# GOVERNMENT ECONOMIC POLICY IN PRE-INDUSTRIAL EUROPE*

Meir Kohn

Department of Economics
Dartmouth College
Hanover, NH 03755
email: mkohn@dartmouth.edu

November 2005

ABSTRACT: Government had an enormous impact on economic growth and development in pre-industrial Europe. Mostly, this was unintended—a side effect, for example, of government exaction or of the waging of war. However, governments did also intervene in their economies deliberately. These interventions can be grouped into a number of policies—the pursuit of legibility, a policy of provision, protectionism, bullionism, and mercantilism. This paper examines why governments pursued these policies, what form these policies took, and what were their effects on the economy.

JEL Categories: N430, N130, F130, L410, L500, L530, Q180

*This paper is a draft chapter of *The Origins of Western Economic Success: Commerce, Finance, and Government in Pre-Industrial Europe.* Other draft chapters may be downloaded from http://www.dartmouth.edu/~mkohn/

Government had an enormous impact on economic growth and development in pre-industrial Europe. Mostly, this was unintended—a side effect, for example, of government exaction or of the waging of war. However, governments did also intervene in their economies deliberately. This chapter will examine why they did so, what were the nature of the policies they pursued, and what were their effects.

We begin with motivation. Governments generally intervened in the economy to further their own interests. To understand those interests, we review the different forms of government in this period and their functions. Then, following a brief overview of economic intervention and its evolution during the period, we examine each of the major categories of intervention in detail.

## GOVERNMENT AND ITS INTERESTS

Government in pre-industrial Europe was a patchwork of competing and overlapping authorities. It had its origins in the collapse of the late Roman empire.

### The different types of government

The Roman empire went through a long process of disintegration and 'privatization' that left territorial government in the hands of a warrior nobility.[1] This territorial government was predatory in nature: nobles controlled territory in order to exact resources from it. There was little pretense that territorial government was for the good of the governed. It was imposed from above by force and maintained by force.

Territorial government at the beginning of our period was organized as a feudal hierarchy. At the top was the king, who was lord of the whole territory. A part of this—his domain—he controlled directly, but the rest was divided among his vassals. Each great vassal controlled a part of *his* territory directly, with the rest divided among his vassals and so on down. Within a feudal lord's domain, he possessed the full authority of government, and he exercised this authority through his officials. In the territories of his vassals, however, the lord's authority was limited and he lacked any direct means of exercising it. In the vassal's territory, the vassal was the government, and it was only with

[1]See (Kohn forthcoming) Ch 18 for details.

the vassal's consent and by means of his officials that the lord's authority might be exercised.[2]

Territorial government was fragmented and it was therefore weak. Its weakness left room for the emergence of a second type of government—associational government. This was not imposed from above like territorial government, but rather organized from below by various groups for the purpose of joint action. There were many examples of associational government in pre-industrial Europe—from villages to merchant associations and city leagues—but the most important in terms of economic intervention were the cities. Some of these, particularly in northern Italy, succeeded in winning their independence and became city states. Many others, although formally subject to the rule of kings or local lords, were quasi-independent and enjoyed in practice a great deal of autonomy.

In addition to the feudal hierarchy of territorial government and the independent or quasi-independent governments of cities, there was a third type of government, or at least quasi-government, in pre-industrial Europe—the Church. The former state religion of the late Roman Empire, the Church enjoyed a monopoly in religion across most of Europe. It was a government in the sense that it largely governed itself, but it also competed with other forms of government in performing a number of government functions for society as a whole.

### The interests of territorial rulers

Territorial rulers and the nobility of which they were a part were in the business of violence. Their principal goal was to expand the territories they controlled; their principal means for doing so was war. And to wage war they required resources. So when a ruler intervened in the economy his primary and overriding concern was revenue. Revenue mostly came from exaction in its various forms—expropriation, taxes, tolls, and seigniorage. Consequently, much intervention in the economy was aimed at facilitating exaction.[3] Exaction was not, however, a ruler's only source of revenue. His command of violence enabled him to sell violence services to his subjects. These included protection

[2](Heckscher 1935) Part III Ch 1. See (Kohn forthcoming) Ch 21 for more on the structure of the feudal system of government.

[3](Miller 1971)

from the predation of others through the provision of peace and order.[4] But they also included, intervention in the economy to favor some at the expense of others.[5]

In some circumstances, a ruler might take a more enlightened view of his territory—acting more as a herdsman than as a hunter. This as, he might seek to increase its prosperity and wealth in order ultimately to increase the potential for exaction.[6] For example, the Angevins, who conquered the Kingdom of Sicily in the thirteenth century pursued a variety of policies aimed at stimulating the economy.[7] The counts of Flanders in the twelfth and thirteenth centuries even went so far as to invest their own resources in infrastructure, especially dikes and waterways, to stimulate economic development.[8] However, the need for revenue was generally too urgent for rulers to give much weight to long-term considerations. In the late fifteenth century, for example, Ferdinand and Isabella pursued a variety of policies to stimulate the economy of a newly united Spain.[9] But their successors, the Hapsburgs, faced such unremitting fiscal pressure that they squeezed out every last drop of revenue irrespective of the long-term impact on trade and production.[10]

While rulers were motivated primarily by their need for revenue, they did have other motives for economic intervention. Although their control of their territories did ultimately rest on violence, less violence was needed if their subjects acquiesced in their rule. Such acquiescence was undermined by economic hardship. Famine or widespread unemployment caused unrest and sometimes even outright rebellion. Unrest and rebellion were costly to suppress and could be exploited by a ruler's internal rivals and external enemies.[11] So some interventions were motivated by a desire to prevent such situations from occurring.

Turning this logic around, rulers had an interest in creating economic hardship in the territories of their enemies in order to foment unrest and to reduce their enemies'

---

[4] See (Kohn forthcoming) Ch 23 for more.

[5] The Sicilian Mafia, also in the business of violence, offers essentially the same services: see (Gambetta 1993).

[6] (Olson 2000) talks of a ruler having an 'encompassing interest' in his territory.

[7] (Pryor 1979)

[8] (Stabel 1997)

[9] (Hamilton 1932)

[10] (Tracy 2002)

[11] (Clay 1984)

revenues. So another motive for economic intervention was economic warfare.[12] For example, England prohibited the export of wool during its wars with Flanders. This brought the Flemish textile industry to its knees and exerted intense pressure on the Count of Flanders to come to terms.[13] Yet another motive for economic intervention came from the *fear* of economic warfare. To protect themselves against this threat, rulers intervened in their economies to promote self-sufficiency.

**The interests of cities**

Cities were in the business of commerce and of manufacturing. Cities were also large concentrations of population that had to be supplied with the necessities of life. Consequently, the economic policies of city governments were aimed at furthering their interests as traders, as producers, and as consumers.[14]

As centers of trading, cities tried to capture as much trade as they could.[15] This meant rivalry with other cities in the same territory as well as rivalry with foreign cities. For example, the merchants of York fought for trade with those of London no less aggressively than they fought with merchants from Flanders, Scotland, or France. As centers of production, cities were mainly concerned with protecting their 'brand name'—the reputation of their products. This meant enforcing standards on their own producers, and it sometimes meant taking action against counterfeiters outside the city. As consumers, cities were rarely self-sufficient in food and other necessities. So a primary concern of city governments was to secure reliable sources of supply. For cities that were centers of manufacturing, this concern extended to the supply of raw materials.[16]

City governments no less than territorial governments were in need of revenue to finance their activities. So many of their policies, like those of territorial rulers, had a fiscal motivation or were directed at facilitating the collection of revenue.

---

[12](Miller 1971)

[13]In another example, Venice in the tenth century caused the surrender of Istria and the Mark of Verona by cutting off their supply of salt (for which Venice was the principal source), causing their cattle to die ((Heckscher 1935) Part III Ch 3)

[14](Heckscher 1935) Part III Ch 1

[15]"Because prosperity, or livelihood itself, was so closely linked to the volume of trade handled by a town and to the terms on which it was conducted, increase in this volume and bettering of these terms were fundamental aims of the burgesses." (Hibbert 1971)p159

[16](Hibbert 1971)

Of course, the government of a city did not necessarily pursue the interests of its population as a whole. Most city governments were in the hands of an elite—usually of merchants but sometimes of manufacturers or nobles. So it was the interests of this elite that the city government had uppermost in its mind. However, more often than in the case of rulers the interests of the elite often coincided with those of the general population.

### The interests of the Church

The Church was in the business of salvation. Since salvation depended on the moral behavior, setting standards of morality was a central concern. In particular, the Church took a keen interest in the morality of economic behavior, and its teachings in this area constituted an important form of economic intervention. The Church's position on usury, for example, had a significant impact on the evolution of financial instruments.[17]

In setting standards for economic behavior, the Church was not however a disinterested party. Apart from its own extensive involvement in economic activity, it shared too in the rewards of the economic activity of others through tithes, donations, and bequests. It therefore had strong incentives not to stand in the way of economic progress:

> In the matter of trade, for instance, canon law in the early twelfth century still spoke of it as an occupation scarcely compatible with Christianity. But as the growing needs of society produced more elaborate forms of commercial organization, the ecclesiastical lawyers began to have other thoughts. They modified some principles and interpreted others until a large field was cleared for commercial enterprise, and the restrictions that remained were largely ignored or circumvented.[18]

## THE EVOLUTION OF ECONOMIC INTERVENTION

All these different forms of government intervened in the economy in various ways. The legitimacy of such intervention was taken for granted. As we have seen, pre-industrial Europe had its origins in the late Roman Empire, and this had been characterized by massive government intervention in the economy.[19] When the Empire

[17]See (Kohn forthcoming) Ch 6.

[18](Southern 1970) p 40. The English Church was precocious in already adopting a pro-market view in the eleventh century, perhaps because of the early revival of economic development in that country ((Nightingale 1995) p 76).

[19]"Everywhere the free enterprise of the early Empire gave way to compulsion and control in the attempt to avert the disintegration of the Roman political order…" ((Miller 1971) p292)

collapsed, the tradition of intervention remained. Everyone accepted that government had both the right and the duty to regulate all aspects of life—including the economic—in the interests of 'justice and of the common good'.[20] Of course, in practice intervention was motivated less by the common good than by the good of governments and of those who controlled them.

Even so, it is difficult to discern in the mass of often conflicting interventions any consistent economic policy. Most interventions were reactive—responses to problems and crises.[21] They certainly did not emerge from the application of any coherent economic theory. To the extent that there were theories, they were thought up after the fact as rationalizations. Consequently, if the nature of intervention tended to be similar across Europe, it was not because it was guided by a common theory, but rather because governments faced similar problems and responded in similar ways.[22]

While were no economic policies in the modern sense, it is nonetheless useful for our purposes to bunch together syndromes of interventions that addressed a particular problem and to give each the honorary title of 'policy'. The first such policy, a prerequisite for the others, was *legibility.* Throughout the period, both territorial rulers and cities pursued a variety of policies aimed at making economic activity easier to observe and to monitor.[23] Legibility was a precondition for other kinds of economic intervention. For example, a city wishing to enforce a monopoly on trade had to ensure that no trade was taking place without its knowledge. Legibility was also a prerequisite for exaction: rulers could not tax what they could not see. To promote legibility, governments restricted where people could trade, with whom they could trade, and what they could trade. They also attempted to standardize weights and measures.

As we have seen, both cities and rulers wished to prevent shortages and to ensure that the population was supplied with the necessities.[24] The consequent interventions could be seen as constituting a policy of *provision.*[25] The primary focus of this policy was food—

---

[20](Reynolds 1997) p lv, p 200; (Supple 1977); (Hibbert 1971) p 161.
[21](Clay 1984)
[22](Cipolla 1971)
[23](Scott 1998) uses the term legibility in a somewhat broader sense.
[24](Parry 1967) p 157; (Miller 1971)
[25](Heckscher 1935) Part III Ch 3

especially grain—but governments also made efforts at various times to ensure adequate supplies of fuel, construction materials, and inputs for manufacturing.[26] To some extent, the policy of provision was motivated by a concern for the poor, although not always for entirely altruistic reasons. There was also, as we have seen, a fear of unrest, as well as a desire for a cheap, plentiful and cheerful workforce.[27] The needs of the rich were not neglected either: governments took steps to ensure the supply of luxury goods as well as of necessities. And governments were always careful to secure military supplies—both armaments and the materials necessary for their production.

Another set of interventions was aimed at furthering the economic interests of particular groups by excluding or handicapping competitors. Such *protectionism* was initially a concern primarily of city governments. However, territorial rulers soon learned that cities and other groups were willing to pay handsomely for economic intervention on their behalf.

Apart from grain, the supply of one other commodity was the object of particular attention—bullion. Rulers had two very strong reasons to ensure its plentiful supply—to pursue a policy of *bullionism*.[28] First, seigniorage from the production of coin was an important source of revenue: a continued flow of revenue required a constant supply of new bullion to the mints.[29] Second, rulers needed to be able to mobilize and to deploy their resources for war: that is, they needed liquidity.[30] There were various ways to manage liquidity but they all depended ultimately on an adequate supply of money. So bullionist policies were motivated too by considerations of national security.[31] Of course, an adequate supply of coin was also necessary to meet the needs of commerce.[32] While this was often cited as a justification for bullionist policies, it was a secondary consideration for territorial rulers. It was more important, of course, for cities but only independent cities had control of their coinage.

---

[26] (Cipolla 1971)

[27] (Herlihy 1958) Ch. 9

[28] (Munro 1972) Ch. 1

[29] See (Kohn forthcoming) Ch 7.

[30] See (Kohn forthcoming) Ch 20.

