

Before the Industrial Revolution

*European Society and Economy
1000-1700*



Carlo M. Cipolla

Third Edition



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BEFORE THE INDUSTRIAL REVOLUTION

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CONTENTS

<i>List of illustrations, maps, and figures</i>	vi
<i>List of tables</i>	viii
<i>Preface</i>	xi
Part I A static approximation	
1 DEMAND	2
<i>Type of analysis</i>	2
<i>Population</i>	2
<i>Needs, wants, and effective demand</i>	4
<i>Income and its distribution</i>	5
<i>Types of demand</i>	17
<i>Private demand</i>	17
<i>Public demand</i>	28
<i>Demand of the Church</i>	35
<i>Foreign demand</i>	38
2 THE FACTORS OF PRODUCTION	41
<i>Classes of “inputs”</i>	41
<i>Labor</i>	42
<i>Capital</i>	61
<i>Natural resources</i>	70
<i>Organization</i>	72
3 PRODUCTIVITY AND PRODUCTION	75
<i>Choice and productivity</i>	75
<i>The determinants of production</i>	75
<i>Medieval and Renaissance productivity levels</i>	77
<i>Positive production</i>	83
<i>Negative production</i>	84
Part II Toward a dynamic description	
4 THE URBAN REVOLUTION: THE COMMUNES	91

5	POPULATION: TRENDS AND PLAGUES	96
6	TECHNOLOGY	107
	<i>Technological developments: 1000–1700</i>	107
	<i>The spread of technology</i>	120
7	ENTERPRISE, CREDIT, AND MONEY	125
	<i>Enterprise and credit</i>	125
	<i>Monetary trends</i>	128
8	PRODUCTION, INCOMES, AND CONSUMPTION: 1000–1500	142
	<i>The great expansion: 1000–1300</i>	142
	<i>Economic trends: 1300–1500</i>	153
9	THE EMERGENCE OF THE MODERN AGE	162
	<i>Underdeveloped Europe or developed Europe?</i>	162
	<i>European expansion</i>	163
	<i>The scientific revolution</i>	176
	<i>An energy crisis</i>	179
10	THE CHANGING BALANCE OF ECONOMIC POWER IN EUROPE	182
	<i>Economic trends: 1500–1700</i>	182
	<i>The decline of Spain</i>	184
	<i>The decline of Italy</i>	187
	<i>The rise of the northern Netherlands</i>	194
	<i>The rise of England</i>	201
	<i>Epilogue</i>	215
	<i>Appendix tables</i>	218
	<i>Notes</i>	224
	<i>Bibliography</i>	240
	<i>Index</i>	258

ILLUSTRATIONS, MAPS, AND FIGURES

ILLUSTRATIONS

<i>A Country Wedding</i> by Pieter Brueghel the Elder	19
French metallurgical works	48
The Great Crane at Bruges	66
The storage of foodstuffs in Strasbourg	70
<i>The Winged Mill</i> by Johannes Stradanus	112
The development of ships' rigging, 1430–1600	114
Eighteenth-century English merchant vessel	115
A water-powered throwing mill by Vittorio Zonca	121
A mint at work during the Middle Ages	130
Barter and the exchange of money	130
Silver and gold coins	140
A <i>real de a ocho</i> (piece of eight)	140
The <i>fluyt</i>	201

MAPS

Europe AD 1560	11
Italy during the Renaissance	81
The spread of the Black Death in Europe, 1347–53	102
The spread of the fulling mill in various regions of Europe	111
How printing covered the map	117
English mints, Athelstan to 973	130
English mints, 973–1066	130
The Christian reconquest of the Iberian peninsula	143
The foundation of towns in east central Europe	144
The Danish peninsula	146
Florence, showing the walls	146
The Champagne fairs	149
The historical formation of the Swiss Confederation	151
The Portuguese advance along the African coast	160
The routes followed by the Spanish fleets	166
Popular revolts in France in the seventeenth century	183
Spain in 1590	185

FIGURES

1.1	Income distribution in Great Britain in 1688 and 1962	9
2.1	Age and sex structure of the population of Sweden in 1750 and 1950	43
5.1	Mortality and fertility in a French village (Couffé) at the end of the sixteenth century	100
5.2	Trends in mortality, fertility, and marriage during a typical demographic crisis	105
5.3	The mortality rate in Sweden, 1749–1950	106
8.1	Monetary wages of a building craftsman and a laborer in southern England, 1264–1700	158
8.2	Real wage-rate of a building craftsman expressed as a composite physical unit of consumable goods in southern England, 1264–1700	158
9.1	Rate of interest (A) and discount rate (B) on bonds of the Bank of St George, Genoa (Italy), 1522–1620	167
10.1	Economic trends in selected European countries, 1500–1700	184
10.2	Trends in the export of raw wool and cloth from England, 1349–1540	203

TABLES

1.1	Approximate population of the major European countries, 1000–1700	3
1.2	Distribution of wealth in Florence (Italy), 1427	6
1.3	Distribution of wealth in Lyon (France), 1545	7
1.4	Distribution of grain reserves in Pavia (Italy), 1555	7
1.5	Distribution of income in England in 1688 according to the calculations of Gregory King	7
1.6	The poor as percentage of the total population in selected European cities, fifteenth to seventeenth centuries	10
1.7	Estimated breakdown of private expenditure of the mass of the population in selected areas, fifteenth to eighteenth centuries	18
1.8a	Structure of expenditure on consumer goods and services of three families of middle-class and princely rank in the sixteenth and seventeenth centuries	21
1.8b	Some examples of expenditure by aristocratic and institutional consumers in England	22
1.9	Dates of construction and length of city walls in relation to population in selected cities	32
1.10	Annual average expenditure provided in the budgets of the Commune of Perugia in the first decade of the fourteenth century	34
1.11	Expenditure provided in the budget of the Kingdom of Naples, 1591–92	34
1.12	Size of the ecclesiastical property in selected areas of the Florentine Territory in the fifteenth and sixteenth centuries	36
1.13	Percentage distribution of land ownership in Sweden between 1500 and 1700	37
1.14	Approximate value of English imports and exports, 1500–1700	39
2.1	Percentage age distribution of two preindustrial populations, Sweden (1750) and Italy (1861)	42
2.2	Adolescents as percentage of total population in selected Italian areas, 1427–1642	42
2.3	Percentage age distribution of two industrial populations, Sweden (1950) and England (1951)	44
2.4	Foundlings in Venice, 1756–87	45
2.5	Foundlings in Milan, 1660–1729	45
2.6	Estimates of population employed in agriculture as percentage of total labor force, about 1750	47
2.7	Occupational distribution of the population of selected European cities, fifteenth to seventeenth centuries	49
2.8	Occupational distribution of males, aged 20–60, in Gloucestershire, 1608	50
2.9	Percentage distribution of families in Florence (Italy) according to number of servants, 1551	51
2.10	Domestic servants as a percentage of total population in selected European cities, 1448–1696	51
2.11	Ecclesiastical population in selected European cities, 1400–1700	53
2.12	Number of notaries, lawyers, and physicians in relation to total population in selected Italian cities, 1268–1675	54
2.13	Number of physicians in relation to total population in selected European cities, 1575–1641	54
2.14	Number of officially recognized prostitutes in relation to total population of Rome, 1598–1675	56
2.15	Age limits for acceptance into apprenticeship in selected trades in seventeenth-century Venice	60

