

A Different Approach to the Pre-modern Cost of living: Venice, 1372-1391¹

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In 1934 the late, great Venetian economic historian, Gino Luzzatto published an article on the cost of living in Venice in the fourteenth century.² Sophisticated as he was, Luzzatto saw the difficulties in trying to establish the cost of living, likening the attempt to the squaring of the circle for economic historians. An effort to get at the cost of living by comparing the cost of grain over centuries failed, he says, because the price of grain does not parallel the cost of other goods and services and thus cannot be used as a general index. Grain, meat, housing, clothing, and medical care occupy very different places in the costs of living of different times, different places and, let us not forget, different classes.³

¹ I am grateful to Professor Louise Buenger Robbert and to my research assistants, James Everett and Thomas Madden, for their corrections and suggestions after reading drafts of this article. The criticisms of other members of my seminar are also appreciated. Madden has done the graphs. All references to judgements of the courts and to the notarial records are to those in the Archivio di Stato di Venezia.

² Gino Luzzatto, "Il costo della vita a Venezia nel Trecento", originally published in *Ateneo Veneto*, 125 (1934); republished in Gino Luzzatto, *Studi di storia economica veneziana* (Padua, 1954), pp.285-97.

³ Louise Buenger Robbert points out some of the problems of methodology and interpretation: which prices are market prices; ordinary or seasonal or extraordinary; what price variations are acceptable; whether price series can be constructed; what time limits to set. "Money and Prices in Thirteenth-Century Venice", in George S. Robbert and Louise Buenger Robbert, eds, *Genoese Merchants in Medieval Mediterranean Commerce. Studies in Honour of Hilmar C. Krueger*, (Columbia, MO, forthcoming). Jacques Heers also suggests some of the problems. *L'Occident au XIV^e et XV^e siècles: aspects économiques et sociaux* (Paris, 1966), pp.296-97. See also, Richard Mackenney, *Tradesmen and Traders: The World of the Guilds in Venice and Europe, c.1250-c.1650* (London, 1987), pp.48-49; Richard A. Goldthwaite, "I prezzi del grano a Firenze dal XIV al XVI secolo". *Quaderni storici*, 10 (1975), pp.3-36. Goldthwaite professes to limit himself to the cost of grain here, postponing consideration of wages, but he does get into wages a bit. He does so more deeply in *The Building of Renaissance Florence* (Baltimore and London, 1980), pp.333-34. In spite of misgivings Goldthwaite does resort to the relative values of money and wheat. Giuliano Pinto set up his own breadbasket of wheat, meat, and wine, calculating that a daily ration cost 2 soldi. Goldthwaite, *Building of Renaissance Florence*, pp.344-45.

Construction of a cost of living index on a broad scale he finds impossible, and, if it could be achieved, it would have little relation to reality. He therefore pleads for studies of the cost of living on a limited scale, where the way of life was relatively uniform, and during a period of time in which there were no profound social transformations. He further urges abandoning the aim of a deceptively exact series of numbers in favour of the more limited goal of understanding what money meant in terms of the satisfaction of common needs.⁴ I believe that I have discovered a way of approximating this modest, but significant goal for Venice, a method that may be useful to many other historians working in other places and periods.

Luzzatto attempts with some considerable success to provide an example through analysis of the notebook in which Bernardo Morosini kept in the 1340s an account of household expenses for himself and his three brothers inhabiting a common household with servants. Their father, the nobleman Nicolò Morosini, had provided in his testament that his surviving unmarried sons should receive *victus et vestitus* (food and clothing) in his house until they reached age twenty-five. During the period under consideration Bernardo, the eldest brother still living in the common household, headed the family. His notebook provides much important material on prices of various goods and services. Luzzatto can estimate how much beef a doctor or a tutor could buy with an hour's labour. (Doctors could buy vastly more, as we might expect.) The document has limited value, however, for any general idea of the cost of living in Venice in the 1340s. This was an extraordinary family of four bachelor brothers, prosperous, but apparently saddled with extraordinary medical expenses at that time.⁵

Luzzatto just mentions in conclusion another sort of document, «judgements that determine the allowance corresponding to (the cost of) food and clothing for separated wives, the incapacitated, and so on». About the middle of the fourteenth century, he says, such costs came to about 20 ducats/year.⁶ Although he does not give a reference, he probably

⁴ Luzzatto, "Costo della vita", pp.286-87. The most ambitious attempt of which I know to make prices of goods meaningful is Charles M. De La Roncière's massive study of prices and salaries, although he, too, carefully notes the complexity of the problem. *Prix et salaires au Florence au XIVe siècle* (Rome, 1982). Goldthwaite points to the difficulties in trying "to study this kind of detail", and in fact, Goldthwaite's evidence contradicts La Roncière's findings on wages (*Building of Renaissance Florence*), pp.343-44.

⁵ More recently, Philippe Braunstein has supplemented Luzzatto's figures for the prices of wheat, wine, fresh beef, salt meat, and cheese with additional figures from July 1370 until 1414. "Penurie et cherté à Venise pendant la Guerre de Chioggia (1378-80)", *Beiträge zur Handels- und Verkehrsgeschichte*, vol.3 of the *Grazer Forschungen zur Wirtschafts- und Verkehrsgeschichte* (Graz,1978).

⁶ Luzzatto, "Costo della vita", p.297.

refers to the records of the *Giudici dei Procuratori*.⁷ Many Venetians made the Procurators of St. Mark the executors of their wills and many Venetians (and, I feel sure, many others elsewhere) provided in their wills for *victus et vestitus* or variations thereof, not just for those extraordinary cases mentioned by Luzzatto, but more commonly for surviving widows, children (as in Nicolò Morosini's will), and grandchildren. The distinction between Luzzatto's separated wives, the incapacitated, *et al.*, and the much broader real use is significant, because the amounts allowed to separated wives or, say, handicapped relatives might not accurately reflect the allowances for the ordinary cases of widows, children and grandchildren. Although occasionally the allowance was specified in the will, which, of course, would be controlling, usually it was not, so the *giudici* determined it.

These documents provide us with the court's estimate of the expenses for an individual or several individuals.⁸ Given a number of such judgements we can analyze them in terms of median allowances, nobles and non-nobles, the relationship of the beneficiary to the testator and sometimes the wealth of the testator.

We do not know exactly how the judges arrived at these figures, but they undoubtedly took into account the petition of the beneficiary or his or her guardian, the closeness of the relationship, the need, the size of the estate, and, perhaps, the status of the deceased. I am fairly sure that they did not subtract a widow's dowry or other wealth, since the testators provided *victus et vestitus* out of the estate. That term was legally defined as the cost of living, excluding rent. There is no evidence that the judges pared widows' allowances because they had other income. Not all husbands left *victus et vestitus* because dowries were supposed to provide for the widows' maintenance: if the husband did provide for *victus et vestitus*, presumably he intended to assume that burden. All widows had a right to *victus et vestitus* by law for a year and a day, even if not mentioned in the husband's will, probably to allow time for collection of the dowry. I believe that the testator and the law intended that the cost of living should come out of the estate, and that the *Giudici dei procuratori* thus provided.

⁷ One of the functions of the *Giudici dei Procuratori* was to judge cases in which the Procurators of San Marco, who were the executors of many wills and of all intestate successions, were a party. Andrea Da Mosto, *L'Archivio di Stato di Venezia*, v.1 (Rome, 1937), p.93. In many of these cost-of-living cases (and also cases involving dowries), the Procurators did not contest, in fact supported, the plaintiff's claim, so the *Giudici* merely made it official.

⁸ The Venetian law specified that *victus et vestitus* for the widow of an intestate should be construed as modest, not abundant maintenance. Roberto Cessi, ed., "Gli statuti veneziani di Jacopo Tiepolo del 1242 e le loro glosse", in *Memoriale del reale Istituto Veneto di Scienze, Lettere ed Arti*, no.2 (Venice, 1938), 4:33, p.213, n.99.

I discovered some such documents for 1380-81 and 1383-89.⁹ I have supplemented these with some quittances for payment of such allowances found among the protocols of the notaries Giovanni Boninsegna and Odorico Bruto from 1372 until November 1389.¹⁰ This evidence meets Luzzatto's criteria concerning limited time and place, although, because of the War of Chioggia, which broke out near the end of 1377, this time is undoubtedly not one void of social and economic upheaval. Compensating for this one failure to meet Luzzatto's desiderata, however, the documents even provide some information on the rate of inflation probably caused by the war.

