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Mercantilist Institutions for the Pursuit Of Power with Profit. The Management Of Britain's National Debt, 1756-1815

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The Rise Of Britain's Fiscal Naval State

In outline (if not in the chronological detail required for a complete and satisfactory historical narrative) the reasons why the United Kingdom evolved between the Glorious Revolution of 1688 and the Congress of Vienna of 1815, into the most powerful fiscal military state in Europe have become clearer since Peter Dickson inaugurated the modern debate with the publication of *The Financial Revolution in England* some four decades ago.[1]

That seminal book (subtitled "A Study in the Development of Public Credit 1688-1756" directed attention to the economic and geopolitical significance of a political consensus and network of institutions for the accumulation of a national debt required for the rise of British power.[2]

Over the long eighteenth century public debt increased from a nominal capital of under £2 million in the reign of James II to reach an astronomical level of £854 million or 2.7 times the national income when Lord Liverpool's administration returned the monetary and financial system to the gold standard in the aftermath of the Napoleonic War.[3] Up to 85 per cent of the money borrowed as long term loans or raised as short term credit between 1688 and 1815 was allocated to fund a

[*] To be published by Christopher Storr (ed): The Fiscal Military State In Eighteenth Century Europe (Forthcoming, Ashgate 2007)
[1] Dickson (1993)
[2] Jones (1980); Holsti (1991); Colley (1992)
[3] Gordon (1976); Hilton (1977)

sequence of costly armed conflicts against enemies who threatened the security and stability of the realm, as well as the kingdom's rivals who challenged its mission to command the oceans, engaged in mercantilistic competition with British businessmen for the profits of global commerce, or obstructed the nation's ambitions for colonization overseas.[4]

The institutionalisation of public debt was but one symptom and sinew of a combined financial, fiscal and naval strategy for the projection of British power overseas.[5] State debts could only be accumulated, sustained and serviced by revenues from taxation assessed and collected with difficulty from the realm's evolving but narrow fiscal base and recalcitrant bodies of taxpayers. That is why a 'fiscal revolution' the outcome of a political consensus that succeeded an interregnum of destructive civil war, the innovations of a republican regime and the construction of relatively efficient institutions for the assessment and collection of taxes (particularly excise and customs duties) under the restored Stuart monarchs, together with sustained support for a standing navy – have all been analysed by a recent wave of historiography as "preconditions" for the rapid (and in European terms, extraordinary) accumulation of public debt that succeeded the change of monarchical regimes in England in 1688.[6]

Whatever might be claimed for its origins and representations of the Glorious Revolution as the final victory of Parliament over despotism. 1688 certainly marks three interrelated upswing in revenues collected for and expenditures made by the English State.[7] Between King William's War and final victory at Waterloo taxes, loans and allocations for the navy

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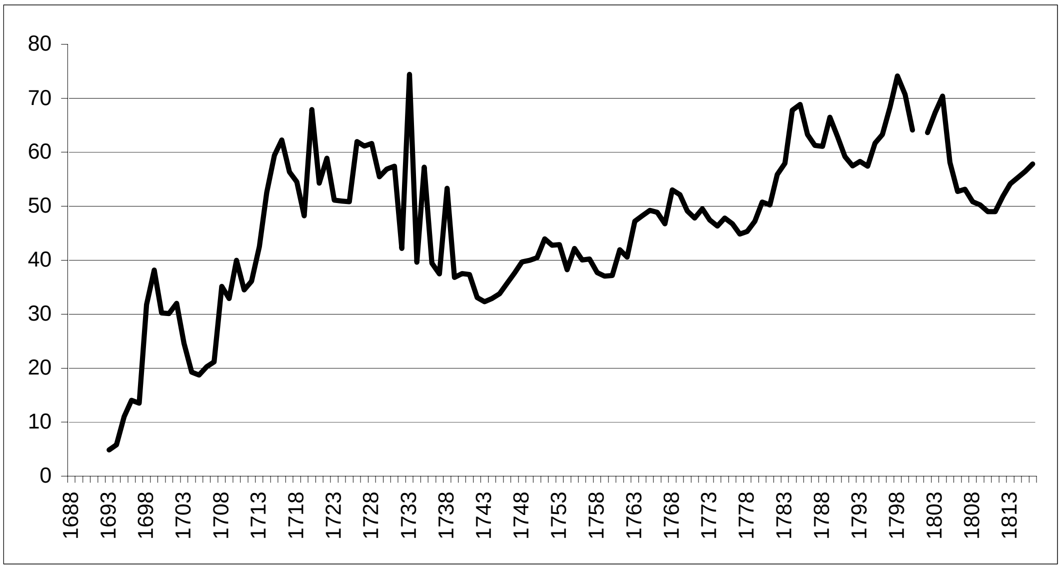
[4] Gomes (1987)'; Stone (1994); Black (1991)
[5] Baugh (19880; Tilly (1990); Ferguson (2001)
[6] O'Brien (1988); Brewer (1989); Roseveare (1991); Braddick (1996); O'Brien and Hunt (1993); O'Brien and Hunt (1999); O'Brien (2002); Ashworth (2003)
[7] North and Weingast (1989); Strasavage (2003)

and the army all rose and continued to increase war after war to peak at the close of the Second Hundred Years War with France, 1803-15.[8]

Revenues from taxation increased far more rapidly than national income – a fact which relocates economic explanations for the rise of the state to a subsidiary place.[9]

Allocations for Debt Servicing as a Proportion of Total Net Income from Taxation[10]



Most of the extra money appropriated by the state from the kingdom's relatively compliant body of taxpayers serviced its national debt. Apart from the tiny residual allocation to support the court and organs of central governance, the remainder of tax revenues available to the state (after hypothecated debt servicing changes had been met)

[8] O'Brien (2007)
[9] O'Brien and Hunt (1993)
[10] O'Brien (2007)

funded the realm's fluctuating but increasing expenditures upon the military and naval forces of the Crown.[11]