2.16	Volume of selected barns built in the thirteenth century	63
2.17	Number of horses and mules in selected European countries, about 1845	64
2.18	Fixed plants in four major English naval shipyards, 1688	67
2.19	Gregory King's estimate of English capital in 1688	68
2.20	Forested area in Europe in about the middle of the nineteenth century	72
3.1	Average gross yields per seed for wheat, rye, barley, and oats in selected European countries, 1200–1699	78
3.2	Average yields per unit of wheat seed in England, 1200–1349	78
3.3	Mean yield ratios on the estate of the bishopric of Winchester, 1209–1453	78
3.4	Average yields per unit of wheat seed in selected areas of Italy, 1300–1600	78
3.5	Quantity of grain sown and harvested and yield ratios in the territory of Siena, 1593–1609	79
3.6	Deadweight of male cattle in the district of Montaldeo (Italy), seventeenth century	80
3.7	Livestock losses in Saarbürg territory (Germany) during the Thirty Years' War	86
5.1	Percentage unmarried in selected social groups in preindustrial Europe	97
5.2	Average age at first marriage for women in selected social groups and places in preindustrial Europe	98
5.3	Mortality in selected Italian cities during the plague epidemics of 1630–31 and 1656–57	103
6.1	Emergence of new industrial applications of the vertical water wheel to <i>c.</i> 1550	110
7.1	Equivalent of the local monetary unit (lira) in grams of pure silver in four major Italian city states	135
7.2	Equivalent of the local monetary unit (pound) in grams of pure silver	137
7.3	Silver outputs from various central European mines	138
9.1	Kilograms of gold and silver allegedly imported into Spain from the Americas, 1503–1650	165
9.2	Percentage rise in prices of selected groups of commodities at Pavia (Italy), 1548–80	166
9.3	Rate of interest and discount rate on bonds of the Bank of St George, Genoa (Italy), 1522–1620	168
9.4	Analysis of silver and gold received in Batavia from the Netherlands, 1677/78–1684/85	169
9.5	Exports of the English East India Company to the Far East, 1660–99	171
9.6	Exports of silver to Asia by the Dutch East India Company, 1602–1795	171
9.7	Estimated slave imports by importing region, 1451–1700	175
9.8	Present mini-max estimates of world population, 1650–1900	177
9.9	Estimates of world population by writers of the seventeenth and eighteenth centuries	177
10.1	State income and debt in Castile, 1515–1667	187
10.2	Woollens production in Florence, 1537–1644	189
10.3	Production of woollen cloth in selected Italian cities, 1600–99	191
10.4	Exports of silk textiles from Genoa, 1578–1703	191
10.5	Estimated value of yearly imports into the Low Countries (northern and southern) about the middle of the sixteenth century	195
10.6	Average yearly English exports of raw wool and woollen cloth, 1361–1500	202
10.7	Commodity composition of English foreign trade, 1669–1701	205
10.8	Occupied blast-furnace sites, average furnace output, and total output, England and Wales, 1530–1709	205
10.9	Charcoal prices in England, 1530–1699	209
10.10	Geographical distribution of English foreign trade, 1700–50	212
10.11	Size of the English merchant navy, 1572–1686	213

A.1	Approximate population of selected European cities, 1300–1700	218
A.2	Rough birth and death rates in selected European cities, 1551–1699	219
A.3	Infant mortality rate in Fiesole (Tuscany), 1621–99	221
A.4	Characteristics of a typical preindustrial population: Sweden, 1778–82	222

PREFACE

The world in which we live and the problems we face cannot be understood without referring to that momentous upheaval known as the Industrial Revolution. Yet the Industrial Revolution was only the final phase, the coherent outcome of a historical development which took place in Europe over the first seven centuries of our now expiring millennium. The purpose of this book is to offer an up-to-date and fully documented summary of the human developments from which our world, with all its blessings and all its woes, eventually emerged.

The book is therefore intended for both students and general readers; although focused on social and economic problems, its approach is essentially interdisciplinary. This double ambivalence may help to explain some of its peculiarities.

Style and exposition have been kept at a reasonably simple level but no efforts have been spared to provide the reader with precise references, abundant statistical material and a wealth of bibliographical information. Disconcerting technicalities have been eliminated without sacrificing scholarly accuracy. At the same time the logical tools of economic and social analysis have been clearly spelled out rather than taken for granted or hidden away in the tissue of the narrative. This, it is hoped, will help the economics student to trace the connections between economic theory and economic history, while acquainting the layman with some of the basic tools of contemporary social sciences.

The book has been organized in two parts. In [Part I](#) our analysis is essentially static. It aims to clarify the way in which the society and economy of preindustrial Europe functioned, while emphasizing certain constant characteristics of that society and that economy. [Part II](#) illustrates the changes which took place within that framework and which gradually transformed Europe from a primitive, uninteresting and underdeveloped corner of the world, under constant threat from its more powerful neighbors, into a dynamic, highly developed and creative society which came to establish undisputed political, cultural, and economic predominance all over the globe.

Quite naturally, the nature of our inquiry is molded by values, mentalities, and beliefs which are peculiar to our own age and society. When another society is under scrutiny, questions which bear little or no relation to the philosophy, values, and beliefs of that society inevitably pose difficulties. It may be that we are interested in the size of the population, the patterns of consumption or the level of production of, let us say, the province of Reims in France at the beginning of this millennium. What the documents relating to that area give us, however, is detailed information on miracles performed by St Gibrian. Because the documentation left by the past reflects the interests and the values of the past, many of the problems raised in the following pages can receive only tentative or approximate answers. The answers become more precise for centuries closer to our own, as people began to ask the same questions that we ask.

This new edition has given me the opportunity to include findings not available when this book was first published and to revise material based on the suggestions of readers and reviewers. The principal changes

are in the discussions of demography and agricultural economics and include the introduction of new material on the history of the northern Netherlands and on Italian manufacturing and trading.

Professor Marcella Kooy and Miss Alide Kooy translated the original Italian text into English. Mr Robert E.Kehoe carefully edited the book and checked on its progress. All additional material included in this third English edition has been translated by Christopher Woodall.