Although no one would claim that they yield a precise cost-of-living index, they do come closer, I think, than Luzzatto's single, idiosyncratic noble family and the prices of various individual products, to his desired sense of what a sum of money roughly means in terms of meeting everyday needs.

Like Luzzatto, I am aware of pitfalls. The years were troubled ones and 90 allowances, all told, are not a large number. Moreover, the terminology of the wills is not uniform. Commonly they provide for «food and clothing», but sometimes for just «food», sometimes additionally for «rent», «shoes», or «schooling». The terminological problem, however, turns out to be a false one. *Victus* alone signifies in civil law the necessities of life, including food, drink, education, clothing, and so on.¹¹

Nicolò Morosini's will, for example, provided for *victus et vestitus*, yet Bernardo listed not only food and clothing but costs of lighting, firewood, small utensils, small repairs, instruction for youngsters, medical care, and buying and repair of shoes. *Victus* or *victus et vestitus* did not, however, cover housing. Nicolò Morosini's sons continued to live in his house, which they had jointly inherited. In the Molin case described below the allowance to the widow for *victus et vestitus* was supplemented by an allowance for rent.¹² We

⁹ *Giudici dei Procuratori*, Sentenze a legge, R.1, and *Giudici dei Procuratori*, Assicurazioni di dote, R.1.

¹⁰ *Avogaria di Comun*, *Cancelliere inferiore*, *Notat.* B21, no.6, Giovanni Boninsegna (hereafter Boninsegna) and B12, Odorico Bruto (hereafter Bruto). Except for one or two cases where the similarity is quite clear, I have reluctantly omitted other yearly allowances that do not specify *victus et vestitus* for fear that these might not be cost-of-living allowances. Also I have been unable to use those where the number of beneficiaries is unknown, as, for example, *victus et vestitus suorum fratrum*.

¹¹ "*Verbo 'victus' continentur, quae esui potuique, cultuique corporis quaeque ad vivendum homini necessaria sunt, vestem quoque victus habere vicem Labeo ait*". *Dig.*, 50, 16, 43. See also *Dig.*, 50, 16, 44. In Venetian law, if a man left his widow *donnam et dominam in domo sua*, she would be the lady of the house and receive an allowance for food and drink. *Volumen statutorum*, lib.4, cap.15, p.67. This may well be synonymous with *victus*.

must therefore make an adjustment to our figures for the cost of housing. I think the documents provide the means of making an educated guess at how much to allow for that purpose.

Three documents from the judgements of the court give us a little information on rents.¹³ One of them arises out of the estate of the nobleman Marco Querini, called Boetio, of S. Polo. A Marco Querini of S. Polo was on the *estimo* for 2,000 *lire a grossi* or 760 ducats.¹⁴ The Procurators, as executor of the late Marco, in 1380, sued his grandson, Nicoletto, for his share as one of three residuaries of his father for rent at the rate of 40 ducats/year for the seven years in which Nicoletto's late father, Namfaxio, had lived in a house owned by Marco.¹⁵ There is also a Nanfos Querini of the same parish on the *estimo* for 1,000 *lire a grossi* or 380 ducats.¹⁶ If these are our men, as I am sure they are, then Namfaxius or Nanfos had been emancipated. Nicoletto pleaded successfully that his grandfather had given the house for Namfaxio's use free of rent, but the document nonetheless provides us with an estimate of rent for nobles who were not rich, but, I think, pretty well off.¹⁷

In the judgement of 1384 in which the court awarded Nicoletta, widow of Nicolò Molin, *victus et vestitus* for herself and eight children, it also specifically awarded her 40 ducats a year for rent. Notice that this was for a

¹² Roberto Sabatino Lopez reports: "...morto Alberto de Calli, la sua vedova faceva fronte a tutte le proprie spese salvo l'alloggio con una pensione annua di sette lire di grossi...", in "Venezia e le grandi linee dell'espansione commerciale", *La civiltà veneziana del secolo di Marco Polo* (n.p., n.d.), p.56. In Venice the widow of an intestate had a right, not only to *victus et vestitus* for a year and a day, but to remain in his house for the same period. If during that time she vowed to remain a widow, she could remain for life unless the house had to be sacrificed to meet the dotal obligations of the deceased to a daughter or granddaughter. This illustrates the power of dotal rights, as does the fact that the widow's own dowry could not be touched to meet this obligation. Cessi, ed., *Statuti veneziani*, p.212.

¹³ In their extensive study of prices, E.H. Phelps Brown and Sheila V. Hopkins, "Seven Centuries of the Prices of Consumables, Compared with Builders' Wage Rates", *Economica*, n.s.23 (1956), pp. 296, note that there are some important costs, notably rent, about which we know little or nothing. Indeed they simply leave rent out of the 'basket' of costs in Table 1, p.297. I shall try to include it, fully aware, like Luzzatto and Cipolla, that I am striving only for reasonable and plausible figures giving us a rough idea of the cost-of-living, something that we can use as a baseline for understanding other figures. Such approximations, after all, are the most we can hope for in history or in life. See Eleanor Searle, "Possible History", *Speculum*, 61 (1986), pp.770-86. I prefer 'plausible', which is somewhat more demanding and allows for shadings from more to less.

¹⁴ Gino Luzzatto, *Il debito pubblico della Repubblica di Venezia*, re-ed. of *I prestiti della Repubblica di Venezia* (Padua 1929). Hereafter, *Estimo*, p.184.

¹⁵ *Sentenze a legge*, R.1, 17v-18r.

¹⁶ *Estimo*, p.184.

¹⁷ *Sentenze a legge*, R.1, 17v-18r.

large family needing a fairly sizeable house.¹⁸ Nicolò was on the *estimo* for 500 *lire a grossi* or 190 ducats.¹⁹

Another widow, a commoner, Cataruccia da Zara, received in 1381 from the court 0.75 ducats a year for rent from the estate of her grandfather (or uncle) Vittorio Cappa. She had asked 1.5 ducats/year, but the Procurators controlled only one-half of Cappa's estate, so they awarded only one-half of that sum.²⁰ Her allowance for rent, however, should be figured at 1.5 ducats. The Ca' da Zara was one of the larger and fairly prosperous non-noble families, but this widow does not seem to have been provided for very well.²¹

On the basis of only three examples means and medians for those wildly disparate rents would be meaningless. What, then, shall we make of them and how shall we explain the disparity? The two large rents are for nobles on the *estimo* at 190 and 760 ducats, not princely sums, but respectable ones, so we can assume that these were not ordinary rents. We must also bear in mind that rent is not a cost per person, but is shared by the inhabitants of the household. If we were calculating the rent/person of the wife and 8 children of Nicolò Molin, therefore, it would not be 40 ducats, but somewhat over 4. This is still well above to the 1.5 ducats to the widow of a commoner not on the *estimo*, but it brings us within a reasonable range. So far as we can tell from the document concerning the commoner's widow she lived alone but, in any case, the allowance was only for her cost of housing. If we adopt the proportions of rent to total living expenses of the Molin case then her cost of food, clothing, and so on might be estimated at 11 ducats/year, low, but almost within our scale for *victus et vestitus*.

If we wish to approximate the cost of living/person, including rent, our best approach, given the evidence presently available, is probably to return to the Molin case, where the court allowed 250 ducats/year for *victus et vestitus* and 40 ducats/year or 16% of that for housing. It is only one case, which may not be representative, but it provides the best information on rent relative to the other costs of living that I have found. It is probable that adding 16% to the other expenses, when rent was not mentioned in the judgement, puts us on somewhat firmer ground than trying to make use of the other two figures that we have for housing.

The *Houston Post*, 20 Mar. 1989, p.1, reported that in twenty-five large cities of the United States surveyed, the average expenditure for rent was 18.5% of monthly income, ranging from 21.3% (Boston) to 13% (Houston). Our figure of 16% in the Molin case cannot be compared to these, however,

¹⁸ *Assicurazioni di dote*, R.1, 76v.

¹⁹ *Estimo*, p.192.

²⁰ *Sentenze a legge*, R.1, 52rv.

