
Controls over Food Supplies in Florence in the Late XVIth and Early XVIIth Centuries

A. M. Pult Quaglia

University of Pisa

The general rise in prices, and in particular those of cereals, which affected Europe throughout the XVIth century became particularly severe in the last decades of the century, and in Tuscany lasted until the 1630s. An examination of the series of grain prices for Florence,¹ Siena,² Pisa,³ Arezzo and Sansepolcro,⁴ shows clearly the way in which these maintained very high levels over successive years, as well as the clear contrast with the pattern of earlier decades.

To cite only one example amongst the many contemporary accounts, the *Alimurgia*⁵ written by the Tuscan naturalist and publicist Giovanni Targioni Tozzetti during the XVIIIth century would lead one to believe that famine and poor harvests were a regular and commonplace phenomenon in Tuscany in the early modern period. The years between the close of the XVIth and the opening of the XVIIth centuries then provided a particularly difficult moment, in so far as a succession of years of poor harvests coincided with the price movement which we have already referred to.

In this essay we shall consider the measures which were adopted by the Medicean government in the face of fluctuating food supplies in the years 1590

¹ G. PARENTI, *Prime ricerche sulla rivoluzione dei prezzi in Firenze*, Firenze, 1939.

² IDEM, *Prezzi e mercato del grano a Siena (1546-1765)*, Firenze, 1942.

³ P. MALANIMA, *Aspetti di mercato e prezzi del grano e della segale a Pisa dal 1548-1818*, in *Ricerche di Storia Moderna I*, Pisa 1976, pp. 289-327.

⁴ A. FANFANI, *Indagini sulla "rivoluzione dei prezzi"*, Milano, 1940.

⁵ G. TARGIONI TOZZETTI, *Alimurgia, o sia modo per rendere meno gravi le carestie per sollievo de' poveri*, Firenze 1767.

to 1630 within the ' *Stato vecchio* ', that is to say the area covered approximately by the modern provinces of Florence, Pisa, Livorno, Pistoia and Arezzo. The ' *Stato nuovo* ', that is Siena and the *Maremma*, although dependent on the Grand-ducal government, had their own magistracies and their own regulations apart.

In Florence there were two magistracies responsible for controlling the market in agricultural products. The first of the was known as the *Abbondanza*, and was responsible specifically for the production and supplies of cereals. The second was the *Grascia*, which was set up to control the production and exchange of all other foodstuffs. There were also other magistracies which had an interest in this vitally important range of activities, and they provide a typical example of the confusion of powers and responsibilities to be found within an *Ancien Regime* state. In addition, the Grand Duke was also constantly informed of the supply situation and it was he, in the last instance, who intervened and took decisions.

The system of controls over food supplies was in many respects similar to those in force in many other national and city states. As is well known, it was particularly during periods of demographic expansion, when agricultural production experienced great difficulties in adjusting to new demands, that such controls tended to become increasingly restrictive and pressing. And the threat of social disturbances, which was always present when either climatic conditions or warfare served to reduce available food supplies, also became much greater at such moments.

In Tuscany for the period which concerns us, there was, as we shall see, in addition to a set of measures derived from the communal era in many respects, two further types of control: firstly essentially conjunctural measures, which had immediate effects but were limited in duration — that is to say, massive purchases abroad, or else rigorous controls designed to ensure a direct transfer from producer to consumer, free distribution to the poor, and so forth; secondly there were measures which were intended to have a greater influence and to operate over more extended periods, which involved the formulation of clear strategies of economic policy, even though they were not always realised.