Berkeley, California

Part I

A STATIC APPROXIMATION

1 DEMAND

TYPE OF ANALYSIS

The functioning of any economic system can be looked at from two points of view, that of demand and that of supply. The two perspectives are intimately linked and reflect the same reality. When one describes them, however, the need to analyze first one and then the other tends arbitrarily to accentuate the distinction between them.

POPULATION

From the point of view of demand, the first point to consider is population. If there were no people there would be no human wants. And if there were no human wants there would be no demand.

The study of population presupposes the collection of demographic data. Venice took censuses of its population as long ago as 1509. In the Grand Duchy of Tuscany censuses covering the whole state were taken in 1552, 1562, 1622, 1632, 1642, and several times thereafter. However, at national levels, reasonably accurate figures about the size as well as the structure of a population are not available before the nineteenth century, with the exception of Scandinavia, for which accurate data are available for the eighteenth century. In Spain a national census was completed in 1789 and was particularly excellent: technically a model of its kind. It found the population of the entire country to number 10,409,879 inhabitants. Other nationwide censuses soon followed: in the United States (1790), in England (1801) and in France (1801) but they were all qualitatively inferior to the Spanish census of 1789.

For the period before 1800, demographic historians have tried to overcome the dearth of data by estimating population on the basis of indirect and heterogeneous information from fields as disparate as archaeology, botany, and toponymy, as well as from written records of the most diverse kind, such as inventories of manors, lists of men liable for military service, and accounts of hearth taxes or poll taxes. [Table 1.1](#) shows estimates of total population for the major areas of Europe. Such figures can be taken only as rough approximations.

The figures for the columns relating to the eleventh and fourteenth centuries are the product of rough hypotheses. Their margin of error is fairly high, not less than 20 percent and perhaps higher. Although the figures in the last two columns are more reliable, they also must not be taken as precise. More reliable figures are available for selected cities (see Appendix [Table A.1](#)), but they too are affected by large margins of error and must be taken only as estimates.

However rough, all the figures in [Table 1.1](#) do consistently indicate that up until the eighteenth century the population of Europe remained relatively small. For long periods it did not grow at all, and when it did, the rate of increase was always very low. Few cities ever numbered more than one hundred thousand inhabitants (see [Appendix Table A.1](#)). Any city of fifty thousand inhabitants or more was considered a metropolis. The preindustrial world remained a world of numerically small societies.

If a population does not increase or increases only slightly, in the absence of sizable migratory movements, the reason lies either in low fertility or high mortality or both. In preindustrial Europe fertility varied from period to period and from area to area, so that any generalization must be taken with more than a pinch of salt. Celibacy was always fairly widespread, and when people married they generally did so at a relatively advanced age. These facts tended to reduce fertility; however, prevailing birth rates were still very high, always above the 30-per-thousand level (see [Appendix Table A.2](#)). While fertility rarely reached the biological maximum, it was nearer to this maximum than to levels prevailing in developed countries of the twentieth century. If the population of preindustrial Europe remained relatively small, the reason lay less in low fertility than in high mortality. We shall return to this point below, in [Chapter 5](#).

Table 1.1 Approximate population of the major European countries, 1000–1700 (in millions)

	<i>c. 1000</i>	<i>c. 1300</i>	<i>c. 1500</i>	<i>c. 1600</i>	<i>c. 1700</i>
Balkans	—	—	7	8	8
Low Countries	—	—	2	3	3
British Isles	2	5	5	7	9
Danubian countries	—	—	6	7	9
France	5	15	16	18	19
Germany	3	12	13	16	15
Italy	5	10	11	13	13
Poland	—	—	4	5	6
Russia	—	—	10	15	18
Scandinavian countries	—	—	—	2	3
Spain and Portugal	—	—	9	11	10
Switzerland	—	0.8	0.8	1.1	1.2

It is worth distinguishing between normal and catastrophic mortality. The distinction is arbitrary and somewhat artificial, but it has the merit of facilitating description. We can broadly define *normal mortality* as the mortality prevailing in normal years—that is, years free from calamities like wars, famines, epidemics. As a rule normal mortality was below current fertility. *Catastrophic mortality* is the mortality of calamitous years and as a rule far exceeded current fertility. In years of normal mortality, the natural balance of the population (namely, the difference between the number of births and the number of deaths) was generally positive. In years of catastrophic mortality, the natural balance of population was always highly negative. Owing to recurrent ravages of catastrophic mortality linked to famines, wars, and plagues, the populations of the various areas of preindustrial Europe were constantly subject to drastic fluctuations which, in their turn, were a source of instability for the economic system severely affecting both supply and demand.

NEEDS, WANTS, AND EFFECTIVE DEMAND

All members of a society have “needs.” The quantity and quality of these needs vary enormously in relation to numerous circumstances. Even those needs which seem most inelastic, like the physiological need for nourishment, vary considerably from person to person according to gender, age, climate, and type of work. In general, one can say that the quantity and quality of a society’s needs depend on:

- a. population size
- b. the structure of the population by age, gender, and occupation
- c. geographical and physical factors
- d. sociocultural factors

The first point requires no comment. As to the second, it seems unnecessary to explain that old people and children do not have exactly the same needs, nor do men and women. As for the third, it should be obvious that a man living in Sweden or Siberia has many needs that are totally different from those of a man living in Sicily or Portugal. The relationship between needs and sociocultural conditions is more subtle.

In preindustrial England people were convinced that vegetables “ingender ylle humours and be oftetymes the cause of putrified fevers,” melancholy, and flatulence. As a consequence of these ideas there was little demand for fruit and vegetables and the population lived in a prescorbutic state.¹ On the other hand, while many people refused to drink fresh cow’s milk, many well-off adults paid wet nurses for the opportunity to suckle milk directly at their breasts. Old Dr Caius maintained that his character changed according to the character of the wet nurse who breast-fed him. Whether his changes of disposition depended primarily on the quality of the milk or on his own hormonal secretions is not a question which should concern us here. The point is that there was a sustained demand for wet nurses not only to feed infants.

Other cultural factors can have an equally determining influence on needs, their nature, and their structure. For centuries Catholics made it a duty to eat fish on Fridays, while the men of the Solomon Islands forbade their women to eat certain types of fish. The Muslim religion forbids its followers to drink wine, while the Catholic religion created in all religious communities a need for wine to celebrate Mass. Extravagant ideas also contributed to the formation of needs held to be indispensable. The Galenic theory of humours created for centuries a widespread need for leeches.