[31] "A desire to maintain stocks of mobilizable wealth available for government exploitation easily gave rise to measures of exchange control or a concern about the balance of trade." ((Miller 1971)p288)

[32] "In economies without fully developed credit institutions, central banks, and fiat moneys, however, concern about the country's coinage supply was hardly irrational." (Munro 1979)

All of these policies continued throughout the period. However, there was a certain intensification and refinement in the sixteenth century. Scholars later labeled the resulting set of interventions, which included elements of bullionism and protectionism and the creation and sale of monopolies, a policy of *mercantilism.* This policy was rationalized in various ways, but the underlying motive for the many seemingly unrelated and often contradictory interventions was simple enough. This was a period of widespread warfare on an escalating scale.[33] The economic policy of territorial rulers was driven almost entirely by the demands of war and by their increasingly desperate need to finance it.[34]

We shall see that economic interventions, whatever their motivation, were generally economically harmful. For the majority of interventions that were intended to serve the narrow interests of those in power or of those they favored this is hardly surprising. However, even when interventions were ostensibly intended to promote the public good, they were generally so ill-conceived that they harmed rather than helped. For example, policies intended to ensure an adequate supply of food often had precisely the opposite effect.

Fortunately, government intervention was of only limited effectiveness, and the wealth of surviving documentary evidence gives an entirely exaggerated impression of its importance. There was indeed a proliferation of proclamations, edicts, and acts of parliament regulating every aspect of economic life. However, issuing proclamations or passing acts of parliament was one thing, enforcing them was quite another.[35] Governments, especially early on in the period, lacked the administrative capacity to

---

[33]See (Kohn forthcoming) Ch 18.

[34]"We would do much better, then, to label the Crown's policies on wealth and taxes in the Renaissance as fiscalist rather than as mercantilist." ((Wolfe 1966) p 472)

"Neither economic writers nor statesmen promoted measures because the tenets of a mercantilist 'doctrine' dictated that they should: they did so because practical considerations suggested they were appropriate… Most of the practical considerations to which they harkened were connected with the need to make the country secure against its external enemies, to maintain order and tranquility within, and to raise the money to carry on the government." ((Clay 1984)p206)

[35]"For it is in the nature of regulation and control to breed documentary evidence and thus to perpetuate itself in history out of all proportion to its real importance in historical development." ((Postan 1987) p 271)

"Royal proclamations, statutes both parliamentary and informal, and even Magna Carta, usually exemplify the aims of those in power, rather than the practical realities of the market place." ((Farmer 1991) p 326)

"… to assume that charters conferred powers that were always enforced and that companies made rules that were always obeyed, would be as naïve as to assume that Elizabethan statutes always attained their economic purposes." ((Willan 1959) p 64) make their policies effective. So the proliferation of economic regulation is, if anything, evidence of its lack of effect—signifying intentions and wishes rather than achievements.

Let us now examine each policy in greater detail.

### LEGIBILITY

To facilitate taxation and regulation, governments pursued a variety of policies aimed at making economic activity more legible. One way of doing this was to restrict trading to places where it could easily be observed. Cities and market towns required that trading be conducted exclusively in open public markets where it could be monitored. To this purpose, rulers actively encouraging the formation of new markets.[36] Cities often attempted to suppress trading in the surrounding countryside, to which it often escaped in order to avoid regulation and taxes.[37] Within cities, merchants engaged in wholesale trade were required to use officially licensed brokers who, in addition to their economic function of matching buyers and sellers, also collected taxes and ensured that regulations were obeyed.[38]

Territorial rulers would sometimes designate a particular city as the staple for a given trade—that is, the sole place where that trade could legally take place. This made the trade in question easier to monitor and to tax.[39] Probably the best known example is the staple of Calais, which served for two centuries as the center for the export of English wool. As the example of Calais illustrates, establishing a staple also made it easier to enforce a monopoly or cartel. The group of merchants known as the Merchants of the Staple had purchased a monopoly on the export of wool, and concentrating the trade in Calais made it easier for them to police their own members and to exclude others from the trade.[40]

An alternative to restricting where merchants could trade was to restrict their means of transportation. Venice, for example, required that parts of its overseas trade—especially trade with the Levant—be carried in state-sponsored galley fleets. This allowed Venetian officials to monitor, tax, and regulate the trade. Portugal and Spain

---

[36](Verlinden 1971)
[37]For example, see (Hoppenbrouwers 2001) on Holland.
[38]For a detailed discussion of government regulation of markets see (Kohn forthcoming) Ch 17.
[39](Favier 1998) Ch. 4; (Heckscher 1935) Part III Ch. 2
[40](Koenigberger 1995)

followed similar policies with respect to their trades with the Indies and with the Americas.[41]

For territorial rulers, a major obstacle to legibility was the proliferation of weights and measures. These not only varied from place to place but also changed over time. In England, for example, the fifty major measures of the tenth century had expanded to several hundred by the late Middle Ages—with some 25,000 local variations.[42] This proliferation complicated taxation—making it difficult to predict tax revenues and to impose taxes equitably. It also made it next to impossible to enforce many regulations.

This proliferation of measures was partly a result of the fragmentation and weakness of territorial government. With the collapse of the Roman empire and later of its Carolingian successor, weights and measures, like much else, had come under the control of local lords. And when towns achieved some degree of self-government, they too demanded the right to establish their own weights and measures. Technological limitations were another reason for the proliferation of measures. Even when weights and measures were nominally the same, they varied significantly in practice. Many measures, for example, were based on human dimensions.

Manipulation of weights and measures was widespread.[43] When prices and taxes were set per unit of quantity, sellers or tax collectors could benefit by reducing the size of the unit. Conversely, when taxes, rents, and debts were collected in kind, tax collectors, landlords, and creditors could benefit from increasing the size of the unit. Or, if a regulated price was not allowed to rise when scarcity increased, a simple solution was to reduce the size of the unit to which the price applied. Tax collectors and stewards took advantage of the confusion: they collected according to one measure and passed on the proceeds to their principals according to another, pocketing the difference.

Territorial rulers therefore attempted to impose standard weights and measures throughout their territories. Apart from the direct benefits in terms of increasing legibility, this was part of a more general campaign on the part of territorial rulers to re-

---

[41]The Portuguese and, especially, Spanish practice was clearly modeled on that of the Venetians; both in Portugal and in Spain Italians played a large role in exploration, financing, and trade ((Coornaert 1967)). See (Kohn forthcoming) Ch 5 for more on government involvement in transportation.

[42](Spruyt 1994) Ch 8

[43](Heckscher 1935) Ch 3; (Spruyt 1994) Ch 8; (Scott 1998)

establish control over their territories.[44] This campaign began much earlier in England, but it became widespread in Europe from the late thirteenth century.

The various attempts at standardization met strong resistance. Using the ruler's measures generally meant paying him higher taxes. Moreover, the local measures, which the ruler's were meant to replace, had evolved to meet local needs and to reflect political compromise among the interested parties. Changing the measures upset this balance, favoring some while harming others. Because of this resistance, the many campaigns of standardization enjoyed very limited success.[45] Indeed, their repetition is evidence of their failure. For example, Spain made five major attempts at standardization between 1261 to 1568, none of them particularly successful.[46] The story was much the same in France, where as late as the seventeenth century, a merchants' manual, *Le parfait négociant*, devoted no less than six chapters to describing the country's multiplicity of weights and measures. England was probably the most successful at enforcing standards, but even there success was limited.

The various policies aimed at increasing legibility served government interests by making it easier to tax and to regulate economic activity. Their impact on economic activity, to the extent they were successful, was mixed. Government attempts to promote legibility probably reduced trading costs in the small but increased them in the large.[47] In the small, the requirements to use public markets and official weights and measures had a positive effect. The concentration of trade in one place made it easier for buyers and sellers to find one another, promoted competition, and made information more readily accessible. The use of standard weights and measures reduced measurement costs and protected consumers. However, in the large, government attempts to suppress 'off-market' trading and to force traders to use public markets raised trading costs. Off-market trading through middlemen often provided traders with better liquidity and lower trading costs, especially for large transactions.[48] It also had the attraction of evading taxes. The

---

[44] "The development of standardized weights and measurements is almost as old as government and his typically been fostered by the state." (North 1981) Ch 3

[45] (Heckscher 1935) Ch 3

[46] (Kula 1986)

[47] (Nielsen 1998)

[48] See (Kohn forthcoming) Ch 17.

extent of off-market trading and its growth over time suggest that for many traders these advantages outweighed the benefits of using public markets.

Moreover, to the extent that public markets and standardized weights and measure did offer economic benefits, government intervention was by no means necessary for their realization. When public markets offered lower trading costs than off-market trading, traders created and used public markets without need for coercion. Where standardization of weights and measure was desirable, it happened spontaneously without government intervention. For example, the many merchants who traded at the fairs of Champagne found it to their advantage to adopt the weights and measures used there—those of Troyes in particular—and did so voluntarily.[49]

**PROVISION**

The policy of provision was primarily a policy of cities. It had ancient origins: Rome, for example, had an extensive program to ensure the supply of grain to its citizens. The policy of provision largely vanished from the scene during the urban decline of the early Middle Ages. It then reappeared with the rapid urbanization of the Commercial Revolution that began in the twelfth century.

Cities pursued a policy of provision because they were particularly vulnerable to shortages. Their large concentrations of population were rarely able to find enough food locally, and anyhow local output fluctuated widely according to weather conditions. The demand for food, especially for grain, was inelastic: half of average household expenditure went on food and half of that on bread. This meant that relatively small changes in supply had a large impact on prices. Shortage therefore often meant starvation for the poor. Dearth was consequently a frequent occurrence and a constant worry.

Most cities depended on trade for their basic supplies either on a regular basis or in emergencies. However, trade in foodstuffs over long distances was limited by high transportation costs and by significant price risk.[50] While the sharp response of price to changes in supply created a strong incentive for trade, the accompanying price volatility was a major disincentive—especially when combined with slow transportation and communications. A merchant learning of high prices in a particular city might refrain

[49](Kula 1986)
[50]See (Kohn forthcoming) Ch 2.

from shipping grain there out of fear that his shipment would arrive only to find that others had beaten him to it and that prices therefore had fallen again.

In the more urbanized regions, provision was a concern for territorial rulers too. Cities were a major source of their revenue and a frequent focus of unrest. So, as the power of rulers grew during the period, they increasingly adopted policies to ensure that their cities were well supplied. Rulers also had their own reasons to be concerned with provision—ensuring food and armaments for their armies and satisfying their own considerable demand for luxury goods.

The various interventions aimed at ensuring provision fell into one of two general categories. The first was trade policy: many cities and territorial rulers restricted the export of certain goods and promoted imports to increase supply. The second category of policy, almost ubiquitous, was direct intervention in the process of trading itself and frequently in the process of production

**Trade policies**

Both cities and territorial rulers intervened to influence flows of trade. They restricted or taxed exports and, in various ways, encouraged imports. These interventions were, however, quite different from modern trade policies. They were not aimed at creating an import surplus in general, but rather at ensuring adequate supplies of certain specific commodities in particular — especially grain.[51] For example, in the early thirteenth century Pistoia declared a *devetum* (ban) on exports of grain, as well as on exports of wood and wool, while it ignored other goods completely. At the same time, and in the same spirit, it sought to stop the emigration of workers.[52]

While cities and territorial rulers both restricted exports, their motives differed. Cities were concerned primarily with provision; territorial rulers were concerned—whatever the rhetoric—primarily with revenue. Export bans imposed by independent cities were actually intended to prevent the export of the commodity in question. Export bans imposed by territorial rulers were intended to make it possible for the ruler to sell

---

[51](Hibbert 1971) That is, these policies were not motivated by a naïve and generalized 'hunger for goods' as some historians have suggested.

[52](Herlihy 1967)

exemptions from the ban.[53] For example, when the rulers of Sicily and Apulia, the great producers of grain, prohibited exports of these commodities, the intention was only to force exporters to purchase licenses that exempted them from the prohibition.[54] Even on the rare occasions on which rulers did initially intend their export prohibitions to be effective, fiscal considerations usually won out in the end. For example, Philip the Bold of France banned exports of wool in 1277 to assure supplies for the cloth industry, but by 1305 his successor Philip the Fair was selling licenses to exporters.[55] The general acceptance of the legitimacy of the policy of provision made taxes on exports much easier to justify than other taxes. Rulers took full advantage of this, imposing taxes on many exports that were not banned outright.[56]

Export restrictions and taxes were not popular with everyone, since they hurt the rural producers of the commodities in question. In particular, they reduced the income of the nobility, which consisted largely of rents on land. The nature and extent of export restrictions was therefore a matter of intense political debate and bargaining.[57] In England, this political struggle worked itself out in parliament. In the fourteenth century, the cities had the upper hand; in the fifteenth, producer influence predominated; in the sixteenth, with London and other towns again growing rapidly, policies once again favored the cities.[58] In general, when and where urban interests predominated, as in the Italian city states, there was outright prohibition of export. When and where rulers received sufficient support from cities to overcome the resistance of the nobility, there were export taxes. When and where the nobility had the upper hand, there were no restrictions at all.[59] In times of actual dearth, the balance of interests, of course, changed.

---

[53]There were, however, exceptions. Sometimes rulers banned exports for strategic reasons—to harm their enemy's economy or to deny him military supplies. ((Heckscher 1935) Part II ch2 and Part III Ch 3)

[54](Cipolla 1971)

[55](Miller 1971) "The prohibition of exports was simply a method of establishing export duties." p308

[56]"All Renaissance commentators agreed that a prince had the right to levy taxes on goods passing out of his domains because export of such goods deprived his subjects of the enjoyment of merchandise. Export duties were desirable, it was argued, because they discouraged foreign merchants from denuding a country of the fruits of its land and labor." ((Wolfe 1972) p344)

[57](Persson 1996)

[58](Gras 1915) Ch. 8

[59](Epstein 2000) Ch. 7. For example, in sixteenth-century Castile, the Cortes, which represented urban interests, campaigned unsuccessfully for restrictions on grain exports ((Vassberg 1984) Ch. 6).

