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Absolutism and Enlightenment in Eighteenth-Century France

Problems of the Absolute State

The conditions that led to the proliferation of writing on economic questions in seventeenth-century England had no parallel in France. Many more feudal institutions remained than in England (although some feudal obligations had effectively become marketable commodities), and the king possessed absolute power. Throughout the seventeenth and eighteenth centuries it was frequently dangerous to express opinions that the state might view as subversive. Of the writers discussed in this chapter, Boisguilbert suffered exile and Mirabeau imprisonment for their economic opinions. In private, however, radical opinions could be, and were, expressed even in salons patronized by the royal family. Political and social criticism could also be left implicit by formulating it as general principles or by directing it against practices found in other countries. Thus, while French writing on economic questions was sparse during the seventeenth century, it grew substantially during the eighteenth, and by the 1750s and 1760s Paris had become the centre of European economic thinking, to which most of the leading figures came.

The structure of French government policy was laid down in the seventeenth century by Jean Baptiste Colbert (1619–83), finance minister under Louis XIV (r. 1643–1715) from 1661. Colbert was not an economist. He did not write on economic questions, and he is not even known to have read widely on the subject. His policies, however, characterize an important type of mercantilism during this period. His primary aim was not to raise the welfare of the population but to increase the power of the King. Internally, he wanted to unify the country, economically as well as politically, so that, for example, famine in one region

could not coexist with plenty in another. Externally, the volume of trade was taken as fixed, so that one country's gain had to be matched by a corresponding loss elsewhere. If France were to gain, it could only be at the expense of England or the Netherlands.

Colbert's policies followed logically from these beliefs. He sought to increase exports and reduce imports, thereby both achieving national self-sufficiency and accumulating the treasure which would drive trade. Attempts were made to increase the population and to keep wages low, thus forcing people to work hard. Immigration of skilled workers was encouraged through subsidies, and Colbert tried to stop emigration. Trade was carefully regulated and new industries were set up, sometimes with foreign workers.

France had long faced severe financial and economic problems, and Colbert's policies failed to solve them. It was not until much later that deaths from famine became a thing of the past. Throughout the century, shortages of food, sometimes occurring alongside surpluses in other parts of the country, were common. Such shortages were particularly acute in towns, for these were beginning to outgrow the resources of their traditional hinterlands. The government resorted to numerous measures in order to deal with the problem, including price-fixing, prohibiting speculation in grain, and direct coercion of producers. However, it did not remove the taxes and barriers to the internal movement of food that lay at the problem's heart. The government also faced chronic financial difficulties, these being due in large part to military expenditures incurred both by Louis XIV and his successors. The state was continually on the verge of bankruptcy. The clergy and the nobility, who owned most of the nation's wealth, were largely exempt from direct taxation, and among those who were liable the burden of such taxes was very uneven. Collection of taxes was arbitrary and inequitable. A major reason for this was that the state did not have the administrative apparatus to collect them itself, but farmed the job out to private companies. These would pay an agreed sum to the exchequer in return for the right to collect certain levies. This process was inefficient, and unjust methods of collection were often used. On

top of this, in 1738 the *corvée*, or system of forced labour, was extended from specific regions to the whole country.

Early-Eighteenth-Century Critics of Mercantilism

One of the early critics of Louis XIV's economic policies was Pierre de Boisguilbert (1646–1714). In *Détail de la France* (published in 1695, but possibly written some years earlier), and in a series of other publications during the following two decades, Boisguilbert sought to explain what he saw as the disastrous decline in the French economy under Louis XIV. Income had, he claimed, halved during the previous thirty years. The starting point of his analysis was the necessity of exchange. As economic development took place, exchange became more and more complex, making it necessary to use money. However, money did not in itself create wealth. It had to circulate actively if it were to be effective. If money could circulate rapidly – perhaps being augmented by money substitutes such as bills of exchange – this would be as efficient as having a larger money supply. Paper money could perform the functions of metallic money, and had the advantage of costing nothing to produce.

What kept money circulating, Boisguilbert argued, was consumption, for one man's spending is another man's income. Consumption and income were therefore equivalent. Thus the decline in French income could be attributed to a decline in consumption. What had caused this? Boisguilbert's answers included the burden of taxation; the distribution of income away from the poor, who spent money quickly, to the rich, who were more likely to hoard it; and the uncertainty that made the propertied class less willing to invest. More fundamentally, however, Boisguilbert linked prosperity to the price system: prosperity requires that there be a balance or equilibrium between different goods and that 'prices are kept in proportion with one another and with the costs necessary for creating the goods'.¹

This perspective led Boisguilbert to conclude that nature alone, not the state, can maintain order and peace – *laissez faire la nature*. Though buyers and sellers are both motivated by profit, the balance between the needs to buy and to sell forces both sides to listen to reason. Thus, although individuals are concerned only with their own interests, provided the state does not interfere they will contribute to the general good. The state's role is to establish security and justice.

