

Table 2.1 *The logistics of war, 1689-1784*

War	Average annual personnel			Average annual expenditure	Average annual tax revenue	Debt	
	Navy	Army	Total			Begin	End
1689-97 Nine Years War	40,262	76,404	116,666	5,456,555	3,640,000	—	16,700,000
1702-13 War of Spanish Succession	42,938	92,708	135,646	7,063,923	5,355,583	14,100,000	36,200,000
1739-48 War of Austrian Succession	50,313	62,373	112,686	8,778,900	6,422,800	46,900,000	76,100,000
1756-63 Seven Years War	74,800	92,676	167,476	18,036,142	8,641,125	74,600,000	132,600,000
1775-84 American War	82,022	108,484	190,506	20,272,700	12,154,200	127,300,000	242,900,000

SOURCE: *British Parliamentary Papers*, vol. 35 (1868-9); B. R. Mitchell and Phyllis Deane, *Abstract of British Historical Statistics* (Cambridge, 1962), pp. 401-2.

foreign troops to fight in Europe also persisted, though the sums spent on foreign regiments and armies was far greater than ever before. Both these tactics helped circumscribe the scope of the standing army.

They also enabled the state to give higher priority to its naval forces. Though the navy was consistently smaller than the army, naval spending occasionally exceeded and never lagged far behind the army expenditure. The *per capita* cost of a wartime sailor was double that of a soldier in the army, mostly because of the navy's higher maintenance costs. But it also reflects Britain's determination to sink money into the navy so as to develop its support services and infrastructure. The great military buildings of eighteenth-century England were not barracks and forts but the dry-docks, stores, ropewalks and building yards of the royal navy. And when we compare the distribution of military spending with that of other European powers, the priority given to the navy is obvious. With the exception of the Dutch, and the French during the American War of Independence, no other major state devoted such a high proportion of its expenditure to a floating force.

The figures for the armed forces provided in Table 2.1 have to be treated with some caution. The army numbers show men voted by parliament, not a tabulation of soldiers in the field. It is certain that these are overestimates of the actual number of combatants. The high rates of desertion common to all European armies in this period and the proclivity of regimental officers to overestimate the strength of their forces in order to pocket the pay allowances of nonexistent men, a practice that had institutional approval in many states, meant that armies were never at their full complement. On the other hand the parliamentary figures do not include troops on the Irish establishment (12,000 men in all), nor the number of militiamen mustered during the Seven Years and American Wars. They are, in any case, the only continuous series over time, apart from the unreliable estimates inserted in the preamble to the Mutiny Acts. For all their weakness, they provide a good general indication of the British army's commitment during wars of several years' duration. The naval figures, which are of men boyed by the navy, including naval marines, are more accurate: they are totals of men actually listed as serving rather than of men for whom money had been set aside.

For all the problems with such statistics, it is difficult to challenge their broad trajectory, which is indisputably upward. On the basis of these estimates, the army, having doubled in size during the Nine Years War, when it reached a peak of 87,500, grew yet again in the struggle over the Spanish Succession. Between 1702 and 1713 it averaged nearly 93,000 men. In the final year of the war there were 144,650 under British arms. Compared with these earlier conflicts, the War of Austrian Succession saw, for the first and last time during the century, a reduction in the size of the wartime army. Only in 1746 did it exceed a total of 70,000 men. Whereas in 1702 an establishment of 28 battalions had been increased to 80, during the 1740s the total rose to a mere 67. But the Seven Years War saw the renewal of the upward trend. Between 1756 and

immediately downplays the military effort of powers like Britain which devoted so much of their resources to their navies. Indeed, there is no reason why naval strength should not feature in any overall assessment of military activity. The English, Dutch, French and Spanish fleets, after all, were each considerably larger and more expensive than the armies of minor states. Equally, we should find some way to include in our calculations soldiers who were not members of a national standing army: bodies of militiamen such as those mustered in France, Spain, England, Denmark, Sweden and several German states; separate bodies of foreign troops subsidized to fight on behalf of a particular nation.

A second assumption that needs to be questioned is that 'militarized' states, those whose civilian apparatus had been either militarized or made subordinate to military control, were thereby more capable exponents of military effort in the arena of international conflict. This is to confuse the type of domestic regime and its capacity for domestic repression with its ability to wage war on other states. An 'unmilitarized' state, as the Dutch and English cases show, was well capable of distinguished 'military effort'. Indeed, as we shall see, there are good reasons to suppose that states that provided their subjects with certain civil freedoms were thereby better able to mobilize their resources for war.

Regardless of the type of regime, those who waged war needed two vital resources, money and men. Eighteenth-century warfare, greater in scale than ever before, required both in great quantities. The effects of Britain's military activities on public spending outlined in Figure 2.1, show a clear pattern: peaks of expenditure during years of war troughs in years of peace. The overall trend is upward. Before 1688 total public expenditure rarely exceeded £2 million per annum. By the War of Spanish Succession it had more than tripled to over £7 million each year. A generation later, during the American War annual spending reached a total of almost £30 million. Between the Nine Years War and the American War it increased by a factor of six.

These figures do not allow, it is true, for the effect of price inflation; nor do they consider population changes in order to calculate public expenditure *per capita*. But neither inflation nor population growth has any major effect on the data. Little of the growth in public spending can be explained by inflation. Prices were relatively stable between the late seventeenth century and the accession of George III. Only after 1760 was there a discernible price increase, so that by the 1780s prices were some 21 per cent higher than twenty years earlier.<sup>27</sup> The population of England and Wales, according to Wrigley and Schofield,<sup>28</sup> increased by 46 per cent between the Glorious Revolution and the end of the American War. In the same period expenditure increased by 600 per cent in constant prices. The *per capita* increase in public expenditure was therefore very little offset by population growth.

