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GENERAL EDITOR • CHARLES WILSON

*The Rise of the
Atlantic Economies*

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Contents

- Foreword ix
Preface xi
1. The Portuguese in the Atlantic 1
 2. Western Europe: 1460-1560 15
 3. Spain in America: The Sixteenth Century 37
 4. Sixteenth-century Spain 56
 5. Western Europe and the Atlantic 73
 6. The Sixteenth and Seventeenth Centuries:
Population, Prices and Incomes 88
 7. Agriculture in the Sixteenth and Seventeenth Centuries 108
 8. The Peopling of America 125
 9. Spain in Decline 143
 10. Latin America: The Seventeenth and Eighteenth Centuries 157
 11. The Rise of the Dutch Commercial Empire 176
 12. England: The Untroubled Island 194
 13. France: The Unsteady Giant 212
 14. Capital, Credit and Financial Institutions 231
 15. The Tropical Colonies in America 250
 16. The British Mainland Colonies 264
 17. France and England in the Eighteenth Century 288

13 France: The Unsteady Giant

The basis of France's political strength was the size of the population with a common language and culture embraced within a single political boundary. Nearly half the people of western Europe were Frenchmen living on French soil; eighteen to nineteen million of them in the late sixteenth century, around nineteen million (in a considerably larger territory) towards the end of the seventeenth. There was no other national concentration of this kind west of Russia; England and Wales only crept past five million late in the seventeenth century, Castile at its peak had no more than seven million people, and the Dutch Netherlands two. The great numbers of the German- and Italian-speaking populations farther east were divided among a multitude of small states, a few genuinely independent but most of them clients of greater powers. French unity, however, was much more striking in the political than in the economic sphere. Its economic regions had very different resources; communications between them were poor, and tariff and toll barriers divided them as much from each other as most were from foreign countries, until Colbert overhauled the tariff system in 1664. The chronology of prosperity and depression, of population advance and decline, shows great differences between the north and the south of France, and between the Atlantic and channel coastal towns and rural manufacturing regions and the eastern interior. Generalizations about French development are constantly subject to contradiction from the experience of particular areas.

Most French economic historians set their history within a framework of sixteenth-century economic advance and seventeenth-century economic decline or at best stagnation; indeed, they write of

'the tragic seventeenth century' or the 'crisis of the seventeenth century', referring to a period running from 1630 to 1730. The beginnings of economic advance go back to the decades 1450-80, when France was emerging from the long European malaise of the late Middle Ages, and from its own particular affliction, the Hundred Years War with England that had repeatedly devastated great areas of the country until it was ended in 1453. Thereafter the loss of population was gradually recovered and empty and abandoned lands and villages were reoccupied - a process which in Burgundy and Picardy went on until late in the sixteenth century. There was a prolonged industrial expansion especially in the north and east, and the creation of hundreds of new fairs reflected the growth of internal trade. This recovery had not quite reached its natural limits when the beginning of the religious wars in 1562 began to disturb parts of the country; prosperity faltered in the south in the 1560s but advance continued in the Paris region, and probably in most of northern France, until after 1580. When Henri IV secured a general peace in 1598 a new period of industrial expansion was ushered in that was halted by the beginning of a period of renewed wars and internal conflicts between 1626 and 1659.

The general economic expansion that ran without much interruption for a hundred years from the late Middle Ages was associated with rapid population increase; by 1580 there may have been half as many Frenchmen again as there had been a century earlier. In much of France the land filled up to support the maximum numbers: its existing agricultural techniques would bear. War intensified the already growing difficulties of feeding the population, but it was not merely war that caused the slowing of expansion. The birth rate was declining in some localities soon after 1560, and generally by the 1580s, and there was no full recovery to the old level of births until well on in the eighteenth century. The lowered resistance of the poor was tested by the reappearance of plague, which raged through many years of the 1580s and returned in the wake of the harvest failures of the 1590s. A heavily reduced population again had room for expansion in the quiet years after 1600, with some recovery of birth rates in the 1620s, but in the second quarter of the new century all the adverse influences returned together; famine, plague, and the devastation of external and internal war. After 1626 northern France was repeatedly invaded from the Spanish Netherlands, and eastern France from the Rhine valley, while the great port of La Rochelle underwent a prolonged siege. Serious epidemic,

returned in 1619 and struck repeatedly during the next few decades, particularly in 1627-31 and 1636-9; the whole country except the Mediterranean south was engulfed in the catastrophes of 1648-52 when famine and epidemic raged alongside the Frondeist wars; and there was a final if more localized burst of serious famine in 1659-62. The losses of those years, and particularly of 1648-52, reduced French population to a level far below its old peak of 1580 or 1630.

Many of the setbacks that afflicted the French economy must be attributed to the character of French government; its extreme weakness during much of the period 1560-1660, and the reaction against the consequences of this weakness.

The great nobles of the sixteenth century were territorial lords commanding the allegiance of men over large areas of France, and they were able to rally forces round themselves and bring pressure on kings. The long series of religious wars that so damaged France between 1562 and 1598 was largely fought by noble factions that drew support on one side from Huguenot fanaticism, on the other from Catholic reaction and the external support of Spain, but both depending heavily on the clients and resources of their noble leaders' home territories. The wars were prolonged because the crown was unable either to suppress the struggle or to decide finally between the contestants. At last in 1594 a strong king, Henri IV, was able to begin reconciliation of the genuinely religious participants, to rouse national feeling against Spanish intervention, and so to bring the nobility to heel and end the war. He created a strong government under which France prospered, and after his assassination in 1610 his work was consolidated by Richelieu, the able minister of Henri's weak successor. Richelieu's purpose, however, was to reassert France's place in the affairs of Europe, and he led France into the Thirty Years War in 1624. Prolonged war - which eliminated Spain from the ranks of the great powers - was enormously costly, and steeply increasing taxes on both peasants and townsmen built up widespread resentment. In the years 1648-53, nobles who were seeking for the last time to recover their independence from the crown secured the support of discontented urban classes and the urban poor - above all the Paris mob - in the series of risings known as the Fronde. These years mark the low point of the French economy in the seventeenth century. In the aftermath of the Fronde, Louis XIV built on the order and confidence that Henri IV had begun and developed an intensely absolutist rule. The nobility,

discredited and deprived of power, was allowed to maintain most of its old tax exemptions, was bolstered with sinecures and privileges, and renewed in each generation by creations from the ranks of financiers, tax-gatherers and officials who had built up fortunes in office. With the nobility either crushed or pacified, the king was able to pursue his own policies, leading France into great and costly wars in which French resources were poured out, taxes nearly doubled, French territories invaded deeply in the north and east, and colonial possessions lost.

France was overwhelmingly rural and indeed agricultural - despite the wide range of employment in rural industry. The agricultural basis seemed incapable after the 1560s of supporting more than a generation or so of rapid population growth without running into disaster. In agriculture, however, it is least of all possible to speak of France as a whole, and we must examine the different experiences of broad regions, and above all those of the cornlands of the north, and of lands with a more mixed agriculture that came within the fringes of Mediterranean climate in the south.

The plains and low hills of France from the Loire valley northward, densely populated and indeed overcrowded, contained a large proportion of France's population. Here peasant holdings were tiny - two-thirds of them less than two and a half acres, though they were supplemented with rented land - whilst pasture and common was very scarce, so that few animals could be maintained. The peasants of this region were heavily preoccupied with corn production; but yields were very low because of lack of manure. Few peasants had much surplus corn to sell except in the years of exceptionally bountiful harvest; while in bad years they went hungry and even starved. Most had patches of garden where they grew peas and beans and roots, and kept a vine and one or two fruit trees; they usually reserved a little land for saleable crops to pay rents and dues - notably hemp, or in suitably wet country flax. Nevertheless, the small peasants depended heavily for survival on earnings that did not come from the land; on wage labour for larger farmers, on carrying, charcoal burning and other work in the woods, and above all on the industrial by-employments in linen and woollen manufacture that their families could find in much of this region. The greatest part of the arable land was cultivated in strips in open fields, with a three-yearly rotation that left one-third of the land fallow each year. After the 1780s little fresh land of any value

could be taken into cultivation without encroaching on the already scanty commons, so there was much division of peasant holdings and an intense competition for rented land that pushed rents up steeply in the first half of the seventeenth century. Nevertheless, many of the young men could secure neither holdings nor regular employment, and had to move to the towns to seek work. This was the region that suffered most severely from inability to adjust its production to population growth except over quite short periods. A generation of over-full farm-houses, or of further subdivisions of holdings, eventually faced a year or two of exceptionally bad harvests without sufficient reserves, and was sharply reduced in size by famine, accompanied by disease. With the land so emptied, the survivors had a few decades of easier conditions, and then the growth of population brought crisis again. This was a sequence that was repeated time after time between 1580 and 1710.

The southern lands — Languedoc, Provence, Dauphiné — approaching the Mediterranean and a drier, sunnier climate, were less suited to corn both by the uncertainty of rainfall and the difficulty of terrain. Much land on which corn was grown was of poor quality, normally kept as rough pasture but cropped one year in five, eight or ten; that is with no regular rotation, and with adjustments to the rise or fall of demand by small changes in the frequency of cropping. Corn was grown at times wherever land was suitable and could be watered naturally or by irrigation, but the average peasant had a variety of products. He grazed sheep and goats on the un-cleared hill-sides, providing wool, milk and occasionally meat. He grew vines, olives and fruit on hillside terraces or in enclosures, and was heavily dependent on the market conditions for these products. Except in the most bountiful years he bought corn to supplement his own harvest, and the region imported a large quantity from northern France in those periods when it had a surplus, or even from the Baltic. The land was emptier than the north, though much of it was infertile or inaccessible and the livings obtained from it were poor; if life was normally hard, the periodical squeeze-out of excess population did not operate so mercilessly here. Through two hundred years from 1480 to 1680 (with some interruption during the religious wars) the rural population was able to expand slowly because younger sons of peasant families could still go out and make themselves holdings, bringing marginal grazing lands into cultivation, terracing hill-sides, making small irrigation works and enclosures for olives and vines. They were favoured by the

growing European demand for these semi-luxuries; but as increasingly unsuitable land was pressed into cultivation the inevitable limit of this process was reached around 1680, when serious food shortages developed in the south, and many of the peasantry fell into debt and their land was sold.