Even restrictions that were normally fiscal in intent were made effective. For example, in times of famine the kingdom of Naples suspended all export licenses.[60]

Cities in many parts of Europe had jurisdiction over the surrounding countryside (*contado*). They used this power to monopolize the local output of foodstuffs, requiring villages within their jurisdictions to sell their output in the town market and prohibiting them from sending their output elsewhere.[61] In Italy, with the consolidation of cities into city states, the size of subject territories grew considerably and came to include subject cities. In some cases, the ruling city would require agricultural producers within its territory to sell only to the ruling city to the exclusion of other cities within the same territory.[62] Florence, in the fifteenth century, promoted the establishment of new fairs, especially near its borders, hoping to attract supplies from neighboring territories; Lombardy, which unlike Florence had an agricultural surplus, was less eager to promote new fairs because it saw them as facilitating exports rather than imports.[63]

In addition to trying to restrict the export of certain goods, governments also attempted to promote their importation. It was hard to square taxes on imports with such a policy, and indeed import taxes were far less common than export taxes.[64] One way to actively encourage imports was to grant privileges to foreign merchants who imported desired goods—for example, by offering them safe passage (even in time of war), free lodging, or freedom from tolls. Not surprisingly, domestic merchants opposed such concessions to their foreign competitors. The merchants of London, for example, campaigned tirelessly against the granting of privileges to foreigners, arguing that it led to a loss of bullion and to the importation of ‘unnecessary luxuries’.[65]

Another way of promoting specific imports was to require merchants, whatever else they imported, to bring in amounts of the goods in question. Cities on occasion required merchants importing other goods to bring in grain as well.[66] In England in 1364, Edward

---

[60](Cipolla 1971)
[61](Epstein 2000) Ch. 7; (Hoppenbrouwers 2001)
[62](Cipolla 1971); (Epstein 1999)
[63](Epstein 2000) Ch. 7
[64](Heckscher 1935) There were, however, taxes on some luxuries, usually for bullionist reasons (see below).
[65](Miller 1971)
[66](Hibbert 1971)

III required merchants exporting wool and cloth from Bristol to bring back wine of equal value; Edward IV in 1472 required Venetian merchants trading into England to bring in four bow staves for each ton of other goods they imported.[67]

In a crisis, governments would offer additional, special inducements such as cash bonuses and interest-free loans. They also took direct action to increase grain imports by sending out 'grain pirates' that would intercept grain ships on the open sea and divert them to their home ports.[68]

### Direct intervention in trading and production

Cities, and to a lesser extent rulers, intervened in the process of trading to ensure plentiful supplies, equitable distribution, and 'affordable' prices. Typical regulations required producers to bring their goods to the public market and to offer them there for sale to the public at large.[69]

Governments regarded middlemen as the enemy. They saw them as profiteers and speculators and held them responsible for creating artificial scarcity—for 'hoarding'—to boost their own profits. Trading with middlemen was therefore restricted or prohibited.[70] However, in normal times, enforcement of these regulations was at best desultory. But in times of crisis, middlemen were a natural scapegoat and the regulations against them were enforced with much greater rigor—not infrequently backed by threats of capital punishment.[71] Governments would seize stocks of grain in private hands and redistribute them to the public. In fifteenth century Sicily, for example, the state introduced 'searches' intended to find such stocks and to make them available.[72] Similar regulations were enacted in England in 1587.[73]

Governments frequently fixed prices, especially for bread and grain. For example, the government of Spain set a maximum price (*tasa*) for wheat, barley, and rye in 1502.[74] In

---

67(Heckscher 1935) Part II ch2

68(Parry 1967) p157. With grain cargoes more valuable in times of widespread shortage, there was also an increase in 'private sector' piracy ((Jordan 1996) Ch. 9)

69(Miller 1971), [Overton, 1996 #1779]

70See (Kohn forthcoming) Ch 17 on the efforts to prevent 'private trading'—trading outside public markets, generally with middlemen.

71(Cipolla 1971); (Persson 1996); (Jordan 1996)

72(Epstein 1991)

73[Nielsen, 1997 #2123]; (Overton 1996)

74(Vassberg 1984) Ch. 7

many places, an 'assize of bread' regulated the weight of the standard penny loaf.[75] Less frequently there were maximum prices for other foods, for beer and wine, for fuel, and even for coffins.

The objective of price controls was both to stabilize prices and to keep them low. Some Italian cities, for example, auctioned the franchise to sell certain basic commodities such as lime or candles: the franchise went to the merchant committed to selling at the lowest price.[76] However, governments did adjust regulated prices (and the weight of the penny loaf) in response to changing scarcity.[77]

Price controls were especially common in times of emergency, such as famine, plague, natural disaster, and war. The Spanish *tasa* expired in 1512, but it was reinstituted in 1539 following a poor harvest and a sharp increase in grain prices.[78] In London, prices of building materials were regulated following a severe storm in 1362.[79] There were attempts, especially in England, to prevent wages from rising in response to the shortages of labor that followed the Black Death in the late 1340s.[80] Price controls were also a common response to inflation. Although inflation was usually the result of debasement, it was useful to deflect the blame by attributing it to unscrupulous middlemen and 'price gauging'.

Some intervention was motivated by consumer protection and quality assurance. This was one motive (although not the most important, as we have seen) for the regulation of weights and measures. Guilds were regulated to prevent them from abusing their market power. Cities appointed inspectors to examine goods imported into the city and goods sold to consumers. Cities also inspected their own exports, not so much to protect foreign consumers as to protect their own 'brand names'.[81]

Many cities decided that the supply of grain was too important to be left to the market. Some independent cities assumed direct responsibility for feeding their populace.

---

[75](Persson 1996).

[76](Cipolla 1971)

[77]Indivisibility of the coinage made it easier to change quantity than price. See (Kohn forthcoming) Ch 7 on coinage issues.

[78](Vassberg 1984) Ch. 7

[79](Hibbert 1971)

[80](Heckscher 1935) Ch. 6. The later Statute of Artificers 1563 added a universal obligation to work: holding back labor was considered to be no better than engrossing grain.

[81]See (Kohn forthcoming) Ch 5.

Public granaries were common, and many independent cities set up grain offices to manage supply. Pisa, for example, set up the *canova* in the fourteenth century to manage its granary, to set the price of grain, and to purchase grain overseas.[82] Public granaries were often subsidized out of public funds, and in emergencies grain was often sold to the poor at sub-market prices.[83]

Governments also intervened in production to promote self-sufficiency. In some cases, cities and territorial rulers either required landowners to cultivate certain crops or provided them with incentives such as tax exemptions for doing so.[84] Some Italian cities imposed quotas of grain on rural producers that they had to supply to the city (*annona*).[85] Some had a general requirement that all land be in cultivation: if a piece of land was left idle, anyone could establish ownership by cultivating it.[86] Some cities required that specific crops be grown. For example, in 1482 Milan threatened its thriving dairy farming sector by passing a law requiring the reconversion of irrigated meadow to arable in the interest of 'abundance'.[87] In sixteenth-century Venice, the authorities promoted the cultivation of rice in the *Terrafirma*, wishing to emulate its successful introduction in the Po valley; however, the soil in the *Terrafirma* proved unsuitable and it was quickly exhausted by the experiment.[88] In England, Tudor governments opposed enclosures because they feared that the switch from arable to pasture would reduce the local production of grain. In Castile, the Cortes campaigned unsuccessfully to restrict the conversion of arable land into olive groves and vineyards, which was happening at a rapid pace in order to serve the growing market for oil and wine in the Americas.[89]

## The impact of policies of provision

Some historians have argued that government intervention in the provision of foodstuffs, grain especially, was necessary in premodern Europe because market

---

82(Herlihy 1958) Ch. 8

83(Persson 1996)

84(Cipolla 1971); (Nicholas 1997) Ch. 2

85Venice, for example, imposed such quotas on the *Terraferma* in the sixteenth century. (Knapton 1988)

86(Cipolla 1971);

87(Jones 1966)

88(Laven 1966) Ch. 1

89(Vassberg 1984) Ch. 6

provision did not work.[90] Frequent bad harvests and inelastic demand meant volatile prices and recurrent shortages, only exacerbated by private hoarding.

However this volatility of local grain prices created two profitable margins of trading—across space and across time—that tended to mitigate shortages. Bad harvests were usually local—the result of local weather conditions. Consequently, price differentials between places where grain was scarce and places where it was more plentiful created strong incentives for trade—often strong enough to overcome the high transportation costs and significant price risk. Moreover, shortages were usually temporary, so that carrying over grain from periods of relative plenty was another way both to turn a profit and to mitigate the problem. Unfortunately, government policies blocked or discouraged trading on both these margins.

Barriers to exports from one place were of course simultaneously barriers to imports to another. The balkanization of the market made the consequences of local shortages more severe. This was particularly clear in northern Italy, where the myriad independent cities fragmented the market (there was some improvement in the fourteenth century when most of these cities were consolidated into larger city-states).[91] In some cases, territorial rulers understood the problem. For example, in 1482 Louis XI tried to eliminated barriers to trade in grain within his territory while continuing to block exports from it.[92]

Interference with the movement of grain across space made it even more important to allow its movement across time. However, government policies directed against 'hoarding' and middlemen made this more difficult too. Even worse, much of the grain that was 'hoarded' was in fact seed corn. Yields were relatively low, so that a significant fraction (up to a quarter) of each harvest had to be carried over to the next season for planting. Consequently, the seizure and sale of 'hoards' often relieved the current shortage at the expense of creating a worse shortage in the subsequent season.

---

[90](Epstein 2000) Ch. 7 provides extensive references. Epstein shows that the degree of intervention actually bore little relation to the severity of problems. For example, both Lombardy (an exporter) and Florence (which suffered no major crises) had extensive restrictions. He suggests that political conditions played a more important role than economic conditions.

[91](Herlihy 1967); (Epstein 2000) Ch. 5

[92](Miller 1971)

Price controls were counter-productive too. Sub-market prices for grain discouraged production and caused domestic producers to switch to alternative products—away from arable farming and towards animal husbandry or horticulture.[93] For example, after the *tasa* was reinstituted in Castile in 1539, the level of the price ceilings remained unchanged until 1558 despite continuing inflation (caused in this case by bullion imports). The policy was so obviously counter-productive that the Cortes—representing its presumed beneficiaries, the cities—lobbied repeatedly for its abolition. Members of the Cortes argued that the effect of the *tasa* was to force peasants either to switch to unregulated crops such as wine and olives or to quit agriculture altogether.[94] Similarly, in 1596, the lord mayor of London suspended enforcement of maximum prices and chose to rely instead on the market.[95]

Fortunately, these counter-productive interventions were often ineffective. Despite efforts to restrict trade in foodstuffs, trade continued to expand throughout the period, and markets became increasingly integrated.[96] So much is evident from the behavior of prices, which increasingly moved in parallel all across Europe.[97] Statistical analysis of prices also suggests that there was considerable carryover from year to year. Price controls too seem to have had a limited effect. Estimates suggest, for example, that half the grain sales in Castile evaded the *tasa*. Prices there continued to fluctuate despite the price caps.[98]

**PROTECTIONISM**

Protectionism was initially a policy not of states but of cities. Moreover, it was primarily a protectionism not of production but of commerce.[99]

---

[93]For an example, see (Herlihy 1958) Ch. 8.

[94](Vassberg 1984) Ch. 7; (Vicens Vives 1969) Ch. 26

[95](Palliser 1983) Ch. 10

[96](Nielsen 1997). On the development of the trade in grain, see (Kohn forthcoming) Ch 3.

[97](Epstein 2000) Ch. 5

[98](Vassberg 1984) Ch. 7

[99]"Whereas in the twentieth century the aim of economic nationalism has been to limit international co-operation, in the sixteenth it was rather to decide upon the agents by whom that co-operation should be carried on." (Fisher 1940) p108

## Commerce

In pre-industrial Europe, commerce and production were distinct activities. Producers were small and either sold locally or, if they produced for distant markets, sold their output to merchants. Merchants specialized in commerce—in buying the output of others to resell, usually elsewhere, at a higher price.

Merchants sought out profitable opportunities for trade, and they tried to capture for themselves as large a part as they could of the resulting gains from trade. The greatest obstacle to success in both respects was competition from other merchants. Other merchants would discover and exploit opportunities first, and competition from other merchants would reduce the share of the gains from trade that merchants could capture from producers and consumers. The only way to suppress competition was by force. There were really no technological or other barriers to entry. Force, therefore, was seen as a normal and legitimate instrument of commerce.

City governments were largely controlled by merchant elites and they therefore often acted as 'merchant associations' to further the commercial interests of their citizens.[100] They attempted to suppress competition from the merchants of other cities and, to a lesser extent, to suppress competition among their own merchants.

Within their own jurisdictions, cities could control competition relatively easily, and they had little trouble in ensuring preference there for their own citizens.[101] Independent cities did so as a matter of course; subject cities purchased the right to do so from their territorial rulers. Venice was perhaps the most extreme in favoring its own. It imposed higher taxes on foreigners, strictly regulated their trading, and excluded them altogether from certain parts of its commerce.[102] Genoa, in contrast, placed few restrictions on foreign merchants. There was of course a tradeoff: restrictions discouraged foreign participation in a city's markets and so reduced the profits of the market itself as well as the trading opportunities of domestic merchants.[103]

---

[100] There were of course also various forms of actual merchant association: see (Kohn forthcoming) Ch 16.

[101] See (Kohn forthcoming) Chs 16 and 17.

[102] (Lane 1973)

[103] See (Kohn forthcoming) Ch 16 for a discussion of why different cities adopted different policies.

Outside the city walls, it was much harder for cities to capture trade for their own merchants and to exclude others. Independent cities and city states could and did use military power—particularly naval power—to enforce monopolies on trade with distant markets or to break the monopolies of others: "A great part of the external history of the more important medieval cities can be written around their conflicts one with another to secure control of a trade route, to dominate the source of a vital commodity and to monopolize access to a great market."[104] The Italian maritime city-states and the cities of the Hanseatic League were able to use their naval power to open up markets to their own merchants and to close them to merchants from rival cities. Venice and Genoa, for example, fought a series of wars with each other from the thirteenth century to the fifteenth over control of trade with the Levant and Asia.