As Figure 2.1 also makes clear, eighteenth-century English governments

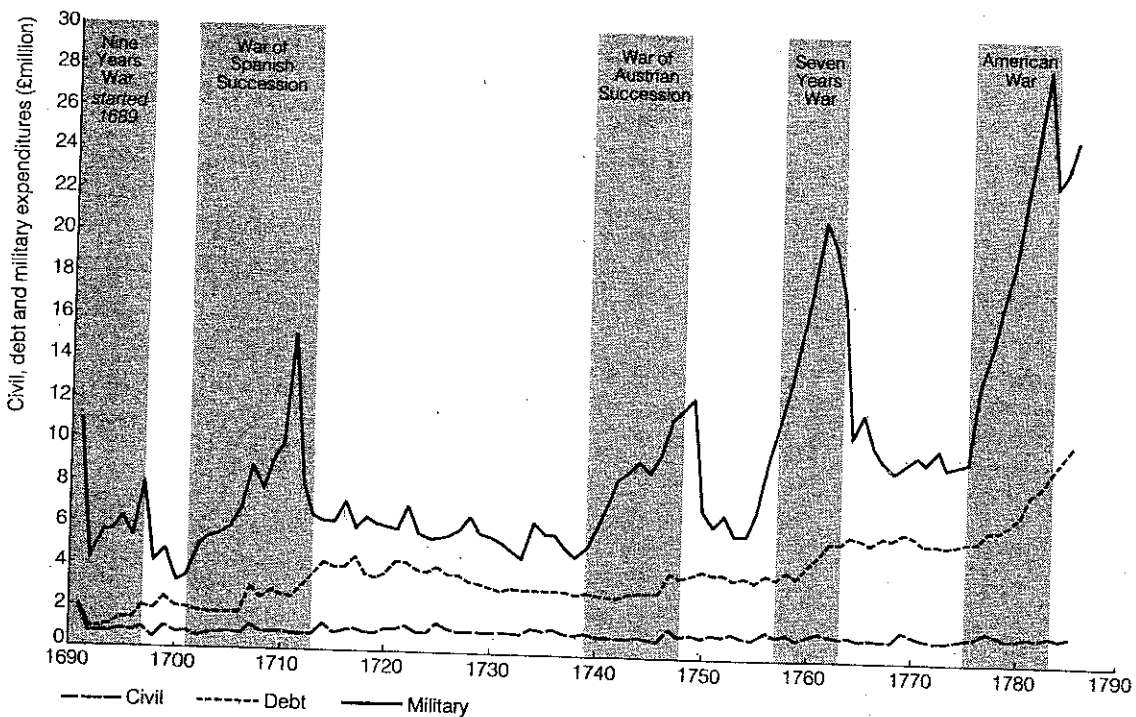


Figure 2.1 Government expenditures, 1691-1785  
SOURCE: *British Parliamentary Papers*, vol. 35 (1868-9)

spent very little on civilian affairs. Civil expenditure – which effectively meant the domestic expenses of the monarch and his court, the so-called civil list – remained remarkably stable throughout this period, rising slowly from an average of just under £1 million per annum to just less than £1.5 million by the 1780s. For all the complaints of back-bench parliamentarians about the extravagance of the monarch and his court, the civil list accounted for only a small percentage (usually less than 15 per cent) of total government costs.

The real expenses lay elsewhere. Eighteenth-century English governments, like most European powers, spent their money waging war. Between 75 per cent and 85 per cent of annual expenditure went either on current spending on the army, navy and ordnance or to service the debts incurred to pay for earlier wars. These figures indicate that Britain had as substantial a commitment to military expenditure as any European power. Even if we exclude spending to service the debt, then current military expenditure accounted for between 61 per cent and 74 per cent of public spending during the major wars of the period (see Table 2.2). This does not compare with Russian disbursements during the Great Northern War with Sweden, when 90 per cent of Peter the Great's revenue was spent on his army and navy. It is, however, roughly comparable to the proportion of public expenditure spent on the armed forces in Prussia during the second half of the century and outstrips the 25 per cent spent by the French during the last years of the *ancien régime*.<sup>29</sup>

Such a comparison is, however, slightly invidious. Though the proportion of Britain's total public spending on the armed forces was high by contemporary standards (as was their expenditure per man), the outlay probably represented a much smaller percentage of national resources than in many other states.

**Table 2.2** *Military spending as a percentage of total government expenditure, 1688–1783*

War	Total spending		Military spending	
	(£000)	(£000)		%
1689–1697	49109	36270	74	
1702–13	98207	64718	66	
1739–48	87789	55814	64	
1716–63	116664	82727	71	
1775–83	178482	109168	61	

source: *British Parliamentary Papers*, vol. 33 (1868–9).

Britain's military spending during major wars absorbed between 10 and 15 per cent of national income (see Table 2.3). This is roughly comparable to the figure given by Peter Dickson for total Austrian expenditure as a percentage of national income in 1780.<sup>30</sup> But it is probable that a state like Prussia, with a smaller population, a less developed commercial economy and an extremely large army, spent a far greater proportion of its wealth on military affairs.

Unfortunately the absence of national income figures for most continental states prevents us from putting this expenditure on 'military effort' in comparative perspective.

**Table 2.3** *Military expenditure as a percentage of national income, 1710–80*

Year	National income		Military spending	
	(£m)	(£m)		%
1710	59.8	5.4	9.0	
1740	55.2	5.5	10.0	
1760	69.4	9.9	14.0	
1780	97.7	12.2	12.5	

source: *British Parliamentary Papers*, vol. 35 (1868–9).

If a comparative assessment of government spending on war is hampered by inadequate economic statistics, a comparison of manpower commitment founders on the question of what manpower figures mean. Aggregate numbers of the size of European armies are an extremely crude indicator.<sup>31</sup> Their value as a measure of the effect of military recruitment on the civilian labour market is largely vitiated by the presence of a large (and varying) proportion of foreigners in almost all of the large armies of Europe. The French army, for example, contained many foreign units, including bodies of Germans, Italians, Swiss and Irishmen. According to André Corvisier, three-quarters of the wartime French army might consist of foreign troops.<sup>32</sup> A similar foreign presence was to be found in the Prussian and Spanish armies. At mid-century about 38 per cent of the Prussian troops were not Prussian subjects; by the last quarter of the century the proportion had risen to over a half. In Spain in 1751 28 of the army's 133 battalions were manned by troops who were not Spanish. British armies were equally dependent upon foreign manpower. During the campaign in Ireland in 1690, two British monarchs, James II and William III, fought each other with troops from France (both Huguenot and Catholic), the United Provinces, Denmark, Sweden and Prussia. The pattern persisted throughout the century. During the American War over 32,000 Germans fought for the British against the colonists. Drawing on the resources of those small German states which specialized in renting troops to other powers, the British hired regiments from Hesse-Cassel, Hesse-Hanau, Brunswick, Ansbach-Bayreuth, Waldeck and Anhalt-Zerbst.<sup>33</sup>

We face further difficulties if we ask how many subjects in a given state acquired military experience as a result of their nation's engagement in war. In order to answer this question we need to know more about an army than its size. The frequency and length of wars (which, in turn, affected the size of the armies deployed) and the turnover in army personnel also have to be taken into account. Death and desertion meant that the composition of armies changed rapidly. During the Seven Years War the French army lost about

number of state employees were courtiers or the personal retainers of the monarch. If and how this changed the attitude of government officials to their task is a matter to which we will return later in this chapter.

Tables 3.1 and 3.2 collate some of the available data on administrative

Table 3.1 *Employees in administrative departments, 1692-1755*

	1692	1708	1716	1726	1741	1748	1755
State	11	35	29	25	40	46	44
Clerks	4+	16	12	7	20	19	21
Trade	—	30	65	73	109	120	115
Clerks (head office)	3	6	7	8	8	8	6
Clerks total	—	6	—	8	16	18	10
Total in the field	—	—	37	51	87	98	93
Office of the Lord High Admiral	8	12	11	16	20	18	37
Clerks	—	1	1	7	7	6	20
Navy Board	—	18	13	17	59	63	64
Clerks (head office)	16	1	1	2	3	3	3
Clerks total	16	1	1	2	14	15	15
Total employees in field	30	5	3	3	42	43	37
Treasurer of the Navy office	—	—	—	26	28	29	29
Clerks	—	—	—	17	19	20	20
Commissioners for victualling the navy	5	8	24	10	16	16	15
Clerks	—	1	7	0	3	3	3

SOURCES: Edward/John Chamberlayne, *Anglicae Notitiae: or, the Present State of England*, 17th edn (1692), 22nd edn (1708); 24th edn (1716); 27th edn (1726); 34th edn (1741); 37th edn (1748); 38th edn (1755).