However, although Boisguilbert saw markets as establishing order, they would sometimes fail. Uncertainty and incorrect expectations meant that output prices would fluctuate. This was particularly noticeable in the market for grain, where prices fluctuated violently. High prices would mean that even the worst land could profitably be cultivated, leading to a glut that pushed prices so low that all farmers made a loss. Boisguilbert thus proposed an exception to his rule of *laissez-faire*: the government should intervene to stabilize the price of grain, holding stocks that could be bought and sold to achieve this.

The idea proposed by Boisguilbert that paper money could fulfil the functions of gold and silver at lower cost was taken even further by a Scotsman, John Law (1671–1729), in *Money and Trade Considered: A Proposal for Supplying the Nation with Money* (1705). Like Boisguilbert, Law started from the premisses that the value of goods depended not on the quantity of money but on the ratio of the quantity of goods to the demand for them, and that the role of money was to facilitate trade. An increase in the quantity of money would therefore raise employment, cause more land to be cultivated, and increase output and trade. Law worked on the assumption that there were normally unemployed resources that could be brought into use when activity increased. However, whereas the mercantilist response was to argue for measures to accumulate bullion, Law argued for an expansion of paper currency. Apart from being cheaper, a paper currency would have the advantage that its supply could be regulated so as to stabilize its value and the level of economic activity. Security would be provided by the titles to land against which loans would be issued. By being linked to the value of land, which Law

claimed was more stable than the value of silver, the value of the currency could be assured.

Law's proposal was designed to revive the Scottish economy, and he submitted it, unsuccessfully, to the Scottish parliament in 1705. In 1706, however, he was forced to flee Scotland to avoid being arrested for murder. The reason was that in 1694 he had killed a man in a duel and, after being arrested, had escaped from prison with the connivance (and possibly the assistance) of the authorities. Union with England in 1707 raised the prospect that he would be rearrested. He settled in France, where he persuaded the Regent under Louis XV to put some of his ideas into effect as a way of solving France's financial problems.

In 1716, in Paris, Law formed the Banque Générale, which in 1718 was nationalized as the Banque Royale. Notes issued by the bank were to be accepted in payment of taxes. In return Law offered to put the French finances, severely weakened by Louis XIV's wars, into order through reducing the rate of interest to 2 per cent. However, the bank's capital was only 825,000 livres, in comparison with a total government debt of around 450 million livres. The result was that the bank had little control over interest rates. As a result Law became drawn into debt management. The Compagnie d'Occident (Company of the West), established by Law in 1717, was given exclusive trading rights in Louisiana in return for taking over a large quantity of government debt, and tax farms were also centralized within the company. To pay for the government debt, shares were issued. Law used numerous marketing devices to sell shares in the Compagnie d'Occident, and through 1719 they rose in value, supported by lending from the Banque Royale. In May 1719 shares were selling for less than their nominal value of 500 livres, but by December they sold for as much as 10,025 livres per share. In January 1720 Law was appointed Controller-General of Finances, the highest administrative post in France, and from January to March plans were made for the demonetization of gold and silver.

In May 1720, however, Law realized that the financial situation still needed to be brought under control and he proposed a plan gradually to reduce the price of shares from their unsustainable value of 9,000 livres per share to 5,000 livres per share by the

end of the year. This outraged the public, who had counted on shares rising in value (there was a highly developed forward market, with some trades taking place on the basis that shares would rise as high as 15,000 livres), and by September the price had fallen to only 4,367 livres per share. This conceals the extent of the collapse, for during this period overissue of banknotes had reduced the shares' value substantially. Valued in sterling, tied to gold, the value had fallen from £302 per share to £47 per share. Much of the public's financial wealth had been destroyed, though the government benefited through having its debts substantially reduced. Despite the collapse in the company's share price, Law persisted in believing that it could have survived had it not been for the arrival of plague in Marseilles in 1720. This caused people to demand coins instead of banknotes and created a liquidity crisis for the bank.