Subject cities generally lacked the military power to act in this way. However, in one instance, the towns of Holland—subjects of the dukes of Burgundy—did join together in the fifteenth century to wage a naval war against the German Hansa to break its monopoly of the Baltic trade.[105] Mostly, however, subject cities lacked the ability to project power. So if merchants of subject cities needed to open a market or to police a cartel, they generally had to purchase violence services from their territorial rulers.[106] Before the sixteenth century, such help was generally mobilized only against other cities that were subjects of the same ruler. Obtaining a trading monopoly from the ruler, enforced by him, protected one city from the competition of others within his territory. The city obtaining the monopoly naturally paid the ruler for the favor, either in cash or by providing him with loans on favorable terms.[107]

One example of such a ruler-enforced monopoly was the declaration of a staple—the designation of one particular town as the sole market for a certain trade.[108] As we have already seen, declaring a staple served the function of improving legibility. However, it also gave the favored town a monopoly of the trade in question. For example, in early fourteenth century Flanders, the counts granted Ghent a staple on grain carried down the

[104](Hibbert 1971) p 165

[105](Israel 1995) Ch. 2

[106](Ekelund 1997) Ch 6

[107]Other types of merchant association, not only cities, acted in this way to purchase trading privileges from territorial rulers: see (Kohn forthcoming) Ch 16.

[108](Hibbert 1971)

Scheldt and Leie rivers from northern France, the principle source of imported grain. In the fifteenth century Ghent extended its monopoly to all of the interior waterways of Flanders. It even resorted to military force to prevent other cities from building canals to evade its control of the grain trade.[109]

Another type of monopoly that a city could gain with the help of the territorial ruler was a monopoly over a particular export trade. For example, in the fifteenth century the king of Castile granted the merchants of Burgos, in exchange for generous loans, a monopoly of the valuable wool trade with the Low Countries.[110]The port cities of the Cantabrian coast through which this trade passed, especially Bilbao, bitterly resented this and they lobbied hard to reduce the privileges of the Burgalese in their own favor. In the sixteenth century, Seville managed to obtain a monopoly of the trade with the Americas, much like the monopoly that Burgos already enjoyed on the export of wool to the Low Countries. Just as Bilbao had objected to the Burgos monopoly, so now did Cadiz object to that of Seville and lobby for its share of the trade.[111]

**Production**

As a rule, urban producers had little interest in protection. They produced mainly for the export market—for sale outside the city. So keeping competitors out of the domestic (city) market was of little interest to them. Moreover, a city's export markets rarely coincided with the boundaries of the territory in which it found itself, so protection at the territorial level was not of much interest either.

There were however exceptions. When the cotton textile industry spread from Italy to southern Germany in the fifteenth century, largely because of rising labor costs in Italy, Italian cities tried to keep German cottons out of their markets.[112] The most notable exception, however, was the Flemish ban on the importation of English woolen cloth that endured from the fourteenth century to the sixteenth.[113] The circumstances in this case were peculiar. English woolens were not a final good but an intermediate product: they required extensive finishing before they were ready to be sold to the consumer. It was in

[109](Nicholas 1997) Ch. 1
[110](Phillips 1983)
[111] (Coornaert 1967)
[112](Mazzaoui 1981), p 145
[113](Munro 1977)

the interests of Flemish producers of unfinished cloth to ensure that Flemish finishers used their product rather than the competing cloth from England.

There was another, more widespread, exception in the fifteenth century. The wars of the fourteenth century had, by raising trading costs, fragmented the European market. Protected from competition in this way, regional manufacturing—especially of inexpensive textiles—had flourished. All over Europe textile industries had grown producing not for export but for the local market. With the return of relative peace in the mid-fifteenth century and the consequent reintegration of the market, these local industries faced increasing competition from the traditional centers of textile manufacturing. Local industries therefore clamored for protection and rulers responded.[114] In Spain the pressure for protection was exacerbated in the first half of the sixteenth century by inflation, which lowered the relative price of imported textiles. At the same time, the value of protection was increasing in Spain because of the rapidly expanding colonial market.[115] That such policies were intended to further local rather than national interests was especially clear in Spain, where the trade restrictions of each of the five kingdoms applied as much to their trade with one another as they did to trade with England or France.[116]

There is another case that historians have often characterized as protectionist—the urban suppression of rural industry. However, the motive here was not really protectionist. The cities were motivated by two quite different issues. First, rural manufacturers often produced cheap imitations of the cloth produced in the cities. This damaged the cities' reputations as producers.[117] Second, manufacturers often moved out of the city and into the neighboring countryside in order to evade city taxes.[118]

Independent cities could regulate rural production directly within their territories. Dependent cities, however, had to enlist the support of the territorial ruler in regulating rural production. For example, in 1531 the cities of the Low Countries convinced their ruler, Charles V, to issue an edict prohibiting the establishment of new industries outside

[114]For example, in France and Spain: (Heckscher 1935) Part III Ch 3; (Cipolla 1971)
[115](Hamilton 1932)
[116](Hamilton 1932)
[117](Nicholas 1992)
[118](Hoppenbrouwers 2001)

their city walls.[119] They also took what measures they could themselves. Leiden, for example, prohibited the sale of raw material and capital goods to rural producers and banned the sale of their output in the city.[120]

Cities producers enlist the support of their territorial rulers in other ways too. For example, in fifteenth-century Castile, wool manufacturers convinced the crown to require that one third of the wool purchased by merchants for export be sold instead, at cost, on the local market.[121]

### The impact of protectionism

These interventions, both in commerce and in production, were of limited effectiveness. To the extent they were effective, they were harmful. The staple of Ghent significantly raised the cost of grain in Flanders. The exclusion of English cloth from Flanders gave a big boost to the competing industry of Brabant, which did not impose such a ban. Seville's monopoly of trade with the Americas hurt the colonists, who consequently were only too happy to trade with English and Dutch interlopers.

Similarly, regulation suppressing rural manufacturing was largely ineffective.[122] Where it was effective, rural manufacturers readily switched to other products that were not regulated.[123] Indeed, the relationship between urban and rural producers was generally one of symbiosis rather than competition and conflict.[124]

## BULLIONISM

Bullionism was an important special case of the policy of provision. It was characteristically a policy of territorial rulers rather than one of cities. This was not because cities were unconcerned about the supply of bullion, but rather because rulers quite early on reasserted their authority over monetary matters.[125]

Because seigniorage from the production of coin was an important source of revenue, rulers had always been anxious to ensure a steady supply of gold and silver to their

---

[119](de Vries and van der Woude 1997) Ch. 8

[120](Noordegraaf 1997)

[121](Phillips and Phillips 1997) Ch. 10

[122](Miskimin 1977) Enforcement was more vigorous in France than in England.

[123]In Flanders, rural producers switched from woolens to linen ((Van Werweke 1954))

[124]See (Kohn forthcoming) Ch 4. (Caferro 1994) argues that this was so even in the relationship between the Italian cities and their *contadi*.

[125]See (Kohn forthcoming) Ch 20.

mints.[126] If bullion was in short supply, minting came to a halt and seigniorage revenue dried up. But rulers were also concerned about the supply of bullion for another reason—liquidity.[127] The waging of war required large amounts of ready cash. This made a plentiful supply of bullion a military necessity. It was not surprising, therefore, that bullionist policies became more pronounced during the wars of the fourteenth century and even more so during the 'bullion famine' of the fifteenth century.[128]

As with the policy of provision in general, bullionist interventions can usefully be divided into two categories—direct intervention and trade policies.

## Direct intervention

It was common for rulers to ban the export of bullion or coin. In England, for example, the first major prohibition came in 1299 and prohibitions remained in force, in one form or another, into the seventeenth century.[129] Following the prohibition of 1299, the English church, which had long remitted taxes to Rome by shipping coin, had either to seek special permission or rely on bills of exchange.[130] Castile too had a long history of prohibitions of the export of bullion and coin going back to 1268.[131] In 1442 John II required that payments to Rome be made either by bill of exchange or by shipment of commodities. Henry VI was so exasperated by widespread violation of his prohibition of the export of bullion that he increased the penalty from confiscation of goods to death.

It was common too for rulers to require importers of bullion (exporters of goods) to bring their bullion to the mint to be coined.[132] To prevent exporters of goods from bringing back foreign coins that would compete with coin minted by the ruler, and so reducing this seigniorage revenue, foreign coins were either not allowed into the country or required to be brought to the mint to be recoined.[133] For example, from 1430 the Merchants of the Staple (English merchants selling wool at Calais) were required to bring

---

[126] See (Kohn forthcoming) Ch 7 on minting and seigniorage.

[127] See (Kohn forthcoming) Ch 20.

[128] (Miskimin 1977) Ch. 5. "The monetary policy of medieval governments in Western Europe can probably be best described as a general scramble for a dwindling supply of bullion." ((de Roover 1949)p 49). See (Kohn forthcoming) Ch 7 for more on the bullion famine.

[129] (Munro 1972), (Clay 1984)

[130] (de Roover 1949) p38.

[131] (Hamilton 1932)

[132] (Postan 1973) Ch. 1.

[133] (Munro 1979)

75% of the value of the cloth they sold immediately to the Calais mint in the form of foreign coin or bullion.

Rulers suspected, not always without grounds, that the financial system was working to frustrate their bullionist restrictions. They frequently blamed shortages of bullion on the activities of money-changers, bullion dealers, and bankers, and they increasingly restricted their activities. In the late fifteenth century, the Burgundian rulers of the Low Countries went so far as to ban banking altogether.[134] Rulers were suspicious, too, of the use of bills of exchange. From the 1430s, the English crown attempted to force merchants trading in the Low Countries to abandon the use of bills of exchange and to sell only for cash.[135] In some cities too—especially in the Hanseatic League—bullionist concerns prompted restrictions on financial intermediaries and on the use of financial instruments.[136]

While the purpose of these bullionist interventions was to ensure an adequate flow of bullion to the ruler's mints, the overall supply of bullion was not generally the issue. Most 'shortages' of bullion were a result of the mints offering too low a price for it.

The mint price was a function of the seigniorage rate—the percentage of the coin produced from the bullion that the ruler kept for himself.[137] If seigniorage was higher at home than it was abroad, then the mint price was correspondingly lower, and bullion tended to flow out to where it was valued more.[138] The obvious remedy—one distasteful to the ruler—was to raise the mint price by lowering the seigniorage rate. Of course, it was possible to pay a higher price *without* sacrificing seigniorage by paying the price in debased coin. Debasement was quite effective in increasing the flow of bullion to the mint in the short run. However, if resorted to excessively it created expectations of further debasement, and this caused hoarding. Such hoarding could be a major factor in exacerbating the shortage of bullion. Indeed, to a significant extent, the acute bullion

---

[134]See (Kohn forthcoming) Ch 8.

[135](Postan 1973) Ch. 1

[136](Day 1987) Financial instruments had been used extensively in the Hanseatic cities in the fourteenth century. However, as bullion became ever more scarce during the fifteenth, the authorities became increasingly hostile to their use.

[137]See (Kohn forthcoming) Ch 7.

[138](de Roover 1949) p 77

shortages of the fifteenth century—'bullion famine'—were a result of just such hoarding.[139]

Bullionist policies continued into the sixteenth century—most incongruously in Spain, where there was a growing flood of bullion imports from the Americas.[140] The Cortes petitioned repeatedly for new and more effective measures to prevent the export of bullion and a series of new laws were passed to this effect.

In this Spanish bullionism, we see again the difference in motivation between cities and the territorial ruler that we observed earlier with respect to the policy of provision. The cities, represented by the Cortes, seemed genuinely to wish to prevent the export of bullion, presumably to ensure an adequate supply of coinage for trade. The motivation of the ruler, on the other hand, was entirely fiscal. For the ruler, bullion was just another export that could be exploited for fiscal purposes—like wheat in Sicily and wool in England. In 1551, Charles V lifted the ban on exports and granted export licenses to the international bankers financing his wars.[141] Despite bitter complaints from the Cortes, Philip II continued this practice and bullion export licenses became a key component of the *asiento* system of finance after 1559.

The crown did everything it could to increase its revenue from bullion. From the beginning of colonization, it vigorously promoted the search for and exploitation of gold and silver deposits.[142] To ensure that all the bullion reached the royal mints, the crown required that it be shipped back to Spain on government fleets where it could be monitored and protected.

## Trade policies

Even before the concept of the 'balance of trade' became current in the seventeenth century, rulers understood the reciprocal relationship between flows of goods and flows of bullion.[143] They realized that imports reduced the amount of bullion in the country and

---

[139]See (Kohn forthcoming) Ch 7.

[140](Hamilton 1932) p 216

[141](Martín 1994) Before, lenders had been obliged to purchase goods (mainly non-bullion commodities) in Castile and ship them abroad in order to recover the money they had lent to the Spanish crown, mostly outside Spain.

[142](Vicens Vives 1969) Ch. 30; (Hamilton 1932)

[143]The term 'balance of trade' first appeared in print in 1623 ((Davies 1994)).

that exports increased it. Consequently they pursued a variety of policies aimed at reducing imports and increasing exports.

Policies aimed at reducing imports had to be selective, of course, in order not to conflict with the needs of provision. Generally, such policies applied to luxury goods rather than to necessities. A typical accusation against foreign merchants (often made by their domestic competitors) was that they brought in unnecessary baubles and took out in exchange valuable treasure.[144] To reduce the demand for luxuries, rulers imposed sumptuary laws. For example, during the English import boom of the 1540s (caused by Henry VIII's debasement), laws were passed to discourage excessive spending on wine and clothing.[145] Governments also imposed import duties on luxuries: France did so in the fourteenth century, for example.[146] And efforts were made to force foreign merchants to balance their imports with exports of domestic goods rather than with exports of bullion. In England, in accordance with recommendations from a panel of experts, Parliament passed the 'Statute of Employment' in 1390, requiring foreign merchants to take out English goods of a value equal to the value of the goods they brought into the country.[147] Invisible imports did not escape the notice of policy-makers: in fourteenth-century England, Richard II took steps to limit the foreign travel of his subjects, especially tourists (pilgrims).[148]

A desire to reduce imports was one reason the rulers of France forbade their merchants from attending the fairs of Geneva and simultaneously promoted their own fairs at Lyons.[149] However, moving the venue did not seem to alter the balance of trade. So between 1484 and 1489 Charles VIII closed the fairs of Lyons because "all the gold and silver of this kingdom, whether coined or in bullion, is taken away and transported outside this kingdom by foreign merchant and others."[150]

---

[144](Miller 1971)

[145](Clay 1984)

[146](Wolfe 1972)

[147](de Roover 1949), (Miller 1971). Castile adopted a similar statute of employment in 1491 to address its adverse balance with Navarre ((Hamilton 1932))

[148](Miller 1971)

[149](Miskimin 1984).