²¹ On the Ca' da Zara, see Donald E. Queller, "The Venetian Family and the Estimo of 1379", in Bernard S. Bachrach and David Nicholas, eds., *Law, Custom and the Social Fabric in Medieval Europe: Essays in Honor of Bryce Lyon* (Kalamazoo 1990), p.199.

until it is adjusted, because it is a percentage of other expenses, not of income or even of the total cost of living. We need to add the 40 ducats allowed for rent to the 250 for *victus et vestitus* to obtain the total cost of living before figuring rent as a percentage of the cost of living. This comes out to 16.8%. This is within the range of the modern figure given by the *Houston Post*, although still not fully comparable, because the cost of living is not exactly the same as income, probably not including, for example, savings. So the Molin rent as a percentage of income would presumably be lower than 18.8%. On the other hand the Molin household was a very large one, and the per capita cost of housing would presumably be less for large households than for smaller ones, at least for families of similar economic status. Peter Laslett believes that «the relative cost of housing in pre-industrial time was less, perhaps considerably less, than it is now».²² My adjustments for rent, it is true, are based only on one document,²³ but it conforms reasonably well both with modern figures and with Laslett's opinion. On balance, therefore, without claiming mathematical precision, I think the modern figures lend credence to our use of the Molin case to adjust for the cost of housing. They do not, of course, prove anything about the fourteenth century. I am not seeking iron-clad conclusions, but plausible ones. If a reader is not satisfied with my adjustments for rent, he or she may ignore them and simply use the figures for *victus et vestitus*, bearing in mind, of course, that they excluded housing.

While the War of Chioggia deprives the period under consideration of the stability desired by Luzzatto, it also provides us with an advantage unusual at this time, the *estimo* of 1379. This is an assessment list for forced loans for the war covering over 2,000 households, about 10% of the households of Venice. A few of our testators are found on it, so we can compare the court's allowance of expenses to their beneficiaries with the testators' assessed wealth.²⁴

Before turning to the documents let us ask, as we always should, why this is worth doing. Others, I am sure, as well as I, have been very frustrated at dealing with amounts of money, for example, for dowries, without

²² *The World We Have Lost Further Explored*, 1st edn., 1965, 3rd edn. (New York, 1984), p.96.

²³ Carlo Cipolla estimates the cost-of-living in Pavia in 1376 on the basis of a single document. *Money, Prices and Civilization in the Mediterranean World*, 1st edn., 1956; reprinted (New York 1967), p.60.

²⁴ The *estimo* has been published by Gino Luzzatto. The *estimo* must be used with caution, as must all documents. It was based upon self-declarations and cannot be used as an accurate statement of real wealth. Gino Luzzatto, 'Les activités économiques du patriciat vénitien (Xe-XIV^e siècles)', in *Studi di storia economica veneziana*, p.134. Originally published in *Annales d'histoire économique et sociale* (1937). Self-declared real estate was multiplied by ten to arrive at the assessed value until 1383, when the multiplier was reduced to 6.4. Reinhold C. Mueller, 'Effetti della

having much of a notion of what those amounts meant.²⁵ It is a little useful to know the cost of a kilo of beef or of a dress, but a cost-of-living allowance allocated by a court to a child or a widow seems more useful, not, of course, for the history of prices, but precisely for the cost of living. A reader may object, that I am dealing with a single city in a very limited time-span. My response is that I hope to provide a model that others may use for their own studies. I would be surprised if similar documents could not be found and used for many other places and times lacking modern statistics on the cost of living.²⁶ This study is a modest one aimed, as Luzzatto wished, at discovering the cost of living in a particular time and place and, if similar sources have survived, suggesting how it might be replicated for other times and places.

Guerra di Chioggia (1379-83) nella vita economica e sociale di Venezia', *Ateneo Veneto*, n.s. 17 (1981), 33. See also Luzzatto's fine book, *Il debito pubblico della Repubblica di Venezia*, re-ed. of *I prestiti* (Milan 1963), full of documentation, learning and clarity of thought; also Margareta Merores, 'Die venetianische Steuerkataster von 1379', *Vierteljahrschrift für Social und Wirtschaftsgeschichte*, 16 (1922), pp.415-419. After re-reading *Il debito pubblico della Repubblica di Venezia*, however, perhaps the *estimo* can be more useful than I had previously thought. See especially pp.23-26. On p.150, Luzzatto estimates that taxable wealth equalled about one-quarter of real wealth. Our American real property assessments, of course, do not reflect real wealth, or even the real value of the property, accurately, even though they are based on assessment by a government body. The *estimo* of 1379, although self-assessed, was checked by the head of the *contrada*, who had quite a good idea of the wealth of individuals within his jurisdiction. Our income taxes are also self-declared, but in some measure verifiable. They, also, do not exactly measure wealth, but are far from useless in attempting to do so. Lane suggests a multiplier of 2.5 to arrive at the actual value of known property. Frederic C. Lane, *Venice: A Maritime Republic* (Baltimore and London 1973), p.151. Shares in the public debt were exempt, as was rent on one's place of habitation. An exemption was also made for the number of persons in the household. Luzzatto, *Il debito pubblico della Repubblica Veneziana*, p.150. Fernando Fagiani is more pessimistic concerning the reliability of the *estimo*. 'Schizzo storico-antropologico di un gruppo dirigente: il patriziato veneziano (secoli XIII-XV)', *Studi Veneziani*, n.s.15 (1988), pp.56-58. I would add a speculative argument, probably impossible to test empirically, in favour of its usability for relative economic status: it seems to me that members of a commercial class, whose credit ratings were vitally important, would feel pressure not to underestimate radically their relative wealth, but would wish to be known to possess assets comparable to their competitors. So, I think, the *estimo* may be used, but very cautiously.

²⁵ I have dealt with the cost of dowries elsewhere. Donald E. Queller and Thomas E. Madden, 'Father of the Bride: Fathers, Daughters and Dowries in Late Medieval and Renaissance Venice', *Renaissance Quarterly*, 46 (1993), pp.685-711.

²⁶ Probates of wills would be a likely source, but some wills themselves specify the allowance.

To complicate matters, the documents do not always express sums in the same coinage. I have constructed and used the following table to convert all sums into ducats, since most of my figures are in that coin:²⁷

1 lira di grossi = 10 ducats

1 lira a grossi = .38 ducats

1 lira di piccoli = .31 ducats

1 hyperperon = .5 ducats

I shall initially consider the documents, first those from 1372-1377, before the beginning of the War of Chioggia, then those from 1378-1381, roughly during the war, and finally from 1383-1384, after the war. (I found no examples for 1382). In the interest of brevity I shall do this in tabular form, according to the amounts of allowances in ducats in descending order for each of the three periods. The final column represents the annual allowance adjusted to include an additional 16% for rent.²⁸ Citations to the documents cited in the Table are given in the Appendix.

²⁷ The *lira di grossi* and the *hyperper* are fixed relative to the ducat. The values of the *lira a grossi* and the *lira di piccoli*, less stable, come from Frederic C. Lane and Reinhold C. Muller, *Money and Banking in Medieval and Renaissance Venice*, vol.1 (Baltimore and London, 1985), p.338, n.15 and p.339, respectively. Vol. 1 is Lane's. In converting amounts from the documents I have rounded off to the nearest ducat. I am aware of the problem of the 'ghost ducat' or ducat as a money of account. See Carlo M. Cipolla, *Money Prices, and Civilization in the Mediterranean World*, 1st. edn., 1956; reprinted (New York 1967), pp.44-51. In my documents sums expressed in ducats are about equally divided between *ducati d'oro* and simply *ducati*, the latter of which might signify either gold ducats or ducats as a money of account. *Ducati a monete* would vary in value according to the value of the more volatile silver coinage in which the sums would actually be paid. Lane, *Money and Banking in Medieval and Renaissance Venice*, I, p.352. Since there is no means of determining which of the two is signified by *ducati*, I have not attempted to distinguish ducats as a money of account from ducats of gold, as Cipolla also does not for florins, pp.60-61. As he says (p.53), we must be more or less satisfied with approximations.

²⁸ Unless the parishes are the same in the individual document and on the *estimo* I have assumed that we are dealing with homonyms. For wills of 1372-1377, I have assumed that the testators were deceased by 1379. The assumption is not necessarily correct, but, given the prevalence of homonyms in Venice, it seems wiser not to risk false identifications. Where a single sum is allowed to more than one beneficiary, a mother and two children, for example, I have divided by the number of beneficiaries. I have counted each allowance separately, even if stemming from the same estate; sometimes the amount is changed.