Despite some rather minor episodes of resistance at home and a serious tax revolt by subjects of the crown residing in thirteen colonies in New England, the degree of compliance secured by an '*ancien regime*' from Parliaments and taxpayers for an extraordinary and sustained uplift in demands for taxes has been retrospectively constructed as a narrative of political, legal and administrative success.[12] Britain's achievements as a fiscal state embodied a consensus among the elite concerning expenditures upon external security, internal order and aggressive mercantilism, *vis a vis* European rivals for gains from commerce and colonization overseas.[13] As Peter Dickson appreciated, it also included a recognition of their stake in the national debt by the nation's wealthy elites – represented in Parliament.[14] They groaned but paid a due share of taxes, and took the opportunities provided by well-managed issues and market for public securities to diversify their portfolios of assets in order to provide pensions and insurance for their dependants.[15] Many also recognized the role played by Government's credit in widening the capital market, in attracting foreign investment to London and promoting the development of banks and other institutions for financial intermediation.[16]

Despite the rapid accumulation of debt, the high shares of total tax revenues allocated as transfers to Government creditors, the antipathies of radicals to monied and aristocratic interests as well as episodes of political anxiety and controversy over the scale of debt, the realm never experienced, fiscal crises of the state of kind that afflicted other powers

[11] Brewer (1989); Stone (1994)
[12] Hoppit (2002); Daunton (2002)
[13] Baugh (1988); Rodger (2004)
[14] Dickson (1993)
[15] Carruthers (1996)
[16] Neal (1990)

on the mainland.[17] Once a system and institutions for regularized borrowing was up and running, the debt matured along the lines depicted by Peter Dickson into another sinew of power - as envied and feared by other states on the mainland as the kingdom's fiscal prowess and its royal navy.[18] That achievement took several decades of experimentation and innovation to mature. With lapses, the system survived the strains placed upon it by the Seven Years War, 1756-63, the American Rebellion, 1776-83 and above all by costly wars against Revolutionary France and Napoleon 1793-1815, because the operations involved in providing the royal navy and armies with the real resources required for the prosecution of warfare and defence of the realm were managed with relative, if not with remarkable, efficiency, by those in charge of the nation's finances during its long transition to geopolitical hegemony.[19]

This essay follows the historical themes explored by Peter Dickson in the Financial Revolution and analyses the principles and practice of debt management from where he left off in 1756 through to the apogees of Trafalgar and Waterloo. Thereafter, and for roughly a century, the United Kingdom's fiscal and financial system supported an altogether cheaper imperial state – mortgaged to its creditors, unavoidably in thrall to *laissez faire* and free trade, but fortuitously in no danger from its rivals before the rise of Germany.[20]

Principles of 18th Century Debt Management

The accountancy of Bond and Bill Finance

Government borrowing was achieved through the sale of paper securities to private capital markets. This task involved British

[17] Hoffman and Norberg (1994); Strasavage (2003); Bonney (2004)
[18] McArthur (1801); Crouzet (1987); Bonney (2004)
[19] Bonney (1995); Dickinson (1989)
[20] Mandler (1990); O'Brien (1997)

Chancellors of the Exchequer and their advisers in the business of managing a national debt. The complexity of that task can only be appreciated by close investigation into the range of decisions behind the marketing of public securities.

Given the level of expenditure, the higher the level of taxes levied on the population the lower was the amount borrowed by the State. In Britain (at or preparing for war for about half the years between the Glorious Revolution of 1688 and the final victory over its European rivals in 1815) borrowing took one of two forms: funded or unfunded. Contemporary discussions of public finance hardly mentioned the latter and regarded a balanced budget as one where revenues from taxes covered expenditure and the Government had no recourse to funded borrowing.[21] It is easy to see how unfunded borrowing could be ignored. In peace time most bills issued by departments of state to obtain goods and services on credit provided funds to anticipate revenue accruing during the *current year* and were automatically paid off (redeemed) when taxes or, receipts from loans, arrived at the Exchequer. 'Contingent' unfunded borrowing of this kind made no contribution towards the finance of annual expenditure; it simply met the needs of the Exchequer, the navy, the army, the ordnance and other departments for ready cash. Whenever governments borrowed short term on the security of revenues which subsequently failed to arrive at the Exchequer or departments of state, issued bills to secure credit for unforeseen increases in levels of expenditure, clearly the state had employed unfunded borrowing to finance its current expenditures. The case is even more obvious when departments issued bills redeemable from tax revenues accruing in future financial years.[22]

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[21] Parliamentary Papers (1786 and 1791); Rayment (1791)
[22] Parliamentary Paper (1857a) 488-534; Wood (1939) 60-62

Since the state both borrowed money and repaid debt during most financial years (1688-1815) only the *net* amount of money borrowed could be used or the purchase of commodities and services by public departments and to meet interest payments on the national debt. Clearly, the wider the gap between total receipts from the sales of bonds and bills and expenditures upon their redemption, the higher the proportion of borrowed money available for the finance of 'real' expenditure would become. At the same time the national debt would accumulate more rapidly. As the volume of debt redeemed grew the amount of current loans available for other forms of expenditure became comparably smaller. When the repayments of debt exceeded funds borrowed over the year, the Government in effect allocated taxes to meet obligations to its creditors, and the amount of debt outstanding and the interest bill then declined. As discussions on the Sinking Fund under Walpole and Pitt revealed, only if the Government possessed a surplus of tax income over expenditure on resources could effective reductions be made in the size of the national debt.[23]

The net amount borrowed by the Government for the finance of 'real' expenditures consisted then of receipts from bonds sold minus payments for bonds redeemed in the market by the Treasury, plus revenue from bills marketed minus revenue used to redeem, matured bills. These four operations encompassed the business of debt management. Receipts from bonds sold usually exceeded the amount of revenue employed to buy bonds and funded borrowing almost invariably made a large contribution (up to 80 per cent – 90 per cent) towards the finance of expenditures on warfare. But the contribution from unfounded borrowing could be either positive or negative. When bills repaid exceeded bills issued part of the revenue from funded borrowing had in fact been diverted to redemption of the floating debt. Furthermore, the

[23] Parliamentary Paper (1868-69) 710-12; Hargreaves (1930) 98-100

net volume of bonds sold over the year bore an inverse relationship to the net volume of bills issued. Unfunded and funded borrowing provided Chancellors with alternative ways of raising money and the higher the level of one the lower the level of the other.