[150](Boyer-Xambeu, Deleplace et al. 1994) p77

To reduce dependence on imports, rulers encouraged domestic production of substitutes. For this reason, Louis XI of France decided in 1466 to establish a domestic silk industry in Lyons: at the time, imports of Italian silk were running at some 500,000 *écus* per year. Louis brought in Italian artisans and rewarded them with tax exemptions and subsidies (paid for by the reluctant citizens of Lyons).[151] There were attempts at import substitution too in 'invisibles': bullionist considerations were a significant factor in policies aimed at strengthening merchant fleets and so reducing the dependence on foreign carriers.[152]

Import substitution was also an important motivation for colonization: colonies could provide necessary raw materials 'domestically', so avoiding a loss of bullion. Of course, the Spanish colonies in the Americas were a source of bullion, and the crown did everything it could to prevent 'leakages' through trade. It prohibited the colonies from trading with foreigners and even restricted trade among the colonies themselves.[153]

Rulers also followed a variety of policies to stimulate exports in order to improve the balance of trade. This was one reason why the rulers of both France and England promoted the formation of trading companies—to better market the country's goods abroad.

### The impact of bullionist policies

As we have seen, the shortages of bullion which these interventions were intended to address were largely the consequences of incentives created by mint policy. The interventions were not generally effective in the face of these incentives. However, they were capable of causing considerable collateral damage. This was especially true of interventions aimed at the financial system. For example, the attempts of the English government in the fifteenth century to prevent wool exporters from selling against bills of exchange brought that trade to a virtual standstill.[154] Bills of exchange were not only a means of remittance that circumvented the shipment of bullion but also an essential

[151](Miskimin 1984) The industry became profitable only after Charles VIII's invasion of northern Italy in 1494 destroyed the competition.

[152](Miskimin 1977)

[153](Hamilton 1932)

[154]It also caused significant damage to cloth manufacture in the Low Countries and a general shift there to Spanish sources of wool. ((Wilson 1925 [1572]); (Munro 1979))

instrument of credit. Similarly, the banning of deposit banking in the Low Countries in the late fifteenth century and the hostility of the Hansa to financial intermediaries and instruments served only to increase trading costs and to harm trade. Trade policies were no more successful. Those that defied market incentives had little effect but to increase trading costs.

In the sixteenth century, bullionism exacerbated the difficulties of the Spanish economy in adjusting to the huge inflow of bullion from the Americas. In the first half of the century, by retarding the flow of bullion out of the country, it only served to exacerbate domestic inflation. Prices rose at 2.8% per annum from 1501-1562 compared to 1.3% for the rest of the century—despite much larger shipments of silver in the later period.[155] A particularly rapid rise of prices in the late 1540s caused the Cortes to petition Charles V for a ban on exports—even to the Americas—as well as a removal of obstacles to imports. Charles passed this 'antibullionist' policy (minus the ban on export to the Americas) in 1552. When bullion exports were liberalized after 1560, domestic manufacturing, which had been over stimulated by the earlier inflation, collapsed in the face of competition from cheaper imports.[156] Even Spanish wool found itself priced out the international market.[157]

**MERCANTILISM**

The 'mercantilist' policies of the sixteenth century were largely an extension and an intensification of the bullionist policies of the fifteenth.
Widespread support for bullionist measures had legitimized interventions that in earlier centuries would have been considered infringements of subjects' rights.[158]

While the policies were mostly the same, there was a shift in motivation. Because of renewed warfare on an unprecedented scale, rulers were increasingly desperate for revenue. In Elizabethan England, for example, economic policy was characterized by a

---

[155](Elliott 1989) Ch. 10

[156]The price of tradable goods fell 10-15% relative to non-tradables after 1550 (Drelichman 2003).

[157](Vicens Vives 1969) Ch. 25

[158]In fifteenth century France, for example, pleas to the crown to help with postwar economic recovery focused on the lack of bullion. "Such pleas, of course, invited the crown to extend its authority and to enter and act upon areas of French society that had hitherto escaped the touch of the medieval monarchy." ((Miskimin 1984) p 92).

"vicious and all pervasive fiscalism".[159] Rulers were also worried about their vulnerability to economic warfare through their dependence on trade for strategic supplies and for economic prosperity. In these circumstances, whatever the nominal justification for a policy, the dominant considerations were always fiscal and strategic. In England, for example, fiscal and strategic considerations lay behind policies as diverse as the chartering of trading companies, the granting of patents and monopoly, and the reform of the currency.

There was another new, or at least strengthened motive in mercantilist policies. The power of territorial governments, which had been growing in the fifteenth century, continued to grow in the sixteenth.[160] This created the opportunity for extensive rentseeking: fiscal need and increasing power meant that rulers were both willing and able to tilt the economic playing field to the advantage of anyone willing to pay.[161] Therefore, with the power of subject cities declining in many places, merchants and manufacturers increasingly pursued their economic interests through rentseeking at the territorial level. The emergence of representative assemblies in the preceding centuries had made it easier for interest groups to organize and to negotiate with rulers.[162]

The resulting mix of mercantilist policies increasingly resembled "a city policy extended over a wider area—a kind of municipal policy superimposed on a state basis."[163] The mix included a continuation of policies of provision and bullionism, as well as an intensified protectionism and the creation of a growing number of monopolies. We shall focus on the latter two.

### Policies for trade and industry

Territorial rulers had begun to restrict imports and to promote exports mainly for bullionist reasons. Now, at the urging of their cities, their trade policies became more explicitly protectionist. Commercial protectionism continued much as before. Cities

[159](Stone 1947)

[160](Nef 1950) Ch. 1

[161](Ekelund 1997) makes a strong case for understanding mercantilist policies in terms of rentseeking.

[162]"Protectionist ideas born in the town market-place broadened into a doctrine akin to economic nationalism, and its protagonists found in parliament a vehicle for presenting it effectively." (Miller 1971)p 339

The simultaneous decline in the power of the nobility, who had generally favored free trade, removed an important obstacle. ((Miller 1971))

[163](Heckscher 1935) p 131. Hecksher calls this a common description of mercantilism.

continued to struggle to control trade and they continued to depend on their rulers to protect them from competition. In England in the 1550s, domestic merchants finally succeeded in pressuring the crown to revoke the privileges in England of their Hanseatic competitors and to impose restrictions on other foreigner traders: "'The natives here,' reported the Venetian ambassador, 'have laid a plot to ruin the trade of all foreign merchants'".[164]

There was a change too with respect to the promotion of exports. Governments continued to do this, but their motivation was now less bullionist than strategic—driven by a desire to reduce their vulnerability to economic warfare. For example, in the late sixteenth century exports of England's primary export, woolen cloth, were highly concentrated in the Low Countries.[165] However, the Low Countries were under the control of Spain, and English relations with Spain were deteriorating. To reduce England's vulnerability to a possible trade boycott, the English government promoted efforts to seek alternative outlets for England's exports.[166] This was an important reason for the crown's support of various trading companies such as the Russia Company and the Levant Company.[167]

The motivation for policies of import substitution changed in much the same way. With the resumption of widespread conflict in the sixteenth century, rulers promoted domestic production not so much to conserve bullion as to secure their supplies of strategic goods. For England, for example, the Low Countries were also the source of most of its imports, including military supplies. So the English government promoted domestic industry, especially in areas of military value such as mining, metallurgy, and ship-building.[168] The measures adopted were much like those that cities had long employed in promoting the establishment of new industries—luring foreign craftsmen by offering them attractive terms; granting monopolies, patents, and tax exemptions to those willing to set up new enterprises in the industries in question.[169]

---

[164](Fisher 1940) p 109

[165]Which now permitted their importation.

[166]In the 1580s Spain did begin to use embargoes against its English and Dutch enemies ((Israel 1990))

[167](Willan 1956); (Wood 1935)

[168](Palliser 1983) Ch. 8; (Clay 1984)

[169](Clay 1984) p 210; (Mokyr 1990) p 78. See also (Kohn forthcoming) Ch 4.

In addition, governments took direct action themselves to establish domestic industries—especially in the area of armaments. The Venetian state had long produced war galleys at the huge *Arsenale* in Venice.[170] Now, as naval ships became more specialized, many other governments became directly involved in shipbuilding.[171] Many also sponsored or managed directly the production of munitions and the mining industries that supplied them with raw materials.[172] In the 1570s, Philip II of Spain launched an ambitious program to bring the production of military supplies under direct royal control.[173] Government officials supervised construction in the shipyards of Cantabria. The government owned and operated arsenals, ordinance factories, iron-works, foundries, powder mills, and munitions houses to supply arms and ammunition to the royal armies and navies.

Rulers also intervened to preserve stability and to prevent civil unrest. For example, as European silver mines became increasingly unprofitable in the sixteenth century, because of competition from lower-cost production in the Americas, rulers took them over in order to maintain production.[174] In England, after a rapid expansion of woolen textile manufacturing in mid-century, the industry subsequently faced serious overproduction and contraction. The government came to its assistance in various ways, including the Statute of Apprentices of 1563 which tightly regulated conditions of employment and production and set caps on wages.[175]

Some interventions in trade and industry was purely fiscal in motivation. A number of governments, particularly those of France and Spain, relied on the sale of offices as a major source of revenue and liquidity. Rulers therefore shared an interest with office-holders in proliferating regulations and interventions for the office-holders to administer: "An important reason why many… permits and regulations exist is probably to give officials the power to deny them and to collect bribes in return for providing the

---

170(Steele 1994)

171(Unger 1980)

172On Tudor England, see, for example (Palliser 1983) Ch. 8.

173(Thompson 1976) The 'imports', from whom Philip wished to end his dependence, largely came from the Low Countries, Naples, and Milan all of which were actually Spanish possessions.

174(Blanchard, Goodman et al. 1992), (Nef 1987)

175(Fisher 1940)

permits"[176] New interventions and regulations could either increase the value of existing offices, so raising the selling price, or provide a justification for the creation and sale of new offices.

In some cases rulers seem to have intervened for no other reason than that they had the power to do so. In France in particular, especially after the accession of Henry IV in 1589, rulers increasingly intervened to promote domestic industries producing luxuries for the royal court and for the nobility, such as fine glassware, luxury cloths, and tapestries.[177] This policy followed on from the earlier establishment in France, in the fifteenth-century, of a domestic silk industry. We have seen that this was motivated by bullionist considerations, but by the end of the sixteenth century bullionism no longer seems to have been an important motivation for this policy.

### Monopolies

Territorial rulers used their command of violence to generate revenue. One way of doing this was to create and sell monopolies. Creating a monopoly generated a flow of monopoly rents (increased profits) that could be shared between the ruler selling the monopoly and whoever purchased it. Rulers usually sold the monopoly rights that they created rather than trying to exploit them directly themselves. They did so for much the same reasons that they often farmed taxes. First, they lacked the necessary administrative capacity to perform the task competently themselves: a monopoly (or a tax farm) placed in private hands would be better run and so more valuable.[178] Second, the sale of the rights enabled the ruler to capitalize future cash flows. The purchaser paid up front the present value of the ruler's share of expected monopoly profits (or taxes).

The creation and sale of monopolies was by no means a new idea: the practice had been common in the ancient world.[179] The first significant example in medieval Europe,

---

[176](Shleifer and Vishny 1993) p 601. On the fiscal importance of sale of offices, see (Kohn forthcoming) Ch 20.

[177](Nef 1940) Ch. 3

[178]"…trade carried on by the state met… with insuperable difficulties of a purely practical character, such as the lack of discipline and the dishonesty of nearly every state administration of the period." (Heckscher 1935) p 341

See (Kohn forthcoming) Ch 20 on the development of government administration.

[179](Webber 1986) Ch 3

however, was in thirteenth-century Naples and Sicily.[180] Territorial rulers there established monopolies for the supply of raw materials such as iron, steel, and pitch, for the sale of salt, for the dyeing of cloth, and for the export of wheat. They licensed these monopolies to merchants who collected a tax for the ruler (50% on iron for example) plus a margin of their own (salt sold at a markup of 600%-1,300%). The wheat export monopoly went to merchants who could provide substantial loans on favorable terms. A little later, the rulers of England created a wool export monopoly, selling the rights first to Italian merchants and later to the English Merchants of the Staple.[181]

From the middle of the fifteenth century, the creation and sale of monopolies became increasingly common, and it became an increasingly important source of revenue for territorial rulers. Rulers created and sold both production monopolies and trading monopolies.

*Production monopolies*

Most production monopolies were in mining. The ability of rulers to create such monopolies derived from their rights over the extraction of bullion, which in turn derived from their regalian rights to control the coinage. The connection between coinage and the mining of precious metals was obvious, but rulers tried to expand their rights to encompass the mining of other metals and even of non-metals.[182] The ruler's rights varied from place to place, but they typically included a right of preemption—a right to purchase all or part of output at a below-market price.

The first important mining monopoly was in alum—a vital input to the textile industry. In 1466 a rich source of alum was discovered at Tolfa in the papal states just as the traditional sources fell under the control of the Ottomans. The Medicis enlisted the support of the pope to exclude Turkish alum from Europe and to create an alum cartel. Although the cartel lasted only a few years, it seems to have opened the eyes of other rulers to the potential of monopolies as a source of revenue.[183]

---

[180](Pryor 1979)

[181]"The king wanted a company of merchants to whom he could give a monopoly in the export of wool, so as to tax monopoly profits by means of a heavy export duty and raise loans from merchants on the security of the duty." ((Power 1942), p88). See too (Kaeuper 1988).