Table 3.2 *Full-time employees in the fiscal bureaucracy, 1690-1782/3*

	1690	1708	1716	1726	1741	1748	1755	1763	1770	1782/3
Customs	1313	1839	1750	1911	1925	1939	1832	2290	2244	2205
Excise	1211	2247	2778	3466	3745	3360	3294	3973	4066	4908
Salt	298	404	465	473	484	468	[410]	[410]	[410]	364
Stamps	73	84	112	119	115	117	[110]	[110]	[110]	[120]
Post Office	158	231	232	155+	162+	253	[200]	[200]	[200]	[200]
Treasury and Exchequer	124	180	109	137	234	220	[200]	[200]	[200]	[200]
Wines etc.	41	29	47	56	56	55	[50]	[50]	[50]	[50]
Other	491	155	155	245	245	245	245	245	245	245
	(hidas)									
Total	2524	4780	5947	6497	6765	6595	6484	7478	7525	8292

SOURCES: Edward/John Chamberlayne, *Anglicae Notitiae: or, the Present State of Britain*, 17th edn (1692); 22nd edn (1708); 24th edn (1716); 27th edn (1726); 34th edn (1741); 37th edn (1748); 38th edn (1755); British Library Harleian Mss 7431, Add. Mss 10404, Add. Mss 37838; PRO Customs 48/18 ff. 120-5; PRO Treasury 44/38, 48/23; Cambridge University Library, Add. Mss 5224, 5227, 5239.

NOTE: [ ] = estimates

growth in this period. Though Table 3.1 is far from comprehensive in its coverage of departments, its general trend is unmistakable.<sup>8</sup> The Navy Board, the Board of Trade and the Secretary of State's Office all grew fourfold. Contemporary comment and fragmentary qualitative evidence from other departments indicate that the growth of these offices was not exceptional. Almost every branch of government expanded in response to the exigencies of war and the administrative demands of empire.

Table 3.3 *Growth in fiscal bureaucracy, 1690-1782/3 (1690 = 100)*

	1690	1708	1716	1726	1741	1748	1755	1763	1770	1782
All depts.	100	181	223	246	256	249	245	286	285	295
Excise	100	186	229	286	309	277	272	328	336	405

SOURCES: See Table 3.2.

Though some departments had more rapid rates of growth, the greatest increase in the total number of employees occurred in the departments of revenue. These were the solid core around which subsequent expansion was built. As Tables 3.2 and 3.3 indicate, between 1690 and 1782/3 the overall number of revenue officers increased threefold, reaching a total of nearly 8300 by the end of the American War.<sup>9</sup>

The pace at which the fiscal departments expanded was not, however, constant. The most rapid increases occurred during the wars against Louis XIV, when revenue employment more than doubled to a total of nearly 6000. This expansion in fiscal administration was largely responsible for the swiftness with which government as a whole grew between 1688 and 1714. During the next twenty-five years, and despite the longest period of peace in the eighteenth century, the fiscal bureaucracy continued to grow, albeit at a much slower rate. Walpole was either unable or unwilling to take the opportunity conferred by the absence of a major war to retrench the fiscal administration.

This failure makes the achievement of Walpole's successor, Henry Pelham, all the more impressive. During Pelham's years in office (1742-54) the number of fiscal employees actually fell. His policy of 'economy', as far as it is consistent with . . . service<sup>10</sup> had the astonishing result of checking the growth in fiscal administration, even though the nation was fighting wars both in Europe and in the colonies. Such retrenchment fell victim, however, to the financial demands of the Seven Years War. This conflict, fought on an unprecedented scale and at unprecedented expense, produced the most rapid growth in administration since the Treaty of Utrecht.

If the revenue departments were the largest employers of state servants, the Excise was by far the most important of the fiscal offices, and the one which underwent the greatest expansion. Between 1690 and 1782 it grew more than fourfold, and from the 1720s more men worked for the Excise than for all the other revenue departments taken together (Tables 3.3, 3.4). By the end of the

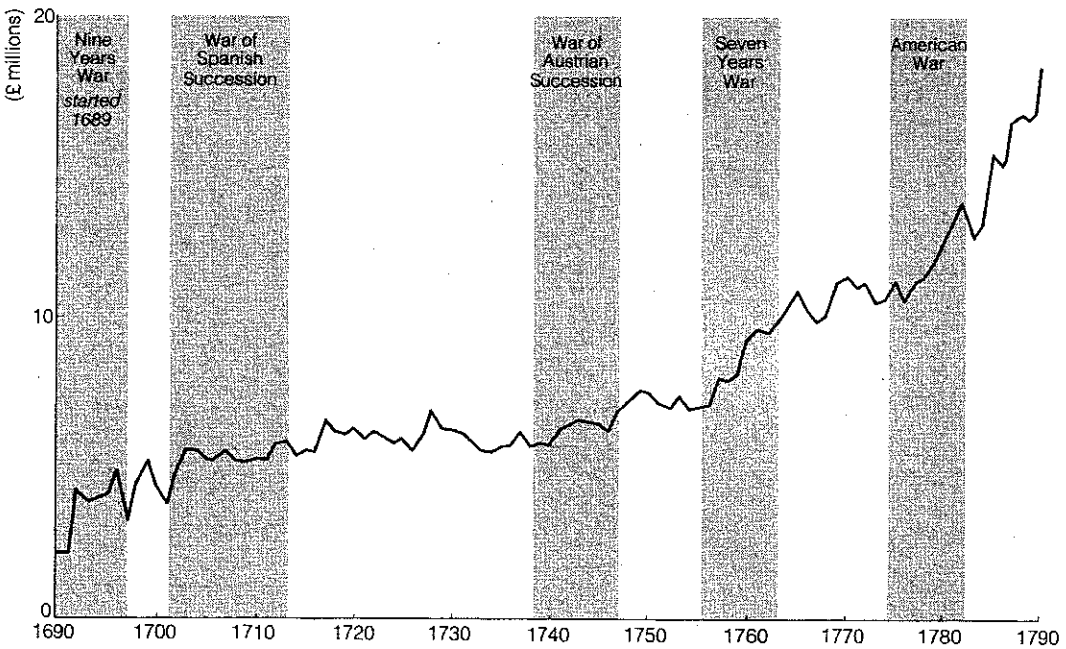


Figure 4.1 Total net tax income, 1690-1791  
SOURCE: *British Parliamentary Papers*, vol. 35 (1868-9)

Morineau's episodic calculations are born out by the more systematic investigations of Peter Mathias and Patrick O'Brien. After making due allowance for population change and price inflation, they conclude that the traditional view that England was lightly taxed by European standards is no more than a myth. They demonstrate that the percentage of national income appropriated as taxes rose from approximately 3.5 per cent in the 1670s to over 9 per cent by the end of the War of Spanish Succession and to between 11 and 12 per cent of national income during the American War.<sup>7</sup> Put another way, the share of British *per capita* income appropriated as taxes rose from 16 per cent in 1716 to 20 per cent in 1760. At the end of the American War the proportion had reached 23 per cent.<sup>8</sup> Mathias and O'Brien's figures for taxes as a share of commodity output bear out the same secular trend: 17 per cent of output appropriated as taxes in 1715, 20 per cent in 1760, 22 per cent in 1785.<sup>9</sup> Though these figures do not compare with the incidence of taxation during the Napoleonic Wars, which rose to an astonishing 35 per cent of both commodity output and *per capita* income, they are nevertheless almost twice the comparable French figures for the eighteenth century. Judged both absolutely and comparatively, Britain was heavily taxed.

This was not lost on contemporaries. William Pulteney spoke for many Englishmen when he exclaimed,

Let any gentleman but look into the Statute Books lying upon our Table, he will there see to what a vast Bulk, to what a Number of Volumes, our Statutes relating to Taxes have swelled since the Revolution. . . . It is monstrous, it is even frightful to look into the Indexes, where for several Columns together we see nothing but Taxes, Taxes, Taxes.