TABLE 1
1372-1377

| Name of testator | Class | Relation-ship | Assess-ment | Allowance per year | Adjusted allowance |
|-------------------------------|-------|------------------|-------------|--------------------|--------------------|
| Grimani, Bertuccio | nob. | son | — | 80 | 93 |
| Lovato, Sandro | other | son | — | 36 | 42 |
| Mezzo, Tantardito da | nob. | son | — | 35 | 41 |
| Morosini, Maria ²⁹ | nob. | son | — | 30 | 35 |
| Morosini, Maria | nob. | child | — | 30 | 35 |
| Morosini, Maria | nob. | child | — | 30 | 35 |
| Morosini, Maria | nob. | child | — | 30 | 35 |
| Mezzo, Tantardito | nob. | natural daughter | — | 10 | 12 |

TABLE 2
1378-81

| Name of testator | Class | Relation-ship | Assess-ment | Allowance per year | Adjusted allowance |
|-------------------------------|-------|---------------|-------------|--------------------|--------------------|
| Zaccaria, Marco ³⁰ | nob. | grandson | — | 150 | 174 |
| Zaccaria, Marco | nob. | grandson | — | 150 | 174 |
| Zaccaria, Marco | nob. | grandson | — | 150 | 174 |
| Zaccaria, Marco | nob. | grandson | — | 150 | 174 ³¹ |
| Zancani, Luca | nob. | daughter | — | 134 | 155 |
| Bedolotto, Ludovico | other | daughter | — | 100 | 116 |
| Castro Arquaro, Giovanni | other | son | — | 95 | 110 |

²⁹ The judgement was given in 1384, but the amounts for the four children were specified in the will of 1372, so I have placed it in the earlier period.

³⁰ There is a Marco Zaccaria of the proper parish on the *estimo* of 1379, but this Marco died sometime before the date of the judgement, which was 4 Nov. 1378.

³¹ One will provides for two grandsons. There are two court decisions, one of Nov. 1378, another of 11 June 1379. The first allows 166 ducats (193 adjusted for rent), the second, of 11 June 1379, allows 150 ducats (174, adjusted). I think it more likely that the earlier judgement was adjusted for some reason — possibly it was the first payment and covered more than six months — than that the amount was reduced at an inflationary time. Also, the odd figure of 16 *lire* 12 *soldi di grossi* sounds as if it might be an adjustment to 15 *lire di grossi*. Therefore I have counted both allowances at 150 ducats.

| <i>(continues)</i> | | | | | | |
|-----------------------------------|-------|--------------------|---|----|------------------|--|
| Castro Arquaro, | | | | | | |
| Giovanni ³² | other | son | — | 90 | 104 | |
| Castel Quadro, | | | | | | |
| Giovanni da | other | son | — | 90 | 104 | |
| Castel Quadro, | | | | | | |
| Giovanni da | other | son | — | 90 | 104 | |
| Lovato, Sandro | other | son | — | 70 | 81 | |
| Lovato, Sandro ³³ | other | son | — | 70 | 81 | |
| Pizzamano, Fantino | nob. | wife | — | 70 | 81 | |
| Arpino, Giovanni d' | nob. | wife | — | 70 | 81 | |
| Arpino, Giovanni d' ³⁴ | nob. | son | — | 50 | 58 | |
| Bocassi, Ermolao | nob. | wife | — | 50 | 58 | |
| Bocassi, Ermolao | nob. | wife | — | 50 | 58 | |
| Bicino, Franceschino | other | wife ³⁵ | — | 50 | 50 ³⁶ | |
| Bicino, Franceschino | other | son | — | 50 | 50 | |

³² One testament and one son, but the child's mother sought and gained an increase. Since we are interested in allowances, rather than individuals, I have counted this as two.

³³ These two and the Sandro Lovato under 1372-1377 are all the same; the son in these documents is also the same son. Three different persons give quittance for the money for the son, however. The first is Sandro's sister; the second is Beriola, widow of Stefano da Lucca, relationship to Sandro unknown, if any; the third Beriola Lovato, same surname. I suspect that the sister took in her nephew on a temporary basis at a modest allowance.

³⁴ Eighty ducats for son and daughter, but a previous document allocates 50 ducats for the son, so I have allocated the son 50 ducats, the daughter 30. The daughter is listed in the table below.

³⁵ It is possible that the allowance was only for the son, since the widow had her dowry. The document reads a bit ambiguously: "...pro victu et vestitu (et) affictus domus ac pro Nicoletto filio dicti testatoris ac pro duobus sclavis". This applies also to the entry under the same name below. I interpret it to include her. I have struggled over whether to omit allowances including servants, but have decided not to count them as beneficiaries, but as part of the cost-of-living. Franceschino had left 100 ducats/year for his widow and son, but his mother, the guardian, at first claimed only 80 ducats annually for four years as sufficient. Inflation made it inadequate, so she asked for the full amount.

³⁶ Rent was specifically included in this allowance. Boninsegna, 9r-10r.

³⁷ This is a very difficult estate. There are five documents between 2 March 1379 and 4 April 1380. Three of them, including the first and the last, award 60 ducats/year to the widow and a son, Leonardo. The other two, one of them on the same day as one of the above, award 40 ducats/year to another son for *victus et vestitus* for Leonardo. I count them as separate awards. Could a mature son have had custody of yet a third son of Bertuccio and the notary have mistaken the name of the dependent son? It is also not impossible that there were two sons named Leonardo. It happened in this period.

| <i>(continues)</i> | | | | | | |
|---------------------------------|-------|----------|-------|----|------------------|--|
| Pisani, Bertuccio ³⁷ | nob. | son | — | 40 | 46 | |
| Pisani, Bertuccio | nob. | son | — | 40 | 46 | |
| Contarini, Francesco | nob. | wife | — | 35 | 41 | |
| Mezzo, Tantardito da | nob. | son | — | 35 | 41 | |
| Querini, Paolo ³⁸ | nob. | wife | 2,280 | 35 | 41 | |
| Querini, Paolo | nob. | son | 2,280 | 35 | 41 | |
| Querini, Paolo | nob. | daughter | 2,280 | 35 | 41 | |
| Querini, Paolo | nob. | daughter | 2,280 | 35 | 41 | |
| Bicino, Franceschino | other | wife | — | 40 | 40 ³⁹ | |
| Bicino, Franceschino | other | son | — | 40 | 40 | |
| Arpino, Giovanni | nob. | daughter | — | 30 | 35 | |
| Querini, Marco ⁴⁰ | nob. | son | — | 30 | 35 | |
| Querini, Marco | nob. | son | — | 30 | 35 | |
| Querini, Marco | nob. | son | — | 30 | 35 | |
| Querini, Marco | nob. | son | — | 30 | 35 | |
| Querini, Marco | nob. | daughter | — | 30 | 35 | |
| Querini, Marco | nob. | daughter | — | 30 | 35 | |
| Querini, Paolo | nob. | wife | — | 30 | 35 | |
| Querini, Paolo | nob. | son | — | 30 | 35 | |
| Querini, Paolo | nob. | son | — | 30 | 35 | |
| Querini, Paolo | nob. | daughter | — | 30 | 35 | |
| Querini, Paolo | nob. | daughter | — | 30 | 35 | |
| Pisani, Bertuccio ⁴¹ | nob. | wife | — | 30 | 35 | |
| Pisani, Bertuccio | nob. | wife | — | 30 | 35 | |
| Pisani, Bertuccio | nob. | wife | — | 30 | 35 | |
| Pisani, Bertuccio | nob. | son | — | 30 | 35 | |
| Pisani, Bertuccio | nob. | son | — | 30 | 35 | |
| Pisani, Bertuccio | nob. | son | — | 30 | 35 | |
| Michiel, Francesco | nob. | daughter | — | 30 | 35 | |
| Bocassi, Ermolao | nob. | son | — | 25 | 29 | |

³⁸ This is an interesting document, when contrasted with those concerning the same estate of Paolo Querini listed below at 30 ducats (35 adjusted). The latter, dated 3 Sept. 1378, awards 140 ducats/year for wife, two sons and two daughters. This one, dated 26 Sept. 1380, awards 140 ducats/year for wife, one son and two daughters. Apparently one son had died or possibly arrived at an age when his support from the estate was cut off. The rise in allowance/person of 5 ducats could represent the fact that the smaller the household, the greater the cost per person. Or, it could reflect the early wartime inflation. Or, of course, a combination of the two.