In the wooded districts of the west — Brittany and western Normandy — there was a distinctive rural economy, in which corn-growing peasants kept far more animals than those in the rest of northern France. The best land was under corn, with a patch for hemp; but beyond this each peasant had substantial grazing land, parts of which he burnt over occasionally and replanted with corn for a year or two. Most households had cows and sold butter and cheese, whilst nearly all were able to supplement income by work in the linen industry. This was an area of modestly prosperous peasants, and here too the pressure of population was slower to make itself felt than in the great cornlands.

Peasant poverty is spoken of in the history of every country in the pre-industrial age as a matter of course, and it is all too easy to think of the mass of peasants throughout Europe as living in an undifferentiated condition close to a common subsistence-level. But there were, of course, great differences even between the *average* living standards of the peasants in different countries and regions; due not merely to the variety of pressures of landlord and state, but also to the size of farms (a function of inheritance laws and social attitudes as well as economic pressures) and the intensity and modernity of their cultivation. By the middle of the seventeenth century the weeding-out of the poorer peasants and the advancement of other peasants into modest farmers had gone much further in the Netherlands and England than in either France or Spain. French peasants were poor not merely in the sense that they were poorer than their English and Dutch counterparts. In an absolute sense they were poor (as the English were not) because they were unable to assure themselves regularly of the minimum needs of life, and therefore suffered, from time to time, a massive mortality. Peasant poverty, in this extreme form, was the basic weakness of the French economy.

Contemporary estimates of peasant income, dubious as they are, show such great differences that it is hard to believe they are wholly misleading; and they reflect the consequences of very small peasant holdings in France, and the lowness of French agricultural productivity. In England, taking the categories of freeholders and farmers (covering 31 per cent of the population) in Gregory King's estimate,

for 1688, the average income is £51; extending this to include the category of cottagers and paupers, which includes many people who would be classified as peasants in France, the average income (covering 55 per cent of the population) is £27. In France an estimate for 1701 gives a corresponding figure of peasant income of 200-300 livres, the equivalent of £9 to £14. A still more tentative estimate for the peasantry of New Castile in 1630 gives a figure of 60 ducats, about £17.

The movement of grain prices in the markets may be a good indicator of the problems of a market-oriented economy; it throws much less light on those of a country whose peasantry was still largely devoted to subsistence farming, and living very close to minimum levels. A great part of the corn produced in France never appeared on the market; in most years market prices reflected quite limited transactions in corn, but in very bad years a host of new buyers appeared, the peasants who normally fed themselves but were now short of corn. Consequently there were enormous differences in prices between ordinary and very bad years, and catastrophes occurred from time to time during the decades around 1700 when the long-term course of corn prices had seemed to suggest the corn supply problem was being mastered. This continued peasant poverty delayed agricultural improvement, held back the emergence of a large market for industrial products, and ensured that the penalty of a bad harvest was not merely worsened hardship but famine.

France suffered from too slow an improvement in agricultural practices; but nevertheless there was change. Here as elsewhere, discussions in terms of the yield of corn crops obscure the diversification and expansion of agricultural production. This diversification was slowed in the decades around 1600 when population pressure was becoming exceptionally heavy and required more concentration on corn, but it then proceeded, through bad periods as well as good, accelerating as corn prices fell away after 1662. Over and beyond the reparation of the damage of the religious wars, there was a considerable investment of urban resources in improvement during the first quarter of the seventeenth century, especially in the neighbourhood of the rapidly expanding city of Paris. Market gardens came to circle the city closely on the south; and farther out to the south and west, landholdings were thrown together to provide pastures for fattening cattle driven up from their rearing grounds on the heights above the Loire valley. On the north

side some large wheat farms of two to three hundred acres were built up by capitalist farmers taking their example from the handful of ecclesiastical home farms in the area. Rents rose steeply in the Paris region, more than doubling between 1610 and 1670 under the influence of the competition for holdings, particularly by bourgeois and richer peasantry trying to build up large compact farms. Nor was change entirely confined to the Paris region. There was much drainage of coastal marshland in the south-west; seigneurial clearances of heath in Poitou to produce new *métayage* holdings which they stocked with animals for mixed farming; and clearance of forest for cornland in central France. In a wide area serving Paris, pasture areas were being extended to support speculative stock-rearing for the Paris market. In the south a steady ploughing up of marginal land for corn and the extension of vineyards went on into the 1670s, long after stagnation had set in over much of the north.

This expansive movement came to an end for a time in the 1630s, in the cornlands of northern and eastern France. The devastation of renewed foreign war ruined many peasants, and its risks made agricultural investment less attractive to urban capital. The condition of the peasantry was seriously worsened by the reform of taxation and of the tithes system under Richelieu. They had been relieved of much of the real burden of old, fixed seigneurial dues by the long rise in prices, and of tithes by the disrepair into which its collection had fallen during the religious wars. Between 1620 and 1640, however, Richelieu vigorously reshaped the tax administration, raised the level of taxes very sharply, and reactivated the collection of tithes. A great part of the tax increase fell on the peasants; the old seigneurial burden was replaced by a fiscal burden. Moreover, the landlords found opportunities to replenish their incomes. Though most peasants owned some of the land they used, they normally supplemented this with plots of rented land, and in the period of rising population to the 1630s the landowners, many of them now town merchants, lawyers and officials, were able to push up the rents of the land they let out. Finally, and perhaps in the long run most important, the wars themselves caused many peasants and village communities to fall into debt in attempting to meet dues and taxes when their crops and property had been destroyed, and in borrowing to replace stock that had been killed or driven away. Much peasant-owned land was sold to creditors in the 1650s and 1660s in order to liquidate these wartime debts.

The early seventeenth-century changes, promising though they

were, were limited in scope. They left France still a country of poor peasants, who were to be further impoverished in many areas by invasion and civil war. Prosperous and well-equipped farmers of large holdings—known in the north as *labourers*—while increasing in numbers, remained rare in most villages. Holdings were generally very small, ill-equipped, adequate to sustain the peasants only with the assistance of wage-labour on others' farms, or industrial by-employment, and easily tipped into shortage and debt by two or three bad harvests or a single encroachment by marauding soldiers. The landlord, rarely resident, left it to his agents to squeeze what they could from the tenants, whether from rents or from making the most of old seigneurial rights, and he invested in improvement only in the most propitious circumstances. The peasant of the mid-seventeenth century, his land producing a low return, and with taxes, tithes and rent taking a third or even a half, of his income, had little opportunity to accumulate capital, or to offer a useful demand for the products of industry.

In the early stages of France's recovery from its late-medieval depression, much of the new industrial growth was in eastern and southern France, aided by a large immigration of Italian and Spanish artisans and traders. Silk weaving was developed at Tours and after 1336 at Lyon, fine linens in the Reims area, tapestry-making at Paris and Orleans, a new woollen manufacture in Languedoc, and iron manufacture on a small scale in many parts of eastern France, particularly Dauphiné. But over the whole period of the sixteenth and seventeenth centuries the most important developments were in the linen and woollen industries, first in the towns of Picardy and Normandy but increasingly in the countryside. Textiles were expanding in northern France not only by moving from town to country but also by spreading out geographically; woollens from Picardy and the Cambrai area where they had long been settled, eastwards into Champagne and westward into Normandy, while linens extended still farther into Brittany, Maine and Anjou. The towns remained important industrial centres, but by the middle of the seventeenth century the early processing and weaving of coarser and middling fabrics in both linen and woollen industries was almost entirely rural. These rural industries, using the resources of town finishing trades and town markets, had by 1650 pushed far beyond serving merely local demands or sending goods abroad through convenient ports. Despite all the difficulties of internal

transport they had created a national market for their products in France, so that, for example, cloths made in the area of Beauvais or Mans were sold in every corner of the country.

The seventeenth century witnessed the appearance of changing fashions in textiles; not merely the turn from woollens to silks, linens and presently cottons, but also the acceptance of an increasing range of types of woollen cloth. The chief sufferers from this were the producers of heavy high-quality cloths, who faced increasing competition for a market that ceased to expand. At the beginning of the seventeenth century the towns of Normandy and Picardy were still major centres for weaving and finishing these cloths, though spinning was entirely rural. The technically conservative urban artisans in these heavily regulated trades were unwilling to change the methods, organization and fabrics they knew; and they could not stand up to the competition of innovations produced by the new Dutch industry at Leyden or the English makers in Wiltshire. The French home market was invaded by these foreign cloths, and they were only checked by Colbert's imposition of very high tariffs in 1664. Behind this tariff barrier he attempted to stimulate the industry by subsidizing the immigration of Dutch and Flemish weavers and entrepreneurs into Normandy. Pressed by its difficulties and encouraged by state assistance, the industry slowly changed its structure and its products. By 1680 the independent town craftsman had generally been replaced by the small workshop in which a single master, backed by merchant finance, employed several journeymen; and he made his production flexible by giving out some work to rural labour. The towns abandoned the more standardized products to rural makers, and began to produce new fancy woollen mixtures, incorporating silk, camel- and goat-hair, and with these luxury products went on to a steady expansion in the eighteenth century.

The rural industry in Picardy had turned over to making cheap, light woollen cloths or worsteds during the sixteenth century, and this manufacture flourished, developing a big export to Spain. Its centre, however, was a border area particularly prone to invasion. The great industry of the Hordschoote region, making the popular light cloths known as *says*, was severely damaged by the religious wars and the Spanish invasion of the 1580s and 1590s; recovering a new prosperity in the first quarter of the next century, it was again destroyed by war after 1630. But the industry revived once more in the decades of stability after 1660, extending into

Normandy and Champagne, and producing still cheaper varieties of cloth. On the other hand, the Languedoc industry which captured Mediterranean markets during the sixteenth century was so badly weakened by the troubles of the 1640s and 1650s that even a massive concentration of state assistance in Colbert's time put it only precariously on its feet, and full recovery was delayed until well into the eighteenth century.