In the *Stato vecchio* there was a prohibition on exports and on hoarding. Foodstuffs could be freely imported, on payment of duties. Introduction and sale of goods on the market was subject to various particular controls which tended to favour the small urban consumer. In fact, in an area of some 20 miles (about 33 kilometres) around the city, goods could only be transported in the direction of the city, and during the first hours that the market was open only individual buyers were permitted to purchase small quantities of grain which had to strictly for their own consumption. In addition, it was obligatory to report the quantities of products harvested — wheat, secondary cereals, and olive oil — as well as population statistics, so that a clear picture of availability could be reached. But there were various permitted exceptions to such norms: for example, for a number of years oil was freely exported from the

highly productive region of the Valdinievole, where as export licences for grain were strictly limited and were always conceded on an individual basis. Similarly, wholesale buying was also at times permitted, as we shall see, but always for limited periods only. And while the price of grain was free — it was only taxed once during these decades — the magistrates set the weight of bread loaves, which differed from place to place. The bakers were obliged to always bake the same quantity of bread, which was always sold at the same price, but the weight of the loaves varied according to the orders of the magistrates. These weights were calculated against the market price of grain, the bakers' costs and the 'reasonable profit' which they were allowed to make. The variations in weight were not automatic, but depended on the general situation in the country. When price conditions were reasonably stable, allowing for seasonal variations, weights remained constant over several years. But in more difficult periods, the slightest fall in grain prices led to an immediate increase in the weight of the loaves, for obvious motives of opportunity, and despite the protests of the bakers who in times of shortage saw their profit margins reduced to a bare minimum. They had virtually no means of exerting pressure on the government and they were in addition subject to endless controls on quality and weights, as well as being liable to heavy penalties when caught in default. Normally the bakers could obtain supplies freely, and were limited only in the quantities available for purchase. There were, however, also cases when the *Abbondanza* intervened to provide supplies freely or by force. This happened when prices rose and the *Abbondanza* took the decision to sell its own grain at prices below those of the market, or else when the *Abbondanza*, due either to bad calculations or incautious purchases, found itself with excessive supplies, or supplies that were likely to deteriorate in storage. The *Abbondanza* could also force the bakers to buy from them directly when they needed to replace quickly the capital which they had outlaid in acquiring the supplies.

For a better understanding of the mechanisms of control in moments of chronic food shortage, it is worth examining the particular measures adopted in the period in question.

⁶ To avoid burdening this article unnecessarily with footnotes, the sources which describe these measures are as follows:

Archivio di Stato di Firenze, *Magistrato dell'Abbondanza*, 12, 13, 14, 15, 16, 17, 18; *Ufficiali della Grascia*, 154, 161; *Pratica Segreta*, 70, 73, 179, 180, 181; *Miscellanea Medicea*, 264; *Magistrato dei Nove*, 3732; Biblioteca Marucelliana, Firenze, *Manoscritti*, A, CCLIII, 3, cc. 34 r-48 v.

A. LAPINI, *Diario fiorentino*, ed. G.O. CORAZZINI, Firenze, 1900.

L. CANTINI, *Legislazione Toscana*, voll. XII-XVI, Firenze 1804-1805.

F. BRAUDEL-R. ROMANO, *Navires et marchandises à l'entrée du port de Livourne (1547-1611)*, Paris 1951.

E. GIDDEY, *Agents et ambassadeurs toscans auprès des Suisses sous le règne du grand-duc Ferdinand Ier de Médicis (1587-1609)*, Zurich 1953.

According to contemporary accounts, the autumn of 1589 was accompanied by very heavy rainfalls which caused rivers to burst their banks and made sowing extremely difficult, as well as prejudicing the germination of the seed due to the excessive dampness of the soil. The rising level of the river Arno in Florence caused warehouses and cellars to be flooded, so damaging reserve stock. In anticipation of poor harvests, in August 1590 orders were given that within the month at least 1/20th of all cultivatable land should be sown with rape in order to augment food supplies: bakers were also forbidden to use flour for any purpose other than breadmaking. But such measures could only provide minimal alleviation, and so Ferdinand I ordered the Florentine merchants to start purchasing in Amsterdam, Danzig, Lübeck, and in England and France, with the result that for the first time, in December 1590, a Hanseatic vessel berthed in the port of Livorno. On the 4th March 1591 a maximum price for corn was set throughout the State, but this measure — which was never used again throughout this period — only lasted a few months. In the same spring of 1591 an edict was issued stipulating that bread should be made half from flour and half from lentils. But the harvest of 1591 also proved inadequate, so that bread continued to be sold to the poor at a subsidised price from the shops run directly by the *Abbondanza*. But these sales proved disastrous, and after rejecting a proposal to put a tax on wine, due partly to the obvious problems of establishing the different prices and to the fact that wine was not considered to be an item of prime necessity, it was decided to lower import duties.

