a).

<sup>22</sup> Fernández Romero (2005); Llopis and García Montero (2011). Pérez Romero (2018).

The peak in Segovian real wages in 1615-1625 was something of a swansong, followed very soon afterwards by the crisis. From 1630 onwards, in fact, real wages declined continuously, interrupted only by the monetary reforms of 1680-1686. Such reforms brought a brief respite, and in 1686 real wages continued to fall, then hovered around the low levels of 1690 until 1740-1750. During the second half of the 18<sup>th</sup> century the pace of the fall quickened again, and in the last years of our series the real wages earned in the construction trades of the city plunged to their lowest point, so that in 1800-1804 they were 50 per cent lower than during those peak years of 1615-25. This situation, more than anything else, embodies the extent of Segovia's economic decline during the 17<sup>th</sup> century and its only moderate recovery in the 18<sup>th</sup> century. The difficulties experienced by the local textile producers had been the main reason for this decline. The decadence was plainly visible in demographic terms, and it must have accounted for a simultaneous fall in demand for the services of all those employed in the construction trades. It is commonly argued that during the 18<sup>th</sup> century the Castilian and Spanish economy enjoyed a recovery, but that recovery was driven by the renewed expansion of agriculture and wool exports rather than by the growth of urban manufacturing, and Segovia is a case in point. Despite still being one of the most important Castilian textile cities, there is little doubt that at the beginning of the 19<sup>th</sup> century the local economy had fallen a long way from its best times in the 16<sup>th</sup> century, and this is what we find in our real wages series in the years around 1800.

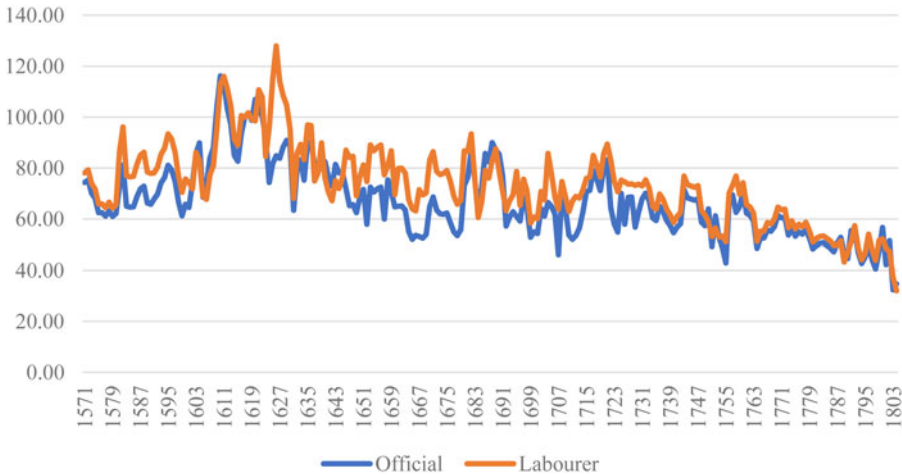
The trend of Segovian real wages we have just described is very similar to that of other Castilian cities<sup>23</sup>. Already in 2001, Allen (2001, p. 435) emphasised the presence of low and falling real wages in southern and central Europe during the 18<sup>th</sup> century. This decline was remarkable in some nearby Castilian towns of the time, such as Madrid and El Burgo de Osma, and the Segovian case clearly fits into this pattern between 1701 and 1800 (Llopis Agelán and García Montero 2011; Pérez Romero 2018).

To cope with the dramatic fall in real wages shown in Figure 2, what strategies did the inhabitants of the city resort to? Before answering this, we have to consider that the wages earned by male labourers were only part of families' total income, and that in order to estimate family income we need to know the number of working days per year and also how much was earned by other family members.

The number of days that the people of the city worked in a year seems to have been higher than traditionally acknowledged. Aware of the many religious festivities, and wanting to provide local workers with enough

<sup>23</sup> Andres Ucendo and Lanza García (2014a); Llopis Agelán and García Montero (2011); Calderón Fernández *et al.* (2017); López Losa and Piquero Zarauz (2016) and (2018); Pérez Romero (2018).