The leaders of the European woollen industry, in fact, were now the Dutch and English, while new competition was appearing late in the seventeenth century from the rising Silesian industry. The French could not excel at everything, and the speciality in which they now led Europe was linen, especially fine linens and best quality canvas. The French industry first grew to importance in Picardy (where it began with labour released by the decline of the woollen industry at the end of the Middle Ages) and spread southward from there. During the sixteenth century it was able to replace imports from the Netherlands; its quality was improved after 1600 by the introduction of Dutch bleaching methods and the best French products forged far ahead of their rivals. The industry originally used flax grown in the lower reaches of the river valleys of the west, but even before the end of the sixteenth century it had to supplement these native supplies by large imports from the Baltic. The best quality linens were made in the area behind Rouen and exported through it; they had no competition except from Flanders. Brittany had a varied linen production, largely serving the home market but also exporting through Nantes and St Malo, while Anjou's chief product was canvas. Everywhere the industry was one of rural outworkers taking their materials from merchant organizers; and it gave double support to rural population as an employer of labour and as a consumer of a readily grown flax crop. The industry, situated close behind the ports of the channel coast and the Atlantic, was strongly oriented towards exporting. Though badly hit by the mid-century wars, it was firmly set on a path of long-term growth, well able to cope with Dutch and German competition, for the European demand for linens was still rapidly expanding.

The silk industry, exceptionally among textiles, was an almost wholly urban one. Its centre after the middle of the sixteenth century was Lyon, well away from the main currents of war; and its competitor was not one of the freely reorganizing countries of the west, but an Italian industry that was old and inflexible in its ways.

The industry at Lyon therefore flourished almost throughout the seventeenth century, diversifying its range of products into damasks and brocades to attract new customers. During the four mid-century decades that were disastrous to much of French industry, the number of silk workshops in the Lyon area actually doubled. The organization of the industry changed; it was brought largely under the domination of the merchants who imported silk from Italy. The master artisans were reduced to the situation of dependent workers, though they still held to their own workshops and employees and maintained some influence through control of the guilds. Finding most of its customers among the rich, the industry was less affected than others by changing tides of prosperity, and it widened its appeal as some of the middle classes came to have aspirations to luxury.

Beyond these industries, which served national and international markets, industry was generally scattered in small units and narrow producing areas. In such a large and thickly populated country the total output was large, but it is hard to measure or even see its approximate size with any clarity. The modest sixteenth-century expansion of the metal industries, and of the iron industry in particular after the introduction of the blast furnace, was checked in the following century by the expansion of Dutch trade in German, Lorraine and presently Swedish iron and iron goods. It remained a small-scale industry, generally with old-fashioned methods, in many of the well-timbered areas of France, to be given some stimulus after 1661 by Colbert's subsidization of selected enterprises in Dauphiné, Burgundy and Languedoc. Beyond this, even such well-known industries with export markets as chemicals, paper, glass and fine leatherware were small.

There was an old tradition of government regulation of urban industries, both through the general regulation imposed by municipalities with the backing of royal authority, and through the strictly controlled guilds that had been created in many towns — again with royal support — and regulated entry to trades and work within them. The check to industrial growth after 1630, and especially the difficulties of branches of the woollen industry, caused government to return to industrial protection in 1648. After 1661 the royal minister Colbert set out more systematically to develop some branches of French industry. He believed that French manufactures had been losing something of that feeling for quality that had enabled them to compete with the Italians in the luxury market in

the sixteenth century. The highest quality goods would always be sought at almost any price, by the wealthy at home and abroad, and he sought to create a new French reputation for them. Some kinds of manufacture were set up in state workshops – Gobelins tapestry or Van Robais woollens; some left in private hands but given temporary monopoly advantages and subsidies, and put under strict regulations to be minutely observed under the eyes of government inspectors. The policy had some success in raising the international esteem of the best French products, in aiding the recovery of the fine-woollen industry of north-western France and setting the Languedoc woollen industry on its feet, and in establishing cannon foundries. In these advantageous respects it outlived Colbert; but it left behind also his legacy of detailed control, meticulous inspection and reliance on privileges that added to the rigidity of French industry and in the long run to its weakness. In any case, Colbert's work had less influence on the recovery of 1660–90 than the re-organization forced upon industries by the difficulties of mid-century, which bore its fruit in a generation of comparative peace, population growth and trade expansion. The move of industry into the countryside accelerated, and craft conservatism was broken down by merchant pressures exercised directly on producers to get more saleable products. In the advancing industries there was a general tendency towards the replacement of independent craftsmen by sharply divided groups of merchant capitalists on one side and dependent wage-earners on the other. In the rural districts merchants dealt directly with the workers, but in the towns they exercised their influence on production indirectly through their dominance of modestly prosperous but dependent workshop owners.

The impact of the new currents of trade that began to flow through Europe in the late fifteenth century had been felt chiefly on the periphery of France. The north-south route through the Rhône valley gained renewed importance, and Lyon became the most active financial centre of the west outside Italy. Marseilles and Toulouse flourished on expanded trade with Spain, and the connection of northern France with Antwerp was strengthened. But France's size, population and natural resources enabled it to be remarkably self-sufficient. At the beginning of the sixteenth century France's only major foreign supplier was Italy, from which it imported fine silks and other fabrics, spices, drugs and dyestuffs. The encouragement of the new silk industry at Tours and Lyon, and the opening of direct

trade with the Turkish Empire in the 1530s, were attempts to reduce this trade, for there was no corresponding French export to Italy.

After the earliest decades of the sixteenth century, however, the expansion of overseas trade was associated with the rise of the western ports. On the channel coast Rouen connected Paris and northern France with the trading metropolis of Antwerp, and was in fact a satellite of that city, with its business carried on largely by Italian and Spanish commercial houses. The small ports of Normandy and Brittany had old-established fisheries, and after 1520 were turning particularly to the Newfoundland fishery, sending hundreds of vessels a year after mid-century. There was a large coasting trade, connecting the ports at the mouths of the great rivers that led into the interior. Bordeaux and Rochelle exported great quantities of wine to England and the Netherlands; Mortaux and St Malo, as well as Rouen, sent linens to Spain, and great fleets came to the Biscay coast to lade Brouage salt for the Netherlands and the Baltic. The bulk trades were largely in foreign hands; English and Dutch ships carried away the wine, and Dutch and Hanseatic ships the salt, which accounted for most of the tonnage of French exports. But the valuable trade was with Spain; indirectly through Rouen and Antwerp, to Catalonia and Valencia through Marseilles, and directly to the rising markets of Castile through Mortaux, St Malo, Nantes, Bordeaux and Rochelle. This rapidly expanding Spanish trade particularly benefited the linen industry of Maine and Anjou, which found its main outlet there; but woollens, corn, wool, iron-ware, paper and other goods were also sent to Spain. The linen trade was largely in the hands of Spanish merchants settled in the western ports, and it was from them that the French at St Malo, Nantes and Bordeaux learned modern Italian commercial techniques.

Overseas trade suffered more from war than most sections of the economy. It seems likely that in the early years of the 1560s, before the wars of religion, a trading peak was attained that was only briefly reached again in the early seventeenth century, and then lost until after 1660. The sieges of Rouen and Havre in 1562–3, of Rouen again in 1591–2, and the blockade of Bordeaux in 1592–5, accentuated the trading difficulties that wars in their immediate hinterland created, though the troubles of each particular port brought short surges of prosperity to the others. From the 1570s Moorish piracy in the Mediterranean and Dutch and English competition began to

whittle away the trade of Marseilles. The early seventeenth-century wars hit the ports less directly (though Rochelle underwent a long siege in 1626-7) but they again suffered from the damage done to industry in the north, and from the breach of relations with Spain.

After 1660 the western ports entered a flourishing period. The total tonnage of French merchant shipping doubled in the next thirty years, with Rochelle, Nantes, St Malo and Bayonne in the lead. This is paradoxical in a period in which the main export trades were not doing well, the linen export to Spain showing a falling tendency and the Levant trade still in the doldrums. The ports and their merchants flourished because Frenchmen took over some of the old bulk trades from foreigners, and above all because colonial trade expanded very rapidly. The Spaniards who had led the commercial life of the western ports were being replaced, in the early decades of the seventeenth century, by Dutch merchants, and in its middle decades most trade and shipping in the west was in Dutch hands. Colbert not only gave France industrial protection by the tariffs of 1664 and 1667, but also proceeded to squeeze out the Dutch traders and carriers. Shipping was promoted by subsidies for building and purchasing ships and encouragement for Dutch and English shipwrights to practise their craft in France. In 1673 a decree excluded foreign ships from participating in French colonial trade.

At the centre of the new trade expansion was the West Indian trade, of which Rochelle and Nantes were the chief beneficiaries in this period, with St Malo and Bordeaux some way behind. St Malo was the centre for the Newfoundland and St Lawrence fisheries, and for Atlantic whaling. The French Atlantic ports, their populations growing fast, became prosperous from Europe's growing demand for tropical products, and called on French industry for manufactured goods to send to the colonies in return. A large shipping industry was built up, largely based on this colonial trade from which the Dutch were excluded; with the single important exception of Baltic trade, the Dutch had been replaced as carriers for France before 1690. Overseas trade was severely set back in the war of 1689-97, when ports were closed and great numbers of French ships were captured; but it recovered and after 1702 was supplemented by a brief but splendid burst of direct trade with Spanish America. St Malo, whose cod fishery had first given it a close connection with Spain, was the centre of this new trade; its ships even penetrating the Pacific; and when Spanish-American trade with

France received its severe setback in 1713, by the peace treaty that handed French privileges to the English, St Malo rapidly lost the importance it had briefly held. But in France, as in England, this commercial expansion had only a very limited industrial impact; there was an expansion of trade passing through the country, of shipping and of commercial capital rather than of industry.

The view of French economic history that sees the period 1630-1730 as one of 'general crisis'—fitted, despite difficulties of chronology, into a general European crisis—is essentially a price-history one. It is associated with Simiand's application to long historical periods of the theory that falling prices, or prices maintained at a low level, are associated with depression and stagnation. The economic weakness of the second quarter of the seventeenth century was not, however, continued, and the remaining eighty years down to 1730 are on the whole years of recovery in which serious brief setbacks were experienced, rather than of overall stagnation. Moreover, there is only a slender link between the histories of the different regions of France; the thickly populated north running into subsistence crises and problems of foreign industrial competition in the 1630s, the Atlantic coast emerging in the 1660s into a bounding prosperity, the southern provinces with their economy expanding until after 1680 and then going into a precipitous decline that was only partially stayed by industrial revival.

There were no serious wars on French soil for half a century after 1653. Plague never struck universally after 1655; the last widespread epidemic in 1668-70 was a comparatively mild one, and it then almost disappeared until its last fling at Marseilles in 1720. The decline in corn prices after 1662 suggests that the desperate shortages of the earlier part of the century had been overcome; though there were setbacks in periods of dearth, in northern France in 1678-81 and in the south in 1684-7. The years 1662-90, in fact, saw low food prices; a marked revival in many branches of industry and the establishment of new ones, and an enormous expansion of overseas trade partly based on colonial development.