After the harvest of 1593 the price of grain fell a little, although still remaining high, and then rose again in 1594 and even more so in 1596.

It was during this period of high prices and poor harvests that a series of measures designed to have a more long-term effect were introduced. Encouragement was given to land reclamation operations in the Valdichiana and in the Pisan countryside, while in February 1597 a 'Deputation for cultivation' was established with the task of encouraging, where necessary, both lay and ecclesiastical proprietors to put uncultivated land in the Florentine countryside under the plough. But the operation of the Deputation did not go beyond sending out inspectors to the different localities for a few months, and after the better harvest of 1598 its activities were broken off.

The organisational activities of the State and Ferdinand I and their concern for the food supply situation did not diminish for that. The correspondence between the Grand Duke and the magistrates responsible between 1602 and 1607 indicates the continuing chronic lack of supplies in the *Stato vecchio* and the

L. DEL PLANTA, *Una traccia di storia demografica della Toscana nei secoli XVI-XVIII*, Firenze, 1974.

F. DIAZ, *Il Granducato di Toscana. I Medici*, Torino, 1976.

A. MENZIONE, *Storia dell'agricoltura e utilizzazione delle fonti catastali: l'estimo pisano del 1622*, in *Ricerche di Storia Moderna I*, cit., pp. 125-142.

consequent need for continuous measures to remedy the situation. This involved, for example, the use of many of the Medici farms situated throughout Tuscany as grain stores which were able to supply local communities from their own stocks or else with grain purchased by the *Abbondanza* and stored on the farms. The government was not only concerned to ensure that there was food available for the urban population but also for the small rural centres, and took particular care to see that there was seed available for the peasants, who would not otherwise have had enough to put by at the time of the harvest or the means of purchasing seed stock. In such cases the seed was loaned on the condition that an equal quantity would be restored after the harvest. With the same end in mind, in December 1601 a 'Deputation for the Community's Requirements of Victuals' was set up with the task of coordinating requests for supplies and of acting as an intermediary between the Grand Duke and the local authorities. In addition, purchases abroad continued to be made, and were particularly necessary in 1602 and again in 1604.

But in a society in which the means of communication were slow and uncertain while the level of technical knowledge was such that the greater part of every-day life was still dependant on weather conditions, the question of food supplies posed a wide range of different problems. Even summer drought provided reason for the government to intervene, because when there was not enough water in the rivers it was difficult to keep the flour mills working, and it could happen — and indeed did in the course of the summers of 1606, 1607, and 1611 — that although there was corn available, Florence still found itself without flour. When this occurred, it was necessary to halt the fulling mills involved in the production of wool so that the little water that was to be had was available for the flour mills.

Following a series of years of good harvests (between 1613 and 1616) and lower prices, Tuscany again entered into new difficulties after 1617. An interesting report written for the Grand Duke in 1619 by a senior Tuscan official, Alessandro Rinuccini, summarised the various measures adopted in the face of the famine which had lasted for three years, and which had been particularly severe in 1619 on account of the failure of the secondary cereals and chestnuts, the staple diet of the bulk of the population. According to Rinuccini it had proved possible to meet the crisis thanks to the fact that ample supplies were available in other regions, such as Sicily and Provence (although, in the case of the latter, only in 1617) and in particular northern Europe. By way of the port of Livorno supplies had never been wanting, but the cost had been considerable. In the course of these three years the *Abbondanza* had had to purchase over 500,000 sacks of corn (some 255,000 quintals), 248,000 sacks of which had been purchased in 1619 alone (i.e. 126,500 quintals). The cost in this single year exceeded 75,000 *scudi*, and this loss was all the more serious as it meant that bullion had to be exported. Sticking to his mercantilist beliefs, the diligent official advised the Grand Duke to continue his pro-

tection of manufactures so that in return for goods exported some part of this lost bullion might be regained, but he also recommended that encouragement should be given to bringing new land under cultivation, as well as to the reclamation of land on the coastal plains, which of course formed the largest lowland area in Tuscany.