**FIGURE 2.**  
**REAL WAGES IN THE CONSTRUCTION OFFICES OF SEGOVIA, 1571-1804**  
 (1616-20 = 100).



Sources: See text.

working days to feed themselves and their families, the Segovian Synod of 1586 reduced to 42 the number of holy days<sup>24</sup>. If we add the 52 Sundays in the year, that leaves 271 working days per year. Our estimate is close to those of other authors. It is slightly higher than that proposed by Allen (2001), and similar to that offered by García Zúñiga (2014, pp. 67 and 76). According to this author, the potential working days in early modern Spain hovered around 270-281.5 days per year, although the number of actual working days could be higher. Very recently, for instance, García Zúñiga and López Losa (2018, p. 18) have indicated that the number of actual working days in the Royal Palace of Madrid was 288-294 days per year at the end of the 18<sup>th</sup> century and the situation must have been similar in Segovia. In the Synod of 1586 the religious authorities of the city and its bishopric adopted a rather flexible approach, letting the inhabitants of the city work more days than the 271 mentioned above (Sínodo 1587, pp. 42-43), and according to the report of Tomás Pérez in 1803 the actual number of working days for the city's weavers was 280 (Franch 1991).

On the other hand, women and children were a fundamental part of the labour force in preindustrial economies, particularly in a manufacturing centre such as Segovia where there were good employment opportunities

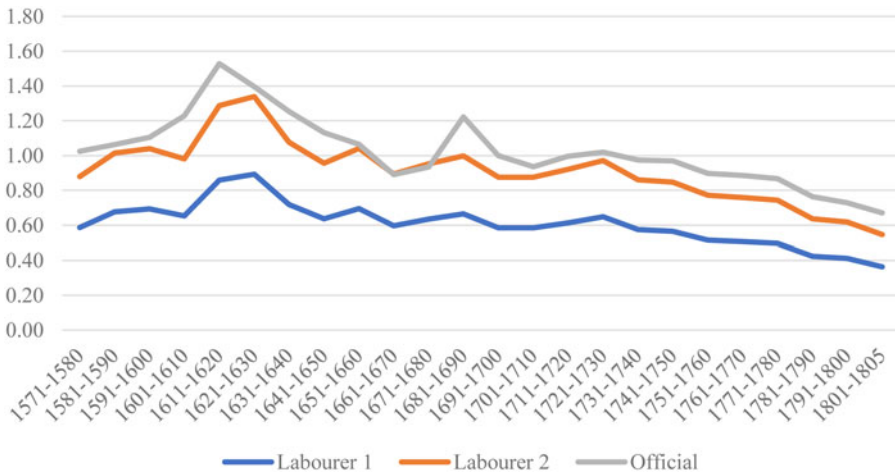
<sup>24</sup> *Sínodo de la diócesis de Segovia celebrado por don Andrés de Cabrera y Bobadilla, obispo de Segovia. Electo obispo de Çaragoça. Año 1586. Barcelona, en casa de Hubert Gotard, 1587, pp. 43-43.*