Cantillon on the Nature of Commerce in General

One of those who saw the flaws in Law's scheme and got out in time to save his fortune was Richard Cantillon (c. 1680/90–? 1734). Cantillon was an Irish merchant banker who spent most of his life in France. He is surrounded in mystery. His home burned down, and for a long time it was assumed either that he was killed in the fire or that the fire was started by an aggrieved servant to cover up his murder. A year later, some of his papers were taken by an unknown traveller to Surinam, leading to the idea that the fire might have been a ruse by Cantillon to cover his disappearance. The motive may have been to escape the lawsuits against which he still had to defend the fortune he had acquired through his activities with Law in the 1720s. The fire, however, had destroyed most of his papers. He published one book, *An Essay on the Nature of Commerce in General*, probably written in 1730, but not published until 1755. It appeared in French, purporting to be a translation from English in order to get round the French censorship laws. Some scholars have seen this book as so significant as to mark the birth of the subject of economics.

Cantillon's *Essay* opens with the statement that land is the source of wealth: 'The land is the source or matter from whence all wealth is produced. The labour of man is the form which produces it: and wealth is nothing but the maintenance, conveniences and superfluities of life.'² Labour, regarded by many economists as the source of wealth, simply adjusts to demand. If there are too many labourers in a country, they will emigrate or become poor and starve. In an implicit criticism of Colbert's policy, Cantillon argues that it is impossible to raise wealth by training more craftsmen. He likens this to training more seamen without building more ships. It is land that determines wealth, and the number of labourers will adjust automatically.

Cantillon attaches particular importance, however, to one type of labour – that of the entrepreneur. Entrepreneurs are people who buy goods either to engage in production or to trade them, without any assurance that they will profit from their activities. For example, the farmer, who is an agricultural entrepreneur employing people to work for him, cultivates land without knowing whether corn will be cheap or dear, or whether the harvest will be good or bad. Merchants buy goods in bulk without knowing whether demand from consumers will be high or low, or how many sales will be lost to competitors. However, although entrepreneurs perform an important function in undertaking risky activities, they are still, like labourers who work for a wage, dependent on the proprietors of land.

Two implications follow from this view of land as the source of wealth. The first is that land is the source of value. Cantillon's analysis is based on the concept of 'intrinsic value'. This is not the same as market price. It is the amount of land and labour that enters into the production of a commodity. If labour is valued according to the amount of land needed to maintain the labourers, this reduces to a land theory of value. To produce corn, for example, requires land on which to grow it plus the land necessary to produce the labourers' subsistence. In contrast, market price depends on supply and demand and may fluctuate above or below the intrinsic value of a commodity.

The second implication that Cantillon draws from his view of land as the source of wealth is that all other classes are

maintained at the expense of the landowners. Only the landowners are 'naturally independent', for it is their spending that determines how resources are allocated between different uses and, as a result, the values of different goods. To quote one of Cantillon's chapter titles, 'The fancies, the fashions, and the modes of living of the prince, and especially of the landowners, determine the use to which land is put in a state and cause the variations in the market price of all things'.³ He gives the example of a large self-sufficient estate that is initially cultivated by the owner himself, who directs overseers to manage it so as to produce the goods that he requires. The division of the estate into pasture, arable, parkland, orchards, gardens and so on will be determined entirely by the owner's tastes (though he will of course have to allocate sufficient land to produce the goods that his labourers consume). Cantillon then considers what would happen if the owner decentralized decision-making, setting up his overseers as independent producers, equipped with the relevant amounts of land, and linked to him and to each other through markets. His conclusion is that everyone on the estate would live in exactly the same way as before. Only if the owner changes his consumption pattern will economic activity change:

For if some of the farmers sowed more corn than usual they must feed fewer sheep, and have less wool and mutton to sell. Then there will be too much corn and too little wool for the consumption of the inhabitants. Wool will therefore be dear, which will force the inhabitants to wear their clothes longer than usual, and there will be too much corn and a surplus for the next year. And as we suppose that the landowner has stipulated for the payment in silver of the third of the produce of the farm to be paid to him, the farmers who have too much corn and too little wool, will not be able to pay him rent... So a farmer who has arrived at about the proportion of consumption will have part of his farm in grass, for hay, another for corn, wool and so on, and he will not change his plan unless he sees some considerable change in the demand; but in this example we have supposed that all the people live in the same way as when the landowner cultivated the land for himself, and consequently the farmers will employ the land for the same purposes as before.⁴

If the landowner were, for example, to dismiss some of his domestic servants and to increase the number of horses on his estate, corn would become cheap (for demand would be less) and hay dear (demand having increased). Farmers would then turn corn fields into grassland.