Once security returned with the ending of the Frondeist wars in 1653, slow development had recommenced in agriculture. There was a concentration of wine production for the market on particular areas: Auxerre, Beaune, Orleans, Poitou and Charente distributed their produce widely through France and expanded their vineyards to cope with increased demand. The north-western

region gradually abandoned its inferior wine production for cider. Rapid expansion of the linen and canvas industries after 1660 encouraged peasants in the north-west to reserve more of their land for growing flax to secure a cash revenue. In south-western and central France, new field crops were introduced; of buckwheat – grown on lands that would bear no other cereal – and of maize, which was high yielding and used for fodder, helping to make possible enlarged cattle herds. Similarly in the pastoral areas that served Paris, the introduction of sainfoin and other artificial grasses supported larger herds. Only in a few cases, however, did the turn away from corn to other products involve the extension of mixed farming that would improve corn yields. The convertible husbandry that elsewhere in western Europe was breaking the vicious circle of few animals and low corn yields was rarely adopted in France.

Corn yields remained low according to the available data, though these are scattered and not wholly conclusive. The averages that have been computed are very heavily influenced by the scattering of bad harvests among them; thus the catastrophic years 1643-51 reveal such a mixed bag of influences – war, bad weather, *Fronde* and plague – that the basic causation is not easily disentangled; and the 'low yield' period 1687-1715 is one in which three or four years' bad harvests pulled down the average levels of more than a quarter of a century in which the return was generally reasonable. If it is possible, as some writers suggest, that periods of particular difficulty for French agriculture are related to climatic cycles of thirty-five to forty years' duration; but final judgement on this must be reserved until the existence of such regular short-term climatic movements has been confirmed and explained.

Cereal prices were generally declining from 1662 until the mid-1680s, and after that date remained at modest levels in most years, rising to extraordinary heights in the years 1692-4 and 1709-10. This was an unfavourable situation for corn production; long-sustained low prices discouraged investment in building up large and efficient cereal farms, while the occasional dearths that temporarily favoured the very large producers were disastrous to small peasants whose surpluses were wiped out so they had to borrow if they were to survive. The level of rents was creeping downward for well over half a century after 1670, giving some relief to those who cultivated leased lands. Cereal production was undoubtedly being expanded, for the slow decline of prices was going on alongside a

rising population until 1692; while it seems unlikely that the rise in corn production towards the middle of the eighteenth century could have come about quite unheralded by earlier improvement.

Industrially, the decades after 1660 saw the recovery of rural industries that had been overrun by war, and the building up of selected industrial sectors by government efforts. This received some support from the increased purchasing power, released by cheap food, in the hands of townspeople, and more plentiful marketable surpluses at the disposal of many peasants. Paris was the great consuming centre of France, but never its economic centre of gravity; the latter might have been found in the industrial areas of the north-west set amidst a thick peasant population, or in the Rhône valley; but at the end of the seventeenth century the most rapid economic advance was in the Atlantic ports of St Malo, Nantes, Rochelle and Bordeaux.

Post-1660 prosperity received a serious shock with the persecution of the Huguenots in the 1680s, in consequence of which some two hundred thousand people are said to have emigrated, a large proportion of them townspeople of the west and south-west – merchants, artisans, lawyers, mariners. The beginnings of agrarian depression in the south were followed by the deficient harvests of 1684-7, threatening the return of general food shortages and showing that France had failed to break out completely from the subsistence cycle. Then in 1689 came renewed war, pursued on a tremendous scale and continuing with only a brief interval until 1713. Taxation was enormously increased – at its peak absorbing possibly 15 per cent of national income – and as always most of it fell on the rural poor and the peasantry. This new taxation imposed a crushing burden on an already weakening agrarian base. The famine disaster of 1692-4 was probably the most destructive in three hundred years; that of 1709-10 was equally deadly in many regions, though it did not strike the whole of France. Between 10 and 20 per cent of the French died in these two brief periods. The disaster was not merely rural, for the cutting-off of demand as people used all their money to buy necessary food created heavy industrial unemployment, and this joined with famine and the migration of rural labourers to bring hardship and pestilence to the towns. Overseas trade was stopped by wartime blockade for long periods, particularly in the 1690s, and was always hampered; many thousands of ships were lost to English and Dutch privateers.

Even when the wars were over their baleful effects were felt; the attempt to liquidate the legacy of crown debt by means of ingenious financial manipulation devised by John Law was ahead of its time and brought about a huge financial and commercial crisis in 1720. This held back advance for some years, and prevented the proper development of French banking institutions for more than half a century. England had lagged far behind France, industrially, in 1600; it was able to progress more rapidly and uninterruptedly during the seventeenth century. By 1730 it was — allowing for its smaller size — far in advance, and had encroached on fields where French supremacy had once been quite unchallenged.

14 *Capital, Credit and Financial Institutions*

*M*odern writers have examined two aspects of capitalism in the period between the fifteenth and the eighteenth century. One is the concept of the 'spirit of capitalism', which will not be pursued here because it is concerned with the response to the increasing importance of capital in productive relations, rather than with something preceding or causing this development. The other is the growing importance of capital-using types of commerce and industry, and the extension of capitalist-wage-earner relationships to larger sections of the population.

There are ambiguities in the economist's view of capital which have particular importance for the pre-industrial age. In the first place, land is often treated as something distinct from capital, though it is fully recognized that cleared and cultivated land derives much of its utility from having been cleared by human efforts which amount to capital investment. It may be convenient to view land as a distinctive form of capital stock; but investment in the improvement of land competed in every year with other uses for new savings, absorbing a very large part of new capital accumulations. There was heavy investment in the enclosure and preparation of vineyards in Andalusia, clearing of woodland to plant tobacco in Virginia, enclosure and ploughing up of pasture in England, building of irrigation systems for new smallholdings in Provence; and on a more spectacular scale polder-building in Holland, fen drainage in eastern England and south-western France, and swamp clearance and irrigation works in St Domingo.

17 France and England in the Eighteenth Century

In 1776 the American Declaration of Independence announced the breaking up of the colonial systems whose origin and development have been principal themes of this book; and Adam Smith published his *Inquiry into the Nature and Causes of the Wealth of Nations*, laying the foundation of modern economics with a work based on empirical study of the economy of the pre-industrial age. Adam Smith was not conscious that an extraordinary change in economic and social life was on the point of overtaking his country; and neither English nor French writers of the time imagined that an Industrial Revolution would within a couple of decades have caused the economic hegemony of Europe to pass decisively to England. The half century before 1776 was a period of prosperity and expansion for both France and England, and the literature of the time is full of self-congratulatory material. Statistics suggest that both French and English national income more than doubled in the first three-quarters of the eighteenth century, though these estimates probably overstate the true increase; and it is likely that in the middle decades, from 1730 to 1770, the advance was faster in France than in England. Yet the acceleration of economic growth and the mounting evidences of prosperity fell far short of the scale of change in England that was to follow 1776. They may better be compared with the expansive period 1600-30 that terminated with the downturn of the mid-seventeenth century. There was nothing new in rapid economic progress in Europe, but it had in the past come in brief surges as it

did to France in the eighteenth century. The really new thing was the steep upturn in England in the last quarter of the century, which is outside the period of this book. These concluding chapters will examine the mid-eighteenth century expansion on its own merits; but it is impossible to ignore the great landmark in economic history that looms up immediately beyond the terminal date of 1776. In examining development in the middle decades of the eighteenth century, the questions must be asked whether it exhibits features that explain the great discontinuity of the Industrial Revolution that was about to occur; and whether it reveals the reasons why the Industrial Revolution came to Britain and not to France.

Rising production and national income must be seen in the context of populations that were growing fast; in England from the 1740s, in France from a trough in the 1720s. In 1690 there had been some five and a half million English men and women; their numbers had not reached six million in 1751, but they passed seven million in 1771 and eight million before 1791. In France, the prolongation of war and economic troubles prevented real recovery of the losses of 1709-10 before the 1720s; but from a low point of nineteen million the French population rose to twenty-six million in 1789 (including a million in freshly annexed territory). The renewal of population growth towards the middle of the eighteenth century, after prolonged stagnation, was the common experience of Europe. Yet there is a significant difference between the general European movement, to which the French corresponded, and the course of development in England. In England, renewed growth began in the 1740s from the highest level that had ever been reached; by 1770 it was some 50 per cent higher than it had been in 1630, and it continued to grow at an accelerating pace into the nineteenth century. In France the initial growth of the 1720s and 1730s was a recovery to old levels of population; by 1770 the numbers were only some 25 per cent higher than they had been in 1630, and in the 1770s rises in death rate began to appear in some areas, slowing the rate of growth and presently bringing about some decline of population in southern and central France. In England growth was continuous and accelerating; in France there was only a brief phase of growth matching England's, before the spectre of the subsistence crisis began to hover once more. The special problem of English demographic history, the explanation of the sustained growth of numbers continuing into the nineteenth century, which other countries did not experience, is beyond the scope of this book.

Renewal of population growth in France seems to be clearly associated with improved food supply, ending the recurrent onsets of severe famine that had afflicted France since the late sixteenth century. There was a long run of generally good harvests from 1726 until 1770 (seriously broken only in 1739-41) and this corresponds with population growth reaching its fastest rate between 1750 and 1770. The chief mechanism of growth in this period, in France as in England, was a fall in the death rate – and particularly the death rate among children – rather than more births. It showed itself in both countries in a cutting down of the occasional violent leaps in the death rate, which in previous centuries had wiped out several years' population increase once or twice in every decade; and in France in the disappearance after 1709-10 of those extraordinary demographic disasters that had repeatedly prevented population getting back to its early seventeenth-century peak. Yet English experience suggests that better feeding was by no means the sole explanation of a lowered death rate. In England the subsistence problem in its most serious form had long since been solved; people still died because they were undernourished and unable to stand up to illness, but famine had long been absent. It has been strongly argued that on the other side, better subsistence could have been expected to produce some rise in birth rates. The factual evidence on this in the eighteenth century is inconclusive, but it had some effect in France, if not in England. However, the well-attested demographic experience of the English peerage throws great doubt on subsistence explanations of population growth in this century. It is unlikely that families of the nobility ever suffered from being underfed; yet they showed the same marked fall in death rates, in the second quarter of the eighteenth century, as did society as a whole.