#### Tax Collection

The effectiveness with which the British state taxed its subjects was in large part a direct consequence of a major transformation in the British fiscal system that occurred gradually between the Restoration and the mid-eighteenth century, as England moved from a fiscal system marked by heterogeneity and amateurism to a tax administration characterized by the orderly collection of public moneys by a predominantly professional body of state officials.

Tax collection after the Restoration lacked administrative coherence. The crown relied on four different bodies of men to collect its revenues: local government officials, who ranged in rank from the humble parish constable to the sheriff and JP; the employees of tax farmers who contracted for the collection of such branches of the revenue as the Customs and Excise; parliamentary commissioners, appointed not by royal authority but by members of the House of Commons, and who administered direct and poll taxes; and royal officials who were amply outnumbered by those who were not the direct appointees of the crown. This bureaucratic patchwork of authorities was not subject to uniform surveillance or direction. As a result, some taxes were

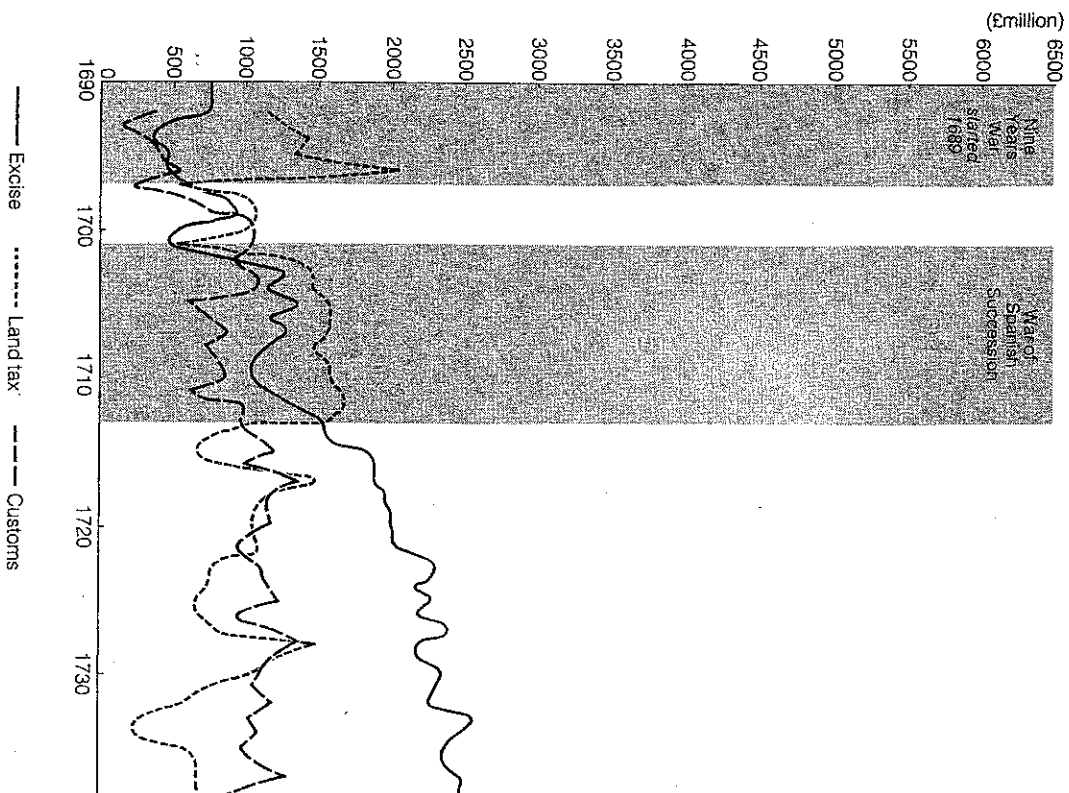
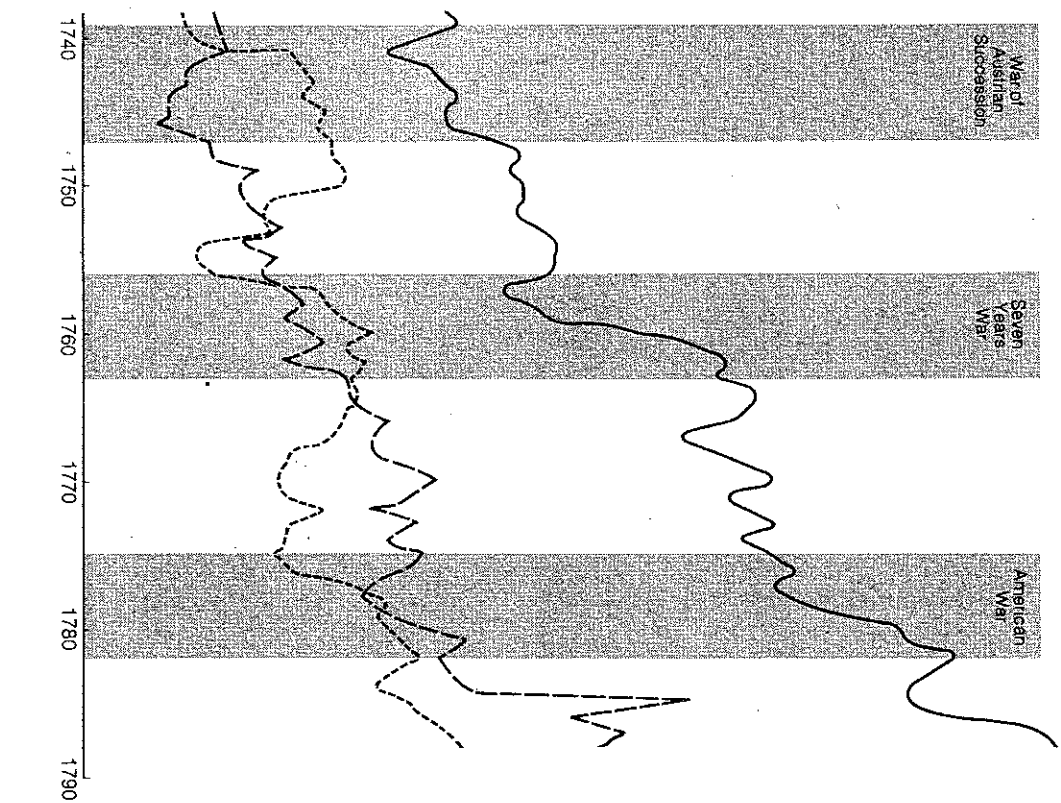


Figure 4.2 Sources of net tax revenues, 1692-1788  
 SOURCE: British Parliamentary Papers, vol. 35 (1868-9)