This basic accountancy must be kept in mind for purposes of discussing all policies and operations concerned with public borrowing. Management of the funded debt involved the sale of new bonds, an operation called floating or negotiating a loan, and the redemption of debt through the purchases of bonds from the money market by Commissioners for the Sinking Fund. Although 18th century governments could opt to purchase bonds and redeem them at par values, bonds were not legally promises for the repayment of debt. Nevertheless, after the American War of Independence, public opinion and statesmen became deeply concerned about the size of the country's debt which had doubled in size (1775-83). Sir Robert Peel wrote a pamphlet to show 'the apprehensions which have surrounded the debt are unjustified' and William Playfair another to disprove the prevalent notion of the debt 'as the great disease of the constitution'.[24] Pitt the Younger shared fears about the size of the post war debt and resolved to place it under a regular course of redemption.[25] His plans leaned heavily on the ideas of Richard Price.[26] Briefly Price recommended the establishment of a Sinking Fund fed by taxes formerly paid as interest on bonds redeemed by the Government. Thus the annuity payments formerly transferred to bondholders would provide the Government with an accumulating fund for the redemption of more and more national debt. As Price himself put it, 'A Sinking Fund fed by interest is a fund constantly increasing'.[27] His ideas had much to commend them. Of course taxes had to be imposed to

[24] Peel (1787); Playfair (1787)
[25] Grenville (1828); Binney (1958) 112-14
[26] Cone (1951) 244-51
[27] Price (1772) 312-15

provide funds to buy an initial amount of bonds from the capital market, but as time went on the Sinking Fund depended less on the imposition of *new* taxes and more upon receipts from taxes formerly levied to pay annual interest to the Government's creditors. Further taxes would not be imposed and the Governments would simply maintain the existing burden of taxation in order to support a strategy for debt redemption. To statesmen faced by a society which exhibited such a marked reluctance to comply with demands for higher taxes, the attractions of Price's scheme were obvious.

In 1786 Pitt established his famous Sinking Fund when he allocated £1 million every year from surplus revenue for the purposes of debt redemption. He also used the interest formerly paid to the owners of the redeemed stock for the redemption of even more bonds. When the annual income of the Sinking Fund reached £4 million Pitt proposed that the interest on the bonds redeemed thereafter could be cancelled and taxes reduced accordingly.[28] Calculations among his papers show that if the price of consols had remained at 75, and no further borrowing occurred then through the operation of this plan, the national debt might have been paid off over 35 years.[29] Pitt was most anxious that his scheme should avoid the fate of previous Sinking Funds whose income had been diverted away from their original purposes towards the finance of other pressing items of public expenditure. In order, as he put it, 'to convince the kingdom something effectual is meant and public debts are indeed on the way to be extinguished', he attempted to design the legal and administrative framework of his Sinking Fund in such a way that it would become mandatory for all future Chancellors of the Exchequer.[30]

[28] Ehrman (1969) 66-73; Parliamentary Paper (1868-69) 711-12
[29] Pitt Papers (275)
[30] Sinclair (1802) 486-87, 496, 499; Grenville (1828) 59, 63

For the five years prior to the wars of 1793-1815, the Sinking Fund operated as Pitt intended. The fund purchased bonds with surplus revenue from taxes and received interest on redeemed stock.[31] When the war against Revolutionary France began in 1793 the Government once again commenced borrowing on a large scale, and with the disappearance of the budget surplus the whole purpose of the Sinking Fund obviously required reconsideration. For reasons discussed further on, the Government persisted with the Sinking Fund and between 1793 and 1815 allocated revenue for the redemption of debt at the same time as it sold bonds to the market.

Management of the unfunded debt involved decisions about the issue, renewal and redemption of bills. Every year the Treasury, confronted with blocks of matured bills due for redemption, could meet the Government's obligations to its creditors in one of four ways. First, the bills could be repaid from the cash received from tax revenues and the unfunded debt would then decline. Alternatively, the Chancellor could allocate cash received from loans towards the repayment of bills. In this case the funded debt would rise but the unfunded debt would decline by a comparable amount. Whenever the Government borrowed on bonds and at the same time reduced the unfunded debt, the Treasury had in effect allocated part of the loan towards the redemption of bills. Thirdly, the Chancellor could opt to renew matured bills for a further year. This occurred whenever the amount of bills issued over the year exceeded the amount repaid and the unfunded debt increased. The renewal of floating debt involved no transfer of cash from the public to the Government and implied that the Chancellor had deferred making proper provision for the redemption of bills until some future date. Finally, the Treasury could convert bills directly into bonds by means of an operation called funding, which simply involved the exchange of bills for bonds of comparable

[31] Fairman (1815) 182

market values. Again no cash passed between citizens and the State. The Treasury reduced floating debt but added a comparable amount to the funded debt. Funding operations increased the supply of bonds offered to the money market over the financial year, which meant that past expenditure, met in the first instance through the sale of bills, was ultimately financed in a subsequent year through the sale of bonds.[32]

To sum up: 18th century debt management was concerned with the sale and redemption of bonds and bills. It aimed to facilitate the flow of revenue into the Exchequer at the lowest possible cost to the public. To implement financial policy, the Treasury operated within the laws, conventions and institutions – analysed in Peter Dickson's classic text and other secondary sources. Nevertheless, economic constraints seriously limited the Government's freedom to change conditions in the capital market for its bills and bonds. At any one time the distribution system in place for the sale of public assets had to be taken as given. For example the Treasury had to bargain with loan contractors, to market bills through London bankers. Ministers continued to depend heavily on the Bank of England not merely to act as a private intermediary with the money market but to support both the Government and the private institutions involved in supplying the State with whatever credit was deemed to be necessary. Furthermore, Chancellors of the Exchequer also operated within the legal framework and constitutional conventions of a long established fiscal and financial system. They required approval from Parliament for all their actions, and money had to be borrowed and spent within a single financial year.