The basis for the rising prosperity in the middle decades of the eighteenth century lay in the unusual combination of growing populations with an agricultural production that kept pace with their needs. The more spectacular and more frequently commented on industrial expansion was dependent on this, to provide part of its market, to release labour from the land, and to feed the manufacturing populations. In England, improvement of agricultural productivity had long been under way, with rising crop yields per acre, and great diversification and specialization of particular areas. More corn was produced, alongside a rise of animal husbandry. Its conjunction with a century of only slowly rising population after

1630 had resulted in the emergence of a food surplus, with low corn prices, culminating in something of an overproduction crisis for the more specialized corn producers in the period 1730-50. The fundamental improvements continued to spread, at a pace that accelerated after mid-century; their main features were the introduction of more flexible crop rotations embracing roots, legumes and improved grasses, which enabled the land both to carry more stock and to grow more corn. The obstacles of open-field farming and of peasant tenures were broken down more easily in the eighteenth century, as the economic advantages became more apparent and the social costs more acceptable to a government now composed of great landlords. The larger farmers, in whose hands an increasing share of the land was held, had the best opportunities to learn about innovations that had been pioneered, and had the resources to introduce them. After mid-century, moreover, rising population brought an end to the long-term stability of corn prices that had prevailed for nearly a century, and they began to move upward. This caused a renewed interest by large farmers and their landlords in expanding corn production, and the main contribution to it was made by ploughing up much of the old common and waste, particularly in the eastern countries. Thanks to the improvement of fodder crops and the bringing into use of more Welsh and Scottish highland and reat cattle for England, this reduction of commons did not prevent continuing increase in supplies of meat and dairy produce.

Change in England was associated with the rapid movement away from a society of peasants to one of middling and large farmers employing a little wage labour and producing for the market. France, on the other hand, remained essentially a country of poor peasants, with no substantial changes in rural structure, although landlords were attempting to build up larger farms here and there. Nevertheless, the years 1730-70 saw a big advance in the productivity of French agriculture. Wheat prices were low and still declining until 1760-1, more than a decade after they had started to move upward in England and Holland, clearly indicating that in an age of population growth French production was rising to match it. Writers on English agrarian history explain increases in long-run productivity by improvements in methods and organization; the French see the good years 1730-70 as essentially a good period in the climatic cycle, four decades in which years of good harvest weather were clustered unusually thickly. These differing emphases reflect, to some extent, the development of the two countries:

agricultural improvement was, over a very long period, much more evident in England than in France. Nevertheless, improvement *was* going on in France; and in particular, the gains of the years of good weather 1756-38 built up peasant resources and enabled some of them to expand their livestock and equipment, so reinforcing the effects of a continuing favourable climate in the next three decades. On the other side, if climatic conditions helped the peasants of northern France, they must have had some influence on the increase of English corn production. In both countries a clustering of years of good harvest weather between 1730 and 1770 supported investment in the land and improvement of methods of cultivation.

French agricultural production leaped forward in this period. Rather dubious overall statistics suggest a doubling of production between 1701-10 and 1781-90; but evidence of improvement of this order of size also comes firmly from the records of yield of tithes in many parts of France. On rented land - which on the eve of the Revolution accounted for over two-thirds of France - rents at least doubled, and in many places tripled, between 1720 and 1780. Yet peasant incomes were rising, because there was some time-lag before the diversion of their income to increased rent took effect.

Landlords had taken little interest in agricultural improvement but a combination of circumstances brought them into it after 1760. A literature of agricultural improvement began to appear in France, and in the 1760s the Physiocrats were drawing attention to the dependence of all incomes on a healthy agriculture. More important, rising corn prices gave an impetus to the ploughing up of fresh land - which in the north meant encroachment on the already very limited commons - and the state, reversing its earlier attitude, encouraged this work from 1761 onward. The enclosure of commons was often the work of landlords, their resources already enhanced by enlarged rent rolls; and their renewal of pressure on the peasantry was a factor in building up the rising peasant discontent that reached a revolutionary pitch in 1789.

Through the period 1730-70, therefore, the French economy was greatly strengthened not only by rising peasant incomes that brought more of them into the market for industrial products but also by the increase in landlord incomes and by the sustained rise in population that a more ample food supply supported. The average peasant remained very poor; but the group that had struggled beyond subsistence level to some modest comfort was enlarged. The growth of landed incomes as a whole was probably faster in

France than in England in the early part of this period, and this was certainly true of the growth of rents. After about 1760, however, the experience of the two countries diverged. In England, the rapid adaptation of capitalist farmers to a rising demand for corn increased its supply and steeply augmented farmers' and landlords' incomes. In France, the efforts of some landlords and their larger tenants made only slow headway, for the tone of French agriculture was still set by a great mass of landowning peasantry, not indeed wholly conservative but adapting itself too slowly. The peasants remained in 1770, as they had been a hundred years earlier, the brake on French economic expansion.

Regional specialization in agriculture depended on good communications to distribute its products. Few major agricultural products could bear the costs of long-distance transport except by waterways; and the risks to a region that specialized away from corn were very serious if it was not assured that supplies could easily be brought in from outside. The problem was a lesser one for England, where no point was a great distance from the sea, than it was for France; but even so the improvement of English river systems for navigation, beginning in the 1660s but carried on much more actively in the eighteenth century, was very important. The supply of the swollen city of London depended in part on food brought by river from the upper part of the Thames basin; and while far more food came into the Thames by sea, it had been brought down to the seacoast to be laded for London by means of the river systems. The Great Ouse and its many tributaries carried corn from much of eastern England down to King's Lynn and other ports, and a series of improvements at difficult points of this system had been made during the seventeenth century. In the north, the rivers of the Trent and Ouse basins carried goods from a huge area down to the Humber and the sea. Great extensions were made to the navigable sections of the Trent around 1700, and in mid-century Cheshire cheese was more often being carried to the Trent and by river and sea to London, than sent out westward through Chester. These river improvements were not, of course, wholly for agricultural purposes; they were designed to get lead from the Pennines to the sea, to provide cheaper transport of wool and woolsens for the Yorkshire manufacturing area, to bring Cheshire salt down to the Mersey and Dee estuaries, and to open up Midland coalfields. But their principal function was carrying corn and fodder, relieving

many inland areas of surpluses that had once been hardly saleable, supplying deficit areas more cheaply, and generally levelling down the price differences that corn sales showed at markets in different parts of the country. The further improvements of river navigations in the 1740s and 1760s, and the beginnings of true canal building with the Sankey Navigation of 1757 and the Bridgewater Canal of 1761-7, were prompted chiefly by the need to bring food and raw materials into the rising industrial districts of the north and to the Birmingham area. In the same period, road improvement began to strengthen the links of towns with the waterways and to speed the movement of long-distance passenger traffic.

The French problem was far greater, in a larger country, much of it very remote from the sea. Great rivers cut into it deeply, but the heavily populated north was less well served by them than the centre and the south. Moreover, to send goods down the immense stretches of one of these rivers to the Atlantic sea coast, and then coastwise and up another river, was a tremendously long and costly business. Drought made sections of the rivers unnavigable in summer, and icing was likely to be encountered in some winters. There were tolls everywhere; the river Loire had seventy-five. The great centre of circulation was the Loire, connected by road links with Paris and the east, and with the Rhône-Saône basin to the south-east; its great city and river port was Orleans. Paris secured its corn supply not merely from the surrounding countryside but from a vast area of central and eastern France served by the Loire and Seine, extending into Burgundy and Lorraine. Corn for Lyon was carried down the Saône from Franche Comté and Burgundy, and from Provence up the Loire. But much traffic was along short stretches, alternately of road and river, in the interior. Away from the rivers many villages were quite isolated, and the regular phenomenon of seventeenth-century France had been serious food shortage and high prices in one region, whilst supplies were ample no more than a hundred miles away.

Colbert, who was conscious of the need to assist development of a national market, gave most of his attention to roads. Though his funds were never adequate, it was nevertheless established in France that the creation of a trunk road system was a function of the state rather than of local administration or private enterprise. After 1738 a national plan for roads was gradually implemented, with roads radiating out from Paris to the seaports, frontiers and great towns. Road-building technique reached a high level from the 1750s, and

in the third quarter of the century French roads were far in advance of English. Yet it was a road and not a waterway system, built primarily for strategic and administrative rather than commercial reasons; it greatly speeded personal travel but did little to cheapen the carriage of heavy goods, or to open up remote regions, so its economic impact was limited. The improvement of waterways was more modest. The famous and costly Canal des Deux Mers, which in 1681 was completed to link the Mediterranean with the Garonne basin, had little economic value. The important waterways were in the north, particularly those that supplied Paris and the industrial areas. In the late seventeenth century, parts of the Loire and the Seine were improved by embanking and straightening; the Loire and Seine connection was established by the Orleans Canal (1692) and the Loing Canal (1724), and the Oise and Somme were connected in 1738. The ultimate alleviation of some of the extremes of food shortage, and the improvement of rural incomes, did owe a good deal to the improvement of waterways. The weak link in French communications, however, remained the inadequacy of the pathways that connected most villages with the great trunk roads or with navigable water.

Since the agricultural sector was so large – in eighteenth-century England accounting for some 40-45 per cent of national production, and in France for some 60 per cent – the state of its health had a strong reaction on the industrial sector of the economy. Indeed, modern writers now see in the long-term advance, and the short-term fluctuation of agriculture, an important part of the explanation of English and French economic development in the eighteenth century, and perhaps in the preceding one.

The complicated relationship between agricultural and industrial prosperity is usually simplified by making two general assumptions: that agriculture was overwhelmingly dominated by corn production, and that the demand for corn was very inelastic. The first may serve, though we are conscious that it applies more closely to the densely populated parts of northern France and southern and mid-land England than to the hilly parts of those countries, and that in England during the first half of the eighteenth century the other produce of the land was being rapidly increased. The second assumption is attested by the wide year-to-year fluctuations in corn prices. Since corn (or its derivatives, flour and bread) was essential to people's lives, they would bid up its price very rapidly if it was

scarce; but since it was the regular and least exciting food, once this necessary demand had been satisfied they spent any money they had left on other foods or on industrial products, so that a surplus of corn would cause its price to fall a very long way. Indeed, beyond the most modest deviations from average, a large corn harvest would actually produce a smaller total cash return to the producer than an average harvest would do; and a long spell of good harvests would actually depress the incomes of large corn producers. Within the limits of these assumptions, the likely consequences of the decades of good harvests that were experienced in the middle of the eighteenth century may be examined.