Throughout this discussion, as in his discussion of value, Cantillon makes it clear that he is dealing only with long-run equilibrium: 'I do not consider here the variation in market prices which may arise from the good or bad harvest of the year, or the extraordinary consumption which may occur from foreign troops or other accidents, so as not to complicate my subject, considering only a state in its natural and uniform condition.'⁵

After considering production and wealth, Cantillon turns to money. Here his ideas owe much to Locke, for he focuses on the circulation of money, accepting the link between the price level and the money supply. However, he criticizes Locke on the grounds that, while 'he has clearly seen that the abundance of money makes everything dear,... he has not considered how it does so'.⁶ To resolve this, Cantillon considers the way in which money enters the economy and the channels through which it flows. He considers three main sources from which an increase in the money supply might arise: gold and silver mines, the balance of trade, and subsidies paid by foreign powers.

If money comes from mines, the first people to be affected will be the mine owners and workers in the mining industry. Their incomes will rise and they will spend more, which will raise the prices of the goods they buy. This will increase the incomes of the farmers and manufacturers from whom the goods are bought, who will in turn increase their spending, raising other prices and incomes. Money will gradually spread out throughout the country, raising prices as it goes. Classes on fixed incomes, such as landowners whose rents are fixed by long-term agreements, will be worse off until their leases can be renegotiated. As prices rise, producers will find that their costs have risen, forcing them to raise prices further. As prices continue to rise, people will be encouraged to buy abroad, where goods are still cheap. This will ruin manufacturers. When the inflow of new money ceases – perhaps because the mines are exhausted – incomes will fall and people will have to cut back their spending. Money will become scarce, and poverty and misery will follow. Because much of the gold and silver will have gone abroad to pay for the increased imports, the state will not end up with any more money than its

neighbours. This, Cantillon argued, was roughly what had happened in Spain after the discovery of America.

In contrast, if the inflow of money arises from a favourable balance of trade, it will first accrue to merchants. This will in turn raise the incomes of those who produce the goods being exported. The prices of land and labour will in turn also be raised. However, because the money will accrue to industrious people who are keen to acquire property, they will not raise their consumption but will save money until they have sufficient to invest it at interest or to buy land. Only then will they raise their consumption. The rise in prices will cause goods to be imported, but such a situation, Cantillon argues, can continue for many years. The effects will be different from those of an increase in money from mines, because the money will be received by different classes of people, whose spending behaviour will be different.

The effects of subsidies from foreign powers will depend on whether the monies are hoarded or spent. Only in the latter case will they have any effect, raising prices.

Cantillon recognized what has come to be termed the price-specie-flow mechanism – the notion that a rise in the money supply will raise prices, resulting in a trade deficit that causes money to flow out of the country. In its pure form, this mechanism implies that attempts to increase the money supply are self-defeating. Cantillon could thus write that when a state's money supply, and hence its wealth, is at its greatest, the state 'will inevitably fall into poverty by the ordinary course of things'.⁷ This would appear to undermine the 'mercantilist' notion that increases in the money supply bring prosperity. However, Cantillon could also write that 'It is clear that every state which has more money in circulation than its neighbours has an advantage over them so long as it maintains an abundance of money.'⁸ Higher domestic prices will mean that the same quantity of goods exported will purchase more imports. In addition, plenty of money makes it easier for the ruler to raise taxes. For prices to rise in this way it is necessary that the money be retained within the state. This is more likely if it were obtained from trade than if it were obtained from mines, for the incomes would be received

by those more likely to invest it rather than engage in luxury consumption.

Having discussed money, Cantillon could move on to finance. The issues he covered included foreign exchange, variations in the relative values of different metals used as money, debasement of the currency, and, finally, banks. Like Law, he saw that banks could be of value to a nation, this value being measured by the paper currency that entered into circulation. He estimated that the Bank of England kept reserves equal to around 1 million ounces of silver, but its notes amounted, on average, to 4 million ounces of silver. When the circulation of money needed to be speeded up, this situation was, he claimed, of great benefit to England. Banks were of particular benefit to small states where silver was scarce. However, given the experiences of the early 1720s, when both England and France had experienced major speculative bubbles which had burst dramatically, Cantillon pointed out the dangers of insolvency should a bank increase its note issue too far. The example of Law's scheme, from which he had managed to get out in time, was one that he could never have forgotten.

The Enlightenment

Some of the most important ideas underlying the Enlightenment can be traced to seventeenth-century England – to Locke and to the scientific revolution associated above all with Bacon and Newton. The Enlightenment involved a belief in reason, progress, liberty and toleration. Reason was believed to be man's central capacity, which enabled him to think and act correctly. Because all men were equal by virtue of their having reason, it followed that everyone should be free to act and think as his reason directed. The Enlightenment was therefore a revolt against the alleged unreason of earlier ages – reason was to replace religious authorities, sacred texts and traditions as the criterion by which all things were to be judged. Above all, however, the Enlightenment was characterized by a belief in progress.