It was no accident, then, that after 1620 there was new talk of a 'Deputation for Cultivation'. It was set up in October of the same year, composed of five representatives of Florentine noble families, with a wider brief than that of 1597. As well as drawing up projects it was also charged with contacting local officials in order to bring into being local commissions. In the Pisan countryside a similar task was undertaken by a magistracy which had been set up in 1601 with the object of improving cultivation and encouraging drainage of marshland.⁷

Within a few months the Florentine delegates drew up reports on their activities and on the projects which they felt should be undertaken. They informed the government that landowners had been invited by them to increase cultivation, and that by March 1621 the landowners had agreed to embark on a series of investments, valued in total at 47,666 *ecus*. But in view of the alacrity shown by the landowners themselves, the Deputation did not feel that there was any further need to send out inspectors to report on types of cultivation, and it also noted that there had been complaints from some landowners who claimed that their share-croppers (*mezzadri*) were neglecting their own lands and instead going off to work as wage labourers for those involved in the investment programmes.

The Deputation also recommended that the prohibitions against damage to woodland (especially important where oak and chestnut plantations were concerned) should be renewed, as well as those directed against damage to farming caused by animals, especially transhumant grazing. They also suggested that the government should force landowners to make certain rearrangements to remove the excessive fragmentation of property in certain parts of the Florentine countryside, in order to facilitate reintegration of land and the establishment of new share-cropping units. The presence of the peasant family and the lesser dispersion of labour which would result would lead to more intensive farming, an expansion of shrub and plant cultivation (especially vines), and an increase in livestock production.

The government did not accept the last proposal, however, but kept the Deputation in being for the following year, although replacing one of its members, Alessandro Caccini, with a representative of the *Abbondanza* on the

⁷ E. LUTTAZZI GREGORI, *Un'azienda agricola in Toscana nell'età moderna: Il Pino, fattoria dell'ordine di Santo Stefano (secoli XVI-XVII)*, in "Quaderni Storici", no. 39, pp. 882-908; e A.M. PULT QUAGLIA, *Il patrimonio fondiario di un monastero toscano tra il XVI ed il XVIII secolo*, in *Ricerche di Storia Moderna I*, cit., pp. 143-208.

grounds that this office gave him greater authority for increasing the area of land devoted to cereals. One can detect a certain degree of difference between the government, on one hand, which was interested mainly in increasing grain production so as to meet domestic requirements and, on the other, the delegates who were inclined towards a form of intervention which conformed more closely with the interests of the landowners, perhaps, who were keen to put their estates in order and encourage the most profitable forms of production — but of the two, this was also probably the more far-sighted and the more suited to the lines of development open to Tuscan agriculture.

The Deputation was not renewed in 1622, but it was revived in the autumn of 1630. Throughout the 1620s grain prices had been high. Following the harvest of 1629 a study was made of the six harvest reports which were considered to provide a representative picture — those of the Medici estates, of two most important hospitals in Florence, and of two of the leading Florentine landowners — and this showed that production was down by 1/16th on the previous year. The *Abbondanza* therefore decided that it was advisable to start making purchases in the *Maremma* and abroad (mainly in Sicily and the Levant). In February 1630 the decision was taken to produce for a few months a third quality of bread composed of beans (3/8), sorghum (2/8). And although the harvest of 1630 was not good, the *Abbondanza* decided all the same in November to come to the help of the exhausted population and increased the weight of the second-quality loaves by about 3 ounces (or 94 grams) and supplied the bakers with grain at lower than market prices. By the end of the year plague was beginning to spread and made the problem even more serious. And in fact the fear of contagion and the setting up of sanitary cordons served to make transportation both slower and more complicated.

Following the better harvests of 1632 and 1633 and the decline of the plague, prices, too, fell. Of course, demographic pressure must also have fallen considerably. Between 1562 and 1622 the population of the Florentine state had increased at an average annual rate of 0.25%.⁸ While we do not have figures for the mortality resulting from the epidemic, a census carried out in 1632 suggests that the population had fallen by some 18% in comparison with 1622. This is a figure which needs to be treated cautiously. A census carried out at the height of the epidemic can only have a relative degree of accuracy, given the obvious difficulties for collecting information and the fact of temporary emigration. Nevertheless, the epidemic which was to last in some parts of Tuscany until as late as 1633 clearly brought about heavy loss of life.

