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# The Triumph and Denouement of the British Fiscal State: Taxation For the Wars against Revolutionary and Napoleonic France, 1793-1815

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# The Triumph and Denouement of the British Fiscal State: Taxation for the Wars against Revolutionary and Napoleonic France, 1793-1815*

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## Sources of Taxation for War

The macro picture

At the start of the long wars against Revolutionary and Napoleonic France, the taxes available to the British state fell mainly on outlays made by its citizens, upon domestically produced commodities and services. Smaller proportions came from import duties and direct taxes upon their incomes and wealth. Since total tax revenues depended on rates of tax levied upon the volume of goods and services assessed to tax, economic forces which affected private expenditures in general, or the demand and supply for taxed goods in particular, influenced the level of Exchequer receipts. Most tax revenue came from commodities consumed either by the mass of the population or from goods and services preferred by more affluent groups in society. Really productive taxes fell on commodities with inelastic demands, regarded as necessities by the poor, or as essential for their life styles by the rich and where the elevation of tax rates did not lead to any permanent loss of revenues. However, specific tax rates (which at that time were the norm) implied that the state's real income would fall in periods of inflation.[1]

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* To be published by Christopher Storrs (ed.) The Fiscal Military State in 18th Century Europe (Ashgate 2008)

[1] Dowell (1965) 4 vols. passim; O'Brien (1988) 1-32.

During the eighteenth century, governments exercised nothing resembling absolute power in matters of taxation policy. Even in wartime they continued to be responsible to Parliament, subjected to pressures from powerful interest groups and constrained by the moral canons of the age in relation to fiscal policy. Furthermore, and to a degree unheard of in modern times, they found themselves circumscribed in the collection of revenue by the deep antipathy found among all classes of society towards the payment of taxes and by the low quality of administrations at their disposal for the enforcement of the law.[2]

That is why the amount collected in taxes between 1793 and 1815 seems truly remarkable. Before the war British citizens paid nearly £18 million a year in taxes. Between 1793 and 1815 the government appropriated a further £12.6 million per annum measured in constant prices.[a] It is the purpose of this paper to show where the extra money came from, to outline the problems and to appraise the methods employed by the state for the collection of tax revenues.

Taxes raised between 1793 and 1815 financed the war effort, paid interest on loans floated to fund the rise in spending on the armed forces and provided for the normal (peace time) civil, military and naval establishments and net interest payments on the national debt, as it stood in 1793. For purposes of this analysis, I assumed that in the absence of war, expenditures on the armed forces, civil governance and interest payments of the national debt would have remained constant. I defined all *additional* tax revenue collected by the government during the years 1793-1815 as ‘war taxes’ that is, money appropriated as a direct result of conflict with France. My definition also includes, but is wider than, taxes imposed for the finance of additional expenditures on the armed forces at current prices. The definition embraces interest paid on

[2] Hoppit (2002); Daunton (2003).

loans raised during the war years and the taxes used to meet increments to civil expenditure, which went up at the same time.

Furthermore my analysis will be confined to ‘significant’ taxes and that means levies which provided at least £500,000 towards the war effort. This benchmark figure excludes from consideration the majority of taxes with relatively small yields, but since my sample accounts for 88 per cent of all revenue required for war, it provides a viable basis for the inferences and generalizations offered in this essay. Taxes marked with an asterisk in table 1 signify taxes imposed after the outbreak of war. All other taxes were on the statute book in 1792. To be consistent with the definition of war revenue outlined above, yields from this group of established taxes consist of the sums collected in each year minus the average annual amount collected over the period 1788-92. For taxes introduced after 1792, the yield includes the total sum collected from the date of imposition to the conclusion of the wars in 1815.

Table 1: The Contribution of Individual Taxes to the Finance of Wars 1793-1815[a]

| Tax on | Yield (£m) Tax | Type of Tax | Revenue from Changes in Volume Taxed 1793-1815 (£m) |
|---|---|---|---|
| Income* | 155.6 | Direct | - |
| Malt | 41.7 | Excise | 0.0 |
| Tea+ | 36.2 | Customs | 1.3 |
| Sugar | 34.0 | Customs | 1.2 |
| Foreign Spirits | 30.6 | Customs | 4.8 |
| British Spirit | 28.7 | Excise | 1.1 |
| Wine | 20.8 | Customs | 0.0 |
| Window | 20.7 | Direct | 1.8 |
| Salt | 15.4 | Excise | 1.3 |
| Beer | 11.8 | Excise | 2.9 |
| Tobacco | 11.2 | Customs | 4.0 |
| Pleasure horses | 9.8 | Direct | 0.0 |
| Cotton Fibres* | 9.4 | Customs | - |
| Farm Horses* | 9.4 | Direct | - |
| Houses | 9.1 | Direct | 0.0 |
| Timber | 8.0 | Customs | 0.0 |
| Bills of Exchange* | 6.8 | Stamp | 5.4 |
| Coal | 6.5 | Excise | 2.7 |
| Probate* | 6.0 | Direct | - |
| Paper | 5.4 | Excise | 0.6 |
| Legacy* | 5.2 | Direct | - |
| Soap | 4.8 | Excise | 4.8 |
| Fire Insurance+ | 4.3 | Stamp | 2.5 |
| Marine Insurance+ | 4.2 | Stamp | - |
| Servants | 4.1 | Direct | 0.0 |
| Carriages | 3.8 | Direct | 0.4 |
| Auctions+ | 3.4 | Excise | 1.9 |
| Glass | 3.3 | Excise | 0.8 |
| Coffee | 3.2 | Customs | 2.0 |
| Bricks | 2.8 | Excise | 0.2 |
| Newspapers | 2.8 | Stamp | 0.0 |
| Dogs* | 2.4 | Direct | - |
| Printed Textiles | 2.5 | Excise | 2.5 |
| Dried Fruit | 2.5 | Customs | 0.5 |
| Hides and skins | 2.3 | Excise | 1.4 |
| Hemp | 2.1 | Customs | 0.4 |
| Hair powder* | 1.9 | Direct | - |
| Stage Coaches | 1.8 | Stamp | 0.0 |
| Silk | 1.8 | Customs | 0.2 |

| | | | |
|---|---|---|---|
| Post Horses | 1.6 | Stamp | 1.6 |
| Hops | 1.2 | Excise | 0.8 |
| Indigo* | 0.9 | Customs | - |
| Tallow* | 0.9 | Customs | - |
| Slates and Stones* | 0.6 | Customs | - |
| Armorial Bearings* | 0.6 | Direct | - |
| TOTALS | 542.1 | | 47.1 |

***Notes***: Taxes marked with an asterisk (*) were imposed after the outbreak of war. Taxes marked + were rated *ad valorem*. The yield from changes in quantity for *ad valorem* taxes should read 'yield from changes in value'.

Tax revenue assessed and collected to finance the war came from the following sources:

| | | Total Yield £ million | Percentage of total |
|---|---|---|---|
| 1. | New Taxes (marked with an asterisk) | 197.1 | 36% |
| 2. | Income from changes imposed to the rates of tax after 1792 | 297.9 | 55% |
| 3. | Income from changes in the volume or value of goods and services taxed in 1792 | 47.1 | 9% |
| | | 542.1 | 100% |

New taxes are self-explanatory. Categories 2 and 3 divide war revenues from taxes on the statue book before the war between that proportion which came from increased production or consumption of taxed goods and services and the share from additions to rates of tax. The calculation (which distinguishes the 'quantity' effect from additions to yield coming from 'changes to tax rates') shows that tax revenue acquired to wage war came mainly from raising rates of tax on taxes available to the government at the outbreak of war. Thirty-six per cent emanated from new taxes introduced during the war years and most of this is the income tax imposed in 1799. The remaining (small proportion) came from increases to the volumes of goods and services assessed to tax. Such changes depended on the forces affecting their demand and supply and efforts by the revenue administration to bring them into assessment.

The remainder of this essay is organized in four sections. Section 2 considers extensions to the fiscal base. Section 3 analyses fiscal administration in wartime. Section 4 investigates connexions between the growth of the economy and increases in the volume of goods and services taxed between 1793 and 1815. The final section speculates about the composition and incidence of taxes raised to fund the wars 1793-1815.

## Extensions to the fiscal base

Minor innovations

At least twenty-one 'new' taxes were imposed between 1793 and 1815, but levies on flax, silk thread and lace, bankers' notes, ships hulls and materials, watches and clocks and madder made too small a contribution to be worth detailed consideration. Productive innovations to the fiscal base (in order of importance) included taxes on: incomes, farm horses, raw cotton, probates, legacies, marine insurance, dogs, hair powder, tallow, slates and stones carried coastwise, and indigo. A point to note about this short list of extensions to the fiscal base is the absence of excises. However, two Chancellors, Pitt and Petty, tried to impose excises on iron, canals, clocks and watches and private or home brewing.[3]

[3] Pitt Papers (222, 273, 301); Liverpool Papers (38252); Parliamentary Debates (6) 949; (7) 75-90, 255-58, 523-25; (23) 570; Journals of the House of Commons (53); Scrivenor (1841) 126-27; Ashton (1924) 143-56; Mathias (1959) 358.