Replacing superstition by reason would enable man to progress without any divine assistance. Newton had shown that the physical world could be understood in terms of a system of laws, comprehensible through reason, and Locke had shown that the human mind could build complex ideas from the basic data of sensory experience. Innate or externally supplied ideas were not needed: reason was sufficient. In the same spirit, Locke had also offered a utilitarian framework for morality, and provided a theoretical basis for representative government.

Such challenges to traditional ideas were suppressed in France under Louis XIV. Censorship still persisted under Louis XV (r. 1715–74), though less rigorously. Printing was still controlled for many years, with the result that unorthodox ideas, circulating only in manuscript form, could not spread as rapidly as if they were printed. However, the relaxation was sufficient to release a pent-up flood of criticism of established ideas and institutions. In the mid 1740s censorship was significantly decreased, and the following decade saw a profusion of new ideas from men such as Diderot (1713–84), on the relativity of knowledge and morals, Montesquieu (1689–1755), on the rule of law, and Condillac (1715–80), who developed Locke's psychology. The optimism of the movement was captured by Diderot and d'Alembert (1717–83), who edited an encyclopedia that would bring together all human knowledge and serve to propagate the new ideas. Between 1751 and 1772, despite periodic attempts by the authorities to suppress it, twenty-eight volumes were published. Covering practical as well as theoretical knowledge, the *Encyclopédie* included articles on economic questions.

Physiocracy

The Physiocrats, or *Les Économistes*, were the first organized group of economists. Physiocratic ideas were developed between 1756 and 1763 by two men, Francois Quesnay (1694–1774) and Victor Riqueti, Marquis de Mirabeau (1715–89), at a time when the Seven Years War with England was putting great strain on

French finances. They held regular meetings to discuss Physiocratic ideas, they had a journal, *Éphémérides*, that published their ideas between 1767 and 1772, and their *La Philo-sophie rurale* (1763) could be regarded as a textbook in Physiocratic economics. Physiocracy attracted devoted followers, including Du Pont de Nemours (1739–1817) and Mercier de la Rivière (1720–93). There were also economists such as Turgot (see pp. 104–7) who were sympathetic towards Physiocracy, though not in complete agreement with its ideas. Physiocratic ideas underlay some of Turgot's reforms during his term as Controller-General of Finances from 1774 to 1776.

By the time Quesnay turned to economics, he had acquired a considerable reputation as a doctor, first as a surgeon and then as a physician (at the time regarded as having significantly higher status, in England as well as in France). His position in the French court was as physician to Madame de Pompadour, mistress of Louis XV, and it was for his medical services that he received a title and considerable wealth. His medical background is important, as it influenced his perspective on economics. In turning to economics, Quesnay sought to analyse the pathology of society and to propose remedies. Influenced strongly by Boisguilbert and Cantillon (on whose work Mirabeau drew heavily), he focused on the circulation of money – a clear analogy with the circulation of blood within the body, discovered over a century earlier. It is tempting to suggest that the term ‘Physiocracy’, meaning the rule of nature, reflected the attitude of an experienced physician who knew the importance of working with nature in effecting a cure. Equally significant, the Physiocratic system rested on a clear analysis of the structure of French society.

To understand society, Quesnay and Mirabeau claimed in *La Philo-sophie rurale*, it is necessary to understand the means by which it obtains its subsistence. Politics and law both rest on this. They outlined the evolution of society, culminating in the commercial societies that had grown up alongside agricultural ones. Trade was essential, which meant that it afforded a secure means of obtaining subsistence, but agriculture remained fundamental. The main reason for this was that it alone, the

Physiocrats argued, yielded net revenue – a surplus over the necessary costs of production (see p. 102). They expressed this by describing agriculture as productive and other sectors (trade and manufacturing) as sterile.

The Physiocrats' assumptions about different classes were developed from Quesnay's observations on agriculture, first published in an article in Diderot's *Encyclopédie*. Most land was cultivated by share-croppers, who paid a fraction (usually one half) of their produce to the landowner in return for the use of the land and the loan of seed and livestock. Their methods were hardly more productive than those employed by peasant proprietors who cultivated their lands with minimal capital. In contrast, there had developed in parts of northern France, as in England, a new class of farmers – agricultural entrepreneurs. These were able to improve the lands they rented from their proprietors (usually the nobility or the Church) and produce large surpluses. The crucial difference between them and the share-croppers was that they had access to capital, for it was this that made it possible for them to employ more productive techniques. In contrast, though it was essential in order to produce goods that people needed, industry produced no surplus. It simply covered its costs. Agricultural capital was therefore the key to economic growth.