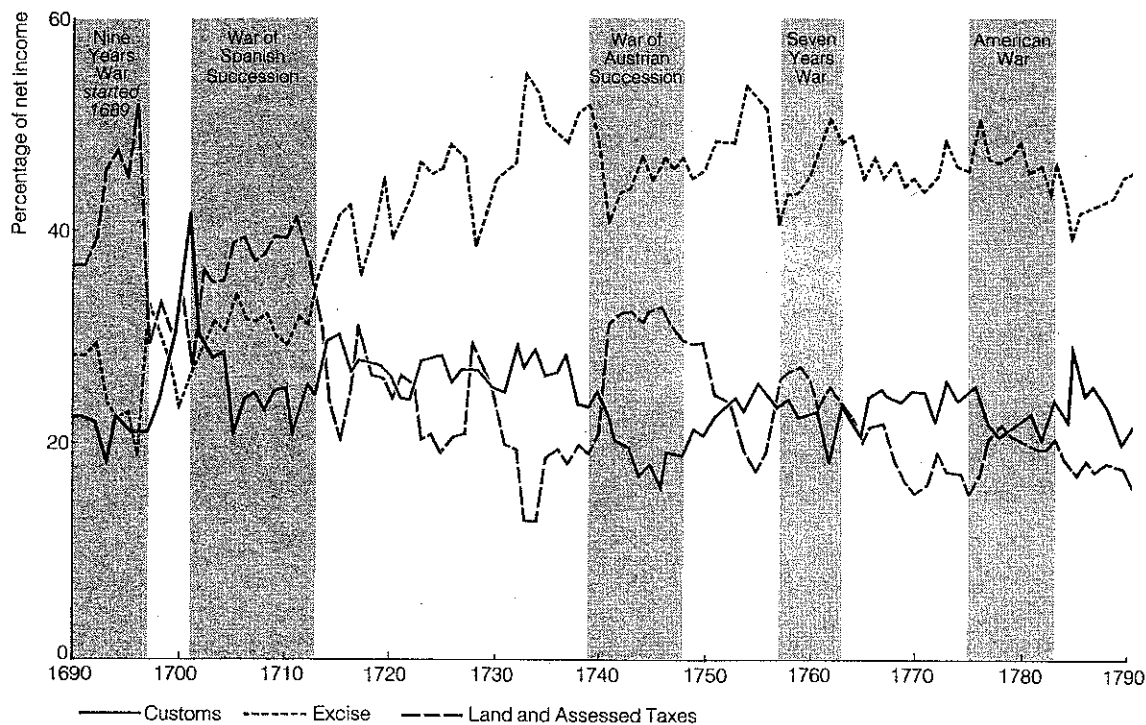


Figure 4.3 Percentage contribution to government revenue of three principal taxes  
SOURCE: *British Parliamentary Papers*, vol. 35 (1868-9)

The history of the excise is the very reverse. In the period before 1713 the excise's performance was sometimes weak and often erratic, though it showed a gradual improvement in the last years of the War of Spanish Succession. Thereafter the revenue grew steadily, gradually outstripping all other sources of tax income. For most of the period after 1714 it constituted more than 40 per cent of all receipts. In the year of the Excise Crisis (1738), when Sir Robert Walpole's proposed reforms expanding excise jurisdiction were defeated, the tax accounted for 55 per cent of revenue. A gradual rise in receipts up to the 1750s was followed by a sharp increase during and after the Seven Years War. By 1760 excise revenue alone exceeded the total of average annual state revenue collected in the Nine Years War. The American War repeated this pattern of swift incrementation: by the end of the conflict returns had almost reached 86.5 million.

Though the customs revenues never grew as quickly as excise receipts, their aggregate return advanced steadily from the mid-century, after a period of gentle increase and mild declension. Returns in the 1780s were more than double those at mid-century and showed a marked improvement at the end of the American War. When added to the excise receipts they clearly indicate the extent to which Britain had come to rely on indirect taxes as the chief source of state income.

Within these broad trends there were many short-term fluctuations. The land tax receipts varied according to the rate, which, in turn, was determined by whether or not the nation was at war. Until the Seven Years War there was a marked discrepancy between war and peacetime rates: it was rare to have to pay more than 2 shillings in the pound in peacetime, and normal during hostilities to pay the maximum of 4 shillings. But the expense of the Seven Years War and of Britain's colonial acquisitions pushed up the peacetime rate. After 1755 the land tax was never again levied at less than 3 shillings in the pound.

Customs and excise receipts were, of course, dependent upon changing levels of economic activity. As a tax on domestically produced goods, chiefly the products of agricultural processes, the excise depended to some degree on the success of harvests; and, because it was often a tax on consumption, it was also affected by fluctuations in demand. Tight money, low demand and poor harvests – the circumstances of the 1690s and of 1741 – pushed down receipts. Similarly the customs returns usually dropped in time of war, because of the enemy's disruption of English trade. The Seven Years War was the first eighteenth-century conflict in which the customs revenue rose.

In the long-term history of English taxation, the period between 1688 and 1714 stands out as an anomaly. Before the Glorious Revolution indirect taxes provided most of the government's revenue. After the Hanoverian Succession a similar pattern obtained. Only under William and Mary and Anne did direct imposts in the form of the land tax dominate revenue collection. The land tax, despite its heavy incidence on the landed classes, was preferred by the House

Table 4.1 Excise establishments, 1690-1783

Country	1690	1694	1699	1700	1701	1701-14	1708	1714(1)
Collectors	36	39	42	42	42	42	50	52
Supervisors	58	80	91	89	86	101	140	199
Gaugers	1015	1019	1139	1090	1088	1356	1810	1994
Others	40	75	50		53	60		41
Country total	1149	1213	1322	1221	1269	1559	2000	2286
London						(1705)		
Field officers	113	120			152	147	166	
Central	51	54			36			
					(no clerks)	86	81	
London total	164	174			188	233	247	
Total	1313	1387			1457	1792	2247	

sources: Edward/John Chamberlayne, *Anglicae Notitiae; or, the Present State of England*, 17th edn (1692); 22nd edn (1708); 24th edn (1716); 27th edn (1726); 34th edn (1741); 37th edn (1748); 38th edn (1755); British Library Harleian MSS 7429, 7431, Add. MSS. 10404, Add. MSS 37838, Portland Loan 29/283; PRO Customs 48/11 ff. 135, 269-74, 48/18 ff. 120-5, 251-6, Treasury 44/15, 44/38, 48/88 ff. 227 *et seq.*; London University MSS 134.

a single collection with 113 field officers in 1690 and 780 in 1780. Among these were a body of surveyors – the London equivalent of the provincial supervisor – who were answerable to an inspector-general. The only difference between London and the provinces was that there was no metropolitan equivalent to the country collector who handled excise moneys. Traders paid their taxes directly to the receiver-general in the London central office.

In the central office itself the majority of its officials (91 in 1690, 309 in 1783) were engaged in one of four tasks: they received moneys from collectors and traders; they drew up current accounts; they audited accounts; or they inspected the excise officers' journals which were sent to London at the end of every collector's round. The commissioners presided over the whole operation, attending the Lords of the Treasury one day a week, taking two days to sit and hear excise cases in their capacity as the metropolitan court of summary jurisdiction and devoting the remainder of their time to routine business.