³⁹ Rent is specifically included in this and the following allowance, Boninsegna, 9r-10r.

⁴⁰ There is a Marco Querini, called Boetio of S. Polo on the *estimo* for 760 ducats, but no indication that he was called 'Boetio'. Also, our Marco made his will in 1375, although this does not prove that our man was dead before the making of the *estimo*.

⁴¹ See above, p.174 and n.37

(continues)

| | | | | | |
|---------------------|-------|---------------------|-----|----|----|
| Venier, Nicoletto | nob. | son | 570 | 20 | 23 |
| Basaleta, Tommasino | other | child | — | 10 | 12 |
| Basaleta, Tommasino | other | child | — | 10 | 12 |
| Badoari, Pietro | nob. | natural daughter | — | 10 | 12 |
| Mezzo, Tantardito | nob. | natural daughter | — | 10 | 12 |

TABLE 3
1383-89

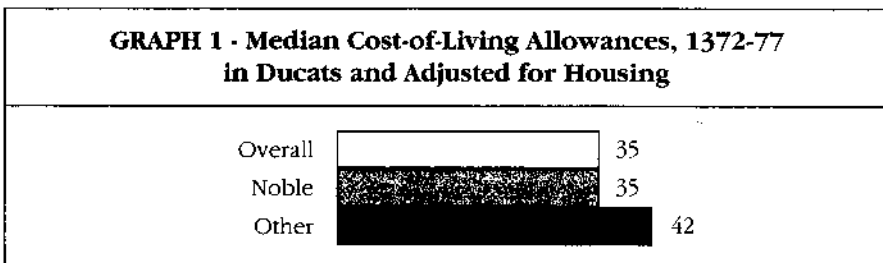
| Name of testator | Class | Relation-ship | Assess-ment | Allowance per year | Adjusted allowance |
|-------------------------------|-------|---------------|-------------|--------------------|--------------------|
| Zane, Marco | nob. | son | 570 | 160 | 186 |
| Pizzamano, Fantino | nob. | son | — | 44 | 51 |
| Giustinian, Orsato | nob. | son | 3,040 | 40 | 46 |
| Zaccaria, Paolo ⁴² | nob. | wife | — | 33 | 38 |
| Zaccaria, Paolo | nob. | son | — | 33 | 38 |
| Zaccaria, Paolo | nob. | son | — | 33 | 38 |
| Castro Gauberto, Fazio | other | daughter | — | 30 | 35 |
| Molin, Nicolò | nob. | wife | 190 | 28 | 32 |
| Molin, Nicolò | nob. | son | 190 | 28 | 32 |
| Molin, Nicolò | nob. | child | 190 | 28 | 32 |
| Molin, Nicolò | nob. | child | 190 | 28 | 32 |
| Molin, Nicolò | nob. | child | 190 | 28 | 32 |
| Molin, Nicolò | nob. | child | 190 | 28 | 32 |
| Molin, Nicolò | nob. | child | 190 | 28 | 32 |
| Molin, Nicolò | nob. | child | 190 | 28 | 32 |
| Zorzi, Giovanni Marino | nob. | daughter | 1,520 | 28 | 32 |
| Zorzi, Giovanni Marino | nob. | daughter | 1,520 | 28 | 32 |
| Zorzi, Giovanni Marino | nob. | daughter | 1,520 | 28 | 32 |
| Panata, Giovanni | other | son | — | 23 | 27 |
| Panata, Giovanni | other | son | — | 23 | 27 |
| Panata, Giovanni | other | daughter | — | 23 | 27 |
| Panata, Giovanni | other | daughter | — | 23 | 27 |
| Rinaldi, Francesco | other | daughter | — | 20 | 23 |
| Arbosani, Giacobello | other | daughter | — | 13 | 15 |

⁴² Paolo was one of the grandsons of Marco Zaccaria, who had received such a munificent *victus et vestitus* in 1379.

| | | | | | |
|---------------------------------|-------|----------------|--------|----|----|
| <i>(continues)</i> | | | | | |
| Cavazza, Giovanni ⁴³ | other | grand-daughter | 11,400 | 12 | 14 |
| Badoari, Pietro ⁴⁴ | nob. | natural son | — | 12 | 14 |
| Grioni, Leonardo | nob | son | 190 | 10 | 12 |

For the three periods, then, we have 90 allowances to beneficiaries usable for our calculations. This is not a large sample, but it is not so bad, considering that Cipolla arrives at 20 florins/year/person for an 'average standard of living' in Pavia in 1376 on the basis of a single document.⁴⁵

Let us return now to our evidence for 1372-77 before the War of Chioggia to calculate the median allowances. Using the adjusted figures allowing 16% for the cost of housing, we find that the median allowance for *victus et vestitus* was 35 ducats/year.⁴⁶ The eight noble allowances also have a median of 35 ducats. There is only one non-noble estate for this period yielding an adjusted allowance of 42 ducats/year. (Graph.1)



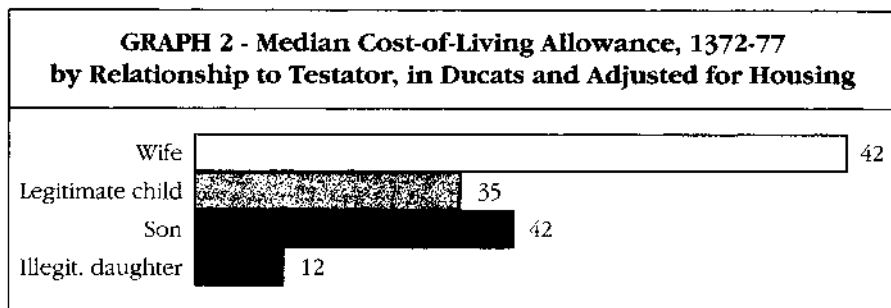
⁴³ The disparity between the grandfather's great wealth and the granddaughter's small allowance makes me suspect that we may be victims of homonyms, in spite of the identification by parish. However, it seems to me that an unexpected result is not sufficient reason for discarding the document.

⁴⁴ See Pietro Badoari, 1378-81. One testament and one heir. The lower allowance was specified in the will; the court awarded a higher allowance after the widow contested payment on the grounds that the natural son had not been of good life and reputation, an allegation that she failed to prove. See above under 1378-81. The illegitimate son, since Pietro had no legitimate sons, also received 200 ducats and a rental house on condition of good behaviour. *Giudici dei Procuratori*, Sentenze, R.1, 95v-96r.

⁴⁵ *Money, Prices and Civilization in the Mediterranean World*, p.60. 'Average' because the two persons involved were 'average people' which is very shaky reasoning. Since the florin and the ducat, however, were approximately equal in value, since his seems to be a *victus et vestitus* document not including rent, and since Venice suffered inflation during the War of Chioggia, his conclusion seem reasonably compatible with those at which we are about to arrive.

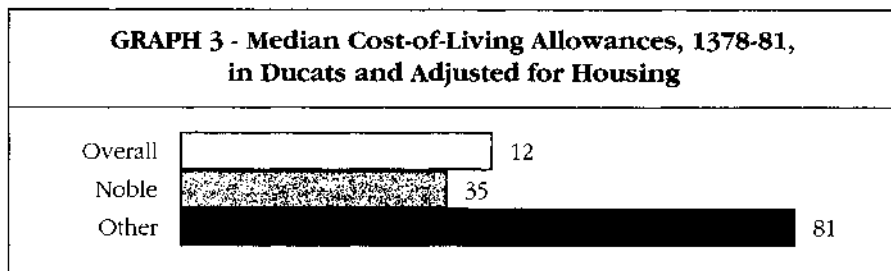
⁴⁶ The median is a better measure for our purpose than the mean, because extreme values, such as the 93 ducats and 12 ducats in this instance, would unduly influence the mean. Marija J. Norusis, *The SPSS Guide to Data Analysis* (Chicago 1986), p. 96.