Through all this time the activities of the *Abbondanza* did not diminish and, in order to counter the excessive drop in agricultural prices it was ordered to make purchases of grain in the interior of the State. For the same reason the right to make wholesale purchases throughout the state, with the exception of the zone within a twenty-mile radius of Florence itself, was also granted.

The policy adopted in Tuscany in this period, then, towards the problem

of food supplies was directed towards solving the problem of resources, and took the form of intervention at the level of production, commercialisation and, in so far as bread was concerned, at that of the transformation of agricultural products.

While intervention with regard to production was both partial and limited it did, as we have seen, occur. Precise measures were taken to ensure that the peasants were not without seed, land reclamation was encouraged, and attempts were made to encourage more intensive farming, and it also seems likely that when these measures were accompanied by independent investment in agriculture on the part of private landowners they did produce results. Despite the presence of high demographic expansion, it would seem that the gap between population and resources was only dramatic in the 1590s. On the other hand, it would also seem probable that the quality of the popular diet fell. During the crisis of 1591 the bread destined for the poor was composed half of pure wheat flour and half of lentils; by 1630 only a quarter was wheat flour, the remainder being made up from sorgum and beans. Also, contemporary accounts of Tuscan farming in the period confirm the expansion of the cultivation of secondary cereals.

As far as commercialisation of the products was concerned, the government intervened to restore balance and in order to prevent price leaps by attempting to level off movements either up or down, and stabilise them around the notion of a 'fair price'. Such controls were designed not only to protect the urban consumer, and so keep wages down, but also took account of the needs of the producers. And if greater attention was given to the city, this was because the greater concentration of population there could the more easily give rise to tumult and riot. In the correspondence between officials and the Grand Duke, the need to avoid popular protests and disturbances was a common theme. But in the countryside the dispersion of settlements and the predominant share-cropping tenures made the possibility of such disturbances almost non-existent.

To achieve this equilibrium, government intervention relied mainly on extraordinary and supportive measures. While the Grand Duke took measures to purchase grain abroad during the more difficult periods, the Florentine and Livorno merchants also did the same, and on occasions supplies were acquired from them directly. The guiding concern was to ensure that neither the city nor the countryside should be without grain, and that prices should not be subject to excessive variations. To effect this, the *Abbondanza* in Florence and its local agents intervened directly, either selling or, in the case of a fall in prices, buying grain. And as far as the small rural communities were concerned, it was even laid down that the villages supplies should be gradually put on the market every year towards the end of the agricultural year, which was the time when it was most difficult to make ends meet, and when the small rural merchants risked finding themselves without supplies.

But if there were severe controls in the period which we have discussed,

these were only applied rigorously to the trade in agricultural products in the most critical moments. And even the activities of the commercial intermediaries, who were looked on with some diffidence and thought of as a hindrance to the realisation of the administrative ideal of a direct transfer of consumer goods from producer to consumer, and on whom the legislation of the time imposed a whole series of restrictions — the need to obtain an annual licence to exercise such a trade, permission to purchase only specified quantities, and the obligation to obtain their supplies far from the city — came to be acknowledged by the government. In 1592, in fact, when the effects of the crisis of 1598 were still being felt, a junior supplier of the *Grascia* proposed that the activities of these intermediaries should be stopped by revoking their licences in order to bring prices down. But the *Practica Segreta*, one of the most important organs of the Medicean government, and the one closest to the Grand Duke, imposed its own views which were quite the opposite of such a proposal. It was argued, in fact, that were such intermediaries to be eliminated, there would be no grain left on the market, and were the *Abbondanza* to have to intervene directly in the market this would result in a heavy increase in costs.

Although the controls over breadmaking were always in force, in more normal times the bakers were allowed to find their supplies freely as long as they adhered to the stipulated weights.

A policy of rigid controls was then the immediate response to a short-term crisis. But a longer period the intervention was more mediated and more tolerant with regard to the interests involved, which it sought to balance and harmonise.