Most new taxes which reached the statute book during the wars did not arouse opposition on grounds of principle or even strong protest from the interests most immediately effected. Nor, unlike the income tax, did they give rise to special problems of collection which could not be accommodated by the established administration for directly assessed taxes. Thus, taxes on hair powder and dogs represented extensions to levies approved by the age. The latter flowed from petitions to Parliament claiming dogs killed sheep and consumed food fit for humans.[4] Assessed taxes imposed on a sliding scale according to expenditures by taxpayers could only be raised by further additions to tax rates which might be self-defeating – as when notable families simply ceased to exhibit armorial bearings or to use hair powder.[5] They found it less easy to give up hunting when Parliament steadily increased licence fees for their dogs.[6]

With taxes on dogs, hair powder, armorial bearings, servants, carriages, houses and horses, the government virtually exhausted the range of visible and checkable outlays of the upper classes as objects available for direct taxation. During the war chancellors extended assessed taxes beyond their original *quasi* progressive justification as taxes levied upon the expenditures of the wealthy to include horses employed in industry and agriculture, widened the tax upon servants to take in persons employed in hotels, taverns and inns and redefined the tax on carriages to embrace carts and other vehicles employed for purposes more productive than the conveyance of gentry from place to place.[7] Fox and Sinclair disliked the whole notion of taxing the horses and carts of farmers because they thought that would affect the price of food. But the government insisted farmers had prospered and should pay

[4] Parliamentary History (32) 994-98.
[5] Pitt Papers (273); Parliamentary History (31) 1313; Inland Revenue (385); Parliamentary Papers (1857).
[6] Parliamentary Papers (1857) appendix 70.
[7] Parliamentary Papers (1857) appendix 68-69.

more.[8] At the end of the war Vansittart bargained with the landed interest against repeal of the tax which had yielded as much as the original levy on pleasure horses, in return for higher tariffs upon imported grain.[9]

Two ‘new’ taxes levied upon foreign trade, namely the marine insurance stamp of 1795 and the convoy duty of 1797 seem complementary – convoy duties fell *ad valorem* on imports and exports and upon the tonnage of shipping cleared inwards from British ports. Rates varied between commodities and destinations for exports. London merchants, consulted about the format of the duty, accepted the government’s view that this tax represented recompense for extra protection afforded by the Royal Navy in a period of intense economic warfare.[10] Nevertheless, after the Peace of Amiens they campaigned for its repeal.[11] While an official suggestion in 1807 that the tax might continue after the war caused such alarm that the Chancellor reassured Parliament he would not persevere with such a plan.[12] Similar considerations rendered the stamp on marine insurance more acceptable to the City. As long as ships sailed under naval convoy, underwriters at Lloyds and elsewhere could afford to keep premiums down. In 1795 Pitt imposed a tax on marine insurance, which varied with the amount insured and premiums charged.[13] Income from marine insurance rose with international trade, the inflation of commodity prices, the rise in premiums charged and the increased share of marine insurance transacted through

[8] Parliamentary Debates (1) 546; Sinclair (1802) 398.
[9] Vansittart Papers (31231).
[10] Pitt Papers (302); Vansittart Papers (31239); Parliamentary History (36) 550-51; Rose (1806) 40.
[11] Vansittart Papers (31237); Parliamentary History (36) 550-51; Monthly Magazine (1802) May.
569, June, 513, December, 473.
[12] Parliamentary Debates (7) 427.
[13] Pitt Papers (277).

London – occasioned by wartime disruptions to Amsterdam and Hamburg.[14]

Other new taxes on imports of indigo and tallow aroused no conflict with the private sector and infringed no canons of taxation.[15] Over the war years the government made no additions to the excise on candles and the quantity taxed for England and Wales rose from 55 million in 1792 to 78 million in 1815. Between 1799, when Pitt first imposed the duty and the end of the wars, imports of tallow increased from 227,000 cwt. to 360,000 cwt, despite the rise in the prices of both candles and tallow.[16] Demand for candles looks price inelastic and rose with population. Imports of tallow increased because the domestic production of sheep fat could not keep pace with demands from the industry.

Imports of indigo grew with the consumption of dyed cloth and this duty enabled the government to share in the technological revolution in textiles, which continued unabated during the war years.[17] The duty imposed on raw cotton in 1798 also helped to divert rising expenditures on textiles to the state. After the ironmasters' campaign we might expect that a tax upon the raw material of a major industry to have aroused serious hostility. When Pitt first investigated the possibility he received protests from spinners in Bolton, but the tax became law without much opposition.[18] The very low rate of 1d per pound probably lead to indifference from an industry undergoing rapid technical progress, and enjoying declining prices for its raw material.[19] Conflict with the cotton industry emerged, however, during hostilities with the United States from 1809 to 1815, when the shipping and colonial interests almost succeeded in persuading the Cabinet to exclude American cotton in favour of

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[14] John (1958) 127, 132, 136; Parliamentary Papers (1810) 250.
[15] Customs Papers (10901); Board of Trade Papers (5/13).
[16] Customs Papers (10901); Tooke (1824) 415.
[17] Parliamentary Papers (1826) 151.
[18] Greig (1922) 137.
[19] Parliamentary Papers (1830) 2; Ellison (1886) 52.

imperial fibres.[20] Although the government refused to accede only determined pressure from the cotton industry prevented the imposition of a far higher duty on American cotton.[21] At the end of the war the industry pushed for repeal, but between 1798 and 1815 the rapid growth of cotton yarn and cloth production automatically increased revenue from the tax on its raw materials. As prices of cotton fibres fell, it is perhaps surprising that the Treasury did not impose higher rates of tax on such an eligible source of revenue.[22]

## The transition to the realm's first income tax

Not one of three direct taxes imposed when Pitt was Chancellor during the French wars introduced new principles into fiscal policy. Embryo forms of death duties already existed and the land tax, as defined in law, aspired to and anticipated a more general taxation of income. At the outbreak of war, taxes on inherited property consisted of the stamp on probates and a legacy duty.  Only probates for personal or moveable property required official stamps. The tax was low and did not apply to real estate or to Scotland. Legacy duty was imposed on receipts for legacies again related only to personal or moveable property. Neither of these duties were comprehensive in scope nor effective in application, because the law did not require receipts for legacies and executors avoided probate duties by not proving wills in court.[23]

In 1795 Pitt told Parliament, 'in a war for the protection of property it was just and equitable that property should bear the burden'.[24] To make probate and legacy duties effective the Chancellor imposed penalties on those who distributed the property of deceased persons without obtaining

[20] Liverpool Papers (38252); Board of Trade Papers (4/14098), (5/18-22); Anon (1812); Lyne (1813).
[21] Parliamentary Debates (20) 222, 274, 305; (26) 202, 259, 372, 395.
[22] Tooke (1824) 391, 401-02.
[23] Dunn (1955) 45-54; Pitt Papers (274).
[24] Parliamentary History (32) 562; Dowell (1873) 34 .

legal probate and made executors of inherited property responsible for payment of the legacy. He tried, but failed to extend the tax to include any kind of property inherited at death, although he promised to exempt lineal descendants. It was not until further reforms in 1802 and 1805 that lineal descendants, and Scotland came into the net.  Even then the quality and format of the machinery for their assessment reduced yields well below legal liability and in 1816 the Treasury took steps to recast the whole administration for the kingdom's taxes on inheritance.[25]

Developments in inheritance taxation, together with the Triple Assessment of 1798, paved the way for the most radical of all wartime alterations to the kingdom's fiscal base – the first income tax of 1799. For generations before and after 1793, any kind of general tax on incomes continued to be repugnant to the kingdom's wealthy elites. The strength of that tradition of opposition to the taxation of incomes became very clear during successful campaigns for its immediate repeal at the Peace of Amiens in 1802, and again after the final victory over France in 1816.[26] Even after sixteen years experience an otherwise powerful Cabinet could not find a majority for retention of the tax in peace time.[27] Given the hostility from powerful and organized groups to the whole notion of a levy upon income and the administrative problems which attended its assessment and collection, the yield of the tax is a tribute to the politicians and officials who navigated it through Parliament and then forward to making a contribution to funding the war that was way in excess of any other tax.

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[25] Dunn (1955) 64-5; 86-8; 101, 181; Parliamentary Papers (1830) 25;  Parliamentary Papers (1857) appendix 44; Newmarch (1843) 9-15; Parliamentary History (32) 561, 1026-30.

[26] House of Commons Journal (57) 250, 251, 273, 276, 286, 290, 296-97, 303; Parliamentary History (36) 446-47.

[27] Parliamentary Debates (30) 652-96; 711-15; Shehab (1953) 60-69; Hope-Jones (1939) 111-20; Brougham (1871) 296-97.

Expenditures on the forces of the Crown had to be financed and the patriotic (or frightened) upper classes were expected to make sacrifices for the security of the realm. As Lord Auckland remarked: 'This measure has been accomplished by the union of opinions respecting the nature of French hostility'.[28] Pitt introduced the tax at a time when the country's ability to resist a French invasion seemed problematical. Furthermore, the income tax became law only after the government had tried an alternative scheme, designed to preclude disclosure and measurement of personal and corporate incomes. As usual, subsequent amendments to tighten the conciliatory format of the original bill and to raise the efficiency of the process and machinery for assessment and collection delayed and diluted opposition.