I have also calculated median allowances, adjusted for rent, for beneficiaries having different relationships to the testator. The one wife received 93 ducats/year. Seven legitimate children received a median of 35 ducats. Four sons received a median allowance of 42 ducats. One bastard daughter got only 12 ducats/year. (Graph.2)

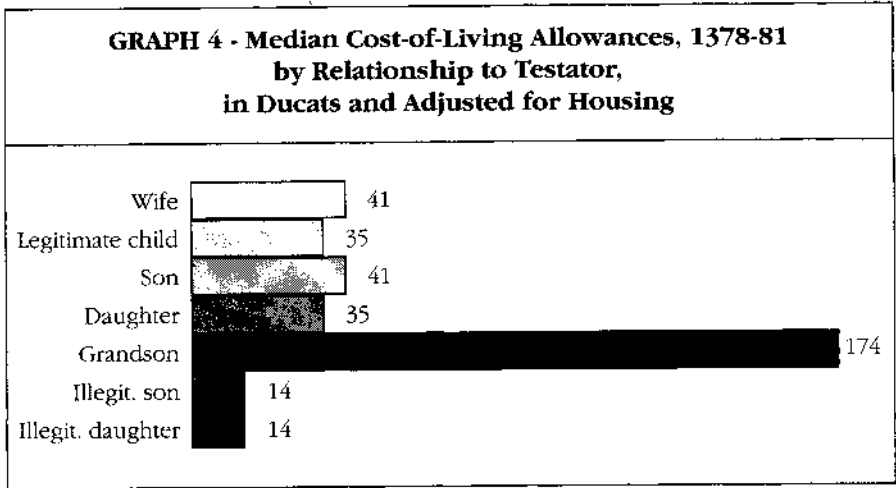


Since we have assumed that all testators were dead before the *estimo* of 1379 we cannot compare allowances to assessable wealth for this period.

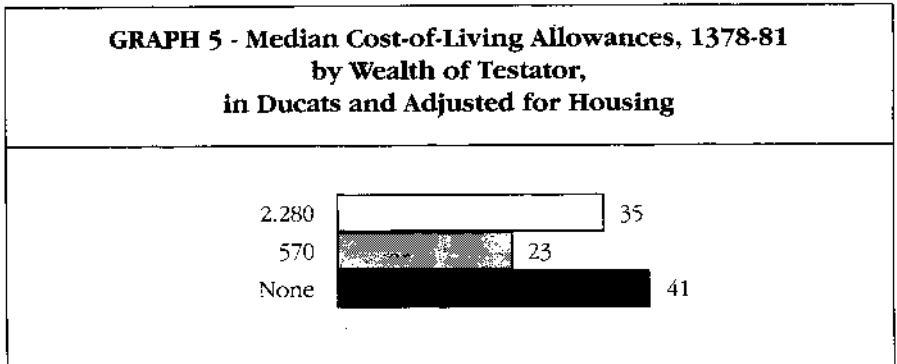
Next, let us do our calculations for 1378-81, the years of the War of Chioggia. Here our data is much more abundant. 54 allowances for *victus et vestitus*. The overall median allowance was 41 ducats/year. For the 41 nobles the median *victus et vestitus* was again 35 ducats/year, adjusted. For the 13 non-nobles, it was 81 ducats/year. (Graph.3).



Again, let us do a breakdown by relationships. The 12 wives received an adjusted median of 41 ducats/year. The 36 legitimate offspring of the testators received an adjusted median of 35 ducats/year. The twenty-four sons had an adjusted median of 41, while the 10 daughters had 35. The two grandsons of Marco Zaccaria received 174 ducats/year, each twice. This is, of course, quite extraordinary and of minimal use, since all four are based upon a single testament. An illegitimate son and an illegitimate daughter (of different fathers) each obtained an adjusted allowance of 12 ducats. (Graph.4)



For this period only two testators appear on the *estimo*, the nobles Paolo Querini and Nicoletto Venier. Querin's wife, two sons, and two daughters received 35 ducats each, later raised to 41 ducats each for wife, one son and two daughters. The estate of Nicoletto Venier, who had assessed himself at 570 ducats yielded only 23 ducats a year as *victus et vestitus* for his son. Those not on the *estimo*, surprisingly, had a higher median than those who were, 41 ducats/year. (Graph.5)



In 1383-89, after the end of the war, the median allowance was 32 ducats/year. The twenty nobles yield the same median. Eight non-noble allowances present a median of 27. (Graph.6)

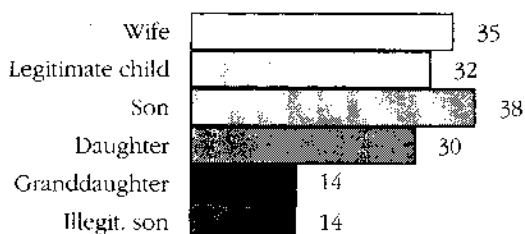
When we consider relationship to the testators, two wives receive allowances of 38 and 32 ducats/year, for a median of 35. Twenty-four allowances for legitimate children yield 32 ducats at the median. Of these,

**GRAPH 6 - Median Cost-of-Living Allowances, 1383-89
In Ducats and Adjusted for Housing**



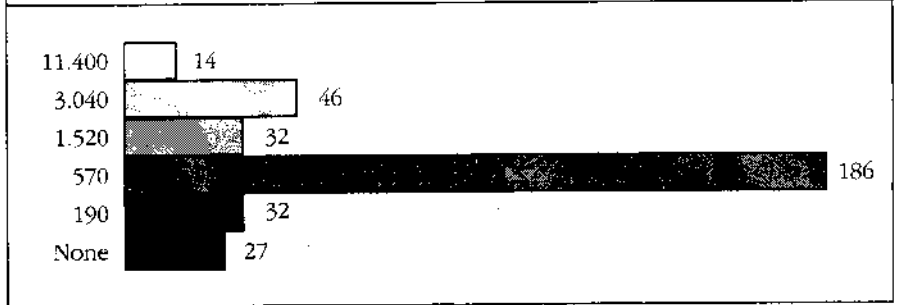
nine to sons have a median of 38, while the eight to daughters give a median of 30. A single granddaughter received 14 ducats. A natural son also received 14. (Graph. 7)

**GRAPH 7 - Median Cost-of-Living Allowances, 1383-89
by Relationship to Testator,
in Ducats and Adjusted for Housing**



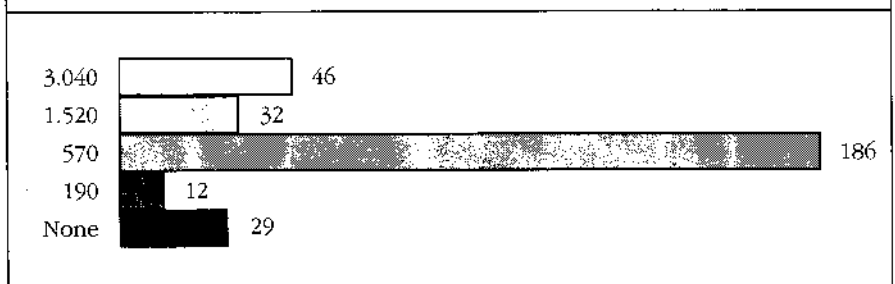
Turning again to allowance relative to the assessed wealth of the testator, the estate of Giovanni Cavazza, on the *estimo* at the princely sum of 11,400 ducats, granted *victus et vestitus* of only 14 ducats/year to his granddaughter. Cavazza presumably was relatively old. His granddaughter was being raised by a wet-nurse, i.e., a person of humble status: the granddaughter, then, was presumably quite young. At a later date she would probably live with some other relative, who could then petition for a larger sum. The estate of Orsato Giustinian, who assessed himself at 3,040 ducats, provided 46 ducats/year for his son. Giovanni Maria Zorzi's (the emancipated son was assessed at half the amount) yielded allowances at 32 ducat/year. The estate of Marco Zane, however, assessed at 570 ducats, provided the princely sum of 186 ducats/year for support of his son. The median allowance for estates assessed at 190 ducats was 32 ducats. The estates of twelve testators for 1383-89 not on the *estimo* had a median allowance of 27 ducats. (Graph.8)