The relationship between agricultural capital and economic growth was explained by Quesnay in several versions of his *Tableau économique*, the first of which was published in 1758. This was a diagram that showed the circulation of money and goods between the three classes in society (proprietors, farmers and artisans) on the assumption that policies were ideal for agricultural development. In different versions of the *Tableau*, Quesnay listed up to twenty-four conditions that had to be satisfied in order for the economy to operate in the way he outlined. These included the following. (1) The entire revenue enters into circulation. (2) People are not led by insecurity to hoard money. (3) Taxes do not destroy the nation's revenue. (4) Farmers have sufficient capital to achieve a net revenue (surplus) of at least 100 per cent. (5) There is free external trade in raw produce. (6) The needs of the state are met only through the

prosperity of the nation, not through raising credit from financiers. (7) People are free to cultivate their land as they think best. Given that none of these conditions was satisfied, obtaining them would amount to a very substantial policy agenda.

The starting point for the *Tableau* is a situation in which farmers have capital, or an 'annual advance', of £2 million (in corn) and proprietors have a stock of money of £2 million. Agriculture produces a surplus of 100 per cent, which accrues to the proprietors as rent. Consider first the circulation of money. Proprietors spend half their revenue (£2 million) on food and half on manufactured goods, so £1 million flows to each sector. This generates incomes which are spent, again half on food and half on manufactures. Each sector thus gains a further £0.5 million from the other. When successive rounds of income are added up, they come to £2 million for each sector (£1 million + £0.5 million + £0.25 million + ...). Each sector thus receives an income of £2 million and spends £2 million on buying consumption goods from the other sector. There is, however, an important difference between the two sectors. Manufacturing uses its remaining £1 million to purchase raw materials from agriculture, with the result that it generates no surplus. The entire stock of money (£2 million) thus ends up in the agricultural sector. Agriculture ends up with a financial surplus of £2 million, which is paid to the proprietors as rent.

The reason why agriculture can generate this financial surplus is that, unlike manufacturing, it produces a surplus of goods. The 'advance' of £2 million in corn is used to produce output worth £5 million. Of this, £1 million is sold as food to the proprietors, and £2 million is sold to the manufacturing sector, half as food and half as raw materials. This leaves £2 million worth of corn to replenish agriculture's capital stock for the following year. The accounts balance.

This numerical example is discussed in detail to make an important point. Although the fundamental insight about the circulation of income came from Boisguilbert and Cantillon, Quesnay tried to develop his argument with a degree of rigour that was absent from their work. Quesnay's numbers may seem arbitrary, but they were not. They reflected such statistics as were

available about the French economy of his day. The figure of 100 per cent for the surplus, for example, reflected Quesnay's belief about what could be achieved in capitalist farming if sufficient capital were available to employ the most efficient techniques (using horses). These techniques were used on large farms in southern England and parts of northern France, but many French farmers could not afford them. Such numerical examples also enabled Quesnay, in successive versions of the *Tableau*, to explore the sensitivity of the economic system to various changes. For example, he showed that if a tax of £25,000 were imposed on both sectors, the result would be a decline in the annual advance in agriculture from £2 million to £1,950,000. Agriculture would lose £25,000 directly and £25,000 indirectly through reduced sales to the manufacturing sector. The result would be economic decline, for less output would be produced the following year. Similarly, he could show that a fall in productivity (perhaps due to government intervention or keeping the price of corn low) or the diversion of spending from agriculture to manufacturing would reduce output.

The Physiocratic system, centred on the *Tableau économique*, was used to defend a clear and controversial political agenda. The state was needed to maintain markets and the circular flow of income. Quesnay performed exercises with the *Tableau* to show how output would be reduced if his initial assumptions were not satisfied. Taxation, interference with agriculture, artificial stimulation of manufacturing, keeping food prices low – all policies pursued by the governments of Louis XIV and Louis XV – were all harmful and should be abandoned. The laws of nature provided constraints on what the state could undertake without undermining the prosperity on which it depended. However, this did not rule out all state activity. The surplus accruing to the proprietors could be taxed (as was necessary to raise the funds needed to support the market), but taxation could not rise too far. The reason was that the proprietors' spending was necessary to maintain the annual flow of income and spending.

Turgot

Not all reformers belonged to the Physiocratic school. One group that stood apart from the Physiocrats, though it supported them on economic policy, was centred on Vincent de Gournay (1712–59). Gournay was a businessman who made himself a public servant by purchasing the office of Intendant of Commerce, a position he held from 1751 to 1759. His work involved visiting different parts of France to investigate trade and manufacturing there. Gournay popularized the phrase '*laissez faire, laissez passer*', and he probably arranged for the publication of Cantillon's *Essay*. He wrote little, but exerted an important influence on others – including Turgot.