in the city and its surrounding area. Women could work in exchange for a daily wage or on a piece rate system in a variety of manufacturing jobs and services such as carding, spinning, sewing, laundry and cooking, and in construction offices as building workers (although the traces left by the female involvement in this last activity are slight in most cases, with some city ports such as Bilbao being exceptions). Any comparison between female/male wages is often difficult because of the scarcity of data and the difficulties of comparing female/male occupations. Again, construction seems to have been the exception. In the second half of the 16<sup>th</sup> century, in Bilbao the daily wage of female building workers was 45 per cent of that earned by their male counterparts, and this ratio hovered around 50 per cent during the rest of the early modern period (Lanza García 2018). The 1:2 ratio may be found at the beginning of the 19<sup>th</sup> century in the building offices of Segovia, as may be deduced from the report of Tomás Pérez previously mentioned (Franch 1991, pp. 107–133). According to him, the local women employed as unskilled daily workers (*peonas*) earned 2.5–3 reales per day, while their male colleagues obtained 5–6. Nevertheless, the cases of the Bilbao and Segovian women we have just mentioned must have been rare, as most job opportunities for Castilian women were found in manufacturing where the gender gap seems to have widened to 30–40 per cent. While the daily wages of Segovian female spinners were 2–2.5 rs, male carders earned 5–6 rs and weavers 7. To quote another case, Rodríguez de Campomanes (1774 [1975], pp. 51 and 66) wrote that women and girls could earn a daily wage of 1.5 rs working as spinners, against the 4–4.5 reales obtained by the ordinary male labourer, and something very similar happened in the middle of the 18<sup>th</sup> century in the province of Palencia, as may be deduced from the Ensenada Cadaster. Only when women worked in the same office as men did the gender gap narrow, and then female daily wages could rise to 60 per cent of that of male wages, as happened in the case of carding, but this was exceptional<sup>25</sup>.

The previous data indicate that, as was normal in preindustrial Europe, women were deeply involved in the labour markets of early modern Spain. A study of the household economies of Astudillo (in Palencia) around 1750 indicates that women and infants' earnings amounted to 36–39 per cent of the total incomes of ordinary labourers and weavers' households (Hernández 2003, pp. 127–132). It seems evident, then, that any analysis of the evolution of the welfare ratios (WRs) based on the idea that the total familial income was earned exclusively by the male head of the household would be grossly inaccurate. Therefore, to estimate the

<sup>25</sup> The case of the female/male nurses employed at the Hospital of Tavera in Toledo between 1550 and 1650, where the wages earned by female nurses were around 70 and even 100 per cent of those obtained by their male colleagues, seems to have been a remarkable exception to the situation we have just described. Drelichman and González Agudo (2019), pp. 24–28.

**FIGURE 3.**  
WELFARE RATIOS IN THE CONSTRUCTION TRADES, SEGOVIA, 1571-1805.



Source: see text.

evolution of this indicator, which sets the line separating poverty from that level of respectability deemed socially acceptable at any given time, we have made the following assumptions.

Firstly, based on a 50 per cent gender gap and on the Tomás Pérez report, we have considered that the revenues obtained by a male building worker in 271 actual working days per year amounted to 2/3 of the total familial income and that his wife provided the other third. To arrive at the total expenditure of the average Segovian family we have multiplied our basket of commodities by 3.15, as indicated by Allen (2001). This figure is equal to the equivalent consumption of a four-member family made up of a married couple and two children, plus house rent. The per adult consumption male equivalent of this notional family could be three or even slightly more, 3.11, times the cost of our basket of goods, depending on the age of the children, in line with Moreiras *et al.* (2013, pp. 258–249). The average size of the familial unit in the province of Segovia in the middle of the 18<sup>th</sup> century was 3.81 people: 4.01 people in the case of craftsmen's families and 3.34 in those of daily labourers (García Sanz 1977, p. 42). Finally, the quotient between revenue and yearly family expenditure then provides us with the WR (Figure 3).

Figure 3 shows that the evolution of the WR of the building officials and labourers' families in early modern Segovia resembles that of real wages and that in both cases WR experienced a continuous decline in the city after the peak of the first third of the 17<sup>th</sup> century.

A closer inspection of the WRs of Figure 3 also indicates that while the wages earned by building officials were enough to keep their families above the poverty line during most of the periods between 1571 and 1741, this would have been a dream for building labourers (Labourer 1). In fact, Figure 3 indicates that the families of building labourers were forced to complete the wages earned by male labourers with those obtained by their wives to attain this objective (Labourer 2); thence the deep involvement of Segovian and Castilian women in the labour market. This mobilisation of female work must have been particularly important in a textile centre, such as Segovia, where women could work as spinners or in any other textile office, and traces of it have been recently found in other areas such as 18<sup>th</sup>-century La Mancha, although it did not suffice to prevent the clear worsening in the WR of labourers from 1731 onwards of Figure 3, when these ratios fell well below the poverty line (Sarasúa 2018).