Chancellors of the Exchequer could certainly, however, exercise some degree of influence on the terms upon which they borrowed money. First they could regulate flows of assets onto the London capital market in order to take advantage of changes in demand. They could also offer the

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[32] Parliamentary Papers (1868-69) 694-701; Treasury Papers (T35/27 and T30/20)

kind of assets popular with the market and profitable to the Government. Finally, they could seek to promote competition among those who purchased public securities.

Timing and arrangements for the issue and redemption of state securities

Chancellors of the Exchequer attempted to regulate the flow and composition of assets offered to the London capital market in order to take every possible advantage of variations in demand. Thus, when the market's preference for liquidity seemed high, interest charges could be contained by borrowing through the medium of bills. If bonds seemed to be in favour obviously it paid the Treasury to fund part of the floating debt. Strategy consisted essentially of reacting to changes in the disposition of the capital market towards different types of public securities. It was, above all, a matter of making the right arrangements at the right time. To appreciate the opportunities open to any Chancellor it is illuminating to outline the factors affecting market demand for securities and the methods available to him for taking advantage of such changes in demand.

In seeking funds the Government always competed with demands for savings for profitable investment elsewhere in the economy. But while the market for the government's assets overlapped with the national market for capital, that market was neither a homogeneous nor perfectly integrated. Bondholders lived on the whole in and around London. For most, their investment horizons probably did not extend to the possibility of owning industrial property in the North or Midlands, and the ways in which industry was financed did not accommodate or normally appeal to them. The range of feasible alternatives open to investors in Government paper may well have been confined to mortgages on real estate and the limited range of securities negotiated on the London capital market, which included stocks of the Bank of England, the East India Company, the shares of several insurance companies, public utilities and the more numerous canal companies. Moreover, since Government borrowing resulted in the sale of assets legally exempt from the operations of the Usury Laws, it became difficult for the private sector to compete whenever interest rates moved above the legal maximum of 5 per cent.[33] The low risk, higher yield and marketability of public securities rendered them a favoured outlet for whatever funds happened to be available in London. While merchants, landowners, canal companies, builders and industrialists found it difficult to obtain loans or credit in wartime because of the diversion of investible funds into Government securities.[34]

First time buyers for new bonds included loan contractors, banks, insurance companies, bill brokers, gentlemen of the Stock Exchange, wholesalers, retailers and merchants of every kind, who together made up the London capital market. Although it might be difficult at the margin to distinguish dealers from investors, most of the immediate and possibly the second line of demand for bonds came from 'speculators'; that is from people more interested in realizing a capital gain on their transactions than in a steady income from interest. Government bills, on the other hand, provided the market with an asset less likely to fluctuate in value, more easily exchanged for cash at a London bank, of short maturity but which in general earned lower rates of interest than bonds. Investors in bills hardly expected to make serious capital gains, but bills did provide them with a fairly profitable and highly liquid outlet for surplus cash.

At any point of time the market distributed the funds available for investment in public securities between cash, bills and bonds. Cash balances offered little or no interest and maximum security. Bills paid

[33] Campbell (1928) 192-98, 206, 473-91
[34] Parliamentary Papers (1818) 8, 11, 13, 20, 143., 162, 197; (1826) 145; Thornton (1802), 286, 290-92, 310; Joslin (1960), 169, 171, 174

interest and were easily realized for cash, while bonds paid higher rates of interest and offered prospects for capital gains. Movements of funds between different types of asset in response to pressures for liquidity was already evident during the 18th century, and reasons for changes in the disposition of the market are also not difficult to trace.[35]

First of all, the propensity to purchase bonds grew stronger when investors' wishes for cash and bills had been satisfied. That depended rather heavily on the Bank of England. If the Bank imposed any restraint either upon purchases of bills from the Government or upon the value of loans to the private sector, its action immediately reduced the overall demand for bonds. Apparently even rumours of stringency in overall monetary conditions produced the same result.[36]

But apart from the absolutely crucial position of the Bank *vis à vis* the London money market, the Government itself could also influence general liquidity. For example, if the Treasury issued more bills than it repaid over the financial year the volume of unfunded debt held by the market increased. While any contraction of the floating debt reduced both the market's liquidity position and its propensity to buy bonds.[37]

Similar effects could be occasioned by large scale transfers of cash to or from the private sector to or from the Government. For example, Newland, the Bank's cashier, explained to a Lords Committee in 1797 how cash accumulated at the Exchequer for several weeks before quarterly dividends payments on the national debt which made a considerable difference to the volume of money in circulation. 22 years later another Lords Committee put the variation in the note issue during the period preceding and following the payment of dividends at between

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[35] Parliamentary Papers (1826) 43, 57, 178, 18-, 205, 212-16; Joslin (1960) 156-77; Pressnell (1956) 287-88
[36] Parliamentary Papers (1826) 37, 43, 57, 180, 190, 192, 212, 215; Boyd (1811) 2-5
[37] Pitt Papers (183); Parliamentary Papers (1805) 169; (1826) 191-92, 271-72; Anon (1796) 33

£3 and £5 million.[38] Any fluctuation in the flow of Government expenditure over the year also produced comparable variations in the volume of cash on deposit with London bankers and, through variations, expansions or contractions in the overall supply of credit afforded to its clients by the banking system.

The propensity of the market to buy bonds was also strongly influenced by expectations of future movements in their values. If prices moved upward and investors expected the trend to continue their disposition to buy bonds became stronger, but if they anticipated a fall in prices their antipathy grew. They preferred to hold bills or cash. In an organized and interlocked market, speculators dispositions to optimism or pessimism tended to become generalized quickly and in wartime their swings in mood could become highly volatile.[39]

This is not to say that the factors normally taken into account by speculators in their predictions were irrational. They knew, for example, that their customers could invest only a certain amount at any one time and that large and rapid increases in the supply of bonds could only be disposed of at lower prices. Thus, when purchasing bonds from the Government or from their fellow dealers in the capital market, they had to make some estimate of the effects on prices of potential future flows of bonds onto the market and of the willingness of investors to absorb all the bonds offered for sale over finite periods of time.[40]In aggregate the relevant flow consisted of the annual loan, bills funded by the Treasury and old stock marketed by the public. Usually the Chancellor informed the market about the amount of the loan early in the financial year, but funding operations occurred as and when his advisers considered it expedient to reduce floating debt. Dealers had no way of ascertaining the