After four years of unsuccessful warfare and a widening perception that conflict with Revolutionary France would be more protracted and dangerous than the political nation anticipated, Pitt persuaded Parliament to depart from the traditional policy of financing most of expenditure on warfare through the medium of loans in favour of raising more revenue in the form of taxation. His profound change in strategy raised the question of how any pronounced and sustained rise in demands for tax revenues might be met. Between 1796 and 1799 Pitt had, however, received hundreds of suggestions for new as well as reformed taxes including well-developed schemes for a tax upon incomes.[29] For example, petitions to Parliament from prominent citizens in Glasgow, Dumbarton, Lanark and Ayr strongly supported his policy of raising more supplies within the year and advocated a general tax upon property.[30] Pitt knew the tax would not be popular with Parliament and he certainly appreciated the

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[28] Auckland (1799) 30.
[29] Windham Papers (37879); Pitt Papers (264-71)' Anon (1798); Jenour (1798); Adams (1798).
[30] House of Commons Journals (53) 541, 582, 616, 672, 676.

administrative difficulties involved.[31] As a compromise, the Chancellor first designed and implemented a plan which involved no disclosure of income and placed no additional burdens upon the amateur administration for direct taxation.

His Aid and Contribution Act or the Triple Assessment of 1798 aimed to employ the existing legal and administrative framework for taxes directly assessed upon outlay in order to achieve all the advantages and circumvent opposition to an income tax. The Tax Office presented Pitt with data on the recorded incidence of existing assessed taxes and then devised a formula designed to convert known personal liabilities for taxes levied directly upon the carriages, servants, riding horses, windows, watches, clocks etc in the possession of affluent households into 'notional' levels of income.[32]

The Aid and Contribution Act exempted people with incomes below £60 a year, taxed those with incomes between £60 and £200 at increasing rates and collected not more than 10 per cent from the notional incomes of those with £200 a year and above.[33] Although Pitt insisted that the Triple Assessment represented continuity with an extant body of fiscal legislation which levied direct taxes on households but could not be disparaged as an income tax, the act had several features in common with one. It sought to tax the wealthy and exempt the poor, contained an element of progression and provided for child allowances. Unlike established levies upon expenditures by householders, taxpayers could not avoid liability by selling their horses, carriages and houses, or by dismissing their servants. Liability became personal.[34] Nevertheless, the Act avoided 'improper disclosures of circumstances' which the

[31] Liverpool Papers (38354); Pitt Papers (273).
[32] Pitt Papers (279, 280, 282, 283).
[33] Shehab (1953) 43; Parliamentary History (33) 1043-74.
[34] Liverpool Papers (38354).

Chancellor recognized as ‘repugnant to the manners and customs of the nation’.[35]

As the King expected the measure did not pass through Parliament easily.[36] Fox and his friends criticized the unequal incidence of a tax based upon patterns of past expenditure. Sheridan called for a levy which taxed according to more accurate indicators of ability to pay. Fox, wary of this line of attack, concentrated his case upon the strategy of attempting to raise more supplies within the year. His tactic merely diverted attention from real deficiencies in the bill onto the less contentious question of raising more tax revenue in order to check the accumulation of the national debt and the government secured a large majority for its bill.[37]

Pitt hoped to raise £7 million, but in April 1798 (after reports of widespread evasion) he revised his estimates downwards to £4.5 million. Eventually the tax yielded only £3 million, but the Exchequer received a further £2.8 million in voluntary contributions.[38] The obvious deficiencies and failure of the Triple Assessment made arguments for a general tax upon incomes irresistible, even though the very idea continued to arouse hostility.[39] Sinclair spoke up for an ancient tradition when he represented taxing income as ‘abhorrent to a free constitution’.[40] Others stressed possible deleterious consequences of the tax upon incentives, investment and prices or simply lamented its incidence upon particular classes invariably described as the ‘backbone of the nation’.[41] Opposition seems

[35] Parliamentary History (33) 1048.
[36] Windham Papers (37877); Buckingham (1853-55) 387; Holland (1852) 96-7.
[37] Parliamentary History (33) contains a record of the debate.
[38] Parliamentary Papers (1799-1800) 108-9.
[39] Pitt Papers (279); Lauderdale (1798); Adams (1798); Beeke (1799).
[40] Sinclair (1802) 232-48.
[41] Pope (1799); Anon (1799); Auckland (1799); Parliamentary History (34) 88, 91-3.

more vociferous than serious and the bill passed through Parliament by large majorities.[42]

Apart from the compelling logic of war, the government's success in circumventing opposition owed a good deal to the flexible arrangements for the assessment and collection of the tax. Only gradually did legal amendments redefine income, tighten up loopholes and improve administrative efficiency. Original definitions of taxable income, particularly income from agriculture could be based upon rules, formulated for the assessment of land tax and for local rates. Farmers' profits were assumed to bear a proportionate relationship to rent; a rule which possessed the merit of simplicity and administrative convenience. Rent was usually known, whereas the task of checking returns of actual profits from a multiplicity of farmers would have proved impossible. Apparently, the convention understated the incomes of farmers, but this rendered the tax less unpopular, mollified those who argued that earned incomes should be taxed at lower rates than rewards from property, and avoided direct disclosure of circumstances to officials.[43]

Other schedules of the original bill gave executive force to the aspiration of an ancient land tax to assess all kinds of income regardless of source. Schedule E which related to salaries, fees and pensions from the public revenue duplicated existing taxes upon that kind of income.[44] Although a tax on interest paid to holders of the national debt had long been resisted as a breach of faith between the state and its creditors, Pitt decided to exempt interest would be inequitable.[45]

Apart from the schedule dealing with incomes from the professions, trade and industry, the new bill can be traced to existing legislation. Unlike the Aid and Contribution Act, it set out to include every British

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[42] Olphin (1934) 61-9; Parliamentary History (34) 22, 81, 84, 90, 91, 97, 134.
[43] O'Brien (1959); Bell (1799); Newberry (1801).
[44] Parliamentary Papers (1868-69) 421-2.
[45] Pellew (1847) 198-9.

citizen whose income reached an annual level of £60 and above. Despite pressures from the commercial community, the act did not differentiate between *earned* income from *unearned* income, because Pitt undoubtedly saw political dangers and administrative difficulties in suggesting any such distinction to a Parliament of landowners.[46]

Another advantage of the tax in contemporary eyes consisted of its neutrality. Several pamphleteers had advocated a progressive tax, but Pitt and George Rose wished to leave citizens in the same relative positions after payment as before.[47] 'Progression …', Lord Auckland observed, 'would be contrary to all the safety and rights of property … inequalities should remain as they are found'.[48] Nevertheless, the law did provide for progressive rates upon incomes between £60 and £200 in order that anomalies inherent in a flat rate system, whereby a citizen with an annual income of £60 contributed £6 to the Exchequer and another with £59 paid nothing. Progression also alleviated its burden upon those with 'middling incomes', while the exemption of incomes below £60 and provisions for child allowances appealed to the moral cannons of the age.[49]

Finally, grudging assent was more readily given to a contentious tax which maintained the established system used for the collection and assessment of other direct taxes based upon outlays.[50] Administrative control remained firmly in the hands of representatives of the propertied classes and the process of assessment operated as it did for all other direct taxes. Parish assessors appointed by general commissioners for divisions demanded signed declarations from all householders resident in parishes. Most simply stated that their incomes fell below the exemption

[46] Pitt Papers (279); Anon (1798); Anon (1799); Frend (1804); Shehab (1953) 49-50.
[47] Rose (1806) 38; Shehab (1953) 49-50.
[48] Auckland (1799) 27.
[49] Beeke (1799) 79-81; Shehab (1953) 50-3.
[50] Bell (1799).

line. Those receiving incomes within the band £60 to £200 made precise declarations of their incomes. Everybody else simply stated the amount of tax they proposed to pay as equal to 10 per cent of their incomes as defined in instructions from the tax office. If a citizen's income emanated mainly from trade or industry, he could opt for assessment by special bodies called commercial commissioners. If not, parish officials delivered declarations to the general commissioners.[51] Commissioners were prominent residents of the divisions over which they presided. Nominations for the post had to be submitted to the grand jury for the county by commissioners for the land tax. For London the city council and directors of the large city corporations, such as the East India Company, the South Sea Company, the Royal Exchange and the Bank of England elected twenty-four commercial commissioners.[52]

Sitting either collectively or in sub-committees, commissioners examined the statements. Their local knowledge of agriculture, trade and industry provided them with a basis for evaluation. They possessed the powers to demand a full statement of income from all sources including deductions specified under different schedules of the act. Commissioners could also summon taxpayers for examination. If citizens failed to make returns they imposed assessments upon them.[53]

Although propertied members of the landed or commercial classes occupied all senior posts in the administration of the income tax, the government did not hand full control over to them. Pitt saw to it that the Treasury was represented, through its surveyors.[54] For over a century surveyors had assisted commissioners in the assessment of direct taxes on houses, windows, servants and carriages. As their title suggests, they

[51] Clear accounts of the administration of the tax can be found in the act 1799 G.3c.13 and c.22; Anon (1799).
[52] Anon (1799); 39 and 40 G.3c.49; Parliamentary History (34) 7, 45; Hope-Jones (1939), 11, 50.
[53] Anon (1799).
[54] Pitt Papers (279, 282).

conducted surveys and valued taxable property for particular parishes, advised commissioners upon points of law, attempted to detect evasion, checked the assessments of parish officials and harried local collectors to gather taxes promptly.