These last examples have actually been chosen to prove that economists have good reason for distrusting the word *needs*. The word implies “lack of substitutes,” and is thus seriously misleading in economic analysis. One must also consider that the line of demarcation between the necessary and the superfluous is difficult to define. While daily bread clearly seems necessary and a trip to the Bahamas superfluous, between bread and a trip to the Bahamas there is a vast number of goods and services whose classification is problematic. Obviously the definition of need cannot be limited to the minimum amount of food required to sustain life. But as soon as the criterion is extended beyond that limit to include other items, it is difficult to say where the line between the necessary and the superfluous should fall. Is one steak per week a need? Or is only one steak a month really necessary? We feel we need bathtubs, central heating, and handkerchiefs, but three hundred years ago in Europe these things were luxuries that no one would have dreamed of describing as needs. Someone once wrote that we regard as necessary what we consume and as superfluous what other people consume.

As long as a person is free to demand what he wants, what counts on the market are not real needs but wants. A man may need vitamins but may want cigarettes instead. The distinction is important, not only from the point of view of the individual, but also from the point of view of the society. A society may need more hospitals and more schools, but the members of that society may want more swimming pools, more

theaters, or more freeways. There may also be dictators who impose or feed specific wants for military conquest, political prestige, or religious exaltation. For the market, what counts is not the objective need—which in any case no one can define except at minimum levels of subsistence—but the want as it is expressed by both the individual and the society.

In practice our wants are unlimited. Unfortunately, both as individuals and as a society, we only have limited resources at our disposal. As a result, we are continually forced to make choices, imposing on our wants an order of priorities that we derive from a battery of economic as well as political, religious, ethical, and social considerations.

Wants are one thing, effective demand is another. To count on the market, wants must be backed by purchasing power. A starving individual may want food with excruciating intensity, but if he has no purchasing power to back up his want, the market will simply ignore both him and his want. Only when expressed in terms of purchasing power do wants become effective demand, registered by the market.

Since purchasing power depends on income, it follows that, given a certain mass of wants, both private and public, and given a certain scale of priorities, the level and the structure of effective demand are determined by:

- a. level of income
- b. the distribution of income (among individuals as well as institutions, and between the public and private sectors)²
- c. level and structure of prices

INCOME AND ITS DISTRIBUTION

The mass of incomes can be divided into three broad categories:

- a. wages
- b. profits
- c. interest and rents

These different kinds of income correspond to different ways of participating in the productive process. Income gives individuals as well as institutions the power to express their wants on the market in the form of effective demand. Obviously the person who earns and receives income spends it not only on himself but also on those he supports. In other words, the head of the family, who works and receives a wage, spends it to maintain not only himself or herself but also a spouse, children, and perhaps also an old mother or father. The earner of income, therefore, translates into effective demand not only his own personal wants, but also those of his own dependants. In other words, the income of the “active population” converts to effective demand the wants of the total population (active population plus dependent population).

Over the centuries, for the mass of the people, income was represented by wages (and in the agricultural sector by shares of the crops). Up to the Industrial Revolution one can say that, given the low productivity of labor (see below) and other institutional factors, wages were extremely low in relation to prices; that is, real wages were extremely low. Turning this on its head, we can say that current prices of goods were too high for current wages. In practical terms we would be saying the same thing, but we would be emphasizing that the basic problem was scarcity.

European society was fundamentally poor, but in every corner of Europe there were gradations of poverty and wealth. There were poor and very poor, and alongside them there were some rich and some very rich.

Among the poorest, the peasants were overrepresented, yet even among them one would have found the very poor, the poor, and the not so poor. Differences were not only clearly visible at single places or within well-defined areas but also broadly across the borders. Early in the seventeenth century, a well-informed English traveler recorded:

As for the poore *paisant* [in France], he fareth very hardly and feedeth most upon bread and fruits, but yet he may comfort himselfe with this, and though his fare be nothing so good as the ploughmans and poore artificers in England, yet it is much better than that of the *villano* in Italy.³

As to craftsmen, many shared the fate of the seventeenth-century artisans of the parish of Saint-Reim in Bordeaux who, according to the local parson, survived only because they received from time to time the charity of the *dames de charité*.⁴ The artisans of more developed cities like Florence or Nuremberg, however, managed to lead a life which, if not comfortable, was at least not completely wretched. It was not unusual for an artisan in Nuremberg in the sixteenth century to have meat on his table more than once a week.⁵ Several Florentine artisans were able to put aside small savings or to accumulate dowries for their daughters.⁶ As always, reality can not be painted in black and white. However, it is undeniable that one of the main characteristics of preindustrial Europe, as with all traditional agricultural societies, was a striking contrast between the abject misery of the mass and the affluence and magnificence of a limited number of very rich people. If with the aid of slides one could display the golden mosaics of the monastery of Monreale (Sicily) alongside the hovel of a Sicilian peasant of the time, no words would be needed to describe the phenomenon. While it is worth keeping this image in mind, one has to go further and supplement that picture with a few measurements. Unfortunately, there is little available data and what there is is not very reliable. According to the fiscal assessments of the time in Florence (Italy) in 1427 and in Lyon (France) in 1545, estimated wealth was distributed as shown in Tables 1.2 and 1.3 respectively. If the assessments were correct, 10 percent of the population controlled more than 50 percent of the wealth assessed. Fiscal documents available for other cities suggest similar conclusions.⁷

Fiscal assessments are rarely reliable, and those of medieval and Renaissance times are particularly open to doubt. One may turn to other evidence. Frequently, the city authorities inquired about reserves of grain stored in private homes. Bags of grain were difficult to hide, and the quantity of grain stored was a function of the income as well as the size of the family. In a city in Lombardy at the middle of the sixteenth century the distribution of private grain reserves was as shown in Table 1.4. Thus 2 percent of the families held 45 percent of the reserves, while 60 percent held no reserves at all.

Table 1.2 Distribution of wealth in Florence (Italy), 1427

<i>Percent of wealth</i>				
<i>Percent population</i>	<i>Real property</i>	<i>Movables</i>	<i>Bonds</i>	<i>Total wealth</i>
10	53	71	86	68
30	39	23	13	27
60	8	6	1	5
100	100	100	100	100

Source: Herlihy, "Family and Property," p. 8.

Table 1.3 Distribution of wealth in Lyon (France), 1545

<i>% Population</i>	<i>% Wealth</i>
10	53
30	26
60	21
100	100

Source: Gascon, *Grand commerce*, vol. 1, p. 370.

Table 1.4 Distribution of grain reserves in Pavia (Italy), 1555

<i>Size of reserves of grain per family</i>	<i>% Families</i>	<i>% Reserves</i>
More than 20 bags	2	45
Between 2 and 20 bags	18	45
Up to 2 bags	20	10
None at all	60	—
	100	100

Source: Zanetti, *Problemi alimentari*, p. 71.