[38] Parliamentary Papers (1807) 951; (1810) 271; (1819) 11-12; Collier (1808) 54-57
[39] Parliamentary Papers (1826) 50
[40] Parliamentary Paper (1796) 317-19

amount of bills scheduled for funding during the year, but they could reasonably anticipate such operations whenever the volume of floating debt outstanding had risen rapidly and when the discount on bills was falling.[41]

Additions to the amount of old stock normally sold by investors remained more unpredictable and depended upon their anxiety about the capital value of their holdings in the funds. Political events had been recognized throughout the century as perhaps the most significant influence on the disposition of both dealers and investors to buy and sell bonds. In peace time the illness of the King, a change of administration, or, as Mortimer amusingly writes: ' the advancement to the highest offices in the state of men of weak minds, corrupt hearts and debauched manners' had tended to lower the demand and the prices of public securities.[42] By the end of the century investors concerned themselves very little with the risk of default by the Government on its interest payments, but they knew that war would radically increase and peace seriously diminish the amount of money borrowed by the state. War, or the expectation of war, presaged an increase in the supply of bonds and bills and some predictably sharp reduction in their prices. Peace portended the opposite. Investors who had purchased assets cheaply while the war continued could expect to make capital gains when hostilities ceased, and people who had purchased bonds before war broke out could expect to make a loss if they realized their assets during the conflict. Thus speculators and investors concerned to preserve the capital value of their investments usually hurried to sell out at the onset of war and to buy when peace seemed imminent.[43] The influence of this body of 'floating assets' on prices could be considerable. Consol prices,

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[41] Pitt Papers (108) and Vansittart Papers (31231)
[42] Mortimer (1801) 255
[43] Mortimer (1801) 248-51; McPherson (1805) 264, Dropmore Papers (2); Creevy Papers (1904) 11

for example, fell sharply at the onset of war in 1756, 1776 and 1792 and appreciated again when peace terms were agreed to in 1762, 1782, 1802 and 1814.[44]

During wars any political or military event which suggested either the prolongation of armed conflict or an early peace affected bond prices and the bids submitted for loans by contractors. For example, the contractor James Morgan, observed that his bid ‘would be governed by reference to the market price in the first instance, next the disposition of the public towards peace’.[45] Thus alliances formed against the Kingdom, the loss of naval engagements or land battles and the termination of peace negotiations all served to depress bond prices. While victories, diplomatic success or the opening of talks with enemy powers invariably lead to an appreciation of prices.[46]

Not all speculation about possible movements in the value of securities can be described as rationally based. For example and on several occasions during the wars the stock exchange and other parts of the market apparently bought and sold on the basis of wild rumours and at least once the market succumbed to a deliberate fraud designed to persuade it that peace was in the offing and prices would rise.[47] Many pamphleteers accused stock brokers and other groups of dealers of rigging the market in order to further their own interests. Those about to buy bonds certainly possessed an interest in affecting reductions in their prices, while ‘bears’ about to sell obviously appreciated rising prices. But whether either group could effectively bring about changes in prices sufficient to affect the overall demand for bonds and the cost of borrowing

[44] Monthly bond prices were published in the Annual Register and Monthly Magazine
[45] Parliamentary Paper (1796) 319
[46] Parliamentary Paper (1805) 167-68
[47] Anon (1814) and Monthly Magazine (February, 1803) 98

by the state seems doubtful, whatever Mortimer and other opponents of the Stock Exchange might say to the contrary.[48]

Major decisions about debt management had usually to be made before the Chancellor presented Ways and Means estimates to Parliament and at that stage he decided upon the proportions of total revenue to be raised from taxes, from loans and through the medium of bills. Theoretically the Chancellor should have favoured bills over bonds whenever the prices of the latter were falling and whenever the market displayed a propensity to remain liquid. The loan could be delayed and subsequently allocated towards the repayment of bills issued to anticipate its revenue. Unfortunately the Chancellor could rarely calculate the relative advantages of funded against unfunded borrowing simply because he could not predict with any accuracy the likely flow of bills onto the market over the year. While he certainly knew the amount of bills due for repayment and could estimate the possible increase in the issue of bills for the finance of *foreseen* expenditure, the volume of bills circulated to cover either inaccuracies in the estimates of departmental (especially naval) expenditure or to anticipate receipts from taxes and loans over the current year could not be brought within a framework of calculation necessary for any rational policy of debt management. Particularly because contingent short term borrowing by the armed services frequently accounted for the greater part of additions to the flow of bills onto the capital market over the year. When sudden and rapid increases in the supply of bills could alter the whole basis of the Chancellor's estimates about the relative movements in the prices of bonds and bills, the Treasury could do little more than attempt to contain *contingent* short term borrowing within narrower limits. Fine calculations as to the relative advantages of borrowing on bills or bonds never really became feasible. The Treasury could not be expected to operate a 'rational policy' of debt

[48] Mortimer (1801)

management but usually reacted to the accumulation of floating debt by funding bills whenever profitable opportunities for conversion arose.[49]

Floating debt might also have been contained if the Government repaid matured bills from the proceeds of loans. Such funding operations possessed certain advantages. First, the Treasury sometimes managed to convert bills into bonds of 4 per cent and 5 per cent denomination, bonds which loan contractors usually refused to accept, but which had the merit of being convertible after the war into 3 per cent consols, thereby reducing the Government's interest bill.[50] Some authors considered funding had an added advantage because it permitted the Treasury to by-pass loan contractors and to deal directly with a larger number of bill proprietors, but whether cutting out one group of middlemen seriously reduced the overall interest bill is impossible to say.[51]

Probably not, because negotiations for funding were usually conducted with a fairly small group of London bankers who represented the market and reached prior agreement on the terms generally acceptable for the conversion of bills into bonds.[52]

Perhaps the most important advantage of funding was that it presented the Treasury with opportunities to regulate flows of bonds offered to the market. For example, the loan could be used to pay off bills or if it seemed more efficient the Treasury could float a smaller loan and follow with a funding operation. Calculations of this sort must have been difficult to make since they involved comparing the known prices of bonds on the date chosen for negotiating the loan with their expected prices on the date proposed for funding bills sometime later in the year. Additions to the loan would, moreover, depress bond prices while deductions from the volume of bills funded usually gave better terms on the conversion.