Proceeding with due caution, Pitt appointed no additional personnel in the first instance, but imposed these duties upon the existing body of surveyors and redefined their functions as ‘assistance’ to commissioners. Although they had access to all tax returns and to local poor law and parish records, their objections could be overruled by a majority of the commissioners.[55] The opposition suggested that commissioners should be given powers to dismiss surveyors but they were unlikely to be troublesome to local magnates who controlled part of their remuneration.

Some small degree of central control over income tax administration was built into the law but government spokesmen seldom referred to it.  The original act of 1799 attempted to meet popular demands for minimal disclosure of income. Taxpayers virtually assessed themselves and then made a submission of their proposals to committees of their peers in their localities.[56]

## The income tax in operation, 1799-1816

Once Parliament accepted the principle of an income tax, successive amendments to the law, reforms to the administration and an upward trend in nominal money incomes made the tax *the* most productive source of tax revenue employed to finance the Napoleonic war. For the sixteen years of its existence, aggregate yields improved with legal alterations to the scope of the tax, changes in definitions of taxable income, more effective administration and autonomous additions to taxable income.

[55] Parliamentary History (34) 101; 39 G.3 c.22.
[56] Pitt Papers (279, 282); Parliamentary History (34) 89, 137.

Table 2  Gross Income Assessed to Tax 1800-14 and Revenue Received From the Income Tax (£million in current prices) [b]

| Year | Gross Income Assessed Under Schedules | | | | | Total | Total Tax Collected [(i)] |
|---|---|---|---|---|---|---|---|
| | A | B | C | D | E | | |
| 1798 | | | | | | | 3.82 [(ii)] |
| 1799 | | | | | | | 4.73 [(iii)] |
| 1800 | | | | | | 80.2 | 5.34 [(iv)] |
| 1801 | | | | | | - | 6.0 |
| 1802 | | | | | | - | 3.3 |
| 1803 | 38.5 | 24.3 | 12.9 | 34.9 | 5.9 | 114.2 | 0.4 |
| 1804 | - | - | - | - | - | - | 3.7 |
| 1805 | 41.8 | 27.0 | 14.4 | 34.7 | 7.1 | 125.0 | 4.5 |
| 1806 | 44.8 | 28.5 | 22.4 | 34.6 | 6.8 | 137.1 | 6.2 |
| 1807 | - | - | - | - | - | - | 10.2 |
| 1808 | 48.0 | 31.4 | 24.0 | 33.5 | 9.3 | 145.2 | 11.1 |
| 1809 | - | - | - | - | - | - | 12.4 |
| 1810 | 51.9 | 33.4 | 24.8 | 34.4 | 10.3 | 154.8 | 13.5 |
| 1811 | 51.9 | 36.3 | 25.4 | 33.3 | 11.1 | 158.0 | 13.4 |
| 1812 | 57.1 | 36.9 | 26.5 | 34.4 | 11.5 | 166.6 | 13.1 |
| 1813 | 56.7 | 36.3 | 30.0 | 36.1 | 11.4 | 170.5 | 14.3 |
| 1814 | 60.1 | 38.4 | 30.0 | 37.1 | 12.8 | 178.4 | 14.5 |
| 1815 | - | - | - | - | - | - | 15.0 |
| | | | | | | | 155.6 |

***Notes***: (i) gross income assessed relates to year ended 5th April and total tax collected relates to tax collected for year ended 5th January
(ii) yield of aid and contribution tax
(iii) includes £2.0 million from aid and contribution act
(iv) includes £0.5 million from aid and contribution tax

Total income tax collected depended upon net income liable for tax and the tax rate. Unfortunately it is not possible to present a complete series of *net* income assessed by schedule for each year, 1803-1815 let alone before the Peace of Amiens, 1802, when returns were not presented in that form. Economic and other forces which determined the contribution of this fiscal innovation towards the war effort can, however, be appreciated from a study of the figures for gross income assessed and it is possible to distinguish three periods: 1798-1801, when the government introduced an experimental framework of legislation and administration designed to secure general acceptance; 1803-1806 when law and administration became tighter, and 1807-15 when the income tax came on stream.

Comparing total tax in 1800 (when the standard rate stood at 10 per cent) and 1804 when Addington (then Prime Minister) had halved the standard rate, it is apparent that Pitt's original act and administrative arrangements allowed for widespread evasion.[57] In 1800 gross income assessed amounted to some £80.2 million, well below the Chancellor's original estimate, but three years later the inland revenue managed to bring a further £34 million into assessment. Most of that increment originated in greater compliance with lower tax rates, reforms to the law and its administration (taxation at source, the introduction of returns under five specified schedules, and the more stringent definitions of income from land ownership and farming) rather than from rising prices or additions to the national product.[58]

By 1806 receipts had nearly doubled compared with 1803. The rise reflected: a doubling of the standard rate, the abolition of child allowances and abatements on property incomes below £150, the lowering of the exemption limit from £60 to £50, the assessment of interest on the national debt at source, the termination of the repairs allowances for landowners and farmers administrative experience and reforms, and in some degree to the rise in national income.[59] To measure the contribution of each factor is impossible, but everything except the rise in the standard rate of tax is reflected in net income assessed to tax. Assuming that gross

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[57] Pitt Papers (279, 282); Treasury Papers (T1/824/2579).
[58] Farnsworth (1951); Vansittart Papers (31229).
[59] To follow the chronology of legal and administrative changes to the operation of the tax see: Pitt Papers (179, 282); Vansittart Papers (31229); in letters to the Treasury Series T1; Minutes of the Board of Inland Revenue; Parliamentary Papers (1821).

and net income assessed rose by the same proportion then about 80 per cent of the additional revenue collected in 1806 compared with 1803 can be attributed to the higher rate of tax.

Turning attention to the contribution made by each schedule, several inferences may be drawn. For example, schedule A included rents from land and houses, Schedule C was composed of interest on the public debt, schedule D was dominated by industrial and commercial profits and only schedules B and E represent income from labour services. Thus, roughly 75 per cent of tax collected between 1803-15 came from the assessment of income from property.[60] The income tax remained in operation as well as in name, virtually a property tax and might be represented as the traditional land tax, expanded to be somewhat more inclusive and in accordance with the letter of the law.[61]

Indeed many of the difficulties encountered with the assessment of profits under the old land tax persisted with the new property tax. Industrialists and merchants found it easier to evade their liabilities than landowners, farmers, bondholders or civil servants. None of the indices of trade, industrial production or wholesale prices, now available to historians, confirms the impression from figures of gross income assessed under schedule D; namely, that industrial and commercial profits remained roughly constant between 1803-15. In contrast, the taxation of public servants and interest on the national debt presented the authorities with no real problems. As the government borrowed money and the interest bill on the public debt mounted, it recouped 10 per cent. Similarly as the numbers and salaries of government employees rose, the Treasury clawed back a share of rising expenditure on bureaucracy and the forces of the crown.

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[60] In 1810 gross income assessed under A included £34 million for lands, £14 million for houses, £2 million for tithes and £1 million of other real property – Parliamentary Papers (1812-13) 10, 87.
[61] Parliamentary Papers (1814-15) 4, 453.

Income assessed under schedules A and B depended upon the annual value of land and part of the increase after 1803 can be attributed to the more regular revaluations of property by treasury surveyors. During the war years large areas of marginal land came into cultivation in order to meet demands for food. Perhaps most of the additional income assessed to tax after 1803 came from the upward movement in incomes from rents.[62] According to contemporaries in numerous instances rents doubled during the period 1790 to 1814. Changes in rent per acre reflected the increased pressure on land for housing and urban facilities as the population grew and the young migrated to towns. More important, between 1790 and 1814 prices of meat, dairy produce and wool doubled. Grain prices fluctuated with harvests but even in normal years they stood about 80 per cent above pre-war levels. As agricultural wages and inputs purchased from the industrial sector lagged behind prices of primary produce and the profitability of farming increased demand for arable land. In conditions of easy credit farmers found less difficulty in raising funds from banks in order to stock and equip farms.