In general it is extremely difficult to evaluate the distortions caused by inaccurate assessments, fiscal evasion, and so forth. Occasionally some individual of the time, on the basis of direct experience, tried to do what we cannot do. If that person was competent and had talent, his conclusions are invaluable. In 1698 Vauban classified the French population as follows:

rich: 10 percent
fort malaisé (very poor): 50 percent
 near beggars: 30 percent
 beggars: 10 percent

This estimate was no more than an educated guess.⁸ Ten years earlier in England a man of genius, Gregory King, made more accurate calculations of national income, trade, and distribution of wealth, putting to good use all the material he had available in addition to his personal observations. The calculations he made are summarized in Table 1.5. If King's estimates are correct, in the England of 1688 about 5 percent of the population (classes A and B) controlled 28 percent of income, while the lower classes, which made up 62 percent of the population, received 21 percent of income. In Figure 1.1 King's data are contrasted graphically with income distribution data for England in 1962.

Although completely different in nature and origins and therefore hardly comparable, the above five estimates all point to an extremely inequitable distribution of both wealth and income.⁹ However, they also suggest that, contrary to Pareto's statement, the distribution of wealth and income was

Table 1.5 Distribution of income in England in 1688 according to the calculations of Gregory King

<i>Socioeconomic class</i>	<i>Number of families (thousands)</i>	<i>Total income in thousands of pounds sterling</i>	<i>% Families</i>	<i>% Income</i>
A (temporal and spiritual lords; baronets; knights;	53	9.816	4	23

<i>Socioeconomic class</i>	<i>Number of families (thousands)</i>	<i>Total income in thousands of pounds sterling</i>	<i>% Families</i>	<i>% Income</i>
esquires; gentlemen; persons in offices, sciences, and liberal arts)				
B (merchants and traders by sea)	10	2.400	1	5
C (freeholders and farmers)	330	16.960	24	39
D (shopkeepers, tradesmen, artisans, and craftsmen)	100	4.200	7	10
E (naval and military officers and clergymen)	19	1.120	2	2
F (common seamen, laboring people and outservants, cottagers and paupers, common soldiers)	849	9.010	62	21
Total	1.361	43.506	100	100

Source: King, "Natural and Political Observations," p. 31.

not a constant.¹⁰ In his report on Spain at the beginning of the sixteenth century, Francesco Guicciardini noted that "except for a few Grantees of the Kingdom who live with great sumptuousness, one gathers that the others live in great poverty."¹¹ The tone of this comment suggests that even a contemporary observer could not fail to notice that the distribution of income and wealth varied greatly from country to country. Wealth and income were inequitably distributed everywhere, but in some countries and/ or at certain times they were much more inequitably distributed than in other countries and/or at other times.

The fundamental poverty of preindustrial societies and the unequal distribution of wealth and income were reflected in the presence of a considerable number of "poor" and "beggars" (the two terms being then used as synonyms). Alongside the great mass of people who received minimal incomes there was a group of people who, because of lack of employment opportunities, incapacity, ignorance, poor health, or laziness, did not take part in the productive process and therefore did not enjoy any income at all. There is no chronicle or hagiography of medieval or Renaissance Europe which does not mention the beggars. Miniatures and paintings devote a good deal of space to these wretched characters. Travelers and writers make frequent reference to them. In England, as late as 1738, Joshua Gee remarked that

notwithstanding we [in England] have so many excellent Laws, great Numbers of sturdy Beggars, loose and vagrant Persons, infest the nation but no place more than the City of London and Parts adjacent. If any person is born with any Defect or Deformity, or maimed by Fire or any other Casualty or by any inveterate Distemper, which renders them miserable objects, their way is open to London where they have free Liberty of showing their nauseous Sights to terrify People and force them to give money to get rid of them.¹²

In 1601, Fanucci wrote, "In Rome one sees only beggars, and they are so numerous that it is impossible to walk the streets without having them around." In Venice the beggars were so numerous as to worry the government, and measures were taken not only against the beggars themselves, but also against the boatmen

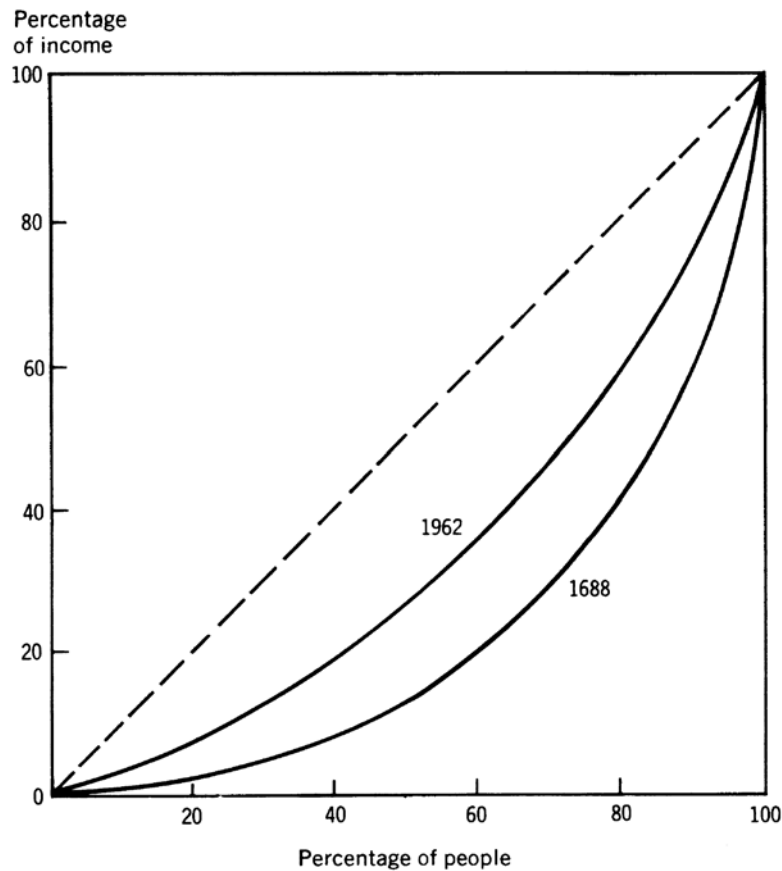


Figure 1.1 Income distribution in Great Britain in 1688 and 1962.

Source: L.Soltow, “Long-run changes in British income inequality,” p. 20.

who ferried them from the mainland. Such evidence easily creates the impression that the beggars were “many.” But how many?

The existence of such a large number of destitute people was so trouble-some that attempts were made to count them—if only to find, as in Florence in 1630 that “the number of poor was greater than had been believed.”

As we have already seen, Vauban, estimated that beggars in France at the end of the seventeenth century accounted for about 10 percent of the population. This does not sound far-fetched. A variety of surveys relating to different countries show that the “poor,” the “beggars,” and the “wretched” represented a proportion that normally ranged from 10 to 20 percent of the total population of the cities (see Table 1.6). Poor people gravitated toward the cities because that was where the rich lived and where alms were more readily available. However, even if one examines whole areas and not just the cities, one still finds that the poor accounted for a significant segment of society.