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[49] Vansittart Papers (31231)
[50] Parliamentary Paper (1868-69) 513-41; Sinclair (1802) 484-85, 503-05
[51] Hales (1796)' Rickards (1855); Sinclair (1802) 280
[52] Pitt Papers (102, 276)

Theoretically the Treasury should have funded an amount of bills or borrowed an amount of money so that the interest payable after both operations were minimized, at the point where the annual cost of the last pound borrowed equalled that on the marginal bill funded.[53]

Funding could also be timed to take advantage of changes in the disposition of the capital market. Negotiations to convert bills into bonds should theoretically have taken place when bond prices were rising. In wartime daily and unpredictable fluctuations in bond prices also rendered the selection of optimal dates extremely difficult and in any case the time for funding operations had to be negotiated with bill holders who had different views from the Treasury. Both they and the Treasury had, however, a common interest in selecting a time which did not overlap with the release of bonds on the current loan. Both parties attempted to avoid occasions when contractors were disposing of new stock that is when additional supplies of bonds could depress their value.[54]

Dates for the negotiation of loan contracts were selected by the Chancellor and presented him with opportunities for choosing times when demand seemed buoyant. He could avoid opening discussions about a loan when the market expected bond values to fall and displayed a strong tendency to remain liquid. For example, whenever adverse political or military conditions coincided with negotiations for a loan the Government could expect the cost of borrowing to rise. Diplomatic and military intelligence could provide the Treasury with advance information about current events and the Chancellor could then decide whether to float a loan late or early in the year in order to take advantage of possible fluctuations in bond prices. The Government could also create more favourable conditions for the negotiation of a loan either by issuing

[53] Huskisson Papers (387590; Pitt Papers (183); Parliamentary Debates (2) 144, 179, 880; (10) 991; (23) 574, 582, 583, 1203-09
[54] Parliamentary Debates (10) 991; (11) 13; (16) 1045

exchequer bills or by timing the contract to follow the payment of dividends on the National Debt and the purchases of stock by the Commissioners for the Sinking Fund. Accessions of cash or issues of bills helped to satisfy the market's demand or liquidity and disposed it towards bonds.

Other things being equal the Treasury obtained better terms for loans if it gave contractors some degree of control over the supply of new bonds offered to the market. This could be achieved by timing contracts for loans and funding operations in such a way that the supply of bonds remained in the hands of a single group of middlemen. If loans overlapped or coincided with funding operations the distribution of bonds to a wider market passed into the hands of several rival groups of bankers and contractors all competing for a finite demand. In this situation contractors could adjust their bids for the loan upwards and the cost of borrowing would rise. If on the other hand, the Treasury made arrangements to allow a single consortium to monopolize the supply of bonds, at least for short periods, contractors were more likely to take an optimistic view of their prospects for capital gains and would raise their bids on the loan accordingly.[55]

It was difficult, however, for the Treasury to widen the gap between loan negotiations without shortening the total time allowed to contractors for the payment of instalments into the Exchequer. Unless subscribers had large personal resources or credit available, they frequently sold the scrip of one instalment to make the next payment. Thus, it became the interest of a consortium to have its liability spread out over the financial year. If the Treasury required payment within a shorter period the rate at which new bonds came onto the market accelerated; profits fell, and bids for the loan would inevitably go down. To help contractors, the Treasury tried to arrange its borrowing operations in order to avoid overlaps and

[55] Bank of England Reports (8 March 1809); (9 May, 1809); (4 March 1812)

gave them the maximum possible time in which to pay the instalments on a loan.[56]

Denomination of bonds

By the late 18th century the Government had marketed bonds of 3 per cent, 4 per cent and 5 per cent denomination and could presumably experiment with stocks of higher or lower face values if it so desired.[57] Borrowing money or funding bills into stocks of higher denomination gave the Chancellor opportunities for reducing the long term interest charge on the national debt through conversion operations. Conversion consisted of borrowing money at lower rates of interest in order to reduce old debts contracted at higher rates. Since the Government retained the right to redeem bonds whenever their value reached par when prices rose to that level the Treasury could readily reduce the State's interest bill by converting debt.[58] Perhaps an example will reveal more clearly how these operations could be advantageous to the State. Suppose during the war the Government could borrow in 5 per cent bonds issued at par or in 3 per cent bonds valued by the market at 60. In the short term the interest bill on either option is identical because the rate of interest is 5 per cent. Assume further that after the war bond prices rise by 50 per cent and the rate of interest thus falls to 3.33 per cent, bonds of 3 per cent denomination would then sell for £90, that is £10 below par and 5 per cent bonds for £150 or £50 above par. If the Treasury had borrowed in 3 per cent bonds it would not be presented with an opportunity for reducing the Government's interest bill. But if borrowing had occurred in 5 per cent stock (repayable at par) interest could be reduced by 1.66 per cent. 'Borrowing at par enables the state to redeem whenever the stock rises

[56] Bank of England Reports (1793-1815 passim)
[57] Parliamentary Paper (1857b)
[58] McCulloch (1845) 448, 465, 475; Rickards (1855) 32-35, 76, 79, 80, 82; Hargreaves (1930) 121-22

above par … the other fixes the rate of interest for ever'.[59] Not only was Rickard's argument theoretically tenable, but a long list of conversion operations dating from the early years of the 18th century testified to its efficacy. For example, interest on loans from the Bank of England and the South Sea Company had been reduced from 6 per cent to 5 per cent in 1717, to 4 per cent in 1727, to 3.5 per cent in 1750 and to 3 per cent in 1757 by well timed conversion operations. Between the close of the War of Succession and the opening of the Seven Years War the Treasury reduced by stages the interest on nearly £58 million of stock from 4 per cent to 3 per cent and all of the stocks bearing interest at 4 per cent and 3.5 per cent in 1761 were subsequently reduced to 3 per cent. But from 1763 opportunities for conversions became more limited because nearly two-thirds of the bonds issued after that date consisted of consols and the remainder were nearly all 4 per cent stock. Furthermore, from 1786 the Government preferred to rely on the Sinking Fund to bring about reductions in the charges paid on the National Debt. Nevertheless, the country's 'long term interest' demanded that the Chancellor market bonds of the highest denomination acceptable to the market.[60]