On the supply side, enclosure and consolidation reduced the supply of farms available for lease.[63] Landowners wished to recoup on their investments in agriculture. At a time of high food prices and demand for urban land, when leases expired, they raised rents well above pre-war levels, and the Exchequer gained revenue under schedules A and B.[64] Wartime agrarian prosperity helped to make the income tax productive for the fiscal state and acceptable to the landed interest. As the commons committee of 1821 noted: ‘while prices were increasing the ultimate

[62] Discussions and complaints about the sharp rise in rents can be followed in the Farmers Magazine for 1802-10.
[63] Wordie (1981).
[64] Parliamentary Papers (1813-14), 5; (1814) 4; (1821), 9.

balance of revenue left to the owner of the land was so much enlarged that he could discharge its encumbrance with less difficulty'.[65]

### Fiscal Administration in Wartime

Under the realm's *ancien regime* for public administration, the four departments of state (Excise, Customs, Taxes and Stamps) responsible for the implementation of fiscal policy devised by ministers and sanctioned by Parliament laboured under a tax system that would have severely challenged the organizational capacities and skills of even the most modern and efficient of public or private bureaucracies. Since 1660 successive governments had charged those departments to enforce an exceedingly complex and constantly expanding body of fiscal legislation. Furthermore, the commissioners and boards that Britain's relatively powerful fiscal state placed in charge of directing departments responsible for taxation were seriously undermanned. They employed poorly paid and under-qualified staffs of officials for the performance of the unenviable tasks involved in extracting money from a society marked by a widespread propensity to evade taxes at every turn and opportunity.[66]

Not much was uncovered by Parliamentary committees who investigated their operations after the war that they carried through any fundamental reforms to their long-established organizational structures and managerial practices under pressure to maximize yields from taxes during the wars with Revolutionary and Napoleonic France, 1793-1815.[67] Prompted by the Treasury all four departments did, however, initiate some but on the whole minor reforms. For example they increased the

[65] Parliamentary Papers (1821) 9, 426.
[66] Daunton (2002); Hoppit (2002); O'Brien (1988 and 2002).
[67] Parliamentary Papers (1820); (1822); (1823); (1824).

numbers of personnel employed, improved modes of selection, revised scales and types of remuneration and put systems into place to monitor the performance of officers directly in charge of processes for the assessment, collection and dispatch of revenues to the Exchequer in London.[68]

Although higher rates of taxation promoted already omnipresent tendencies to defraud the revenue in several ways, war also facilitated the administrative tasks of appropriating more taxes. Patriotism, strong and visible among elites with high stakes in the wealth of the kingdom, may well have led to greater compliance towards demands for funds for the defence of a realm under serious threat. Parliament generally acquiesced more readily to proposals from the treasury and its subordinate boards and commissioners for far greater powers to investigate the wealth, incomes and expenditures of households, as well as the production and turnover of firms in agriculture, industry, commerce, transportation and finance subjected to excise duties.[69] For twenty-three years French and other enemies at sea increased risks for smugglers as well as legal traders while the British state made effective use of its militias and troops on land, and the royal navy offshore to assist the customs service to curb the introduction and diffusion of contraband onto and around the Isles.[70] Pitt's pre-war reforms which had transferred part of the process of taxing imports from the customs to the relatively more efficient excise service certainly contained the consumption of untaxed imported luxuries, such as wines, spirits, silks, tobacco and tea.[71]

[68] O'Brien (1967), 471-6.
[69] References to reforms to the processes for the assessment and collection of taxes can be traced year by year in the correspondence between the Treasury (Papers series T1), the Excise (Papers series E/48), the Customs ( Papers series (10148) and in the reports of Parliamentary Committees investigating all four departments responsible for state revenue in the 1820s and 1830s.
[70] Commissioners for Customs (C/10148); Commissioners for Excise (E/48); Liverpool Papers (38363 and 38383); Parliamentary Papers (1822), appendix 1 and 2.
[71] Parliamentary Papers (1833); (1834); (1935) .

Except for short spans of years wartime salaries paid to revenue officers did not lag behind rising of costs of living.[72] Officers were, moreover, encouraged to be diligent in pursuit of attempts to defraud the revenue by the strengthening of inspectorates acting on behalf of the Treasury. Inspectors and surveyors were offered bonuses and other incentive schemes devised as rewards for boosting revenues by the boards and commissioners for revenue in London.[73] Very late in the war (1811) and after several decades of procrastination, the Treasury managed to abolish an archaic and corrupt system (whereby customs officers who assessed the liabilities of merchants and ship-owners for import duties collected fees for their services) in favour of salary scales that had been commonplace in the department of excise for more than a century.[74]

Overall and apart from reform to land-guards and water-guards against smuggling (which only came on stream in the closing years of the war with Napoleon) the traditional defects and the inefficiencies of the kingdom's fiscal administration remained to arouse strong criticism from Parliamentary committees for several decades after the victory of Waterloo.

## Taxes and the Growth of the Economy

### Wars and the industrial revolution

It is often asserted that victory in the wars against Revolutionary France occurred because it coincided with the First Industrial Revolution. Presumably that implies that rapid growth and structural changes to the economy during the period provided the state with a substantial share of

[72] O'Brien (1967) 471-6.
[73] Inland Revenue Papers (818); Customs Papers (C/10148); Excise Papers (E/48).
[74] Parliamentary Papers (1820) 6; (1822) 11; Hersee (1829); Owens (1879).

the extra resources required by the Navy and Army to defeat France. Recent evidence suggests that a national output grew at something less than 1.5 per cent a year from 1793 to 1815 and that this rate almost certainly fell below the rates achieved for over a decade before the outbreak of war and again after 1821.[75] Deflated national accounts are recognized, however, to be imperfect proxies for growth and difficult to periodize in order to map trends and cycles for the economy before, during and after the wars with France. More secure and illuminating indices for industrial production suggest that industry grew more slowly from 1790 to 1821 than it had in the eighties and again after 1821.[76] Agricultural output probably increased more rapidly in wartime and its growth continued well into the post war era.[77] Foreign trade recovered after the American War of Independence and the boom continued up to the Peace of Amiens when rates of growth for exports, retained imports and re-exports decelerated sharply.[78] According to Feinstein's estimates, the rate of investment also declined during the wars.[79]

In general recent quantitative evidence suggests that the British economy continued to grow during the French wars (but at a slower rate) and that growth was accompanied by the creation of additional capacity in the armaments, iron, food processing, ship-building and textile industries, which helped to supply the army and navy with the weapons, equipment, clothing and food required to defeat the enemy.

But did the economy grow fast enough to provide the extra tax revenues appropriated to service loans and to pay for all that additional expenditure upon the military and naval armed force? My estimates (table 1) suggest that only a small proportion of the *increment* to tax revenue

[75] Crafts (1985).
[76] Crafts and Harley (1992) 703-30.
[77] Crafts (1985)'s estimates are 0.13 per cent for 1760-80, 0.75 per cent for 1781-1801 and 1.18 per cent for 1801-21.
[78] Crouzet (1980) 58-61; O'Brien and Engerman (1991) 177-210.
[79] Feinstein (1988) 40-1.

came from increments to the *quantities* of agricultural, industrial and traded commodities and services taxed before 1793. Assuming that the national income moved in line with the volume of goods and services assessed to tax (an elasticity of 1), implies that the rate of growth of aggregate domestic output required to collect the sums actually appropriated by the state for 1811-15 – while maintaining tax rates and the structure of taxes as they had been *ante bellum* – could only have occurred at a counterfactual and inconceivably high rate of growth, approximating to a rate of growth for national income of at least 4 per cent per annum. If the tax base in *situ* at the outbreak of war had grown in constant prices at the same rate as Crafts's estimates for national income, then by the closing years of the war the government could have appropriated only £24.8 million in taxation, compared to the £43.4 million actually collected. Thus along with the introduction of an income tax Pitt and his fellow chancellors were compelled to push up tax rates and to seek other novel sources of revenue to defeat France.

Clearly the economic growth which occurred from 1793-1815 (while impressive enough for a period of war) did not create much by way of the extra fiscal capacity required to provide anything but a rather small proportion of the sums actually appropriated as taxes during this long conflict with France. Most of that capacity was already in place by 1793. Although the continued rise in real income and urbanization made taxes easier to collect, the government's problem was basically one of extracting extra revenues in more acceptable forms from the economy without seriously eroding its fiscal base.[80]

A more plausible argument is that the fiscal base required to defeat France had already expanded by way of industrialization proceeding at an accelerated pace from 1751-55 to 1788-92. But even this longer-term contribution from prior structural change can easily be exaggerated. If tax

[80] O'Brien (1988) 1-32; O'Brien (1989) 335-93.

revenue had merely grown at the same rate as national output, then by the onset of war with Revolutionary France, the progress of the 'industrial revolution' could have provided the government with only an extra £2 million of tax revenue. Over four decades from 1753-1793 income from taxes increased by some £7 millions to nearly £18 millions, basically because Chancellors raised tax rates and deployed political and administrative policies to extend the state's capacity to tax.[81] Britain's Industrial Revolution had only a limited impact on the tax base. Fiscal development is more accurately represented as the outcome of long spans of political history and of state formation conjoined with the construction of fiscal institutions going back to the Interregnum 1642-1659.[82]

In the European perspective, additions to the values of goods and services taxed during the wars with France were not unimpressive. Some £47 million of taxes collected to pay for the war came from increments to volume of goods and services already taxed in 1788-92. Over twenty-three years of warfare this expansion of the tax base provided the Exchequer with approximately £2 million annually – compared with £17.2 million of taxes collected just before the war. Agreed this calculation neglects the influence of economic development upon the revenue collected from taxes imposed *during* the war. Some part of the yield from the income and other new taxes introduced after 1793 accrued because they fell upon incomes, goods and services undergoing growth. To give two examples: the average amount of gross income assessed to income tax between 1803-6 amounted to £119 million, but by 1814-15 it had risen to £179 million.[83] When Pitt imposed a duty on raw cotton in 1798 imports

[81] O'Brien and Hunt (1999) 53-100.
[82] O'Brien (2007).
[83] See table 2 above.

amounted to about £37 million annually, but by the end of the war imports had nearly doubled.[84]

Yet on aggregate only an extraordinary rate of economic growth and structural change could have provided the government with more than a fraction of the revenue needed to defeat France. Given the impediments to economic growth which arose during a period of prolonged warfare as well as the rapid rise in tax rates levied upon almost all commodities and services, the relevant question to pose is *not* why the industrial revolution contributed so little towards the finance of war expenditure, but rather what forces operated to *maintain* production and consumption at such surprisingly high levels?