The work performed by excise officers was technical, complex and time-consuming. Entrants to the service were required to pass both a written and practical test and to complete a period of pupillage. The examination was not a formality. John Cannon of Lydford in Devon studied 'Cockers decemall Arithmetick Lightbodies/art of Gauging' and hired a schoolmaster to help him with his mathematics.<sup>26</sup> Tom Paine, perhaps the most famous of all excise officers, studied for fourteen months before becoming a supernumerary in 1761.<sup>27</sup> Many trainee officers found the work too difficult and arduous and simply gave up. Those who succeeded in qualifying were undoubtedly as technically proficient as any body of revenue officers in Europe. They learnt

1714(2)	1717	1726	1735	1741	1748	1755	1763	1770	1771	1776	1779	1783
51	48	49	50	50	50	50	52	53		54	53	54
208	198	118	118	190	190	247	253			264	272	294
2101	1973	2700	2700	2700	2300	2300	2398	2704		2799	2794	2888
104	91	98	98	98	98	174	105			351	397	482
2464	2310	2965	2966	3038	2638	2638	3071	3115		3150	3468	3711
173	310	476	528	547	552	903	684	724		730	647	778
101	158	123	131	160	170	153	218	227		230	327	309
274	468	599	659	707	722	656	902	951		960	974	2262
2738	2778	3564	3625	3745	3360	3294	3973	4066		4110	4442	5778
												4910

how to use decimals, square roots and cube roots as well as the geometry of cones, spheres, rhomboids and cylinders. They were also instructed in bookkeeping and accounting, the use of the slide rule and the art of gauging. Excisemen were skilled and proud of the fact: they described themselves as 'artists', wrote treatises and textbooks on mathematics and measurement and offered private instruction in penmanship and arithmetic.

The work was not only skilled but arduous. A footwalk which was surveyed every day by an officer was between 12 and 16 miles in length. Outrides were much longer.<sup>28</sup> When the scheme of excise rounds was first developed in the 1680s, many of the outrides surveyed by officers were between 40 and 50 miles. Warminster, for example, was a 50-mile ride and required the survey of over a hundred vicuallets. Marlborough was even larger – 63 miles in all.<sup>29</sup> But by the Hanoverian Succession most rides had been reduced to 30 miles, though additional excises meant that more premises than ever before needed inspecting.

Carrying their books, seven instruments, pen and special inkpot attached to their lapels, officers often worked long hours.<sup>30</sup> Their supervisors worked for even longer. In 1710, George Cowperthwaite, supervisor in the Richmond (Yorkshire) district, travelled over 290 miles in 23 days between 12 June and 5 July. On that round he visited 263 vicuallets, 71 malsters, 29 chandlers and one common brewer; in all he took 81 gauges. He visited 15 premises a day and checked the work of 9 different excisemen. Eight years later Cowperthwaite was working at the same pace in the Wakefield district. He travelled an average of more than 19 miles a day, six days a week. On a normal day he would inspect four or five premises, take a full set of gauges in at least one of them, and carefully examine the books of one or two officers. On Sundays he made up his diaries for the examiners' office in London.<sup>31</sup> Tom Paine, summarizing the remarks of many officers throughout the century, said of excise work that 'There is one generally allowed truth . . . that no Set of Men



For all its administrative strength and seeming denial of traditional English liberties, excise law was not as unpopular amongst traders as we might at first imagine. Its greatest advantage was the swiftness of its proceedings. When compared with other courts which dealt with civil litigation – Chancery, for example – it was a paragon of efficiency which meant that even the guilty trader knew that his agonies in court would be mercifully brief. But the principles which underpinned the workings of excise law understandably distressed political and legal commentators throughout the century.

The exciseman was a ubiquitous presence in eighteenth-century England, for he worked not merely in the ports and on the coast, like the customs officer, but in every small town and hamlet where beer and ale were brewed or tea sold over the counter. He was a state official, an executive rather than a judicial officer, working under a system of statutory administrative law. As such, he was the symbol of a new form of government. He was also a sign of the state's determination to extract sufficient revenues from the public to ensure that England secured its place as a major international power.

### Public Credit

The effectiveness of its tax system provided the British state with a regular and secure income which made borrowing both comparatively cheap and relatively simple. Public indebtedness, as every politician and political pundit of the era complained, grew at a prodigious rate during the course of the eighteenth century (see Figure 4.6). At the end of the Nine Years War the unredeemed public debt stood at £16.7 million. After almost a decade of stability, it again rose rapidly during the final years of the War of Spanish Succession. Peace brought little respite and, by the time of the financial crash of 1720 – the South Sea Bubble – public indebtedness amounted to more than £50 million. Though the debt declined slowly during the peaceful 1720s and 1730s, the War of Austrian Succession pushed it back up to £26 million by 1748. The Seven Years War and the American War had an even more dramatic effect. During both the debt almost doubled: from £74 million to £133 million between 1756 and 1763 and from £131 million in 1775 to an unprecedented £245 million by 1783. In less than a century the unredeemed debt had increased fifteenfold in current prices. This pattern of growth mirrored, in more exaggerated and distorted form, the other indices of English public finance in the eighteenth century. Every war raised the profile of public debt: each conflict produced a pattern of sharp and ever taller escarpments punctuated by the gently declining plateaux of peace.

As aggregate government borrowing increased with each successive war, so the proportion of wartime expenditure funded by borrowing rose. Credit accounted for 31 per cent of spending during the War of Spanish Succession. By the time of the American war, 40 per cent of expenditure was funded by loans.<sup>62</sup> The state's dependence on credit meant that a substantial proportion

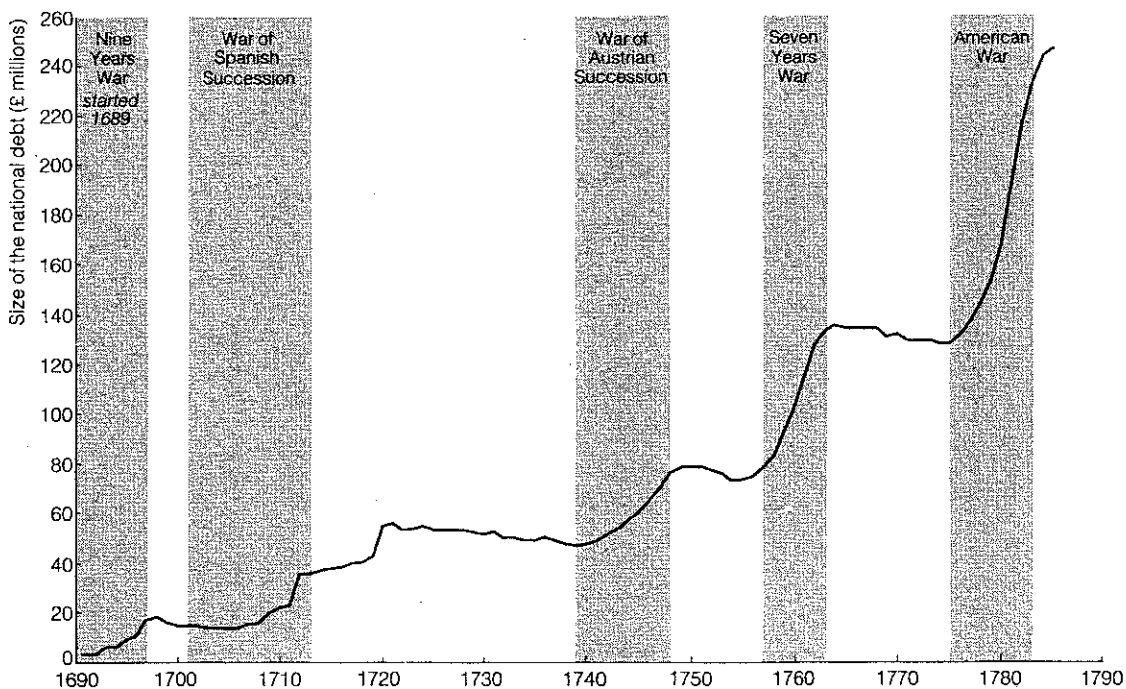


Figure 4.6 Growth of the national debt, 1691–1785

SOURCE: B. R. Mitchell and Phyllis Deane, *Abstract of British Historical Statistics* (Cambridge, 1962), pp. 401–2

of tax revenue was spent on meeting interest payments on the debt (see Figure 4.7). In no year after 1707 was less than 30 per cent of state income required to service the debt. For more than half the years between 1713 and 1785 debts absorbed more than 40 per cent of revenues, and for sixteen years the figure exceeded 50 per cent, reaching a peak at the end of the American War of 66 per cent of total tax revenue. As one French historian has pointed out, this was a greater burden of debt than that which provoked the crisis of 1788–9 in France.<sup>64</sup>

As the debt grew so its expansion came to assume a regular pattern. By the second decade of the eighteenth century, what had originally been a jumble of different sorts of debt had been divided into two distinct categories of public obligation: short-term unfunded debts and long-term funded debts. The history of public credit is in large part the story of the interplay between these two types of public obligation. Put at its simplest, the period saw the transformation of short-term debts into long-term borrowing.