At the end of the seventeenth century in Alsace, in the Alençon area, of a total population of 410,000 inhabitants, 48,051 were beggars, that is, about 12 percent. In Brittany, of a population of 1,655,000, there were 149,325 beggars, or about 9 percent.¹³ At the beginning of the eighteenth century the

Table 1.6 The poor as percentage of the total population in selected European cities, fifteenth to seventeenth centuries

<i>City</i>	<i>Years</i>	<i>% of total population</i>
Louvain ^a	End of 15th century	18
Antwerp ^a	End of 15th century	12
Hamburg ^b	End of 15th century	20
Cremona ^c	c. 1550	6
Cremona ^c	c. 1610	15
Modena ^d	1621	11
Siena ^e	1766	11
Venice ^f	1780	14

Sources: a Mols, *Introduction*, vol. 2, pp. 37–39.

b Bücher, *Bevölkerung*, p. 27.

c Meroni, *Cremona fedelissima*, vol. 2, p. 6.

d Basini, *L'uomo e il pane*, p. 81.

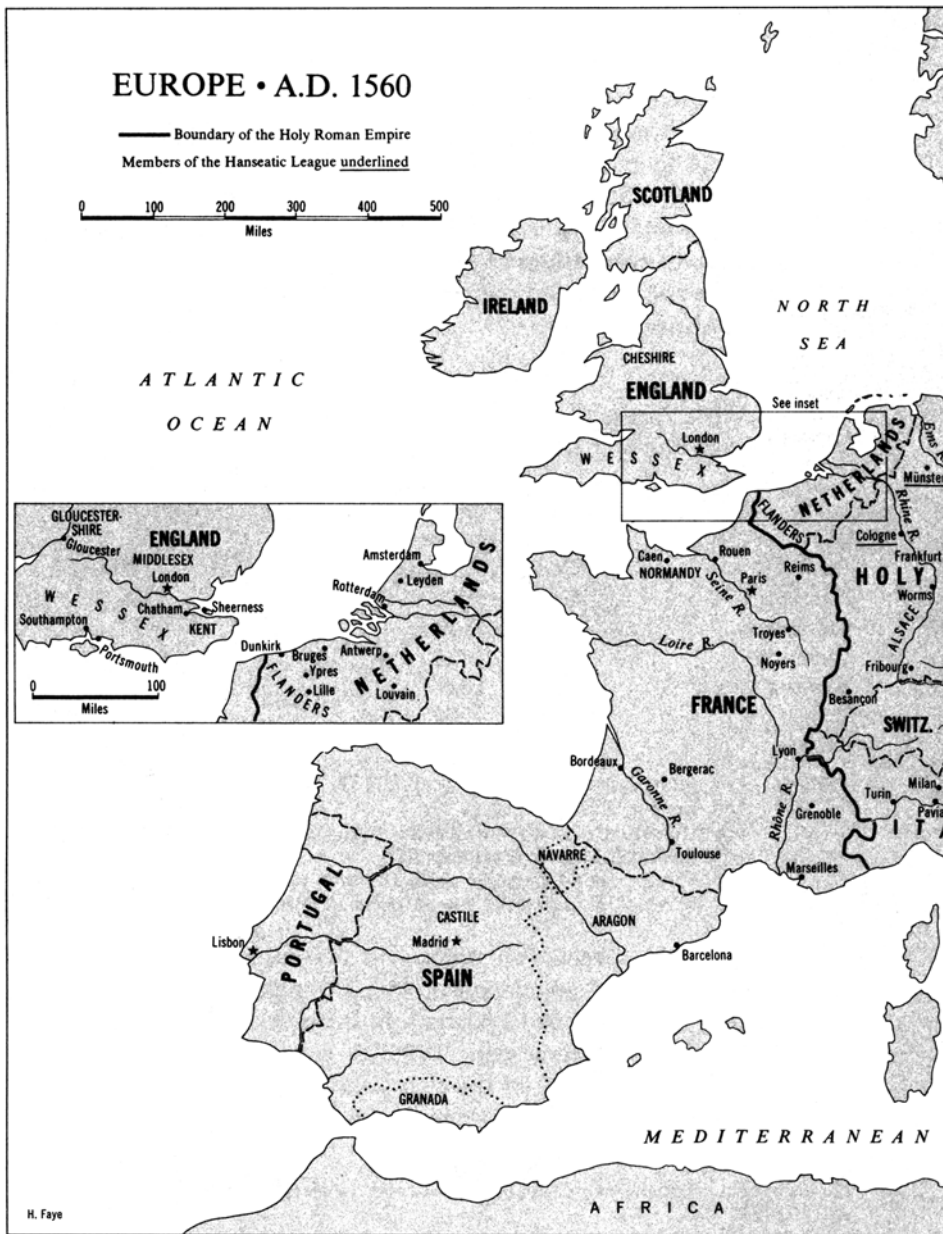
e Parenti, *La popolazione della Toscana*, p. 8.

f Beltrami, *Storia della popolazione di Venezia*, p. 204.

Duke of Savoy could consider himself fortunate that in his states, of a total of 1.5 million inhabitants, only 35,492 or 2.5 percent were classified in the census as beggars.¹⁴ In England the percentage of the poor was high enough to preoccupy the English monarchs from Henry VIII onwards, and to provoke specific custodial legislation which has gone down in history under the name of the Poor Laws. Of the end of the seventeenth century, Charles Wilson wrote:¹⁵

We need look no further than Gregory King's statistics for striking evidence of the magnitude of this problem at the end of the seventeenth century. Out of his total population of 5.5 million, 1.3 million—nearly a quarter—are described baldly as “cottagers and paupers.” Another 30,000 were “vagrants or gypsies, thieves, beggars, etc:...” At a conservative estimate, a quarter of the population would be regarded as permanently in a state of poverty and underemployment, if not of total unemployment. This was the chronic condition. But when bouts of economic depression descended, the proportion might rise to something nearer a half of the population.