The question is well posed because production and trade proceeded most rapidly in sectors untaxed by the state and their direct contribution to its income could be negligible. However, the development of these sectors of the economy increased the volume of taxable goods and services indirectly through complementarities in production and by way of higher expenditures on taxed goods by investors and workforces whose incomes and consumption rose with economic growth. In short, the proportion of any addition to national output automatically obtained by the government depended upon the degree to which taxes fell upon sectors of the economy undergoing growth; upon inputs delivered to those sectors or expenditures derived from incomes earned in expanding sectors of the British economy.

Yet Parliament continued to oppose taxes on exports at a time when growth remained impressive among industries which sold high proportions of their outputs abroad, particularly textiles, metallurgical products and pottery. Even under pressure of war most inputs delivered to rapidly growing industries escaped taxation. Thus iron (and other ores) and coal sold outside London, British grown timber, bleaching materials,

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[84] Marshall (1833) 110.

chemicals, most dyestuffs, raw wool, kaolin and machinery remained untaxed. New forms of transport used by industry such as canals and turnpikes avoided the exactions of central government. Pitt did, however, extend taxation to include raw cotton, indigo, tallow and farm horses and the Exchequer derived direct benefit from investment in industry and transport through a range of taxes levied on bricks and other construction materials.

To sum up: given the traditional priority accorded by the British state to shipping and foreign trade and limited linkages of the export sector to intermediate goods and raw materials already taxed, the relationship of the industrial revolution to war finance probably occurred more in terms of its effects on the general level of demand and less through taxes which fell either directly or indirectly on rapidly growing sectors of the economy.

## Taxes and the elasticity of the kingdom's fiscal base 1793-1815

To isolate and measure the effects of all the factors which either maintained or reduced or, in some cases, increased the *volume* of goods and services subjected to taxes from 1793 to 1815 is not however feasible. Information on key variables such as prices and costs of production for wide ranges of economic activity is not available. Published monographs for most of the industries or commodities affected by taxation do not exist. Pending detailed investigations item by item into trends and fluctuations in the quantities of tea, coal or glass, the numbers of windows, houses, servants and the values of legacies etc. etc, (*vide* table 1) the following discussion can, therefore, only mention and speculate about major macro-economic forces sustaining and conditioning the government's fiscal base throughout these long and difficult years.

For example, with the exception of duties on starch, Indian textiles and European linens, yields from most taxes did not decline as tax rates went up. For starch the higher rate added to the rising cost of its principal raw material (grain) and pushed down consumption of a commodity with an elastic demand.[85] Imported textiles, faced with severe competition from the mechanization of the domestic cotton industry were burdened by higher freight rates.[86] For several commodities (malt, wine, brandy, timber, pleasure horses, stage coaches and newspapers) quantities assessed fell below levels as taxes went up. For most goods volumes and/or values continued to rise albeit modestly. Thus, in general the taxes available to the State proved themselves capable of meeting the demands made upon them. Exactions seldom reached the point of negative returns.[87]

Taking the period as a whole, a plurality of economic and political forces, both positive and negative, operated upon the volume and values of goods and services assessed. Incomes probably went up faster than for previous wars in the eighteenth century and important changes continue to occur in conditions of demand and supply for production and consumption despite the war. [88] On the negative side, inflation which pushed up prices of taxed commodities depressed tax receipts.[89] Between 1793 and 1815 costs of both capital and labour increased for almost all sectors of the economy. During the wartime inflation, manufacturers and farmers raised prices of their products because their raw material and other input costs had risen. With a tax base dominated by specific taxes the government obtained no direct advantages from

[85] Excise Papers (11894).
[86] Customs Papers (10901).
[87] See note (a).
[88] O'Brien (1989).
[89] Tooke (1824).

rising prices, except for a small group of *ad valorem* taxes levied on tea, bills of exchange, auctions, and fire insurance (*vide* table 1).

An exceptional run of bad harvests adversely affected yields from taxes levied upon agro-industries. For any economy with a large agriculture and sector deficient base, harvests not only reduced the overall level of domestic consumption, but also raised costs of raw materials for manufacturers of beer, malt, spirits, starch, candles and soap.[90] Furthermore, the sharp rise in freight rates and marine insurance premiums for all goods imported by sea exerted downward pressure on the consumption of timber, Indian textiles, European linens, raw and thrown silk, brandy, rum, tobacco, sugar, tea, coffee and dried fruit as well as coal, slates and stores carried coastwise

No government can accord absolute priority to the maximization of taxation even in wartime. For example, controls on the distillation of grain to stabilize bread prices in years of poor harvests reduced the production of spirits and starch.[91] The persistent pursuit of a mercantilist strategy of drawbacks and bounties to encourage manufacturers to sell more of their outputs overseas narrowed the fiscal base as excises on goods produced and sold domestically rose higher and higher. While the switch from imported Baltic to imperial (Canadian) timber considerably reduced revenue from timber duties in the closing years of the war.[92] Government borrowing pushed up interest rates and lowered tax receipts from the whole group of taxes on construction (bricks, timber, glass, windows and houses).[93] Military and naval expenditures on commodities such as leather, timber, horses and carriages and hemp diverted expenditures

[90] Excise Papers (11863); (11894); Parliamentary Papers (1821); (1829); (1857); Tooke (1824); Lowe (1822); Galpin (1924); Mathias (1959).
[91] House of Commons Journal (1795); Reports of Committees of the House of Commons (1800-1801).
[92] Pitt Papers (301); Parliamentary Papers (1820); (1821); (1835); Cock (1821) ch.6.
[93] Excise Papers (11894); Gayer (1953) 14, 35, 47, 69, 95, 127; Ashton (1959) 85-7, 101-4, 165-7.

away from the private to the public sector and reduced *net* receipts from taxes levied on these goods; indeed on all purchases by the state. In general, as reports of select committees to Parliament and the public debate reveals, conflicts between fiscal needs on the one hand and imperial preferences, social welfare and good order on the other, all intensified in wartime. [94]

Connexions among taxes (cross elasticities) also influenced overall yields. For example, the high prices of sugar in the early stages of the war restrained the consumption of tea and coffee. After the turn of the century, when sugar prices fell, that stimulated demand for both beverages. As tariffs on wine and brandy went up faster than tariffs on imperial rum and on domestic spirits or beer, consumers substituted between drinks.[95] Fiscal policy attempted to modify the overall design of the tax structure to preclude significant transfers of expenditure to cheaper or untaxed substitutes. As income on one tax fell away, the Chancellor recouped on another and complementary tax. But when cost reducing innovations emerged in under-taxed industries, the Exchequer could lose income. For example, the diffusion of cheaper mechanized cottons in the late eighteenth century reduced the consumption of highly taxed textiles such as silk, Indian cloth and imported linens.[96] Meanwhile the construction of canals lowered the tonnage of coal carried coastwise into London, reducing demand for taxed transportation by road.[97]

Although changes in the volume of commodities and services assessed to tax do not seem to have been either directly or strongly affected by technical progress, its positive contribution to war finance

[94] Parliamentary Papers (1806-1807), (1807), (1808), (1812), (1816), (1829), (1898); Anon (1792); Anon (1793); Sheffield (1804); Corrie (1808); Isley (1810); Dixon (1810); Tooke (1824); Galpin (1924); Ragatz (1928); Crouzet (1958).
[95] Excise Papers (11863 and 11894) and see references in footnote 94.
[96] Pitt Papers (301); Excise Papers (11863 and 11894); Monthly Magazine, 1798-1808 *passim;* Customs Papers (10901); Parliamentary Papers (1810); Tooke (1824); Warner (1912); Wadsworth and Mann (1931); Jordan (1931).
[97] Ashton and Sykes (1929) 200-02; Eddington (1803).