Competitive tenders

Firm adherence to the system of competitive tender represented another means open to the Treasury to influence the price it obtained for bonds. At the outbreak of the long wars with France, this system was still of recent origin.[61] Negotiations for loans in the early part of the 18ht century had frequently been conducted with the East India Company, the Bank of England or the South Sea Company.[62] Only public companies

[59] Richards (1855) 79-80
[60] Parliamentary Paper (1868-69) 513-15, 523-28, 537-41; Sinclair (1802) 484-85; Fairman (1816) 22, 162
[61] Rose (1810) 27
[62] Grellier (1812) 33-56'; Hales (1796) 34

with their resources and status could guarantee the success of a Government loan. Later private bankers and prominent mercantile houses took over the function of selling bonds for the Government, but up to the American War the numbers of firms who could guarantee to market an issue of government bonds remained small. Already during that war sufficient groups of speculators had expressed interest in the transaction for two rival consortiums to be formed for the loans of 1782 and 1783 but the Treasury preferred to retain the power to allocate and incurred the charge of partiality. Pitt insisted, however, upon sealed tenders for the loan of 1784 and thereby set the precedent for the system of competitive tender.[63]

But negotiations with select groups of City financiers even in competition with one another, was not without its opponents who favoured 'open subscriptions'.[64] Critics often failed to realize that open subscriptions places the onus on the Chancellor to fix the price at which he proposed to issue new bonds and attract subscribers and it would have been difficult for him to discharge such a responsibility with competence. His proposed price had to be sufficiently high to obtain all the cash required and the Treasury needed to assess the reliability of all potential subscribers to honour their engagements. If bond prices moved downward after the contract the risk of default increased and if they moved upward the Chancellor stood exposed to the charge of extravagance with public money.[65] An open subscription implies a developed stock market ready to subscribe to any reasonable offer from the Treasury. Such a market had not developed by the late 18th century for anything but closed and competitive tenders to be the appropriate method to deploy.

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[63] Parliamentary History (22) 1052-64; (23) 767-96; (24) 1018-34; Rose (1810) 27; Sinclair (1802) 281; Norris (1963) 105

[64] Douglas (1791); Parliamentary History (32) 792

[65] Sinclair (1802) 280; Hales (1796) 35

Among those not impressed with the system of competitive tender was the economist, Sir John Sinclair. He thought that competition encouraged speculators who took up a new loan in order to sell out quickly which lowered the price of bonds and thereby increased the cost at which subsequent loans could be floated. Competition, Sinclair considered, had raised the rate of interest, because it augmented the risk and diminished the profits of lending to the Government. Sinclair preferred the old system whereby established banking houses received their allocation of scrip which they sold gradually at a reasonable profit to themselves and for the benefit of the Government.[66]

There is no substance to his first argument. Certainly it would be impossible to prove that the list of subscribers to loans offered to competitive tender contained more 'speculators' (so often a term of disapprobation during the 18th century) who sold scrip more rapidly than old-established houses. Upon inspection so many speculators, with or without competition, turn out to be old-established houses anyway. Furthermore, how a competitive system of tender *per se* influenced decisions about selling or holding bonds is difficult to comprehend. Such decisions depended primarily upon movements in bond prices. If speculators expected prices to rise they held bonds, and sold if they anticipated a downward trend. Of course, proponents of Sinclair's view might argue that the existence of competition itself leads to pessimistic expectations about bond prices. Competition represented, however, a continuing factor in the capital market and only one among the multifarious influences on price changes, actual or anticipated. Even in theory it cannot be held responsible for a tendency towards more rapid turnover than might have occurred if loans continued to be allocated among contractors.

[66] Sinclair (1802) 281-85

There is more to Sinclair's second criticism. Insofar as competition raised the bid made by a loan contractor for bonds it reduced the margin within which he could profit from their subsequent sale, and also increased the risk of loss if bond prices declined while the loan remained under payment. Bond prices fluctuated unpredictably in wartime and when a consortium suffered losses the capital market in general revised its assessment of the risks involved in loan contracting. Bids for the subsequent loan might be revised upward.

Chancellors of the Exchequer seem aware of this factor and in expressing satisfaction with the terms of a loan usually added that they hoped the terms would prove profitable for the contractors. Pitt, for example, told Parliament the terms of the loan for 1794 'were highly favourable to the public and what was desirable he hoped safe to the lender'.[67] His attempt to compensate the capital market for its losses on the Loyalty Loan of 1796 displayed an appreciation that over time the Government would not be in the public interest characterized Treasury negotiations with the capital market.

To point out that certain of the loans negotiated in closed contract between 1793-1815 cost less than others offered to competition is an invalid criticism. Adherence to the system of competitive tender remained the only real guarantee that money had been borrowed as cheaply as possible. Competition prevented corruption and did away with patronage. Under the alternative system of allocation, the market price of bonds on the day of the loan contract invariably formed the basis for settling the price at which contractors purchased bonds. Thus, they had a joint interest and sometimes took steps to artificially depress bond prices before negotiating for loans. As a group they gained and the public lost from subsequent appreciation in prices. Under a system of competitive tender, their interests did not coincide. Efforts to depress the current price

[67] Parliamentary Debates (3) 549; (6) 569; (13) 535

of bonds for a loan contract certainly continued during the war years, but the presence of rival consortia at negotiations implied an interest by some groups, to bid close to, sometimes below, a market price which they knew to be artificially depressed. Furthermore, had loans continued to be allocated to old-established houses the boundaries of the capital market and the development of specialization within it would probably not have been extended to anything like the extent witnessed between 1793 and 1815. Departures from competitive tender could only be defended by the circumstances of a particular case.