Better harvests changed the incomes of those who derived incomes from cornland; they sold more, at prices that were lowered, and more labour had to be put into harvesting, threshing and carrying; whether by the family or by wage-earners. Since most people derived their income from the land in one way or another — as peasants or farmers, labourers or landlords, carriers or dealers in foodstuffs — change in their incomes powerfully influenced the total of all incomes that were available to be spent not only on agricultural products but on manufactures, services and imported goods. Moreover, all but the well-to-do spent so large a part of their income on the basic foodstuffs that a modest reduction in corn prices could multiply the surpluses to be spent on other things. Transport costs, grinding and baking and traders' margins made up a large part of the final cost of flour and bread bought by most consumers, and the relative stability of these additional costs prevented bread prices from fluctuating so violently as those of corn. The disagreements among historians over the short-term impact of harvest fluctuations, and the more permanent results of long periods of low or high corn prices, arise from their differing estimates in two fields. One is the importance of the combined incomes of all those who supplied and served the market for corn, in relation to the total income of all food producers; the other concerns the patterns of expenditure of various classes within society and the way these classes reacted to changing prices. The differences reflect real and important contrasts between the social structure of England and France.

Assuming that the demand for corn was inelastic, the effect of an abundant supply on the incomes of its producers could range between two extremes. At one end was the large capitalist farmer, employing wage labour to do much of his work, and expecting to

sell most of his corn on the market though he kept some for seed, tithes and his own family consumption. In an exceptionally good harvest, doubling his normal yield, he would be able to sell a good deal more than twice his normal supply on the market — perhaps two and a half times as much. However, the very heavy reduction in price, and the greatly increased cost of harvesting, threshing and carrying, caused such a farmer to suffer by a good harvest. A series of good harvests could be disastrous for him, as English experience showed in the 1730s. He was, of course, the best equipped of all farmers to divert resources away from corn production if the long-term prospects seemed bad. At the other extreme was the peasant whose main concern was to produce the corn needed to feed his own family. His rents and other outgoings were found from the proceeds of such subsidiary products as grapes, flax or pigs, by labouring for others on their land, or industrial by-employment of himself or his family. In an average year he produced enough corn to meet his family needs, pay his tithe and provide next year's seed; in a good year he had surplus corn to sell on the market, and this was pure gain for him beyond his normal condition — however low the price, he got something rather than nothing. A period of low corn prices gave him no adequate inducement to transfer resources to other production.

Obviously there was every kind of dependence on the market for corn between these two extreme types of producer; but it is important to see that, over most of the intermediate range, good crops *must* have added to peasant incomes, apart from by-employments. Consider, for example, the peasant who in an average year was able to sell a quarter of his corn crop as surplus. In a moderately bad year he would have none to spare and he might go hungry. In a very good year, in which the harvest was doubled, he could sell nearly five times as much as in the average year, and no conceivable fall in price would prevent his income being raised. Moreover, in a year of cheap corn the demand for other food products would expand and (if weather conditions favouring corn had not been harmful to them) the same peasant would get more money for his sales of this other produce. Much the greatest part of French rural production, and a very considerable part of English even in the middle of the eighteenth century, came from small and modest peasants in this intermediate range, together with the really poor subsistence peasants. Those English writers on the eighteenth century who assert that the farming community suffered from the series of good

harvests lean too heavily on the experience of the big farmers; even in England the class of cultivators as a whole probably benefited from good harvests. Rural social structures in France and England differed greatly; in England in 1750 – or in 1700 or even 1650 – the admixture of large capitalist farmers was substantial. The English generalization about good harvests is closer to reality, therefore, for England than it is for France. The large farmer was a substantial customer for the products of industry, and a decline in his income would reduce his purchases; but even in England the expansion of peasant incomes might well have counterbalanced this, and in France it certainly did so. However, the smaller peasants – and particularly those in the more remote areas of rural France – would have spent their extra earnings more with the small craftsmen of their own localities than on the produce of the national large-scale industries.

What were the effects of lowered corn prices on other incomes? Half the population of England, and rather less in France, were regular wage-earners, though of course they received only a small part of the total national income. Neither in England nor in France did wages on the land or in industry fall along with food prices; and there was some increased employment to handle a bigger output. With incomes at least maintained, and the cost of their flour or bread considerably reduced, the wage-earners could buy more of other things, and their total additional demand would be large. English writers have attached great importance to expansion in demand for industrial goods from this source. However, they had other outlets for their surplus income; later experience suggests that increased real income among poor wage-earners was likely to be spent on improving the quality of their food supply, and particularly on buying more meat. Moreover, rural labourers, and even workers in small-town industry and services, were more likely to buy the coarse products of local weavers and shoemakers, and the urban poor to buy the cast-off clothing of the rich that descended through servants to the second-hand market, than add to the demand for products of the national, large-scale industries. French historians, indeed, incline to the view that this part of the population was normally so poor and underfed that its reaction to cheaper bread was to buy much more of it. On the whole it seems doubtful whether wage-earners made a large contribution to industrial demand, even in England.

Much the largest component of income that was in the hands of the rich or relatively well-to-do was in the form of rents of land.

The level of rents, when they could be freely negotiated, moved under two different influences. An expanding peasant population, with younger sons seeking landholdings, had always bid up rents competitively, and this was still happening in France between the 1720s and 1770s despite the lowness of corn prices. Men wanted livings for their families, not the right to produce for a competitive corn market. In France in this period agricultural production was greatly expanded; a little of this gain went to the consumers in lower prices; most peasants gained by eating better – yet selling more, until higher rents ate into their surpluses; and their landlords presently managed to push rents up very substantially. Only a few big specializing farmers suffered. The improvement in landlord incomes – the doubling and more of rents in half a century – was probably the most powerful influence on raising the level of industrial demand in France. The other influence on rents was the ability of the enterprising, market-oriented farmer to pay; and this might well decline in a period of low corn prices. In England, in fact, the maximum level of rents was set by what the large commercial farmer would pay rather than by peasant demand; and until well after 1750 it reflected the low prices he was getting for his produce. Maximum commercial rents had some tendency to fall. The total of rental income was rising moderately, however, with the continuing process of dispossessing smallholders, breaking up open fields, and transferring inefficiently cultivated lands that had produced low rents into the hands of commercial farmers who would pay the maximum market rent. Before 1760, however, total rents were not rising at anything like the pace of those in France.

In both countries there was a considerable stratum of urban population as well as of middling peasants well above the level of the very poor. Many of them derived their income ultimately from land; the modest minor beneficiaries of the income of great estates – cousins, nieces, aunts of the minor aristocracy – living in provincial towns. There was a great proliferation of dealers, carriers and shopkeepers with the widening of market areas, and industrial producers and craftsmen were multiplying. The rise of these middle-income groups is a conspicuous feature of English social development in the eighteenth century, and it is evident, if not on the same scale, in France. If the rich landowners, traders, financiers and officials spent much of their income on services and luxury craft products, and the poor bought from local craftsmen, these middle strata accounted for a great demand for produce of good quality

that was produced reasonably cheaply. The typical large-scale industries of the eighteenth century, the great rural textile industries, turned out great quantities of woollen and linen cloth, of stockings, sheets and blankets, to meet these middling demands. The spending of such people was important to the metallurgical industries, making cutlery, locks, metal ornaments and buttons; and to such industries as hat-making, soap-making, paper-making and many others. In these families in the middle ranks of society, spending patterns could be markedly influenced by the cheapening of corn; the very prosperous craftsman or shopkeeper, the low-ranking official or small professional man making £100 a year, might in a normal year spend a fifth of this on breadstuffs for his family.

Though views differ on the effect of increasing agricultural productivity on the income and spending of different social classes, they lead to the same general conclusion about the overall effect on industry. For some English historians, the good harvests and low corn prices of the mid-eighteenth century indicate a reduction in farmers' and landlords' incomes; yet they consider industrial demand was expanded because the rise of wage-earners' incomes and other urban demands outweighed the fall in rural producers' spending. For the French writers, who see farming as overwhelmingly peasant farming, good harvests indicated higher farm incomes and increasing rents; all but the poorest peasants could buy more industrial goods, and so could their landlords, while wage-earners hardly affected the situation for they lived so close to subsistence that their surpluses were always negligible. All agree, however, that good harvests were good for industry and for the economy as a whole; and looking beyond these narrow economic arguments it was obviously a better society in which the mass of the people were adequately fed and had some small surpluses. The most powerful effect on industrial expansion was exerted by the increased purchasing power of the middle incomes in England, and by this together with the expansion of landlord incomes in France. Purchasing power was released by the cheapening of basic foodstuffs and the raising of real incomes. The increased demand for foods of better quality and more varied kinds, and for manufactures and craft products, reinforced the purchasing power of cattle-raisers and dairy farmers, artisans and wage-earners and their employers; there was a multiplier effect at work, whose influence even extended to some expansion of investment.

18 France and England: Industrial Growth and Industrial Revolution

*I*n the late seventeenth century both England and France went through a phase of some industrial growth; but in France it was less vigorous and was very seriously checked by the wars and famines of 1689-1713, while in England several branches of industry continued to move ahead rapidly and were even stimulated by wartime conditions. After 1730 French industry was again expanding fast; English industrial growth accelerated in the early 1730s, was slowed during the long war of 1739-48, and burst forward rapidly in the interval of peace that followed. Over the first three-quarters of the eighteenth century, taken as a whole, industrial growth was at much the same pace in both countries; in the middle decades its acceleration was possibly stronger in France. The extent of growth is hard to establish with any precision, for it came largely through the expansion of a range of minor industries whose statistics cannot be very usefully aggregated. Though both woollen and linen industries continued to expand, they ceased to dominate the industrial scene so completely as they had done in preceding centuries.