should not be ignored. Technical innovation modified the impact of inflation on prices and encouraged private capital formation. Beneficial effects on tax receipts can be mentioned for all bulky goods (such as bricks, glass and timber) carried by canals. Most of the additional revenue collected from the excise on printed textiles and raw cotton imports, came from mechanization and the introduction of new chemical processes into the finishing of cotton textiles.  Costs of mining coal and salt were reduced by the application of steam power and via the employment of iron in both industries. An improved still enabled lowland distillers to produce cheaper whisky by the beginning of the nineteenth century.[98] In agriculture the application of new methods to the breeding of sheep and cattle cheapened the by-products of animal husbandry such as candles, tallow, soap and leather.[99] New organizations and techniques in the commercial and financial sectors encouraged the spread of fire and marine insurance and the wider use of bills of exchange.[100]

Finally, the continued growth of population and its concentration in towns not only simplified their administration of taxation,  but raised household expenditures on such popular foodstuffs as salt, beer, tea and sugar and upon ‘urban’ necessities like housing, coal, soap and shoes and cotton textiles. Urbanization, together with the growth of production and trade, lead to unusually high levels of investment in the country’s infra-structure for a period of war and thereby maintained revenue from duties on bricks, glass, timber, slates and stones.[101] At the same time the inflation redistributed income from wage-earners to those who owned real estate, industrial and commercial property and helped to maintain the demand for such luxuries as wine, spirits, tobacco, silk, coffee, dried fruit,

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[98] Reports from Committees of the House of Commons (11); Parliamentary Papers (1823).
[99] Ashton (1955).
[100] Parliamentary Papers (1823); King (1936); Drew (1934); Raynes (1948).
[101] Gayer (1953); Crouzet (1987); Ashton (1959).

horses, carriages and servants. Although rising excise duties prompted manufacturers and traders to export in order to escape taxation, the risks of international trade in conditions of war and the French blockade of markets on the mainland encouraged them to sell more at home. Paradoxically Napoleon's Continental System which attempted to close Europe to British trade probably helped the government to raise even more finance to prosecute the war against France and her allies.[102]

**The Composition and Incidence of Taxation**

Pressure groups

Decisions by wartime governments in the field of fiscal policy continued to be constrained by the activities of more or less powerful pressure groups operating through Parliament and deploying moral rhetoric to defend their interests against exactions by the state. War certainly undermined the influence of lobbies – after all their interests were being attacked by a revolutionary foe and ministers became less amenable when the overriding pressure was to find revenue. Thus when opposition spokesmen persisted in arguing from moral precepts chancellors usually asked them to suggest alternative ways of raising revenue.[103]

Most major innovations to the tax structure occurred between 1797 and 1800 when, in the context of widespread agreement about the need to raise a higher proportion of finance for the war in the form of taxes, Pitt widened the fiscal base in ways which might otherwise have aroused decisive opposition. Even he found it expedient to introduce direct taxes on wealth and income by stages.[104] Only gradually did the government

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[102] O'Brien (2007).
[103] Ehrman (1996); Parliamentary History and Parliamentary Debates *passim*.
[104] Ehrman (1996).

turn these ‘hateful imposts’ into efficient instruments for the collection of revenue and at no time did ministers attempt to introduce the principles of progression. After Waterloo public opinion defeated the endeavours of Liverpool’s otherwise powerful administration to retain an income tax as a permanent part of the fiscal system.[105]

Alas, historians can rarely detect viable plans for taxes that statesmen of the day shelved because they anticipated successful opposition, both inside and outside the House of Commons. During the wars three interest groups, represented in Parliament, articulated their opposition to well formulated proposals of new and/or higher taxes. With the exceptions of iron, watches and clocks, protests by industrialists, merchants and shippers against taxes normally failed to defeat proposals from the Treasury.[106] Landed gentlemen took part in several campaigns to defend their interests against taxes on wealth, leather, farm horses and carts and private brewing; and to countervail the pressure of the only other Parliamentary lobby to exercise anything like real influence on the formation of wartime fiscal policy - namely planters, merchants and shippers producing and distributing sugar, rum, coffee, indigo and cotton imported from the British Caribbean.[107]

The West Indian interest waged successful attempts against the East India Company to import more sugar and to countervail the efforts of landowners to protect their investments in distilleries against imported rum and the substitution of molasses for grain.[108] On the whole taxation policy made concessions in favour of West Indian merchants and planters over domestic interests, largely because ministers were concerned to

[105] Hilton (1977); Gordon (1977).
[106] Pitt Papers (301); Scrivenor (1841); Ashton (1924); Journals of the House of Commons (53).
[107] Parliamentary Papers (1857), 4; Journals of the House of Commons (53); Vansittart Papers (31231); Liverpool Papers (38363); Anon (1813); Parliamentary Debates (23) 783-90; (26) 225-36; and *vide* the reports to Parliament on the use of sugar and molasses in the distillery cited in footnote 94.
[108] Parliamentary Papers (1808), (1898); Galpin (1924); Ragatz (1928).

afford relief to a part of the Empire of strategic importance which had suffered economically from the vissitudes of Atlantic warfare and interruptions to trade.[109] Strategic considerations also came out clearly in the politicised dispute between rival groups of merchants trading in timber from North America and the Baltic in 1809-12.[110]

Social policy and the incidence of taxes

Moral or ideological opposition to taxes that fell upon commodities and services consumed by the mass of the population – the poor – seem *prima facie* to have exercised a stronger influence on wartime fiscal policies than the campaigns of interest groups. On most occasions ministers remained unmoved by appeals against taxation on welfare grounds, which they countered with pleas of necessity. Nevertheless, the facts (which are by no means conclusive) suggest that in a contest against Revolutionary France Britain's aristocratic governments did not set aside the distributive ideals of their times.[111]

Table 3 Rates of taxes for 1792 and 1814 (1792 = 100)[(c)]

| Tax[(b)] | Specific Rates in 1814 |
|---|---|
| *Food* | |
| Coffee (plantation per lb) | 213 |
| Sugar (plantation per cwt) | 74 |
| Currents (per cwt) | 191 |
| Salt (per bushel – rises 1812) | 316 |
| Tea (ad valorem) | 768 |
| *Textiles* | |
| Printed cloth (cottons per sq.yd) | 100 |
| Indian muslins and nanqueens (ad valorem) | 180 |
| Silk (Bengal raw per lb) | 139 |
| Cotton (raw – USA per 100 lb) | 261 |

[109] Monthly Magazine (1804-12) passim; Parliamentary Debates (26), 117, 202-3, 251, 372-4, 395-96; Dixon (1810); footnote 94.
[110] Cook (1821); Albion (1926); Parliamentary Papers (1812), (1821); Crouzet (1987)..
[111] Kennedy (1913); Ehrman (1996).

| | |
|---|---|
| Leather (tanned hides per lb – rises in 1812) | 200 |
| Linen (German per ell) | 257 |
| *Alcohol and tobacco* | |
| Beer (strong per barrel) | 125 |
| Spirits (English per gallon) | 179 |
| Malt (English per bushel) | 277 |
| Rum (per wine gallon) | 300 |
| Brandy (per wine gallon) | 387 |
| Wine (Portuguese sherry, per gallon) | 300 |
| Tobacco (American per lb) | 260 |
| *Cleaning materials* | |
| Soap (hard, per lb) | 100 |
| Starch (per lb) | 100 |
| *Heat and light* | |
| Candles (tallow, per lb) | 100 |
| Coal (London, per chaldron) | 106 |
| *Housing and construction* | |
| Houses (with annual value of £20) | 272 |
| Windows (payable on a house with 10 windows, per annum) | 207 |
| Timber (Memel firs, per load) | 985 |
| Glass (Crown sheet, per cwt) | 456 |
| Bricks (small, per ‘000) | 233 |
| *Transport* | |
| Carriages (per annum to run a 4-wheel carriage) | 136 |
| Horses (per annum to keep 1 horse) | 575 |
| Travel by public stage carriage (per mile) | 400 |
| Travel by public horses (per mile) | 100 |
| *Miscellaneous* | |
| To keep 3 servants per annum | 232 |
| Newspaper (large sheet) | 280 |

If we examine percentage changes in tax rates presented above, several interesting pointers (no more than that) to the incidence of wartime taxation emerge. First, rates of duty upon soap, printed textiles, salt, leather, beer and coal (taxes viewed by contemporaries with antipathy because they fell upon commodities consumed largely by the poor) remained constant or stable for most of the war. Although the excise on malt nearly trebled, half of total malt consumption in Britain was by families on higher incomes who brewed their own beer. Duties on tea and sugar went up because Ministers remained unconvinced that they fell with particular severity on the poor.

With certain exceptions, tax rates on commodities and services consumed by affluent classes (such as Indian textiles, European linens, spirits, wine, tobacco, windows, glass, transport, newspapers and servants) appear to have increased steeply compared to taxes on commodities more widely consumed. True luxury products such as coffee and silk escaped lightly but duties on coffee were maintained to help Caribbean planters and the lower duty on raw silk protected domestic manufacturers from competition with smuggled French silks.