**GRAPH 8 - Median Cost-of-Living Allowances, 1383-89
by Wealth to Testator,
in Ducats and Adjusted for Housing**

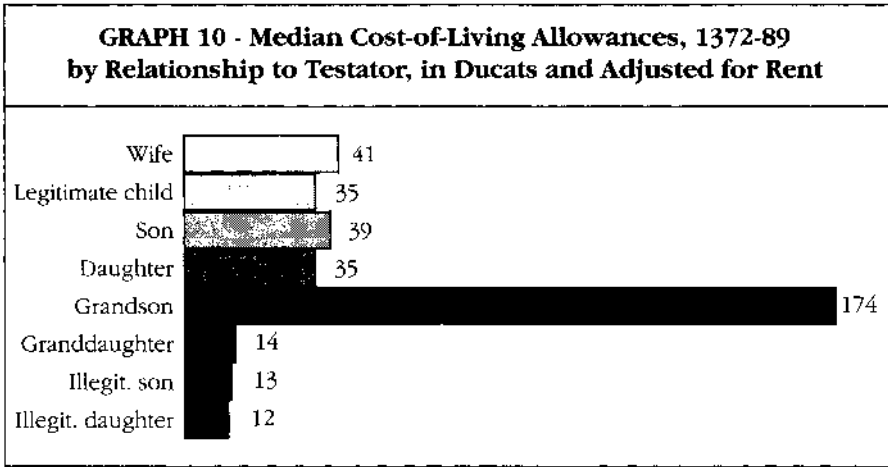


Now let us look at these figures in their totality. Most significant, at least if our purpose is to approximate what it cost for a person to live for a year, we find an overall median of 35 ducats, ranging from 35 for the pre-war period, 41 during the war and 32 after it. Surprisingly, in the first two sub-periods the median allowances for non-nobles is higher than for nobles. The figure for the pre-war period may be discounted, since it is based only on a single non-noble allowance, but the war years provide a non-noble sample of thirteen, seven of which are remarkably above the expected range. Perhaps the nobles did bear, as they claimed (and as they should, since it was their state) the heavier burden during the war and were accordingly financially constrained, while some non-nobles very likely profited handsomely. The post-war years represent an overall, but modest decline, and the noble median allowance is higher than the non-noble. For the whole period, however, the median for nobles is 35 ducats, for non-nobles 40. (Graph. 9)

**GRAPH 9 - Median Cost-of-Living Allowances, 1383-84
by Wealth of Testator, in Ducats and Adjusted for Housing**



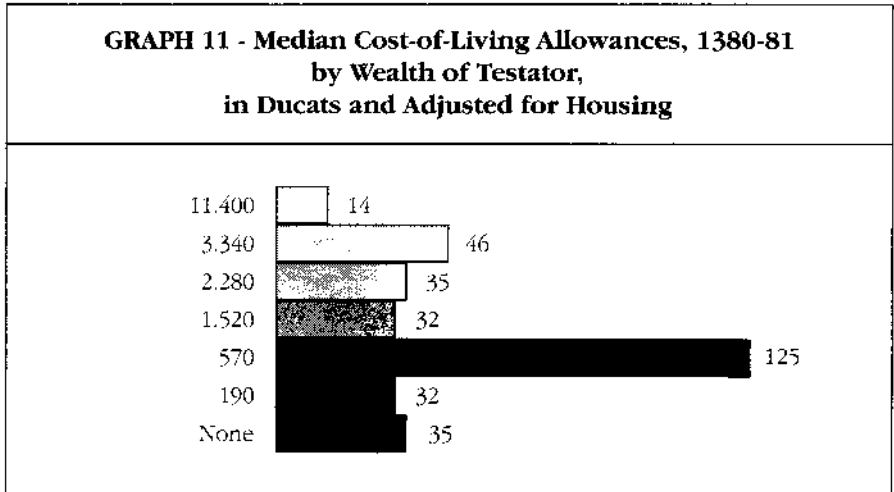
The fifteen widows received a median allowance of 41 ducats, so they were quite well provided for. Legitimate children, sixty-six of them, received a median allowance of 35 ducats. Of these, the thirty-seven sons had a median of 39, while eighteen daughters received 35, so sons were preferred, although not very strongly. The costs of food, clothing and other necessities (recall that *victus et vestitus* was intended to cover a modest living standard) should not be radically influenced by gender, although there may have been a belief that sons required more food. All four allowances to grandsons at 174 ducats/year stem from one testament and signify little. The single granddaughter received 14 ducats. The four illegitimate children had a median allowance of 13 ducats, 13 for the two sons and 12 for the two daughters.⁴⁷ (Graph.10)



Comparison of *victus et vestitus* allowances with the assessed property of the testator yields a confusing picture. Strikingly, those not assessed for the war and post-war periods (the pre-war period precedes the *estimo*) have a slightly higher median than those on the *estimo* and apparently more prosperous than themselves, 37 ducats to 32. I am at a loss to explain this, especially since it is based on relatively large samples of twenty-six assessed and sixty-four not assessed. Two other anomalies appear: the minimal allowance to a granddaughter from the estate of the highest assessed person that we have and the median of 125 ducats for two testators assessed at only 570 ducats. The first, of course, is based on a single case, and I have given a possible explanation of it above. The second is derived from only two, wildly disparate, allowances. The allowances in terms of assessment range from 1.5% of those assessed at

⁴⁷ Illegitimate children also often receive modest legacies.

3,040 ducats, 1.7% of these at 2,280 ducats, 11% of those at 190 ducats. The rising percentage as the assessed wealth declines is not surprising since a modest cost of living should be only modestly affected by the wealth of the testator. Graph.11 gives us no significant correlation⁴⁸. We must conclude, therefore, that there is no correlation between assessed wealth of the testator and living allowances from his or her estate. This lends force to my belief, in spite of the occasional extremes, that the median allowances do provide us with a reasonable estimate of a modest cost of living.



In determining the allowance the *Giudici dei Procuratori* not only considered the cost of grain, meat, wine, shoes and education, but presumably clothing and servants. One judgement confirms a hunch that I have had about the cost of good clothing, especially dresses, from the very serious way in which wills treat such items and from the importance of the market in used clothing.⁴⁹ In his testament of 1374, which places it before the inflation caused by the war,

⁴⁸ Regression line of $-.002$ and r^2 of $.021$. Two of my advanced graduate students, Thomas Madden and James Everett, have tested the *estimo* against the size of dowries and the prestige of political offices held, respectively, and have come up with no correlations. Their findings, along with mine here, raise serious questions whether wealth in Venice correlates with anything or whether the *estimo* is useful as an index of wealth.

⁴⁹ One encounters in the documents a surprising number of *Strazzarioli*. There are only two on the *estimo*, pp.151 and 152, for modest assessments, as against twelve *Spezieri*, but we would expect to find lots of *Spezieri* among the more prosperous. There are four mercers (sellers of clothes - *Strazzarioli*).

Vittorio Valentino, a commoner, left his daughter 40 ducats for a dress.⁵⁰ Our Vittorio Valentino died before the *estimo* of 1379, although it does contain a Vittorio Valentino in another parish, possibly our Vittorio's son, grandson or nephew.⁵¹ He was rated at 1,000 *lire a grossi* or 380 ducats, not a rich man, but by no means a poor one. A single dress at forty ducats represents, as we have seen, the equivalent of a better-than-average living allowance for a person for one year. The testament of Giovanni Cavazza of 27 November 1382 leaves his former wet-nurse, who also has the care of his orphaned granddaughter, 40 ducats for a gown and a summer fur. Cavazza is on the *estimo* for 11,400 ducats, a princely sum. Curiously, the *Giudici dei Procuratori* assigned only 12 ducats/year for the support of the child.⁵² The cost of the dress, which I find interesting in itself, in any case shows how an approximation of the cost of living enables us to put the price of clothing in a context.

The high cost of clothing is further confirmed by Ramusio's account of the banquet offered by Nicolò, Maffeo and Marco Polo, at which they ultimately ripped open the seams of their shabby travelling garments to display their jewels. They appeared three times at short intervals, successively in robes to be cut up and the pieces distributed among the servants to the consternation of their greedy relatives. Apparently even a piece of a valuable robe was a desirable gift.⁵³ And when William I of Sicily sent a raiding expedition to Egypt in 1154 it obtained *magnae opes auri et argenti ac preciosae vestis*.⁵⁴ Post-mortem inventories for artisans of Dijon in the seventeenth century show that they invested in a few, very expensive clothes.⁵⁵ Mary Sprunger has noted the high cost of clothing and the prevalence of used-clothes dealers in seventeenth-century Amsterdam.⁵⁶ Louise Buenger Robbert provides us with information on the high cost of the clothing of a rich, twelfth-century Venetian merchant.⁵⁷

⁵⁰ *Sentenze e legge*, R.I, 70v.