Anne Robert Jacques Turgot (1727–81), in a eulogy written in 1759, argued that Gournay saw himself not as a systematizer but as someone who offered common-sense maxims. Mercantilist regulations that allowed one city in France to treat citizens of other cities as foreigners, preventing them from working within its precincts, or that ruined a weaver because his cloth was inferior to that produced by a guild, did not make sense. Turgot claimed that, though Gournay saw matters as common sense, there was a principle underlying them: that 'in general every man knows his own interest better than another to whom it is of no concern'. Gournay, he argued, reached the conclusion that

when the interest of individuals is precisely the same as the general interest, every man ought best to be left at liberty to do what he likes. Now in the case of unrestrained commerce, M. de Gournay thought it impossible for the individual interest not to concur with the general interest.⁹

The government should therefore restore liberty to all branches of commerce – removing barriers to trade, simplifying taxes, and giving everyone the right to work. This would 'excite the greatest competition in the market, which will infallibly produce the greatest perfection in manufacturing, and the most advantageous price to buyers'.¹⁰

Turgot's first contribution to economics was a critique of Law's monetary theory in 1749. In the 1750s, however, he met Gournay and worked with him, translating a book by the English

economist Josiah Tucker (1712–99), and accompanying Gournay on tours of inspection in the provinces. In 1761 he was appointed intendant in the Limousin, a backward region in France, where he engaged in a process of reform. Areas affected included taxation, the system of forced labour during the harvest, and the road system. It was during this period that his main contributions to economics were written. His commitments as a government official meant that these were mostly letters and reports. The two exceptions were *Reflections on the Formation and Distribution of Wealth* (1766) and an unfinished essay, 'Value and Money' (1769).

In 1774 Turgot was promoted to Controller-General of Finances and moved to Paris. Here, too, he engaged in reform. His response to the perennial problem of food shortages was to free the grain trade, though he still prohibited the export of corn and made special provision for the supply of grain to Paris. He replaced the inefficient private company that held the monopoly of saltpetre (needed in the manufacture of gunpowder) with a state-owned firm, run by the chemist Lavoisier. Postal services were also transferred to a government department, and further similar reforms were projected. In 1776 Turgot sought to liberalize the corn trade still further, to abolish the guilds that restricted access to many industries, and to fund road building through a tax on landowners instead of through forced labour. He also spoke up in favour of tolerating Protestants. These measures, however, trampled on numerous vested interests. As a result, Turgot lost the support of other ministers and was attacked in the *parlements*, restored by his predecessor. He tried to force through his reforms using the King's authority, but his opponents managed to turn Louis XVI against him and he was dismissed. Many of his reforms were abandoned.

Though Turgot's reforms may have been pragmatic, they were consistent with the view of economic phenomena outlined in his two most systematic writings on economics. The early sections of the *Reflections* could have been written by a Physiocrat. They discuss the origins of exchange and the pre-eminence of agriculture of the husbandman over the artisan and distinguish between a productive and an unproductive class. Like Quesnay,

Turgot discusses different ways in which agriculture can be organized, arguing that farming by tenant-entrepreneurs is most efficient, but that it is possible only if there is sufficient capital. However, he takes the argument in a different direction when he argues that lending money can also contribute to the creation of wealth. This leads into a discussion of the role of money in commerce, and eventually to a very un-Physiocratic perspective on the role of industry in creating wealth.

When people save, they accumulate capital that they can then use in a variety of ways: they can lend it at interest, purchase land (which yields rent), or employ it as an advance in industry (which yields profit). Because people have this choice, Turgot argued, the returns on all three of these uses of capital will be linked. They will not be equal, because the risks are different. If you lend money the borrower may fail to repay you, but if you purchase land you are secure. Land will thus yield a lower return than lending at interest. Similarly, investing in industry is more risky and will carry a higher return. Competition will therefore establish an equilibrium between the returns on these different ways in which capital can be employed. If, for example, the value of land is too high (equivalent to the return being too low) compared with other uses of capital, owners will exchange it for other types of capital and its price will be pushed down.

The equilibrium rate of interest is determined by supply and demand: it 'depends directly on the relation between the demand of the borrowers and the offer of the lenders'.¹¹ Thrift increases the number of lenders and reduces the number of borrowers, while luxury consumption has the opposite effect. Europe's falling rate of interest, Turgot argued, showed that thrift had prevailed over luxury, producing a rise in the amount of capital. This view led him to insist that the rate of interest was a price like any other and should therefore be determined by 'the course of trade' like the price of any commodity. The rate of interest would determine which lands were sufficiently profitable to cultivate and which industrial activities were sufficiently profitable to be undertaken.