The mega question of who paid for the war could only be seriously addressed by attempts to measure the relative burdens of wartime taxation on particular social and income groups. Unfortunately exercises of the kind carried out by modern investigations into social incidence is impossible for the early nineteenth century, because data on income distribution and expenditure patterns for various classes are not available. Apart from contemporary research by Davis and Eden largely confined to families receiving poor relief, no household budget surveys exist.[112] A crude assessment of relative burdens can only be offered on the basis of contemporary opinions.[113]

Discussions of taxation during the period were based on the assumption that taxes fell where legislators intended and virtually ignored the whole problem of incidence which looms large in the modern economics of public finance.[114] Contemporaries assumed that direct taxes were paid by the taxpayers legally assessed and that indirect taxes were passed on by firms to consumers in the form of higher prices. Debates of the day focussed on four social groups: the landed and

[112] Horrell and Humphries (1992).
[113] Kennedy (1913).
[114] Dome (2004).

commercial classes synonymous with two equally amorphous classes: the rich and poor. Boundaries between the agricultural and other interests were never clearly demarcated. Because neither theory nor statistical measurement ever came to grips with the ultimate incidence of particular taxes, it remains difficult for historians to mediate between assertions made by both ‘classes’ that the other had not paid its ‘fair’ share towards the costs of wars.

In general terms the long conflict against Revolutionary and Napoleonic France marks a departure from the tendency of eighteenth century governments to shift a ‘disproportionate’ share of additional taxes required in wartime onto industrial commodities and commercial services sold on the home market. Accounts for revenues collected for the state indicate that the *share* collected from levies on industry and services declined, from nearly half of total taxes in 1788-92 to 38 per cent by 1808-15; while the proportion collected in the form of taxes on income and wealth rose from 22 per cent to 34 per cent.[a]

Looking at the period 1788-1815 as a whole, duties levied upon imports maintained their share in total tax revenue at or around the 30 per cent mark – despite frequent interruptions to international trade. Up to the Peace of Amiens, the real value of industrial commodities and commercial services sold on the home market seem to have risen as fast as the deflated value of excise and stamp duties collected by government. From 1800-15 those trends were reversed. Nevertheless, over the war as a whole the proportion (extracted as taxes) from the gross value of manufactured commodities and commercial services sold on the home market probably remained roughly stable.[115]

Duties on imported commodities certainly rose faster than retained imports. By 1808-15 the proportion of duties on foreign goods (collected

[115] Data for these statistical conjectures are cited in O’Brien (1988) and depend on the data calibrated by Crafts (1985) and Crafts and Harley (1992).

by both customs and excise departments) expressed as a share of the current value of *retained* imports had increased from around a quarter in 1788-92 to perhaps 40 per cent by the end of the war. Again the jump in the burden of duties on imports emerged after 1800 when the long boom in overseas commerce was followed by fluctuations in foreign trade, coupled with increasing depredations from a state searching desperately for more revenue.[116]

1793-1815 emerges, however, as a period when agriculture may finally have paid an increasing proportion of the costs for a major war. Direct taxes appear to be biased against the agricultural interest. For example, it obviously proved administratively easier to assess landowners, farmers and holders of pubic debt for income tax. Over 70 per cent of that particular tax was collected from these groups. While the value of commercial and industrial profits assessed under schedule D hardly increased from 1803-15. Merchants and industrialists could also evade other direct levies on housing, servants, horses, carriages, dogs, hair powder, armorial bearings, as well as duties on wine, brandy, coffee and silks, if they refrained from living and consuming like country gentlemen. Agricultural incomes went up by between 1 per cent and 2 per cent a year from 1790 to 1815, while total direct taxes deflated by an index of agricultural prices rose by 5.5 per cent a year over the same period. My rough estimates imply that the burden (or share of income taken by the state) from those whose incomes came from agricultural rents, real estate and profits from farming, may have multiplied by a factor of 2.5 between 1793 and 1815.[117] Meanwhile, industrial and commercial profits may have been increasing at 3 per cent a year and given the greater opportunities and higher propensities of merchants and

[116] Crouzet (1958); Crouzet (1985).
[117] Allen (2006).

industrialists to evade direct taxation, exactions from their incomes probably increased slowly.

A glance at the full range of taxes levied to defray wartime expenditures suggests the ‘landed and agricultural interest’ had a point in complaining that the state had biased the burden of taxation towards the owners of natural resources and real estate. Whether they contributed out of all proportion to the value of their considerable stake in the wealth and income of British society remains an un-testable proposition.[118]

Contemporaries (and historians following their lead) have been much more concerned, however, to distinguish between burdens of taxes which fell mainly on the rich from those borne largely by the mass of the population. According to the cannons of the age, necessities should be taxed lightly while commodities and services consumed by the more affluent were considered to be particularly eligible objects for taxation.[119] Of course, arguments persisted over the perceived incidence of several taxes but a rough consensus prevailed about incidence in general.[120]

Nevertheless and simply on the basis of recorded contemporary opinion, it is possible to divide most taxes collected to pay for the war into two parts – taxes falling on the ‘rich’ and taxes appropriated from the ‘poor’. For the levies on malt and domestic spirits, total yields can, moreover, be divided between both groups. Malt, which formed the principal constituent of beer, was purchased by richer families, who made their own beer and by public brewers who brewed for sale to the population at large. Using information from Mathias’ study of the brewing industry, I divided the war yield between both categories.[121] Nearly everyone in Scotland consumed spirits, but in the rest of the Kingdom, hard liquor was probably drunk mainly by those who could afford to pay

[118] Shehab (1953); O’Brien (1989).
[119] Dome (2004).
[120] Kennedy (1913).
[121] Mathias (1959)

for it. This geographical difference provides some basis for dividing the yield from the tax between the two groups. I allocated all other taxes into levies paid by the rich or by the poor, according to the views of contemporary writers on public finance, opinions on incidences as expressed by members of Parliament and a perusal preambles to the legislation.

Table 4: The Contribution to Funding the Revolutionary and Napoleonic Wars from taxes levied on the affluent groups in British Society.[(a)(d)]

| Tax | Yield (£000) |
|---|---|
| Income tax | 155.6 |
| Foreign spirits | 30.6 |
| Malt | 29.9 |
| Domestic spirits | 21.5 |
| Wine | 20.8 |
| Windows | 20.7 |
| Tobacco | 11.2 |
| Pleasure horses | 9.8 |
| Houses | 9.1 |
| Servants | 4.1 |
| Carriages | 3.8 |
| Coffee | 3.2 |
| Newspapers | 2.8 |
| Stage Coaches | 1.8 |
| Silk | 1.8 |
| Post Horses | 1.6 |
| Farm Horses | 9.4 |
| Probate | 6.0 |
| Legacy | 5.2 |
| Glass | 3.3 |
| Dogs | 2.4 |
| Hair Powder | 1.9 |
| Total | 345.5[(c)] |
| Total collected for the war | 542.1 |

My ‘statistical conjectures’ suggest that up to 60 per cent of all additional tax revenue raised to defeat France probably came from the more affluent classes in British society. As far as taxation was concerned ‘war for the defence of property’, as Pitt called it, seems to have been financed to a considerable extent by levies on those with property. This does not imply that the richer classes contributed a progressively rising proportion of their income. Surely the top 10 per cent of income earners made nothing like a proportionate contribution to taxes appropriated to defend their stake in the wealth of the kingdom. This ‘soft’ data simply suggests that the burden may not, as radicals maintained, have fallen with undue severity on the working class, let alone the poor. Governments of the day cannot be condemned for departing from the fiscal cannons (or rhetoric) of their age. For example, taxes on food (including tea and sugar) contributed just 16 per cent to the revenue collected for war, while a more considerable share collected from those on the lower rungs of the income scale came from levies on alcohol. In general alcohol (which included malt, beer, hops, spirits and wine - with tobacco) contributed 27 per cent of additional tax revenue required for war. If smoking and the consumption of alcoholic beverages had not been widespread in British society, the government would have experienced far greater difficulty in finding the money and resources to defeat Revolutionary France and Napoleon.

Notes:

a) All data related to: rates of taxation; to gross and net amounts collected; to receipts at the Exchequer; to volumes and/or values of commodities, services and incomes subjected to taxation have been taken from official sources - Parliamentary accounts and papers and the records of the departments of customs, excise, stamps, taxes, inland revenue and the exchequer, responsible for the assessment, collection and receipt of taxes. The sources are fully referenced.

b) Sources for gross income: Accounts and Papers, 1812/13 (XII) p. 235 et seq; 1814-15 (x) p. 85 et seq; 1 Comms of Inland Rev., 1857 (iv); Inland Rev. Papers (385); Schedule.C for 1803 and 1805 was calculated from the tax collected. Gross means total income which came within the purview of the tax administration – see O'Brien (1959).Sources for tax collected: Customs 17: States of Navigation Revenue and commerce, 1798-1808 and Parliamentary Papers; Accounts and Papers (1814-15)(x) ;1816 (xi).

c) I have attempted to present the typical commodity from a given group. For example, American cotton was the most common type of cotton fibre imported between 1795-1815. Not all taxes have been listed above. I have included only those which appear relevant to a discussion of incidence.

d) All other taxes were either not allocable in terms of their incidence or were assumed to have been paid by the poor.

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