[182](Nef 1987)

[183](de Roover 1948) p 44

When silver deposits were discovered in the Tyrol in the late fifteenth century, the Hapsburg rulers of Austria sold their rights of preemption to the Fuggers, a major merchant banking house.[184] The Fuggers later extended their control of the sources of silver to new discoveries in Hungary. They also worked to establish a cartel in the production of copper, a major side-product in the smelting of silver.

The rulers of France and of England created dozens of mining monopolies in the sixteenth century.[185] The French monopolies were generally more successful than the English because of the superior ability of the French government to enforce them: England lacked the extensive system of administration of the French. The French even set up a special bureau—the national administration of mines—to enforce its mining monopolies and to collect the government's share of the revenue.

Perhaps the most successful French monopoly, from the government's point of view, was the monopoly on salt. In the fourteenth century, French merchants—with the help of local lords—had established regional salt cartels. As the crown gained increasing control of the country in the fifteenth century, it took over enforcement of these cartels and consolidated them into a national system.[186] In north and central France, the crown established official warehouses (*greniers)* with the sole right to trade in salt and to set its price.[187]

Enforcing monopolies in manufacturing was inherently more difficult than it was in mining, because production was geographically much less concentrated.[188] The rulers of France found a solution to this problem: they converted the artisan guilds into an instrument of government control. The guilds themselves, although they had sometimes tried to enforce monopolies, had generally been unable to do so: it was simply too easy to set up shop outside their jurisdiction.[189] Royal regulation of the guilds had begun in the fourteenth century. However, it was the severe economic disruptions of the fifteenth that

---

[184](Strieder 1931)

[185]In England, "Industrial monopolies were auctioned to the highest bidder." (Stone 1947)

[186](Wolfe 1972) Ch. 1

[187]The English government attempted to emulate the French in establishing a salt monopoly, but its efforts came to nothing ((Nef 1940) Ch. 3)

[188]This was less of a problem for the new manufactures that territorial rulers themselves promoted (see above), and they often offered monopoly rights as an additional inducement. Since these new manufactures were typically unprofitable, at least initially, these monopolies were not difficult to enforce.

[189]See (Kohn forthcoming) Ch 5.

made the guilds receptive to intervention and opened the way for the creation of effective monopolies.[190] In 1467 Louis XI began to enforce restrictions on non-guild competition, imposing heavy fines on violators—half of which went to the crown. Government regulation of the guilds was tightened in the sixteenth century and again in later centuries.[191] The rulers of Spain successfully followed the French example, also strengthening their guilds through the use of state power.[192]Elizabeth tried the same idea in England but with much less success. Again, the English system of local administration was far less effective, and it proved quite unable to suppress non-guild competition.[193]

Agriculture lent itself even less readily to monopolization than did manufacturing. However, there were examples. In Castile, the Mesta was an umbrella group of local associations of wool producers. Its primary function was to secure routes for transhumant herds of sheep, especially against bandits and against the imposition of local transit taxes. The Mesta also tried to act as a cartel, limiting production to keep up prices. The Mesta found it advantageous to purchase the services of the crown both to protect it from local predation and to police its members.[194] The crown was delighted to oblige—not only because of the rewards the Mesta could offer, but because customs on the export of wool were a major source of crown revenue. The government's fiscal interest in wool led it to favor the interests of the Mesta over those of arable farmers along the migration routes, even at the expense of overall agricultural productivity.[195]

As we have seen, rulers also created monopolies for non-fiscal reasons—mainly to promote import substitution in industries of strategic value. Individuals or groups willing

---

[190]"The state, by its intervention, wanted to create large sources of revenue for itself, under the more or less false pretence of guiding industry along the right lines." ((Heckscher 1935) p178)

[191](Ekelund 1997) Ch. 4; (Heckscher 1935) Ch. 2. "As a result largely of the intervention of the crown in municipal industry, the gilds flourished during the reign of Louis XIV as they had never flourished in the Middle Ages." ((Nef 1940) p15)

[192](Vicens Vives 1969) Chs. 23 & 26

[193](Ekelund 1997) Ch. 3. See (Kohn forthcoming) Ch 21 on the different systems of local administration in England and in France.

[194](Ekelund 1997) Ch. 5

[195](Davis 1973) Ch. 4. In Sicily, the situation was just the opposite. There it was customs on wheat exports what were a major source of revenue, and in the mid-fifteenth century the government supported farmers who wished to convert pasture into arable ((Epstein 1991) Ch. 4).

to establish such an industry were granted a monopoly, usually for a fixed number of years. The Tudor rulers of England were particularly active in this area.[196]

*Trading monopolies*

Trading monopolies had a long history too. As we have seen, subject cities had often purchased the support of their territorial rulers in enforcing their exclusive rights to a particular trade. This had mainly resulted in the creation of monopolies within the territory of the ruler in question (staples and export monopolies). However, with the explorations of the late fifteenth century, cities and rulers combined to establish monopolies over trade outside the ruler's territory—especially over the new trans-oceanic trades.

The rulers of Portugal and Spain played a major role in opening up and in controlling transoceanic trade. They directly supported exploration and conquest, and they employed force to protect their own traders and to plunder foreign traders. They also employed force to maintain a monopoly of the trades they helped to establish. This mix of state-supplied violence and private commerce was strikingly similar to the way in which the maritime republics of the Mediterranean, especially Genoa and Venice, had opened up trade with the Muslim world in earlier centuries.[197] The similarity is, of course, not coincidental: Italians, especially the Genoese, played a major role in organizing the Portuguese and Spanish overseas expansions.

The Portuguese crown initially exploited its monopoly of trade with Asia directly itself. In the early sixteenth century, it set up a system of fortresses, factories, warehouses, and fleets, all managed by the *Casa da India* in Lisbon.[198] The crown reserved the trade in spices and treasure for itself, but it permitted private trade in other goods.[199] The state-run monopoly, however, functioned poorly. Officials and seamen devoted most of their energy to their own private trading and to lining their pockets in

---

[196](Nef 1940)

[197](Lane 1950); (Scammell 1981)

[198](Scammell 1981) Ch. 5. The organization was similar in many ways to that of the trading monopolies of Genoa and Venice.

[199]Subject to a 20% tax, the *quinta* ((Coornaert 1967)).

other ways.[200] By the late sixteenth century, the crown was ready to farm its monopoly rights to private merchants.[201]

In contrast, Spanish trade with the Americas was initially unregulated. However in 1503 the *Casa de Contratación* was set up on the model of the Portuguese *Casa da India*.[202] It soon became clear, however, that a state monopoly along Portuguese lines was unsuited to the very different circumstances of the transatlantic trade. Private initiative was clearly essential if the potential rewards of colonization were to be realized.[203] By 1510, the role of the *Casa de Contratación* had changed to one of regulating and taxing private trade. As we have seen, the monopoly of trade with the Americas was granted to Seville. It was enforced by requiring merchants who traded with the Americas to ship only on state-sponsored fleets.[204]

Both the nature of overseas trade and the organization of monopolies was different in England. As we have seen, a wool export monopoly had already been established in the fourteenth century. This monopoly was granted not to a particular city (as in Spain with Burgos) but rather to an *ad hoc* association of merchants. The members of this association included merchants from a number of English cities as well as some foreigners. Another *ad hoc* association—the Merchant Adventurers—was formed on private initiative in the fifteenth century by merchants exporting English cloth to the Low Countries.[205] Its purpose was mutual protection and joint negotiation with the Burgundian authorities for trading rights. The Merchant Adventurers had difficulty in preventing non-members from free-riding on their efforts and were unable to form an effective cartel. So in 1564 they purchased a royal charter that granted them the official monopoly of trade with the Low Countries. The Tudor government had already granted a similar monopoly

---

[200]"Already in 1508 royal officers were said to be too immersed in their own business affairs to attend to those of the crown.… With only three years—the usual term of service—to make their fortunes, exactions reached such a pitch that, as in Malacca, trade was driven elsewhere." ((Scammell 1981) p274).

Officials and seamen were permitted to ship their private goods on royal ships: private cargo sometimes equaled royal cargo in value. ((Coornaert 1967))

[201]"The crown accordingly turned to the well-tried expedient of farming out to others what it could or would not do itself." ((Scammell 1981) p273). See (Subrahmanyam and Thomaz 1991) for details of the arrangements.

[202](Haring 1918)

[203](Stein 2000)

[204](Coornaert 1967)

[205]See (Kohn forthcoming) Ch 16 on the Merchant Adventurers and on merchant associations in general.

for the trade with Russia to another group of merchants, the Russian and Muscovy Company in 1555. Other monopolies followed—the Spanish Company in 1577, the Eastland Company in 1579 (trade with Danzig), the Levant Company in 1581 and a number of others, culminating with the most famous of them all—the East India Company in 1600.[206] By the end of the sixteenth century almost all of England's foreign trade had been divided up among the different monopolies.[207]

Despite France's success in creating industrial monopolies, it was relatively unsuccessful in establishing trading monopolies. The basic reason was the difficulty of enforcement. Enforcement was easier when there was a single major export—like woolen cloth in England or wool in Spain. Enforcement was also easier when the government could control transportation. However, France did not have a single major export, it was not an island, and its government did not control the transportation of its foreign trade. In the fifteenth century, Louis XI did try to organize several monopoly trading companies—including the Mediterranean Company of Jacques Coeur—but they were all unsuccessful.[208] They were also politically unpopular. Merchants opposed them because the monopolization of trade conflicted with their goal of building up Lyons as an important international entrepot.[209] Nobles opposed monopolization too because it raised the price of imported luxuries, of which they were the principal purchasers. In 1484 the Estates General issued a strong declaration in favor of freedom of trade, and there were no further attempts at monopolization of trade until Colbert established the French East India Company in 1664

For territorial rulers the major benefit of creating trading monopolies was fiscal. The fiscal reward could take a variety of forms—a tax that represented a share of the monopoly profits; a cash payment up front that capitalized this cash flow; or preferential loans. Another way for the ruler to benefit was by becoming a silent partner in the enterprise. Elizabeth, for example, was a major shareholder in a number of joint stock

---

[206](Rosenberg and Birdzell 1986) Ch. 5; (Harris 2000)

[207]The Merchant Adventurers remained by far the most important, accounting for about 75% of cloth exported from London. The Adventurers had some 3,500 members in 1600, of which some 200 were active and the largest 30 accounted for over half the trade. ((Clarkson 1971))

[208](Miller 1971), (Coornaert 1967)

[209]See (Kohn forthcoming) Ch 17 on the tradeoff between garnering monopoly rents and encouraging market participation.

trading companies. In 1579 she invested £40,000 in the Levant Company (part of her cut of the Spanish bullion taken by English privateers).[210] Influential nobles also received shares in return for their influence at court in obtaining the monopoly for the investors.[211] With the exception of the explicit tax, none of these monopoly-related sources of revenue required the consent of a representative assembly. Since representative assemblies were often difficult, this was a major advantage of monopolies over other potential sources of revenue.[212]

There were also non-fiscal benefits from the creation of monopolies. Like tax farmers, purchasers of monopolies provided the administrative capacity that rulers generally lacked. Trading monopolies also frequently provided rulers with military support, especially at sea: they built overseas forts and built and maintained ships that could be mobilized in times of war.[213] The granting of a staple to a foreign city was a way to reward allies.

What territorial rulers provided in return was enforcement—that is, protection against competitors or 'interlopers'.[214] For the English trading monopolies, this meant principally protection against domestic interlopers. The crown authorized the companies to use force themselves to police their monopolies, and it made the royal courts available to punish interlopers with 'fines, forfeitures, penalties, emprisonments or otherwise'.[215]

In the case of Spain and Portugal, it was protection against foreign interlopers and pirates. The distinction between interloper and pirate was rather fuzzy: traders hoping to break into a trading monopoly had to come well armed, and if a potential prize came their

---

[210](Unwin 1927)

[211] "There were more immediate reasons for adopting the joint-stock form, not the least being that it provided royalty, courtiers, and other passive investors with a convenient means of participating in the profits of monopolized trade. A regulated company or other type of franchise would have mostly excluded such investors who had neither the skill nor inclination to engage directly in mercantile ventures but whose political influence was instrumental in securing and preserving monopoly charters." ((Jones and Ville 1996) p910). See also (McNulty and Pontecorvo 1983).

[212]{Harris, 2000 #2567

[213]{Harris, 2000 #2567}. However, the primary role of the forts was in enforcing the monopoly ((Ekelund 1997) Ch 6).

[214]The term 'interloper' was first used in 1590, and it referred to non-members of the monopoly or to members engaged in unauthorized trading. ((Willan 1959) Ch II).

[215](Harris 2000); (Willan 1959) Ch II. The interlopers also turned to the courts to appeal what they perceived as abuses by the holders of the monopoly.

way they took it.[216] The governments of Spain and Portugal provided protection to their transoceanic commerce in the form of heavily armed fleets.[217] Of course, rulers also provided support to their own subjects in breaking the monopoly of others. Elizabeth supported and profited from English privateering aimed at trading with the Spanish colonies and at raiding Spanish commerce.

Rulers also provided merchant monopolists with political support against domestic opposition to their privileges from the nobility and from other merchants who were not so fortunate as to be part of the monopoly.[218] The merchants who campaigned for 'free trade' in Elizabethan England were not seeking lower tariffs. Rather, they were demanding free access to trade for all merchants—not just the fortunate few who were members of the monopoly companies.[219]

There is a pattern here. Associations of traders (cities and merchant associations) and of producers (guilds) wished to create market power for their members but had very limited ability to do so. However, in exchange for suitable payment, they could enlist the help of their rulers. Rulers were able to use their command of violence to create market power. However, they lacked the means to exploit it. So it made sense for them to sell their monopoly-creating services to a group that was better able to exploit the market power that they created—an existing association or one created *ad hoc* for the purpose.[220] Paradoxically, this is an excellent example of the gains from trade!