Important features of this view can be found in seventeenth-century writing, notably by Locke on the rate of interest and by

Mun on capital. However, Turgot integrated the various elements of this theory better than any of his predecessors. Furthermore, he used the theory to answer more clearly than anyone at that time the question of what constitutes a nation's wealth. His answer was that it comprises, to use modern terminology, the present value of the net revenue from land (the value of the land) plus the stock of movable goods. This, in essence, is the answer any modern economist would give. Turgot pointed out explicitly that to include 'capitals on loan' (financial assets) would involve double counting and that, though money was the object of saving, specie (a movable good and therefore part of wealth) was but a very small component of wealth.

In the course of this argument about the nature of wealth, Turgot explored the nature of value, a theme he developed in his later unfinished work. He started from the assumption that the value, or worth, of a good was unique to each individual. It depended on the fitness of the good to serve the purposes for which it was required, and on the difficulty of obtaining it. This concept of value could be described as 'esteem value', for value depended on the esteem in which a good was held. Turgot argued that there is no natural unit in which to measure value, and that the value of one good has to be measured in terms of another good. It is possible, for example, to say how many armfuls of firewood have the same value as a measure of grain. In practice, given that there are many goods, value is measured in terms of an arbitrary unit given by convention – a *numéraire*. If all goods are measured in terms of the same *numéraire*, then the relative value of any pair of goods can readily be calculated.

Turgot's discussion of 'esteem value' was applicable to an isolated person. From there he proceeded to consider exchange between two people who would generally value goods differently. He assumed that two goods would be exchanged at the average of the two parties' esteem values. If this were not the case, one would benefit less than the other from the exchange and would force the other to come closer to his price. This established what Turgot called 'exchange value'. Though conceptually different from the term 'price', which denotes the sum paid for a good, exchange value and price are numerically the same and can, in

many contexts, be used interchangeably. Finally, Turgot introduced a second pair of traders, so that he had four people in communication with each other, two selling wood and two selling corn. He outlined how competition would force both sellers of each good to accept the same price.

Turgot was not alone in developing a subjective theory of value. On the contrary, there was a long tradition of such theories, going back through natural-law philosophers such as Samuel Pufendorf (1632–94) and Hugo Grotius (1583–1645) to the scholastics and Aristotle. In the eighteenth century, however, the clearest statements of subjective-value theories came from Italian economists, of whom Ferdinando Galiani (1728–87) is perhaps the outstanding representative. In 1751 Galiani published *Della Moneta*, one of the few works cited by Turgot in his essay on value. In 1759 he was appointed to the Neapolitan Embassy in Paris, where he stayed for ten years. This decade was precisely the time when, due to Quesnay, political economy had become fashionable. Galiani, however, was not a Physiocrat, and criticized the policy of allowing free export of corn while there were still extensive barriers to internal trade. *Della Moneta* clearly states the doctrine, taken up by Turgot, that value is subjective and measurable only in relation to the value of other goods. Utility and scarcity are the main factors explaining value. Galiani's argument that man is the common measure of value was, Turgot claimed, 'one of the newest and most profound truths which the general theory of value contains'.¹²

Economic Thought under the *Ancien Régime*

When the once-strict French censorship laws were relaxed sufficiently to allow the publication of writings that could be used against the government, the main issue driving economic thought was reform. Taxes and regulations were seen by many to be stifling trade. Against this background it is not surprising that the doctrine of laissez-faire was developed by a wide variety of writers, from Boisguilbert at the start of the century to Turgot on

the eve of the French Revolution. The effects of government restrictions on agriculture no doubt provide part of the reason (though not the whole reason) why the Physiocrats emphasized the productivity of agriculture so strongly. They needed to counter the assumption, underlying Colbertism, that resources had to be shifted into manufacturing.

However, though economic thought was largely stimulated by urgent policy questions, many abstract ideas were developed. Cantillon's main work was on the nature of commerce *in general*. The Physiocrats went even further, developing an abstract numerical model of economic activity. Turgot, even while involved in the running of the French state, and trying to reform it, probed into the meaning of abstract concepts such as wealth and value. The result was that the French economists of this period produced ideas that proved able to be taken up and used in very different contexts in the following century. French ideas fed into English classical economics through Adam Smith, who was strongly influenced by Quesnay and Turgot, as well as through writers working after the Revolution, such as Jean Baptiste Say (see p. 142). Though his economic views could hardly be more different, the *Tableau économique* inspired Karl Marx (see pp. 156–63).