As implied at the end of the above quotation, the number of the poor fluctuated wildly. Most people lived at subsistence level. They had no savings and no social security to help them in distress. If they remained without work, their only hope of survival was charity. We look in vain in the language of the time for the term *unemployed*. The unemployed were confused with the poor, the poor person was identified with the beggar, and the confusion of the terms reflected the grim reality of the times. In a year of bad harvest or of economic stagnation, the number of destitute people grew conspicuously. We are accustomed to fluctuations in unemployment figures. The people of preindustrial times were inured to drastic fluctuations in the number of beggars. Especially in the cities the number of the poor soared in years of famine because starving peasants fled the depleted countryside and swarmed to the urban centers, where charity was more easily available and hopefully the houses of the wealthy had food in storage. Dr Tadino reported that in



Milan (Italy) during the famine of 1629 in a few months the number of beggars grew from 3,554 to 9,715.¹⁶ Gascon found that in Lyon (France) “in normal years the poor accounted for 6 to 8 percent of the population; in years of famine their number rose to 15 or 20 percent.”¹⁷

The fundamental characteristic of the poor was that they had no independent income. If they managed to survive, it was because income was voluntarily transferred to them through charity. Income is generated by



the participation of labor and capital in the productive process. Income, however, can be transferred as well as earned, and the transfer of income is not necessarily linked with productive activity. In every society there are many different kinds of income (or wealth) transfer. To simplify matters, we can speak of two

broad categories: voluntary transfers and compulsory transfers. Charity and gifts are common forms of voluntary transfer of income (or wealth). Taxation is one common form of compulsory transfer.

In the contemporary world we are accustomed above all to transfers that take the form of taxes. As a modern economist has bluntly observed, “Charity and gifts are outside the logic of the system.” This, however, was not the case in preindustrial Europe. At that time charity and gifts were very much within “the logic of the system.” Chronicles and documents continually refer to voluntary transfers of income or wealth by princes as well as by the ordinary people. The tradition of charity was strong and the act of charity an everyday affair. Certain events accentuated the phenomenon.

When death knocked at the door, people opened their purses more freely, for fear of the devil or for more reasonable sentiments. The chronicler Giovanni Villani relates that

in the month of September 1330, one of our citizens died in Florence who had neither a son nor a daughter...and among the other legacies he made, he ordered that all the poor of Florence who begged for alms would be given six pennies each.... And giving to each poor man six pennies, this came to 430 pounds in farthings, and they were in number more than 17,000 persons.¹⁸

When Francesco di Marco Datini, the great “Merchant of Prato,” died in 1410, he left 100,000 gold florins to establish a charitable foundation and 1,000 florins to the hospital of Santa Maria Nuova in Florence for the construction of an orphanage. In Venice in 1501 the patrician Filippo Dron left rich legacies to the hospitals and other institutions of Venice, as well as a legacy with which to build one hundred small houses to give “for the love of God to the poor sailors.”¹⁹

Disasters also served to accentuate the phenomenon of charity. In times of plague or famine, to appease God and the saints or from a natural spirit of solidarity, people donated more freely. In the eight years between the Easter of 1340 and June 1348, the parish of Saint Germain l’Auxerrois in Paris received 78 bequests. Then came the plague and in only eight months bequests reached the record figure of 419.²⁰ During the same plague of 1348 the hospital of Santa Maria Nuova in Florence received donations totalling 25,000 gold florins, and the Compagnia della Misericordia received bequests worth 35,000 gold florins.²¹ The donors did not come only from the ranks of the rich. An antiquarian who patiently compiled the list of benefactors of the Hospital of Santa Maria Nuova in Florence noted that “the list shows that every social class can boast generous souls full of charity for their brothers,” among the donors one finds “the humble maidservant” leaving the few florins she has accumulated with the sweat and savings of many years, as well as powerful and rich citizens, owners of large estates, like Giovanni Pico della Mirandola.²²

Apart from private largesse, there were the donations of princes and public administrations. In the plague epidemic of 1580 the Commune of Genoa spent, taking charity and health expenditure together, about 200,000 ecus.²³ Very often food, and occasionally articles of clothing, were given to the poor. Henry III of England had a mania for distributing footwear.

Feasts were also suitable occasions for charity. In Venice the Doges made large donations to the poor at election time; in 1618, Antonio Priuli distributed two thousand ducats in small coins and a hundred in gold coins. In Rome at the election of a pope and subsequent anniversaries,

a half giulio was given to anyone who came to ask for it and the gift increased for each child; pregnant women counted as two. People lent or hired each other their children, and pillows multiplied the pregnancies. The more opportunistic managed to present themselves more than once and to collect a good amount of money.²⁴

In Venice, epidemics and famines in 1528 and 1576 caused the state to levy general poor-rates, hence on those occasions the poor were helped not by voluntary acts of charity but by compulsory transfer payments levied by public authorities.²⁵ In England, the Elizabethan administrators and their seventeenth- and eighteenth-century successors repeatedly tried to enact a system of public relief based on the levy of poor-rates on the propertied classes.²⁶ No matter how commendable and modern in their conception, however, these efforts remained isolated and their effectiveness limited: even in Venice and in England, private philanthropy continued to play by far the major role in alleviating the dire poverty of a large segment of society.

The preceding observations are interesting, but they still leave the basic macroeconomic question unanswered: what order of magnitude did charity represent in relation to income?

Various family budgets of the rich and the well-off in the sixteenth and seventeenth centuries show “ordinary charity” in the order of 1 to 5 percent of consumption expenditure, but, in addition to these gifts private individuals left to charity part of their wealth at death. Business enterprises regularly gave to charity; in the books of the Florentine mercantile companies, charity outlays are normally recorded in a special account under the heading “*conto di messer Domineddio*” (literally, “account of Milord God”). Much of the “charity,” however, was actually a transfer of wealth to the Church.²⁷ In its turn, the Church gave to the poor only a very small part of what it received. Churches in our own time still spend much more on new construction and on congregational expenses than on charity.²⁸ At the end of the Middle Ages, in normal times, the immensely rich English monasteries gave less than 3 percent of their income to the poor.²⁹ In fact, documents show that the monks sometimes embezzled money which had been left to them as charity trustees.³⁰ However, if one adds together charity from private individuals and companies, from the public powers, and from the Church, one is led to believe that transfer payments to the poor must have amounted to much more than 1 percent of the gross national product. (According to Kohler, in the United States, in about 1970, voluntary interfamily transfer involved altogether only “a tiny fraction of one percent of GNP”.)

The part played by charity in satisfying the wants of a large segment of the population is indicated not only by the amount of funds involved but also by the broad spectrum of wants to which the said funds were destined. During the five-year period between 1561 and 1565, the *Scuola di San Rocco* at Venice—a religious society for the laity—dispensed charity to the tune of 13,027 ducats, the equivalent of 70,290 days’ wages of a worker. This broke down as follows:³¹

58 percent in alms

23 percent to provide dowries to poor girls

15 percent to hospitals

4 percent in medicinals

Until recent times hospitals, houses for abandoned children, and foundations for the distribution of dowries to poor girls operated in Europe with the income accumulated over the years from private donations. Also, schools were often subsidized by private donations and, especially in Protestant countries, after the Reformation, charity was increasingly directed to the instruction of the poor in useful skills.³²

The gift is, like charity, a transfer of income or of wealth, but its motivation is not (or not necessarily) the poverty of the recipient. Like charity, the gift has not completely disappeared in industrial societies, but its economic importance has decreased considerably: all commodities and services have a price, and buying with money on the market is by far the most common way to acquire desired commodities and services. In

preindustrial Europe the situation was different and the further back one goes, the more important the role of the gift becomes in the system of exchanges. Often the motive behind the gift was not generosity, but either the compulsion to show off the donor's social status or the expectation of receiving in exchange another gift or the favors of someone in power. Traces of this tradition recur in industrial societies on the occasion of events like weddings or holidays like Christmas.