The short-term debt consisted of exchequer bills, navy, transport, and victualling bills and ordinance debentures. Exchequer bills, which gradually became the chief means of raising short-term loans, were interest-bearing bills redeemable on demand and managed by the Bank of England. The other bills were issued by spending departments to pay for the everyday running costs of war. They covered the expense of supply, armaments and provender and were paid off 'in course', i.e. sequentially in order of issue. This meant that the more recent the issue of the bill, the longer the recipient had to wait until he could convert it into cash.

During every eighteenth-century war the short-term debt grew rapidly (see Figure 4.8). Sometimes, as in the case of the navy debt in the War of Spanish Succession, its growth became unmanageable. As the size of the short-term debt increased, so it took longer for creditors to cash their departmental bills. It became harder or more expensive for government departments to secure goods on credit because suppliers knew that the size of the debt lengthened the time they would have to wait for repayment. Bills were discounted and became less valuable, thereby making further extension of credit to the government even less attractive. In short, every war treated a credit crisis, and the longer the war went on, the more severe it became.

The solution to this problem, one that was adopted by almost all administrations towards the end of a war or shortly after the declaration of peace, was to convert the short-term liability into a long-term funded debt. In 1763, for example, £3,670,739 of navy and ordinance debt was converted into 4 per cent stock.<sup>64</sup> The interest on such stocks was paid from specific taxes earmarked by parliament.

New issues of government stock, whether to cover budget deficits or to fund short-term debts, required either an increase in existing rates of taxation or the imposition of additional taxes. These extra revenues came from indirect taxes – customs, excise and stamp duties – not from the land tax. Fiscal policy

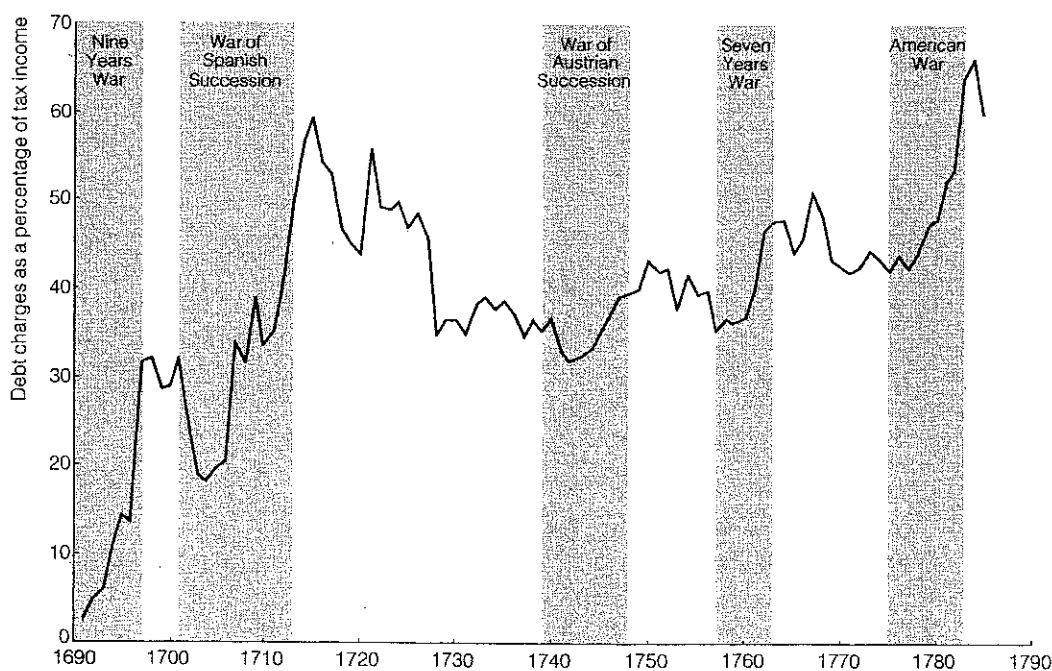


Figure 4.7 Total debt charges as a percentage of tax revenues  
SOURCE: B. R. Mitchell and Phyllis Deane, *Abstract of British Historical Statistics* (Cambridge, 1962), pp. 401–2; *British Parliamentary Papers*, vol. 35 (1868–9)

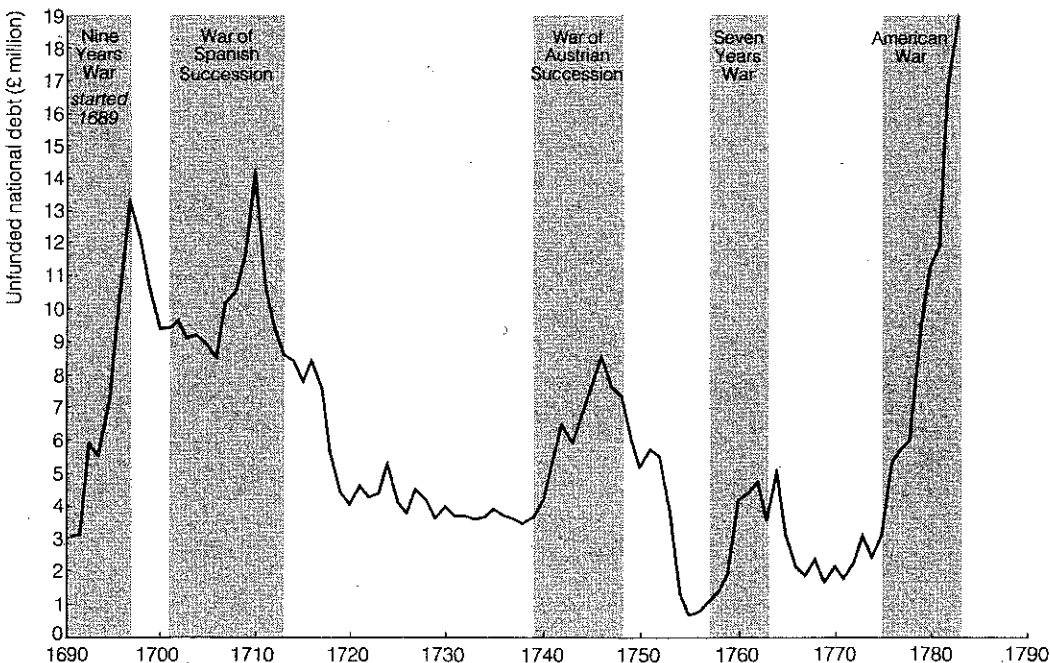


Figure 4.8 *Unfunded portion of the British debt*  
 SOURCE: B. R. Mitchell and Phyllis Deane, *Abstract of British Historical Statistics*  
 (Cambridge, 1962), pp. 401-2

during all eighteenth-century wars therefore contained two, interrelated components: long-term loans of increasing size; and an increase in indirect taxes in order to pay the interest on them. After wars were over (or in 1711 before they had ended) short-term debts were funded with new stock. Between 1711 and 1714, for instance, the Earl of Oxford introduced duties on coffee, tea, books, playing cards, calicoes, candles, coal, hackney coaches, linens, leather, paper, parchment, soap, silks and Irish salt, to raise over £8.5 million.<sup>65</sup> A similar pattern obtained at the end of the Seven Years War. In 1760-1 an issue of over £20 million in new government stock was underwritten by substantial increases in the malt and beer excises. The government's increased dependence on indirect taxes after 1714 was therefore directly linked to the growth of the long-term national debt.