**The impact of mercantilist policies**

Given the motivation of mercantilist policies—fiscal and strategic on the part of rulers, rentseeking on the part of their subjects—there is little reason to expect them to be anything but harmful to the economy.

Industrial policies generally, not only harmed the economy, but also failed in their objectives. State-owned industries were no more successful in the sixteenth century than they would prove to be in the twentieth. In Venice, for example, the *Arsenale* was not

---

[216](Pérotin-Dumon 1991)
[217](Parry 1967)
[218](Ball 1977)
[219](Willan 1959) Ch II
[220](Ekelund 1997) argue that the supply and demand of monopoly rights through the machinery of the state is the very essence of mercantilism.

competitive with private shipyards. To protect it from competition, the government placed restrictions on private shipyards—prohibiting them from producing ships of over 100 tons, for example—and banned the imports of ships. These restrictions and others hampered the development of Venetian shipbuilding and ensured its eclipse by the more dynamic private industry of Holland.[221]

The attempt of Philip II of Spain to bring the armaments industry under state control was similarly a failure.[222] Government officials lacked the incentives of private producers to cut costs and to monitor quality. For example, powder from government mills was so bad that it had to be re-refined before it could be used. Because of the government's perpetual fiscal crisis, government enterprises were constantly starved of financing. The resulting below-market pay meant a lack of skilled workers, and the resulting slowness in paying bills meant a shortage of materials. Consequently the output of the state-managed industry was never enough, and the military continued to depend on imports. Some of those imports came from the Dutch, even though they were then at war with Spain.[223] Indeed, the failings of state-owned production in Spain were highlighted by the contrast with the highly successful private armaments industry in the Netherlands.[224]

Other forms of industrial intervention were no more successful. For example, although the Spanish government did not take over shipbuilding directly in the same way that it did the production of arms, it did try to control it and to influence its direction. Specifically, it promoted the production of very large ships, which it believed to be superior in battle. Large ships were, however, less economical in commercial use, and this raised the cost of transportation for Spanish merchants.[225] Moreover, when it became clear that large ships were in fact inferior in battle to smaller ships, it was too late: the

[221](Lane 1973) Ch. 26

[222](Thompson 1976) Ch. 9

[223]"As early as the 1560s, when the Dutch revolt against Spain began, individual merchants in the rebellious provinces were not loathe to export weapons and ammunitions, even to the Spanish enemy." (Vogel 1998) p199

[224](Vogel 1998)

[225](Phillips and Phillips 1997) Ch. 11

Spanish shipbuilding industry had lost the skills needed to produce the smaller types of ships.[226]

Industrial policies in general slowed adjustment to changing circumstances and impeded technological progress.[227] Governments taxed strong industries to support weak industries. Monopolies and regulation froze existing structures and blocked institutional change. The government takeover of the guilds, especially in France, transformed them into an obstacle to progress—something they had not been before the government took them over.[228] Regulations intended to maintain quality became obstacles to cost-saving innovation. In addition, the French government's bias towards the production of luxury goods for king and court hampered the development of industries turning out cheap goods for the mass market.[229]

Trading monopolies too had harmful effects. To the extent they were effective they impeded trade.[230] High monopoly profits also provided  a strong incentives for interlopers to enter the market and to undermine the monopoly. For example, the Spanish settlers in the Americas, unhappy with the high prices and poor quality of the goods they purchased from the monopoly traders of Seville, were only too pleased to trade with the Dutch, French, and English interlopers who offered them a better deal.[231] It was these interlopers, heavily armed to protect themselves against Spanish patrol squadrons, who also preyed on Spanish shipping and settlements.

---

[226]"The limitations of the Spanish shipbuilding industry… lay primarily in design. By 1600 a century of royal policy, the profits of the American trade and the dangers of navigation in the north Atlantic had channeled the shipping industry almost exclusively into the construction of large, heavy-built, broad-beamed vessels. By 1617, the navy no longer wanted the massive 1,000-ton galleons of the 1590s, but the technical ability to build the fast 200-300 tonners now in vogue seems to have been lost. Even the best experts in Spain could not get their blue-prints right and the Cantabrian shipwrights consistently exceeded their specifications." (Thompson 1976) p203

"As Spain had gained experience from the same war as England and the Netherlands, we must suspect that the Spanish institutional framework for learning, adaptation, and change was deficient." ((Thompson 1995) p164).

[227](Miskimin 1977), writing on France, but his observations apply more generally.

[228]See (Kohn forthcoming) Ch 4.

[229]"[Government] influence upon the technical progress of the French nation was thrown more on the side of artistry and quality rather than on that of cheapness and quantity." (Nef 1940) p85

[230]"The question, therefore, of whether the Merchant Adventurers were an organ of expansion of English trade must clearly be answered in the negative.… They were certainly not organs of an expanding commerce. Where expansion was taking place, it found expression in resistance to the monopoly claimed by the companies." (Unwin 1927) pp 172-4

[231](Glete 1999) Ch. 9. The crews of the patrol squadrons, sent from Spain to enforce the monopoly and to protect Spanish shipping and settlements, often traded illegally themselves.

The creation of trading monopolies had an impact too on forms of business organization as it favored the development of large enterprises. Large firms did not arise naturally in the commerce of pre-industrial Europe. Economies of scale were generally addressed instead through the formation of merchant associations for joint action.[232] Indeed, some of these economies of scale arose from the need to bargain with governments over monopoly privileges and levels of taxation. For example, the Staplers and the Merchant Adventurers were 'regulated companies' (a form of association) that existed primarily to obtain monopoly privileges from the English crown. Since rulers were often desperate for liquidity, the best way to outbid others in the rivalry for monopoly rights was to offer the ruler large-scale lending on easy terms. In this, large firms had an advantage over merchant associations, because their superior credit gave them an advantage in borrowing the funds they needed to finance their loans. For example, the 'supercompanies' of the fourteenth century secured the export monopolies of grain from Sicily and of wool from England mainly because of their ability to borrow on a large scale. And it was only when lending to the crown became a decisive factor in England that regulated companies were replaced there by joint stock companies, which were organized as large firms rather than as associations.[233]

## CONCLUSION

The generally harmful effect of government economic intervention throughout the period was mitigated by its ineffectiveness. A major reason for this was the lack of effective administrative machinery. Local officials were few and poorly motivated; their tasks were many; and corruption was endemic. Poor communications made effective oversight impossible.[234] While enforcement was weak, incentives to circumvent regulations and restrictions were strong.[235] For example, when it was profitable to ship bullion, merchants did so despite the risk of confiscation or worse.[236] As we have seen,

[232] See (Kohn forthcoming) Ch 16.

[233] See (Kohn forthcoming) Ch 14. (Harris 2000) argues that "…monopoly became an almost inherent characteristic of the early business corporation, and a major factor in their future development." (p41)

[234] See (Kohn forthcoming) Ch 21 on government administration.

[235] "Economic forces and the material interests of thousands of private individuals acting in response to them, were too strong, and the power of the state, despite its grandiose pretensions, too feeble, for its attempt to freeze society into a static mould to succeed." ((Clay 1984) p238)

[236] (Munro 1972)

when trading monopolies earned significant profits, interlopers took great risks to gain access to the market in question. Indeed, even the rulers themselves did much to undermine their own regulations. To ensure the provisioning of their courts and their armies, they often relied on private middlemen, flouting their own laws requiring the use of public markets.[237]

More generally, rulers—always short of money—tended to turn interventions into taxes. As a result, the damage of economic intervention was to some extent self-limiting. The more harmful an intervention, the more merchants were willing to pay to be free of it, and the greater the temptation for the ruler to give it up in exchange for cash.[238]

By the sixteenth century, the administrative capability of governments was increasing—especially in France and Spain. An expanding government bureaucracy made intervention—at least potentially—more effective. However, the self-limiting mechanism was still at work: the greater potential for effective intervention was realized only partially. To a significant extent, it resulted instead in higher levels of exaction.[239] A large part of the proceeds, however, ended up not in the ruler's treasury but in the pockets of the bureaucracy. Rulers attempted to recapture some of this by selling official positions.[240] Of course, the sale of offices and the rewards of office gave rulers and officials a common interest in the proliferation of regulations for officials to enforce. The result was a syndrome of growing bureaucracy and increasing economic intervention.

The severity of this syndrome varied from place to place. In the sixteenth century, two very different systems of government were emerging in Europe. France and, to a lesser extent Spain, were examples of one of these systems—the 'imperial state'—in which the power of the state was growing at the expense of other centers of power such as the cities. The second emerging system of government was the 'associational state'—epitomized by the Dutch Republic. Here city-style associational government was

[237] (Nielsen 1998) Ch. 3

[238] "As regulation became more burdensome, charging denizens and aliens for exemption from tariffs and for licenses to trade in restricted areas became extremely lucrative for the government." (Kermode 1998) p193

[239] (Thompson 1998) notes with respect to the Castilian monopoly of trade with the Americas: "Indeed many of the export and trade restrictions became, in effect, if not in intention fiscal devices, enabling the Crown to sell licenses and exemptions." p283

[240] See (Kohn forthcoming) Ch 21.

extended to the level of the state.[241] It is in the imperial state that we find the syndrome of growing bureaucracy and increasing intervention. In the associational state there were constraints on the growth of the bureaucracy and political feedback to prevent or moderate the most destructive interventions. City protectionism continued in the associational state, but it was not elevated to the level of the territory as a whole as it was in the imperial state.

Government in England at the end of the sixteenth century did not really fall into either category. Instead, it continued with the system of 'medieval constitutional government' that had obtained across most of western Europe since the high middle ages. The rulers of England would have liked to have followed many of the policies and practices adopted by their French and Spanish peers, but they were unable to do so.[242] The constitutional constraints were too strong and the government's administrative apparatus was too weak. Local administrators, unpaid and often members of the commercial class, simply failed to enforce regulations they thought harmful to their own interests and to those of their peers.[243]English rulers were consequently forced to negotiate with parliament over the forms of intervention, and the most damaging kinds of intervention were therefore generally avoided.

[241]See (Kohn forthcoming) Ch 18 for more on these two types of government and how they evolved.

[242]"The differences in the character of the laws in the two countries were slight compared with the differences between the success of the French and English monarchs in enforcing them." (Nef 1940) p138

[243]See (Kohn forthcoming) Ch 21 on the different systems of local administration.

**REFERENCES**


Ball, J. N. (1977). *Merchants and Merchandise: The Expansion of Trade in Europe 1500-1630*. New York, St. Martin's Press.

Blanchard, I., A. Goodman, et al. (1992). Technological diffusion in the international mining and metallurgical industries: introduction. *Industry and Finance in Early Modern History*. I. Blanchard, A. Goodman and J. Newman. Stuttgart, Franz Steiner Verlag.

Boyer-Xambeu, M.-T., G. Deleplace, et al. (1994). *Private Money & Public Currencies: The 16th Century Challenge.* Armonk, NY, M.E. Sharpe.

Caferro, W. (1994). "City and Countryside in Siena in the Second Half of the Fourteenth Century." *Journal of Economic History* Vol. 54, No. 1.(Mar.): 85-103.

Cipolla, C. M. (1971). The economic policies of governments: the Italian and Iberian peninsulas. *Economic organization and policies in the middle ages*. M. M. Postan, E. E. Rich and E. Miller. Cambridge, Cambridge University Press.

Clarkson, L. A. (1971). *The pre-industrial economy in England, 1500-1750*. London, Batsford.

Clay, C. G. A. (1984). *Economic expansion and social change: England 1500-1700*. Cambridge, Cambridge University Press.

Coornaert, E. L. J. (1967). European economic institutions and the New World; the Chartered Companies. *The Economy of Expanding Europe in the Sixteenth and Seventeenth Centuries*. E. E. Rich and C. H. Wilson. Cambridge, Cambridge University Press: 223-275.

Davies, G. (1994). *A History of Money*. Cardiff, University of Wales Press.

Davis, R. (1973). *The rise of the Atlantic economies.* Ithaca, N.Y., Cornell University Press.

Day, J. (1987). *The Medieval Market Economy*. Oxford, Basil Blackwell.

de Roover, R. (1948). *The Medici Bank: its organization, management, operations and decline.* New York, New York University Press.

de Roover, R. A. (1949). *Gresham on foreign exchange*. Cambridge, Harvard University Press.

de Vries, J. and A. van der Woude (1997). *The First Modern Economy: Success, Failure, and Perserverence of the Dutch Economy, 1500-1815*. Cambridge, Cambridge University Press.

Drelichman, M. (2003). The curse of Moctezuma: American silver and the Dutch disease, 1501-1650. U. o. B. C. Department of Economics. November.

Ekelund, R. B. (1997). *Politicized economies: monarchy, monopoly, and mercantilism.* College Station, Tex., Texas A&M University Press.

Elliott, J. H. (1989). *Spain and its world, 1500-1700: selected essays*. New Haven, Conn., Yale University Press.

Epstein, S. R. (1991). *An island for itself: economic development and social change in late medieval Sicily.* Cambridge [England]; New York, Cambridge University Press.

Epstein, S. R. (1999). The rise and decline of Italian city states. LSE.

Epstein, S. R. (2000). *Freedom and Growth: The rise of states and markets in Europe, 1300-1750*. London, Routledge.

Farmer, D. (1991). Marketing the produce of the countryside, 1200-1500. *The Agrarian history of England and Wales: Vol. III 1348-1500*. E. Miller. London, Cambridge U.P.

Favier, J. (1998). *Gold & spices: the rise of commerce in the Middle Ages.* New York, Holmes & Meier.

Fisher, F. J. (1940). "Commercial Trends and Policy in Sixteenth-Century England." *The Economic History Review, New Series*, Vol. 10, No. 2.(Nov.): 95-117.

Gambetta, D. (1993). *The Sicilian Mafia: the business of private protection.* Cambridge, Mass., Harvard University Press.

Glete, J. (1999). *Warfare at Sea, 1500-1650: Maritime Conflicts and the Transformation of Europe.* London, Routledge.

Gras, N. S. B. (1915). *The evolution of the English corn market from the twelfth to the eighteenth century.* Cambridge.