Remarkably, from 1741-50 the WR of building officials also fell below the poverty line, and this decline lasted until the end of our series. This leads us to conclude that poverty must have been a permanent danger for a substantial part of the city's inhabitants during the period analysed in this essay, even if the percentage of those officially listed as poor was small (less than 10 per cent of the Segovian population). Poverty was a threat to all those who, without any other source of income, depended exclusively on their labour and lost their employment as a result of accident, infirmity or old age. In times of bad harvests and famine, when bread prices and therefore prices in general skyrocketed, as in 1631, 1803 and 1804, this was a risk faced by all the workers of the town and their families. Recent works prove that the fall in real wages of the 18<sup>th</sup> century in nearby towns, such as El Burgo de Osma, during the 18<sup>th</sup> century drove an intensification in the labour of the local workers (Pérez Romero 2018, pp. 12-13). This must have been a way to mitigate the risk of poverty for many Segovian workers, and the resort to the services provided by the system of poor relief developed in Segovia and the rest of the Castilian cities must have been another option. Many individuals, and above all the parishes, monasteries and convents of the city, offered alms to those in need, and their efforts were completed by the nine hospitals in the city. These hospitals were at least partly funded by a city council which, as mentioned previously, also monitored the local wheat and bread markets, even being willing to subsidise the wages of city officials in times of massive unemployment, as at the beginning of 1680 (Andrés Ucendo and Lanza García 2014b, p. 349). The fact that, as far as we know, Segovia did not suffer the food riots that took place in other Castilian cities during the 16<sup>th</sup> and 17<sup>th</sup> centuries could be considered the best tribute to the efficiency of this relief system, but its dismantling at the beginning of the 19<sup>th</sup> century changed things dramatically.

In 1835, the dissolution of the monasteries set up by the Spanish government must have had a particularly damaging effect in Segovia, where at least 20 religious establishments and three hospitals were disbanded that year. This would have been compounded by the impossibility of enforcing the traditional policy of low-bread prices or even subsidising wages in times of crisis brought by the collapse of the town finances during the same period. After these transformations, alms were the only remaining element of the city's old relief system, whose disappearance seems to have exacted a heavy toll from broad sections of the Segovian and Spanish population, at least judging from a mid-19<sup>th</sup>-century source according to which, during that period, Spanish daily labourers were forced into begging in order to feed their families (García Sanz 1980, p. 65).

## 5. FINAL REMARKS

Between 1621 and 1680, Segovian price levels rose by a remarkable extent in nominal terms. After a fall between 1681 and ~1750, there was a renewed increase during the second half of the 18<sup>th</sup> century. This pattern was the result of the monetary policy followed by the Crown in 1621-80 and the last decades of the 18<sup>th</sup> century, the shortcomings of Castilian and Spanish agriculture from ~1765 onwards, and the failure of the reformist measures promoted by Carlos III and his enlightened ministers. The impact of monetary factors on the evolution of our index seems to have been particularly important, especially during the time of the copper currency manipulations, and between 1621 and 1807 our price index in grams of pure silver experiences what could perhaps best be described as long-term stagnation.

As in other Castilian cities, such as Madrid, the real wages of the Segovian building officials and labourers peaked around 1615-25 and then experienced a long and continuous fall, driven by the currency manipulations and the collapse of the local textile industries, which resulted in the simultaneous decline of the city. Although there was an expansion of the Castilian and Spanish economy during the 18<sup>th</sup> century, it was prompted by the recovery of agriculture and the rise of wool exports, and Segovia never regained the prosperity of the best periods of the 16<sup>th</sup> and the first decades of the 17<sup>th</sup> centuries; so in the last decades of the 18<sup>th</sup> century the real wages earned by those enlisted in the construction trades of the city had plunged to the lowest point of the whole period. We can conclude, therefore, by stating that the evolution of Segovian real wages during the early modern period closely followed the trajectory of the local economy, and that this might be considered representative of the economic trends prevailing in all the manufacturing cities in the interior of Castile during the period.

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