⁵¹ *Estimo*, p.164. Or, of course, it is possible that our Vittorio had moved.

⁵² *Giudici dei Procuratori, Assicurazioni di doti*, R.I, 57v; *Estimo*, p.147.

⁵³ Quoted in Marco Polo, *The Book of Ser Marco Polo*, Sir Henry Yule, trans. and ed., 3rd ed. re. (London 1903), p.5. Yule argues that even though Ramusio's account seems fanciful, it has verisimilitude, since it conforms to Mongol custom.

⁵⁴ I am grateful to Thomas Madden, my then research assistant, for this reference to *Sigeberti Continuatio Praemontratenensis*, in M.G.H., SS., 6:455.

⁵⁵ James R. Farr, *Hands of Honour: Artisans and the World of Dijon, 1550-1650* (Ithaca, NY, 1988), pp.116-317.

⁵⁶ Mary Sprunger, *Rich Mennonites, Poor Mennonites: Economics and Theology in the Waterlander Congregation of Amsterdam, 1605-1668*, dissert., University of Illinois, 1992. The final version has not yet been deposited, but p.18 in the draft.

⁵⁷ "Twelfth-Century Italian Prices: Food and Clothing in Pisa and Venice", *Social Science History*, 7 (1983), especially pp. 388-90. Cipolla has contrasted the price of books with the cost of living with even more striking results. (*Money, Prices and Civilization in the Mediterranean World*, p. 61).

Our sources also give a little information on the cost of servants. A priest named Marco Mucio in 1381 bequeathed to his housekeeper, Catarina, all his household goods, his pledges (*pignora*), and money, if there should be any, and his bark. This was in lieu of her salary of five ducats per year, which was in arrears four years. Presumably she lived in the household and received her food and other necessities.⁵⁸ Luzzatto also offers some figures for the cost of servants from the Morosini *quaderno*. Two women who served for a time, probably to assist the sick, were paid at the rates of 3.5 and 3 ducats per annum.⁵⁹ An old wetnurse was called back into the household for four months at the rate of 3.5 ducats per annum.⁶⁰ These pre-inflationary figures match up reasonably well with our five ducats per year. Another document provides eight *grossi* and two *piccoli* for six months for *donne di fatte*, houseservants. This is an unbelievably low figure, .08 ducats per year for the two or more of them. In any case, we do not know whether they were two or more, so we have no choice but to set this evidence aside.⁶¹

Finally, we can achieve some notion of inflation. Cessi indicates the strain upon private purses caused by the war.⁶² Braunstein has taken the prices of three items from the Morosini notebook plus the price of another item from another document of 1378 as a baseline and has compared them with prices of the same items from October 1379 to 1414. From Oct. 1379 until March 1381, the period of crisis of the war, prices were relatively stable. They show, however, an inflation rate of about 400% of the baseline figures.⁶³ Our figures tend to support the finding that there was substantial inflation at the inception of the war, then a return to a lower figure, followed by very modest inflation.

⁵⁸ *Sentenze e legge*, R.1, 106v. Christiane Klapisch-Zuber informs us that in Florence servants' wages were rarely paid at regular intervals. "Women Servants in Florence during the Fourteenth and Fifteenth Centuries", trans. from French by Nancy Elizabeth Mitchell, in Barbara Hanawalt, ed., *Women and Work in Preindustrial Europe* (Bloomington, IN, 1986), p. 68.

⁵⁹ Luzzatto, "Il costo della vita a Venezia nel '300", p.292.

⁶⁰ *Ibid.*, p.295

⁶¹ I have checked a microfilm of the document (ASV, *Procuratori di san Marco*, Misti, 70A, Commissio di Nicolò Morosini di Contrada Santa Maria Formosa), which Luzzatto records correctly, although why he says there were 'probably' two women servants escapes me, unless because the sum is so small. Whether .08 ducats, however, is divided by 4, 3, or 2, makes little difference, since the largest figure, .04, still makes no sense.

⁶² Roberto Cessi, 'La finanza veneziana al tempo della guerra di Chioggia', in *Politica ed economia di Venezia nel Trecento*, p.192.

⁶³ Braunstein, 'Pénurie et cherté à Venise pendant la Guerre di Chioggia', p.21, fig.2. Braunstein illustrates how speculators profited from the crisis. *Ibid.*, p.2. Mueller, relying upon narrative sources, finds the most cruel inflation and price-gouging in the winter of 1379-80. Many of the poor had to leave the city. 'Effetti della Guerra di Chioggia (1378-83)', p.35.

I have found two modest documents that reveal adjustments to the living allowances for shorter-term inflation. On 25 October 1380, Nicoletto Bicino petitioned on behalf of his grandmother, Lucia, for an increase in the allowance for *victus et vestitus et affictus domus* for her, himself and two slaves out of the estate of Nicoletto's father. The court on 2 April 1379 had awarded 10 *lire di grossi* or 100 ducats per year, but Lucia had accepted only 80 ducats per year as sufficient. Prices had increased in a year and a half, however, so the court allowed an additional 20 ducats for the current six months.⁶⁴ Since this was a one-time adjustment I think we cannot use it to approximate the rate of inflation, although it shows that inflation was present. She returned again, though, nine months later, 30 July 1381, and received a permanent increase to 100 ducats/year. This represents an inflation of 25% over about 28 months or 10.7% a year.⁶⁵ This is double-digit inflation, of course, not surprising during wartime. The increase awarded to Franceschina, widow of Giovanni da Castro Arquaro, does not permit us to calculate an annual rate of inflation, since no date is given for the initial allowance. It must have been approximately in line with the Bicino case.⁶⁶ Braunstein is probably correct that there was a radical jump from his baseline (which includes data as late as 1378) at the outbreak of war. My data suggest substituting "substantial, but not runaway inflation" for his "relative stability" after the initial stages of the war.

On the surface this has been a modest study designed to approximate a cost of living for a limited area and a short span of time and enabling us to know, as Luzzatto asked, what a sum of money meant in terms of meeting common needs. I hope it has much broader significance, however, as an illustration of how this can be done for other times and places by the use of records of probate. It incidentally provides some related information on rents, clothing, pay of servants and inflation.

Let us consider these in reverse order, so that the primary conclusion may be considered last. Although my data are extremely scanty, it looks as if inflation after its initial meteoric rise, continued during the war at a significant, but not horrendous rate. Clearly, inflation was present: 5 ducats/year in addition to board and lodging, which appears to be reasonable in terms of Luzzatto's figures for an earlier period and in terms of the cost-of-living. We have a little evidence that the cost of clothing, fine clothing, at any rate, was extremely high.

For the cost of housing we find figures from 40 to 3/4 ducats/year. 40-16 ducats/year seems to have been adequate for a large house for a noble, in

⁶⁴ *Sentenze e legge*, R.1, 9r-10r; *Cancellaria inferiore, Notai*, B21, Giovanni Boninsegna, quaderno 1, 35v.

⁶⁵ *Ibid.*, p.107bis.

⁶⁶ *Sentenze e legge*, R.1, 16rv.

one case for a mother and eight children. This document yields 13.8% of the total cost of living for rent.⁶⁷

The primary purpose of the study, however, has been to find a rough estimate of the cost of living, and this, I think, has been accomplished. If we want such a rough figure for the second half of the fourteenth century, using our numbers and Braunstein's, 35 ducats/year is a very good guess, granting fluctuations for inflation and deflation. Henceforth, at least for the limited place and time studied, we will be able to estimate, taking our rough figure of 35 ducats/year as the cost of living, that it would require a dowry of 700 ducats in government bonds at 5% — less if bought below par at the market price and therefore yielding a higher real interest — to support a widow at the overall cost of living. Similarly, the impact of a fine, the cost of a ship, the income of an Arsenal worker and a myriad of sums will take on enriched meaning for us.

⁶⁷ My multiplier has been 16%, but that is on *victus et vestitus*, not including housing.