Hamilton, E. J. (1932). Spanish mercantilism before 1700. *Facts and factors in economic history; articles by former students of Edwin Francis Gay.* Cambridge, Mass., Harvard University Press.

Haring, C. H. (1918). *Trade and navigation between Spain and the Indies in the time of the Hapsburgs.* Cambridge, Harvard University Press.

Harris, R. (2000). *Industrializing English law: entrepreneurship and business organization, 1720-1844*. Cambridge, Cambridge University Press.

Heckscher, E. F. (1935). *Mercantilism*. London, G. Allen & Unwin ltd.

Herlihy, D. (1958). *Pisa in the early Renaissance; a study of urban growth.* New Haven, Yale University Press.

Herlihy, D. (1967). *Medieval and Renaissance Pistoia: The Social History of an Italian Town, 1200-1430*. New Haven, Yale University Press.

Hibbert, A. B. (1971). The economic policies of towns. *Economic organization and policies in the middle ages.* M. M. Postan, E. E. Rich and E. Miller. Cambridge, Cambridge University Press: 157-229.

Hoppenbrouwers, P. C. M. (2001). Town and Country in Holland, 1300-1550. *Town and Country in Europe, 1300-1800*. S. R. Epstein. Cambridge, Cambridge Univ Press.

Israel, J. I. (1990). *Empires and entrepots: the Dutch, the Spanish monarchy, and the Jews, 1585-1713 / Jonathan I. Israel*. London, Hambledon Press.

Israel, J. I. (1995). *The Dutch republic: its rise, greatness, and fall, 1477-1806*. Oxford, Oxford University Press.

Jones, P. (1966). Medieval agrarian society in its prime: Italy. *The Cambridge economic history of Europe 2nd ed. v. 1. The agrarian life of the Middle Ages*. M. M. Postan and H. J. Habakkuk. Cambridge, Cambridge U. P.

Jones, S. R. H. and S. P. Ville (1996). "Efficient Transactors or Rent-Seeking Monopolists? The Rationale for Early Chartered Trading Companies." *Journal of Economic History* v56 n4(December): 898- 915.

Jordan, W. C. (1996). *The great famine: northern Europe in the early fourteenth century*. Princeton, Princeton University Press.

Kaeuper, R. W. (1988). *War, justice, and public order: England and France in the later Middle Ages*. Oxford [Oxfordshire]

New York, Clarendon Press; Oxford University Press.

Kermode, J. (1998). *Medieval merchants: York, Beverley, and Hull in the later Middle Ages*. Cambridge, Cambridge University Press.

Knapton, M. (1988). City wealth and state wealth in Northeast Italy, 14th-17th centuries. *La Ville, la bourgeoisie et la genèse de l'état moderne, XIIe-XVIIIe siècles: actes du colloque de Bielefeld, 29 novembre-1er décembre 1985*. N. Bulst and J.-P. Genet, Éditions du CNRS. Paris.

Koenigberger, H. G. (1995). Parliaments and estates. *The origins of modern freedom in the West*. R. W. Davis. Stanford, Calif., Stanford University Press.

Kohn, M. (forthcoming). *The Origins of Western Economic Success: Commerce, Finance, and Government in Pre-Industrial Europe.* *http://www.dartmouth.edu/~mkohn/*

Kula, W. (1986). *Measures and men*. Princeton, N.J., Princeton University Press.

Lane, F. C. (1950). "Oceanic Expansion: Force and Enterprise in the Creation of Oceanic Commerce." *The Journal of Economic History* Vol. 10, Supplement: The Tasks of Economic History: 19-31.

Lane, F. C. (1973). *Venice, a maritime republic*. Baltimore, Johns Hopkins University Press.

Laven, P. (1966). *Renaissance Italy, 1464-1534.* London, Batsford.

Martín, A. M. (1994). Medina del Campo 1500-1800: an historical account of its decline. *The Castilian crisis of the seventeenth century: new perspectives on the: economic and social history of seventeenth-century Spain.* I. A. A. Thompson and B. Y. Casalilla. Cambridge, Cambridge University Pr.

Mazzaoui, M. F. (1981). *The Italian cotton industry in the later Middle Ages, 1100-1600*. Cambridge, Cambridge University Press.

McNulty, P. J. and G. Pontecorvo (1983). "Mercantilist origins of the corporation: comment." *Bell Journal of Economics* 14: 294-297.

Miller, E. (1971). The economic policies of governments: France and England. *Economic organization and policies in the middle ages.* M. M. Postan, E. E. Rich and E. Miller. Cambridge, Cambridge University Press.

Miller, E., et al (1971). The economic policies of governments. *Economic organization and policies in the middle ages*. M. M. Postan, E. E. Rich and E. Miller. Cambridge, Cambridge University Press: 281-429.

Miskimin, H. (1977). *The Economy of Later Renaissance Europe*. Cambridge, Cambridge University Press.

Miskimin, H. A. (1984). *Money and power in fifteenth-century France.* New Haven, Yale University Press.

Mokyr, J. (1990). *The lever of riches: technological creativity and economic progress /.* New York, Oxford University Press.

Munro, J. H. (1972). *Wool, Cloth, and Gold: The Struggle for Bullion in Anglo-Burgundian Trade, 1340-1478*. Toronto, University of Toronto Press.

Munro, J. H. (1977). Industrial protectionism in medieval Flanders: Urban or national? *The Medieval City.* H. A. Miskimin, D. Herlihy and A. L. Udovitch. New Haven, Yale University Press.

Munro, J. H. (1979). Bullionism and the bill of exchange in England, 1272-1663: A study in monetary management and popular prejudice. *The Dawn of Modern Banking*. New Haven, Yale University Press: 169-239.

Nef, J. U. (1940). *Industry and government in France and England, 1540-1640*. Philadelphia, The American Philosophical Society.

Nef, J. U. (1950). *War and human progress; an essay on the rise of industrial civilization.* Cambridge, Harvard University Press.

Nef, J. U. (1987). Mining and metallurgy in medieval civilization. *Cambridge Economic History of Europe: II, Trade and Industry in the Middles Ages.* M. M. Postan and E. Miller. Cambridge, Cambridge University Press: 693-762.

Nicholas, D. (1992). *Medieval Flanders*. London, Longman.

Nicholas, D. (1997). *The later medieval city, 1300-1500*. London; New York, Longman.

Nielsen, R. (1997). "Storage and English government intervention in Early Modern grain markets." *Journal of economic history* v57n1: 1-33.

Nielsen, R. A. (1998). The state and the market: the evolution of early modern grain markets, Wasthington University.

Nightingale, P. (1995). *A medieval mercantile community: the grocers' company and the politics and trade of London.* New Haven, Conn, Yale University Press.

Noordegraaf, L. (1997). The new draperies in the northern Netherlands, 1500-1800. *The New Draperies in the Low Countries and England, 1300-1800*. N. B. Harte. Oxford, Oxford University Press: 173-196.

North, D. C. (1981). *Structure and Change in Economic History*. New York, W.W. Norton & Co.

Olson, M. (2000). *Power and Prosperity: Outgrowing Communist and Capitalist Dictatorships.* New York, Basic Books.

Overton, M. (1996). *Agricultural revolution in England: the transformation of the agrarian economy 1500-1850*. Cambridge, England; New York, Cambridge University Press.

Palliser, D. M. (1983). *The Age of Elizabeth: England under the later Tudors, 1547-1603*. London; New York, Longman.

Parry, J. H. (1967). Transport and trade routes. *The Economy of Expanding Europe in the Sixteenth and Seventeenth Centuries*. E. E. Rich and C. H. Wilson. Cambridge, Cambridge University Press: 155-222.

Persson, K. G. (1996). "The seven lean years, elasticity traps, and intervention in grain markets in pre-industrial Europe." *The economic history review* v49: 692-714.

Phillips, C. R. (1983). "Spanish Merchants and the Wool Trade in the Sixteenth Century." *Sixteenth Century Journal* Vol. 14, No. 3.(Autumn): 259-282.

Phillips, C. R. and W. D. Phillips (1997). *Spain's golden fleece: wool production and the wool trade from the Middle Ages to the nineteenth century*. Baltimore, Johns Hopkins University Press.

Postan, M. (1987). The trade of medieval Europe: the North. *Cambridge Economic History of Europe: V II, Trade and Industry in the Middles Ages*. M. M. Postan and E. Miller. Cambridge, Cambridge University Press.

Postan, M. M. (1973). *Medieval Trade and Finance*. Cambridge, Cambridge University Press.

Power, E. E. (1942). *The wool trade in English medieval history, being the Ford lectures*. [London, New York, etc.], Oxford University Press.

Pryor, J. (1979). Foreign policy and economic policy: the Angevins of Sicily and the economic decline of Southern Italy, 1266-1343. *Principalities, Powers and Estates*. L. O. Frappell. Adelaide, Adelaide Universtity Union Press.

Pérotin-Dumon, A. (1991). The pirate and the emperor: power and the law on the seas, 1450-1850. *The Political Economy of Merchant Empires*. J. D. Tracy. Cambridge, Cambridge University Press: 276-297.

Reynolds, S. (1997). *Kingdoms and communities in Western Europe, 900-1300, 2nd ed.* Oxford, Clarendon Press.

Rosenberg, N. and L. E. Birdzell, Jr. (1986). *How the West Grew Rich: The Economic Transformation of the Industrial World*. New York, Basic Books.

Scammell, G. V. (1981). *The world encompassed: the first European maritime empires, c. 800-1650*. Berkeley, University of California Press.

Scott, J. C. (1998). *Seeing like a state: how certain schemes to improve the human condition have failed.* New Haven, CT, Yale University Press.

Shleifer, A. and R. W. Vishny (1993). "Corruption." *The Quarterly Journal of Economics* Vol. 108, No. 3(Aug.): 599-617.

Southern, R. W. (1970). *Western society and the Church in the Middle Ages.* [Harmondsworth, Eng.], Penguin Books.

Spruyt, H. (1994). *The sovereign state and its competitors: an analysis of systems change.* Princeton, N.J., Princeton University Press.

Stabel, P. (1997). *Dwarf among giants: The Flemish Urban Network in the Late Middle Ages.* Leuven, Apeldoorn.

Steele, M. (1994). The state as entrepreneur in early modern Europe. *Entrepreneurship and the transformation of the economy (10th-20th centuries): Essays in honor of Herman Van der Wee*. P. Klep and E. v. Cauwenberghe. Leuven, Leuven University Press.

Stein, S. J. (2000). *Silver, trade, and war: Spain and America in the making of early modern Europe.* Baltimore, Johns Hopkins University Press.

Stone, L. (1947). "State Control in Sixteenth-Century England." *The Economic History Review* Vol. 17, No. 2: 103-120.

Strieder, J. (1931). *Jacob Fugger the Rich: Merchant and Banker of Augsburg, 1459-1525*. New York, Adelphi.

Subrahmanyam, S. and L. F. F. R. Thomaz (1991). Evolution of empire: The Portuguese in the Indian Ocean during the sixteenth century. *The Political Economy of Merchant Empires.* J. D. Tracy. Cambridge, Cambridge University Press: 298-.

Supple, B. (1977). The nature of enterprise. *The Economic Organization of Early Modern Europe*. E. E. Rich and C. H. Wilson. Cambridge, Cambridge University Press: 393-461.

Thompson, I. A. A. (1976). *War and government in Habsburg Spain, 1560-1620*. London

[Atlantic Highlands] N. J., Athlone Press;

distributed by Humanities Press.

Thompson, I. A. A. (1995). 'Money, money, and yet more money!' Finance, the Fiscal-State, and the Military Revolution. *The military revolution debate: readings on the military transformation of early modern Europe.* C. J. Rogers. Boulder, Westview Press: xi, 387.

Thompson, I. A. A. (1998). The decline of Spain. *Political competition, innovation and growth: a historical analysis.* P. Bernholz, M. E. Streit and R. Vaubel. Berlin; New York, Springer: 265-296.

Tracy, J. D. (2002). *Emperor Charles V, impresario of war: campaign strategy, international finance, and domestic politics*. Cambridge, U.K.; New York, Cambridge University Press.

Unger, R. W. (1980). *The ship in the medieval economy, 600-1600*. London, Croom Helm.

Unwin, G. (1927). The Merchant Adventurers' Company in the reign of Elizabeth. *Studies in Economic History: the Collected Papers of George Unwin*. R. H. Tawney. London, Macmillan: 133-220.

Van Werweke, H. (1954). "Industrial growth in the Middle Ages: The cloth industry of Flanders." *The economic history review* 2nd series v6n3: 237-45.

Vassberg, D. E. (1984). *Land and society in Golden Age Castile*. Cambridge [Cambridgeshire]; New York, Cambridge University Press.

Verlinden, C. (1971). Markets and fairs. *Economic organization and policies in the middle ages.* M. M. Postan, E. E. Rich and E. Miller. Cambridge, Cambridge University Press.

Vicens Vives, J. (1969). *An economic history of Spain.* Princeton, N.J., Princeton University Press.

Vogel, H. (1998). Arms production and exports in the Dutch Republic, 1600-1650. *Exercise of arms: warfare in the Netherlands, 1568-1648*. M. v. d. Hoeven. New York, Brill: xi, 235.

Webber, C. (1986). *A history of taxation and expenditure in the Western world*. New York, Simon and Schuster.

Willan, T. S. (1956). *The early history of the Russia Company, 1553-1603*. Manchester, Manchester University Press.

Willan, T. S. (1959). *Studies in Elizabethan foreign trade*. Manchester [Eng.], University Press.

Wilson, T. (1925 [1572]). *A Discourse Upon Usury*. New York, Harcourt Brace.

Wolfe, M. (1966). "French Views on Wealth and Taxes from the Middle Ages to the Old Regime." *The Journal of Economic History* Vol. 26, No. 4(Dec.): 466-483.

Wolfe, M. (1972). *The fiscal system of Renaissance France*. New Haven, Yale University Press.

Wood, A. C. (1935). *A history of the Levant company.* [London], Oxford university press.