Gifts and charity do not exhaust the possible forms of voluntary transfers of wealth. In preindustrial Europe dowries and gambling had considerable importance. Although such transfers had no connection with productive activity, they could nevertheless affect it. As in all underdeveloped societies, people thought of dowries and of gambling as means of financing business. Goro di Stagio Dati, for example, recorded:

On 31 March 1393, I was betrothed to Betta, the daughter of Mari di Lorenzo Vilanuzzi and on Easter Monday, 7 April, I gave her the ring ... I received a payment of 800 gold florins from the Bank of Giacomino di Goggio and Company. This was part of the dowry. I invested in the shop of Buonaccorso Berardi and his partners.

Betta died in October 1402. In the trading accounts of 1403, Goro recorded:

When the partnership with Michele di Ser Parente expired, I set up a shop on my own.... My partners are Piero and Jacopo di Tommaso Lana who contribute 3,000 florins while I contribute 2,000. This is how I propose to raise them: 1,370 florins are still due to me from my old partnership with Michele di Ser Parente. The rest I expect to obtain if I marry again this year, when I hope to find a woman with a dowry as large as God be pleased to grant me.³³

Buonaccorso Pitti tells in his *Cronica* how gambling brought him the necessary capital for (quite literally) some horse-trading:

they began to play and I with them and at the end I brought home from this twenty golden florins in winnings. The next day I returned and I won about eleven florins and so for about fifteen days, so that I won about twelve hundred florins. And having Michele Marucci continually in my ears begging me not to play again, and saying, "Buy some horses and go to Florence." I, in fact, listened to his advice and I bought six good horses."³⁴

So far we have discussed voluntary transfers of income and/or wealth, but as mentioned above there were also compulsory transfers. When we think of compulsory transfers we think mostly of taxation, but plundering raids, highway robbery, and theft in the narrow sense belong to the same category. In medieval Europe some political theorists saw only a fine line between taxation and robbery. As for distinctions between war, plunder, and robbery, they were very tenuous indeed. There is a curious clause in the laws of the Ine of Wessex which seeks to define the various types of forcible attack to which a householder and his property might be subjected: if fewer than seven men are involved, they are thieves; if between seven and thirty-five, they form a gang; if more than thirty-five, they are a military expedition.³⁵

The relative importance of taxation on the one hand and plunder and theft on the other cannot be quantitatively assessed, but there is no doubt that the earlier the period in question the greater the importance of plunder and theft relative to taxation.

We shall discuss below the incidence of taxation in preindustrial Europe. Here it is worth devoting a few words to plunder and theft. Much has been written about theft from the legal and judicial points of view, but

little from the statistical. We know, however, that it was a very frequent event—which is not surprising if one considers the great proportion of poor in the total population, the inequality in income distribution, the frequency of famine, and the limited capacity of preindustrial powers to control people and their movements. All this helps to explain the frequency of theft and robbery on the part of common and low-class people. However, the noble and the wealthy also did their share, especially in the earlier centuries of the Middle Ages. In 1150 the Abbey of St Victor of Marseille complained to Raymond Beranger, Count of Barcelona and Marquis of Provence, that Guillaume de Signes and his sons had stolen over the years 5,600 sheep and goats, 200 oxen, 200 pigs, 100 horses, donkeys and mules from the various possessions of the abbey. In 1314 a great quantity of timber was stolen from a royal possession in the Craus valley (Haute-Provence, France). An inquiry showed that the robbery had been perpetrated by the men of the Count of Beuil, under his orders: the count traded in timber.³⁶ As for war-plunder, one may mention that at the beginning of the fifteenth century the sire d'Albret admitted to a Breton knight that “Dieu mercy” war paid him and his men well, but that it had paid still better when he fought on the side of the King of England, because then “riding *à l'aventure*,” he could often “get his hands on the rich traders of Toulouse, Condon, La Réole or Bergerac.”³⁷ The leader of the *lansquenets*, Sebastian Schertlin, who fought in Italy from 1526 to 1529 and took part in the sack of Rome, returned to Germany with a booty of money, jewels, and clothing valued at approximately 15,000 florins. A few years later, the good Sebastian bought himself an estate which included a country house, furniture, and cattle at a price of 17,000 florins. Among the Swedish commanders who participated in the Thirty Years' War, Kraft von Hohenlohe amassed war spoils of about 117,000 thalers, Colonel A.Ramsay about 900,000 thalers in cash and valuables, and Johan G.Baner, a fortune estimated at something between 200,000 and a million thalers which he deposited in the bank of Hamburg.³⁸

Ransom is one form of plunder. We are best informed on large-scale ransoms paid by princes and high dignitaries for their release. When Isaac Comnenus, duke of Antioch, was captured by the Seljuqs in the reign of Michael VII, the sum of 20,000 gold besants had to be paid for his release.³⁹ In 1530 King Francis I of France had to pay the enormous ransom of 1.2 million gold ducats to Emperor Charles V for the liberation of his two children.⁴⁰ Individuals of lesser importance were worth a great deal less. But the total amount of ransoms paid by travelers captured by pirates, soldiers and citizens captured in war, and towns captured by the enemy, represented at all times a continuous large transfer of wealth.

We have absolutely no way to measure the relative importance of unilateral transfers (including charity, gifts and dowries, as well as plunder, ransom, and theft) on the one hand and exchanges on the other. But it appears that the earlier the period under examination, the greater is the relative importance of transfers compared to that of exchanges. Indeed, for the Dark Ages Grierson has asserted that “the alternatives to trade (gift and theft) were more important than trade itself.”⁴¹ Another authority has aptly observed, “Savage society was dominated by the habit of plundering and the need for giving. To rob and to give: these two complementary acts covered a very large portion of exchanges.”⁴² Such was the logic, as it were, of *that* system.

As there was as yet little trade (whether in the form of barter or involving money), weekly markets or fairs were more than able to satisfy the needs of the population. These weekly markets were held in the vicinity of the manorhouse or the abbey or in a village. In some localities, particularly blessed by geographical or political conditions, there developed monthly or yearly fairs in addition to the weekly market. On such occasions people would come from further afield and sometimes merchants arrived bearing exotic goods.

As time progressed and civilization developed, after the end of the tenth century, trade expanded and began quite naturally to concentrate in the cities that were then developing partly as a cause and partly as an