Diversification away from the old textile industry was particularly marked in Britain, but even here the woollen industry was far from stagnant. The woollen and worsted industry of West Yorkshire was one of the most actively growing sectors of the economy. Its counterpart, however, was the decline of other producing areas: Devon, which had been the leading producer of worsteds in the first

1949-55). The literature in languages other than Dutch is very scanty. A useful general study is C. R. Boxer, *The Dutch Seaborne Empire* (London, 1969). Early Dutch development is touched on in M. Postan's chapter in the Cambridge *Economic History of Europe*, vol. II (1952) and P. Dollinger, *The German Hanza* (London, 1970). V. Barbour, *Capitalism in Amsterdam in the Seventeenth Century* (Baltimore, 1950) contains much interesting material, and C. Wilson examines the 'Decline of the Netherlands' in *Econ. Hist. Rev.* (8, 1958). B. H. Slicher van Bath's 'Agriculture in the Low Countries, 1600-1800' (*Int. Congress of Historical Sciences*, Rome, 1955) supplements his work referred to in chapter 6; A. E. Christensen, *Dutch Trade to the Baltic about 1600* (The Hague, 1941) is an exhaustive survey of quantities of trade and methods of trading; and N. W. Posthumus, *Geschiednis van de Leidsche Lakennijderij* (The Hague, 1933-9) is an excellent study of the branch of textile industry that came to prominence in the seventeenth century. J. C. Riemensma, *Religious Factors in Early Dutch Capitalism* (The Hague, 1967) analyses religious groupings and their relation to state policy and economic behaviour.

CHAPTER 12: ENGLAND: THE UNTRUBBLED ISLAND

Three general surveys cover the sixteenth and seventeenth centuries: L. A. Clarkson, *The Pre-Industrial Economy in England, 1500-1750* (London, 1971); P. Ramsey, *Tudor Economic Problems* (London, 1963); and C. Wilson, *England's Apprenticeship 1600-1763* (London, 1965), which is altogether more detailed. P. Jeannin has surveyed the English experience from another standpoint in *L'Europe du Nord-Ouest et du Nord aux XVII^e et XVIII^e Siècles* (Paris, 1969). T. P. R. Laslett, *The World we have Lost* (London, 1965) is an original and useful examination of social trends, if at times it reads too much into limited evidence; and L. Stone, 'Social Mobility in England, 1500-1700' (*Past and Present*, 1966) is full of brilliant ideas that await investigation.

Agricultural history is exhaustively surveyed for its period by J. Thirk (ed.), *The Agricultural History of England and Wales, Vol. IV, 1540-1640* (Cambridge, 1967), but E. Keridge, *The Agricultural Revolution, 1570-1670* (London, 1967) presents an important new interpretation of the early history of agricultural improvement. P. Ramsey has edited a collection of essays on *The Price Revolution in Sixteenth Century England* (London, 1971).

Among a large number of histories of individual industries no single one covers the great woollen industry in its entirety; but the outstanding regional history, G. D. Ramsey's, *Wiltshire Woollen Industry in the Six-*

teenth and Seventeenth Centuries (Oxford, 1942) illuminates problems of marketing and organization that were general. J. U. Nef's *The Rise of the English Coal Industry* (London, 1932) is a solid study; and in *The Conquest of the Material World* (London, 1964) he has reprinted essays in which he drew attention to rapid expansion among the minor industries during the period 1540-1640. J. W. Gough, *The Rise of the Entrepreneur* (London, 1969) summarizes the history of several industries.

G. D. Ramsay, *English Overseas Trade in the Centuries of Emergence* (London, 1957) is an excellent general survey; several of the key essays for modern interpretation are collected by W. E. Minchinton, *The Growth of English Overseas Trade in the Seventeenth and Eighteenth Centuries* (London, 1969), but the most important article deals with an earlier period: it is F. J. Fisher's 'Commercial Trends and Policy in Sixteenth Century England' (*Econ. Hist. Rev.*, 10, 1940). B. E. Supple, *Commercial Crisis and Change, 1600-1640* (Cambridge, 1959) goes beyond a survey of overseas trade to present an exceptionally lucid analysis of the relations between commercial interest, economic thinking and economic policy, and R. Davis, *The Rise of the English Shipping Industry in the Seventeenth and Eighteenth Centuries* (London, 1962) relates overseas trade to problems of transport. Works on banking and finance are listed in the bibliography to chapter 14, but P. G. M. Dickson's fine study of the government debt, *The Financial Revolution in England* (London, 1967) deserves mention here.

E. M. Carrus-Wilson (ed.), *Essays in Economic History*, vols. I and II (London, 1954 and 1962) has collected many of the most useful articles written in the past half-century.

CHAPTER 13: FRANCE: THE UNSTEADY GIANT

The new *Histoire Economique et Sociale de la France*, ed. F. Braudel and E. Labrousse, provides in vol. II (Paris, 1970) a set of magisterial surveys of the period 1660-1789 that makes further bibliography almost superfluous. However, another useful general volume is the special issue of the journal *Dix-Septième Siècle* (70-1, 1966) devoted to economic history. The great strength of French economic history is in its regional studies; they are too numerous to be fully listed, but those particularly useful for this period include P. Goubert's masterpiece, *Beauvais et le Beauvaisis de 1600 à 1730* (Paris, 1960); M. Venard, *Boisnois et Paysans au XVII^e Siècle; le Role des Bourgeois Parisiens dans la Vie Agricole au sud de Paris* (Paris, 1957); E. Le Roy Ladurie, *Les Paysans de Languedoc* (Paris, 1966); R. Baehrel, *Une Croissance: la Baisse Provençaise rurale (fin du XVII^e Siècle -*

1789) (Paris, 1961); and A. Zink, *Azerex: la Vie d'une Communauté Rurale à la fin du XVII^e Siècle* (Paris, 1969). Little more need be said about agriculture, but J. Jacquart's contribution to *Dix-Septième Siècle* (*supra*) is useful and brief. J. C. Toutain has attempted to construct a statistical account of the growth of agricultural production in *Le Produit de l'Agriculture Française de 1700 à 1958* (Paris, 1958); it is severely criticized by E. Le Roy Ladurie, 'Les Comptes Fantastiques de Gregory King' (*Annales*, 23, 1963).

Industrial history is much less satisfactorily covered. H. Lapeyre, *Une Famille des Marchands: Les Ruiz* (Paris, 1955) has a good account of the sixteenth-century linen industry; P. Devon contributes a useful section on industry in *Dix-Septième Siècle* (*supra*), and his *Amiens: Capitale Provinciale* (Paris, 1967) deals with an important cloth-making centre. W. C. Scoville, *The Persecution of the Huguenots and French Economic Development, 1680-1720* (Berkeley, 1960) examines several branches of industry, and P. Leon, *La Naissance de la Grande Industrie en Dauphiné* (Paris, 1953) is a good study of metallurgy. J. Delumeau has a summary of overseas trade in *Dix-Septième Siècle* (*supra*); beyond this the reader should go to the histories of ports, such as R. Boutrouche, *Histoire de Bordeaux, 1453-1715* (Bordeaux, 1966); G. Rambert, *Histoire du Commerce de Marseille* (vols IV-VI, Marseille, 1954-7); and M. Trocmé and M. Delafosse, *Le Commerce Rochelais de la Fin du XV^e au Début du XVIII^e Siècle* (Paris, 1952). C. W. Cole's *Colbert and a Century of French Mercantilism* (New York, 1939) examines the commercial policies of governments during the seventeenth century.

CHAPTER 14: CAPITAL, CREDIT AND FINANCIAL INSTITUTIONS

Sixteenth-century exchange and banking, and the role of exchange fairs, are examined in M. Vigne, *La Banque à Lyon* (Lyon, 1903) and D. Gioffré, *Gènes et les Foires de Change: de Lyon à Besançon* (Paris, 1960), while R. Ehrenberg elucidates the emerging role of Antwerp in *Capital and Finance in the Age of the Renaissance* (London, 1928). The working of the exchange system is illustrated in M. Lapeyre, *Une Famille des Marchands: les Ruiz* (Paris, 1955) and F. Ruiz Martin, *Lettres Marchandes échangées entre Florence et Medina del Campo* (Paris, 1965).

R. de Roover, *L'Évolution de la lettre de change* (Paris, 1953) is the standard work; J. M. Holden, *History of Negotiable Instruments in English Law* (London, 1955) explains how the favourable legal situation facilitated their proliferation in eighteenth-century England. H. Van der

Wee, 'Anvers et les Innovations de la Technique Financière aux XVI^e et XVII^e Siècles' (*Annales*, 22, 1967) shows some differences from de Roover's conclusions. A. P. Usher, 'The Primitive Bank of Deposit, 1200-1600' (*Econ. Hist. Rev.*, 4, 1934) leads towards modern banking; J. G. Van Dillen, *History of the Principal Public Banks* (The Hague, 1934) has a chapter on each of them. Different aspects of banking development in England, the country where it progressed farthest by the eighteenth century, are examined by R. D. Richards, *The Early History of Banking in England* (London, 1929), D. M. Joslin, 'London Private Bankers, 1720-1785' (*Econ. Hist. Rev.*, 7, 1954), and J. H. Clapham, *The Bank of England* (Cambridge, 1944). The institutions discussed in H. Lüthy, *La Banque Protestante en France* (Paris, 1959) were largely concerned with public finance, but there is a useful discussion of French banking in Braudel and Labrousse (see chapter 13). Institutions of public debt are further examined in R. Carande, *Carlos V y sus Banqueros* (Madrid, 1943-9); B. Schnapper, *Les Rentiers au XV^e Siècle: Histoire d'un Instrument du Crédit* (Paris, 1958); and P. G. M. Dickson, *The Financial Revolution in England* (London, 1967).

A long historical controversy on the growing importance of bills of exchange in multilateral trade in the seventeenth century is summed up by J. M. Price, 'Multilateralism and/or Bilateralism?' (*Econ. Hist. Rev.*, 14, 1965), and S.-E. Åström, *From Cloth to Iron: The Anglo-Baltic Trade in the late Seventeenth Century* (Helsingfors, 1963). S. Homer's *History of Interest Rates* (New Brunswick, N. J., 1962) throws much light on relative scarcity of capital.

CHAPTER 15: THE TROPICAL COLONIES IN AMERICA

R. Pares, *Merchants and Planters* (Cambridge, 1960) is the best general discussion of the problems of the sugar planters, and his 'A West India Fortune' (London, 1956) illustrates them from the long experience of a single family in Nevis. L. J. Ragatz, *The Fall of the Planter Class in the British Caribbean* (New York, 1928) examines, and perhaps overstates, their difficulties in the eighteenth century. N. Deerr's *History of Sugar* (London, 1950) is wide-ranging and makes possible comparisons between sugar-producing areas.