One important consequence of this connection was that new taxes imposed to fund the debt became firmly embedded in the fiscal fabric of the state. The repeal of such a tax, thereby removing the security of a particular stock, would have been a gross breach of public confidence and a threat to the security of public credit. In these circumstances the levying of the tax could be ended in only one of three ways. The loan which it funded might be redeemed in full, thereby rendering the purposes of the tax obsolete. If the market rate of interest fell, the government could reduce the interest paid on loans and thereby reduce the annual cost of servicing the debt. This would release at least some of the tax revenue assigned to the stock. But, if neither of these options were feasible, the only alternative was to replace the existing tax with another.<sup>66</sup>

In its early years the debt grew rapidly and threatened to get out of control. Successive administrations struggled to raise money, adopting expedients which provided them with much-needed funds, but which created serious problems for those who were to manage the debt in the future. At first most of the debt was unfunded. As Figure 4.9 shows, over 70 per cent of the state's obligations in the Nine Years War took the form of short-term debts, and not until 1712 did the funded debt exceed unfunded obligations. This pattern differs sharply from that of subsequent wars. In no major war after 1714 did the unfunded portion of the debt exceed 20 per cent. Usually it was under 10 per cent, though it reached 14 per cent during the War of Austrian Succession. The switch from short to long-term indebtedness could hardly be clearer.<sup>67</sup> It is also eloquent testimony to the success of Godolphin and Robert Harley, Earl of Oxford, in putting the debt into order. Their policies may not have constrained its growth but they certainly put public borrowing on a sounder financial base.

The history of the long-term debt falls into two periods: the first, before the Hanoverian Succession, was characterized by the floating of fixed-term loans; the second, after 1713 saw the emergence of loans for which no repayment date had been set. Under William and Anne the government adopted a variety of expedients to raise money: it borrowed by self-liquidating annuities

(usually for lives or for ninety-nine years), by organizing public lotteries, or by selling corporate privileges (the Bank of England (1694), the New East India Company (1709) and the South Sea Company (1711)) in return for substantial loans. After 1714, however, the state was able to take advantage of the market in government securities which had developed rapidly since the Glorious Revolution to issue large amounts of stock. As Peter Dickson points out,

the development of a market in securities in London in the period 1688 to 1726 was one of the most important aspects of the financial revolution. For unless facilities had existed to enable lenders to sell to a third party their claim on the state to annual interest, the government's system of long-term borrowing would never have got off the ground. The state would have been obliged to promise repayment in a limited number of years – and to keep this promise. This would have effectively stopped it from borrowing on the scale it needed.<sup>5</sup>

It could not have borrowed such amounts because the cost of paying off both principal and interest would have been beyond the means of the state's income from taxes.

The incorporated bodies of public debtors, especially the Bank of England, helped to develop the securities market. The leading figures in the chartered companies were financial and commercial capitalists of great wealth and experience. The government was able to draw on their expertise and knowledge of money markets to ease the floating of loans. And as the companies gradually assumed the management of the national debt, their administrative and book-keeping procedures, which were less antiquated and cumbersome than those of the Exchequer, made it easier for brokers and investors to deal in government securities.

But reliance on the corporations had its disadvantages. Ever since the foundation of the Bank of England in 1694, these institutions had provoked political controversy and economic resentment. Political and economic interests excluded from participating in state financing complained bitterly about the special advantages enjoyed by holders of public funds and tried to muscle their way into the action. In 1707, for example, the Sword Blade Company tried to wrest part of the debt away from the Bank of England.

The incorporated creditors also fought amongst themselves for a larger slice of the fiscal pie. In the same year that the Bank of England had to fend off the attentions of the Sword Blade Company, the East India Company orchestrated a run on the Bank to weaken its rival. And, when a large number of those who held the short-term debt were incorporated into the South Sea Company in 1711, the object of Lord Oxford's ministry was not only to restructure the debt but to create a tory – or, at least, non-whig – rival to the whig-dominated Bank of England.

The competition to hold a large part of the public debt is not difficult to explain. The acquisition of substantial public funds guaranteed their holder a

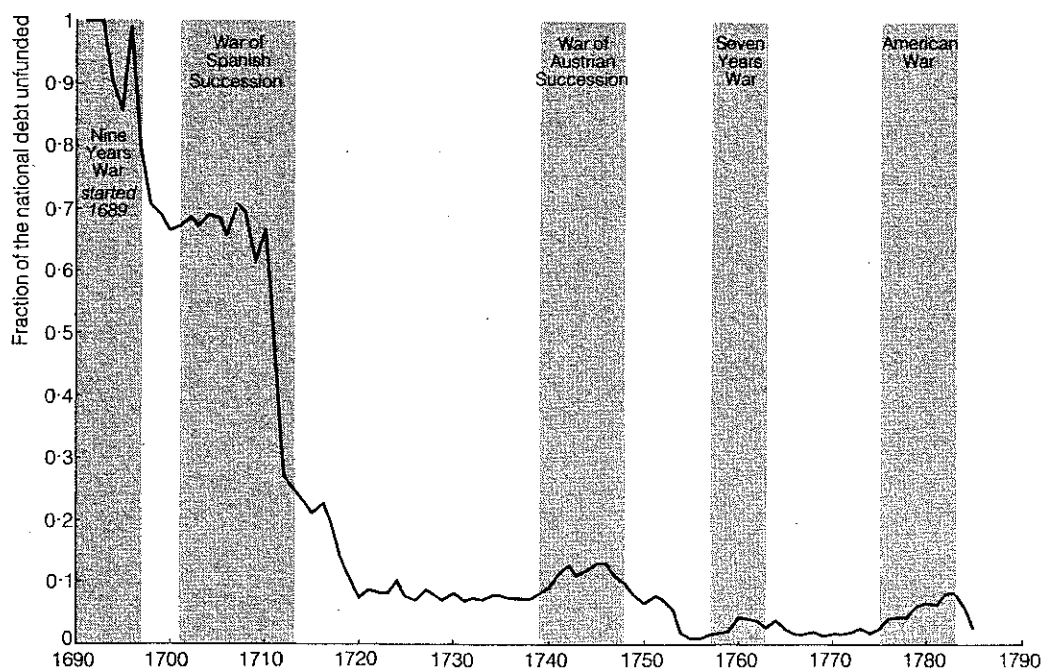


Figure 4.9 Fraction of the British debt unfunded  
SOURCE: B. R. Mitchell and Phyllis Deane, *Abstract of British Historical Statistics* (Cambridge, 1962), pp. 401–2