R. B. Sheridan has a valuable economic survey of all the West Indian colonies of the powers in *Chapters in Caribbean History* (London, 1970). On the particular colonies, useful works are F. W. Pitman, *The Development of the British West Indies, 1700-1763* (New Haven, 1917); L. Der-migny, 'St. Domingue aux 17^e et 18^e Siècles' (*Rev. Historique*, 204, 1950)

(which summarizes scattered and inaccessible works of G. Dehien); L. P. May, *Histoire Economique de la Martinique, 1635-1763* (Paris, 1930); C. R. Boxer, *The Dutch in Brazil, 1624-1654* (Oxford, 1957); and F. Mauro, *Le Portugal et l'Atlantique au XVII^e Siècle, 1570-1670* (Paris, 1960).

CHAPTER 16: THE BRITISH MAINLAND COLONIES

The economic history of colonial America, which attracted much attention in the early part of this century, has been relatively neglected in recent years, and many gaps remain unfilled, while much good work is confined to particular colonies, and is therefore of too narrow an interest to be listed here. L. H. Gipson's monumental *The British Empire before the American Revolution* (vols II and III, New York, 1960) includes detailed description of the economic activity of the different colonies in the middle of the eighteenth century. The most useful general history is C. P. Nettels, *The Roots of American Civilization* (London, 1963); S. C. Bruchey, *The Roots of American Economic Growth, 1607-1861* (London, 1965) is slight but has some stimulating ideas. Useful regional studies are P. A. Bruce, *Economic History of Virginia in the Seventeenth Century* (New York, 1907); W. B. Weedon, *Economic and Social History of New England, 1620-1789* (New York, 1890); and D. E. Leach, *The Northern Colonial Frontier* (New York, 1966).

L. C. Gray, *History of Agriculture in the Southern United States to 1860* (New York, 1941) is comprehensive. M. Harris has a wide-ranging discussion of *The Origins of Land Tenure in the United States* (Ames, Iowa, 1935). The recent detailed analysis of the land history of a small community, P. J. Greven's *Four Generations: Population, Land and Family in Colonial Andover, Mass.* (London, 1970) is extremely valuable and poses new questions. Important discussions of colonial markets are J. M. Price, 'Economic Growth of the Chesapeake and the European Market, 1697-1775' (*Jnl. Econ. Hist.*, 24, 1964) on tobacco, and W. Sachs, 'Agricultural Conditions in the Colonies before the Revolution' (*Jnl. Econ. Hist.*, 13, 1953) on food supply to the towns. Two excellent volumes on town growth and economic activity, by C. Bridenbaugh, are *Cities in the Wilderness* (New York, 1960) and especially, *Cities in Revolt, 1743-1776* (New York, 1955). V. S. Clark's *History of Manufactures in the United States of America* (Washington, 1929) covers the colonial period in vol. I. There is no good general study of trade from the colonial end. R. Davis, 'English Foreign Trade 1700-1774' (*Econ. Hist. Rev.*, 15, 1962) sketches the structure of colonial trade and its impact on Britain. Much illumin-

nation can be obtained from the histories of individual business houses, such as J. B. Hedges, *The Browns of Providence Plantations* (Cambridge, Mass., 1912); P. L. White, *Beckmans of New York* (New York, 1956), and B. Fairchild, *Messrs. William Pepperell* (Ithaca, N.Y., 1954). The West Indian trading connection is discussed in R. Pares, *Yankees and Creoles* (London, 1956). The effect of British legislation on American trade and industry is the subject of O. M. Dickerson, *The Navigation Acts and the American Revolution* (Philadelphia, 1951), and recent controversy on the overall economic effects of the Navigation Acts is summarized in G. M. Walton, 'The New Economic History and the Burdens of the Navigation Acts' (*Econ. Hist. Rev.*, 24, 1971).

CHAPTER 17: FRANCE AND ENGLAND IN THE EIGHTEENTH CENTURY

CHAPTER 18: FRANCE AND ENGLAND: INDUSTRIAL GROWTH AND INDUSTRIAL REVOLUTION

In England, the century before the Industrial Revolution has always attracted the interest of economic historians, and the literature is very extensive; in France, however, it has received less attention than the two preceding centuries. The best overall discussion, for France, is again F. Braudel and E. Labrousse (eds.), *Histoire Economique et Sociale de la France*, vol. II (Paris, 1970). R. Mandrou, *La France aux XVII^e et XVIII^e Siècles* (Paris, 1970) is also useful. Good general works for England are T. S. Ashton, *The Eighteenth Century* (London, 1955) and *Economic Fluctuations in England, 1700-1800* (Oxford, 1959); and C. Wilson, *England's Apprenticeship, 1600-1763* (London, 1965). This century has attracted some statistical studies, notably the earlier sections of P. Deane and W. A. Cole, *British Economic Growth 1688-1919* (Cambridge, 1967); J. Marczewski, 'Some Aspects of the Economic Growth of France, 1660-1958' (*Economic Development and Cultural Change*, 1961); and P. Léon, 'L'Industrialisation en France: en tant que facteur de Croissance Economique du Début de XVIII^e Siècle a nos jours' (*Int. Conference of Economic History, Stockholm*, 1966). D. V. Glass and D. E. C. Eversley, *Population in History* (London, 1965) reprint a number of important essays on English and French demographic history.

Turning to specific sectors, English agricultural history is summarized by J. D. Chambers and G. E. Mingay, *The Agricultural Revolution in England, 1750-1880* (London, 1956), and E. L. Jones has collected a number of important recent articles in *Agriculture and Economic Growth in England, 1650-1875* (London, 1967). The background of change in the

cotton industry is examined in great detail by A. P. Wadsworth and J. de L. Mann, *The Cotton Trade and Industrial Lancashire, 1600-1780* (Manchester, 1931), while S. D. Chapman's more recent *The Early Factory Masters* (Newton Abbot, 1965) has demonstrated the importance of its north-midland origins. R. G. Wilson, *Gentlemen Merchants, 1700-1830* (Manchester, 1971) shows how the forms of relationship between merchants and producers in Yorkshire fostered the concentration of the woollen industry there during the eighteenth century. The best study of the metal industries is W. H. B. Court, *The Rise of the Midland Industries* (Oxford, 1938). R. Davis, 'English Foreign Trade, 1700-1774?' (*Econ. Hist. Rev.*, 15, 1962) analyses the statistics and discusses their implications.

E. Labrousse, *La crise de l'Économie Française à la fin de l'Année Régime et au Début de la Révolution* (Paris, 1944) is a superb analysis of the agricultural economy. For French industry, the works referred to in chapter 13 remain useful, and may be supplemented by P. Dardel, *Commerce, Industrie et Navigation à Rouen et au Havre, au XVIII^e Siècle* (Rouen, 1966), B. Gille, *Les Origines de la Grande Métallurgie en France* (Paris, 1947), and T. J. Markovitch, 'L'Industrie Lainière Française au Début du XVIII^e Siècle' (*Rev. d'Histoire Econ. et Sociale*, 46, 1968). Volume IV of F. Lacombe-Gayet (ed.), *Histoire du Commerce* (Paris, 1951) is a useful discussion.

There are innumerable works on the Industrial Revolution in England, most of which give a good deal of attention to the earlier background which is the subject of these chapters. Outstanding among them are P. Mantoux's classic *The Industrial Revolution of the Eighteenth Century* (London, 1928), D. Landes' penetrating analysis in his chapter of the *Cambridge Economic History of Europe*, vol. VI (1965), and P. Mathias, *The First Industrial Nation* (London, 1969), which is the best of the modern textbooks. A. E. Musson and E. Robinson, *Science and Technology in the Industrial Revolution* (Manchester, 1969) includes much interesting material. The final chapter owes much to F. Crouzet's fine study, 'Angleterre et France au XVIII^e Siècle: Analyse Comparée de Deux Croissances Économiques' (*Annales*, 21, 1966), which stimulated me to much thought, if in the end to some disagreement.

Index

- Acapulco, 162
 Aegean Sea, 9
 Africa, 1-14 *passim*, 50, 65, 75, 96,
 136-7, 148, 167, 169, 185, 206,
 209, 242, 274, 311
*Agrarian History of England and
 Wales, 1540-1640*, 195
 agriculture, 108-24 *passim*
 Aix-en-Provence, 111
 Albany, 272, 275
Alcibada, 68, 70-2
 Algarve, 3, 10
 Alleghany, 272, 278-9
 Almadén, 51
 Alva, 76-8
 Amazon, 172-4
 America, xiii, 11-12, 37, 39-43,
 45-7, 50, 54, 60, 62-5, 67, 77, 80,
 88, 90, 96, 100, 160, 165-7, 172,
 180, 184-5, 191-2, 208, 235,
 250-63 *passim*, 288; discovery of,
 xii, 12, 15, 73-5, 77, 87;
 colonization of, 81, 84-6, 125-42
passim; English, xi, 86, 125-42
passim, 172, 264-87 *passim*, 288;
 French, 125-42 *passim*; Latin,
 37-55 *passim*, 157-75 *passim*;
 North, xi, xiii, 80, 82-3, 125-42
passim, 168, 172, 184, 243,
 264-87 *passim*, 303, 306;
 Portuguese, 125; see also Brazil;
 South, xi, 37-55 *passim*, 38, 87,
 135; Spanish, xi, xiv, 36, 37-55
passim, 57, 59, 62-5, 67-70, 72,
 206, 226, 307; United States of
 ix, xi; revolution, 251, 264, 266,
 268, 273, 277-80, 282, 285-6;
 Declaration of Independence,
 288
 Amsterdam, 31, 34, 90; population,
 94, 96, 118, 178-83, 186-90,
 192-3, 206, 235, 243, 246-7,
 256
 Amsterdam, Bank of, 179, 185,
 246-9
 Anatolia, 9-10
 Andalusia, 10, 18-19, 56-7, 59-60,
 63-4, 67, 71, 148, 231
 Andes, 38, 53, 55, 162, 170-1
 Anjou, 220, 222, 225
 Antigua, 133, 253
 Antwerp, 21, 26-36, 64, 68, 76,
 78-9; population, 94, 97, 105,
 176-9, 183, 188, 190, 206-8,
 224-5, 240, 243, 247
 Arabia, 261
 Aragon, 14, 56-7, 60, 62, 66, 124,
 143, 155
 Arequipa, 53
 Arguing, 6, 8
 Arica, 53
 Atkwright's water-frame, 312-14
 Armada, 155