The Management of the Debt, 1793-1815

<u>Historical contexts for an appraisal of debt management</u>

Before, during and since the French wars, the management of the National Debt aroused controversy and criticism. Much consists of ill-informed assertions which often degenerate into political vituperation. This can be ignored and so can almost all arguments by comparison or analogy. For example, Pitt and his successors at the Treasury were often condemned or praised for borrowing money at higher or lower rates of interest than their predecessors in charge of Britain's finances in earlier wars. Since even the most capable of Chancellors could exercise only a marginal influence on the price obtained for bonds, (the rate of interest being determined by a range of factors outside the control of the Treasury), comparisons between the cost of borrowing in one war and another indicate very little about the efficiency of debt management.

The most persistent focus for controversy during the wars with France concerned the size of the debt itself. On one side can be found prophets of woe, like Tom Paine and William Cobbett opposed to the wars altogether. Along with most radicals they disliked the whole system of funded borrowing because it increased the power of the state, and the affluence of the Bank of England, the Stock Exchange and loan contractors. Their antipathy is really to an unreformed aristocratic constitution backed by the City of London. Appalled by the rapid accumulation of debt, the size of the loans and mounting burdens of interest payments radicals predicted ruin, national bankruptcy, the collapse of the whole financial system and other dire consequences unless the Government ceased to borrow money. Less politicised critics combined gloomy forecasts with recommendations, not as one might expect to finance wars with taxes, but with implausible schemes for the immediate redemption of large portions of the debt.[a]

On the other side of the controversy supporters of the Government (many no doubt paid by the Treasury for their efforts) attempted in print and in the House of Commons to counteract all dangerous talk of financial chaos. They pointed out that the nominal capital of the debt really indicated very little at all. For proofs of the country's ability to meet Government demands for loans, public opinion needed to be well informed about the nation's resources and production. Usually they coupled this injunction with as many statistics as they could muster to demonstrate that trade, industry and agriculture all flourished and that incomes had risen since the onset of war.[b]   As supporters of the Government they properly observed that the British system , which rested upon consent, could not collapse as long as the Government continued to abide by the established constitutional rules and conventions for borrowing money.

Certainly, the size of the debt is largely irrelevant to an investigation of its management, and the voluminous controversy on this subject in the press, in pamphlets and in Parliament diverted critical attention away from a proper and potentially efficient scrutiny of day to day Treasury policies. As Peter Dickson correctly anticipated the only way to understand the management of the debt at any time between 1689 and 1815 is to place financial policy and administration firmly in historical context. He recognized it is essential to bear in mind the constraints of the financial system, the difficulties of borrowing in war time and the war aims of the state.[68] Peter Dickson's example (pioneered by Grellier (1812) and Newmarch (1855)) to reconstruct historical contexts on the London capital market for the entire gamut for funded, unfunded and redemption operations conducted by the Treasury for 1793-1815 were followed *à la lettre* in my doctoral thesis submitted to the University of Oxford in 1967. Alas there is no space (and it would be tedious) to repeat the detail gleaned from: Parliamentary Papers for 1796, 1797, 1798, 1805, 1807 1810, 1821, 1826, 1868-69); from the report books and minutes of the Bank of England (1792-1815); from statemens' papers (Pitt, Auckland, Huskisson, Vansittart, Liverpool, Dacres-Adams) deposited at the Public Record office and British Library. From departmental records (admiralty, war office, treasury and inland revenue); as well as debates in Parliament (Parliamentary History, Parliamentary Debates); newspapers (Times, Morning Chronicle); magazines (monthly magazine, annual register); etc. etc.[c] For present purposes I propose to summarize my general inferences and conjectures from a day-to-day investigation of debt management; leaving readers to consult my thesis – O'Brien (1967, pp 99-168) for further details and full references.[d]

During the war years, governments of the day modified their managerial practices and passed laws designed to alter the established framework for the London money market in their favour – including that most innovatory and important measure of all, the suspension of specie payments by the Bank of England in 1797. This famous departure from traditional financial policies previously pursued by the Hanoverian state has been analysed by O'Brien (1967); Ehrman (1996); O'Brien (2002) and (2007).[e]

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[68] Dickson (1993)

Apart from the major discontinuity in monetary policy some rather less than successful attempts were made to reform procedures used by the Navy, Army and Ordnance to estimate their annual expenditures and thereby reduce their unpredictable demands for credit as well as some administrative endeavours to speed up the collection of taxes and their despatch to the Exchequer in London.[f] The assumption behind historical analysis conducted here is that ministers and their advisers could do little more than to manage the debt in ways designed to take a rather limited range of options open to the governments at the time to borrow as efficiently as possible. As elaborated above, the Treasury could bring about reductions in the cost of borrowing in four ways. First, it could control the flow and composition of securities offered to the market in order to take advantage of variations in demands. Second, it could foster competition. Thirdly, by pressing stocks of higher denomination on a reluctant market to purchase bonds of denominations higher than 3 per cent the Chancellor left the way open for conversion operations which diminished the cost of borrowing over the long run. Finally the Government deliberately eschewed the option of abandoning the sinking fund at the outbreak of the war, which if taken could have seriously reduced the total supply of bonds offered to the market between 1793-1815.

Flows of bonds and bills

Before 1797 the Treasury could not, however, take advantage of the possibilities for alternating between funded and unfunded borrowing, by selling bills whenever bonds prices seemed depressed and funding bills whenever bond prices appreciated again. Under pressure from the Bank of England and anxious about the large and unpredictable issues of naval and military bills onto the market, Pitt became more concerned to contain the floating debt.[69] His funding operations over the years 1794-1797 seem to be more of a response to credit restrictions imposed by the Bank and unpredicted accumulation of debt for the Crown, than a considered technique of debt management.[70]

After the Suspension of Cash Payments in 1797, followed by reforms to the format of the navy bills and some improvements to military and naval estimates, the employment of unfunded borrowing became a real possibility.[71] Yet between 1798 and 1807 anxious about the stability of the kingdom's inconvertible currency the Treasury exercised caution in marketing bills followed by funding operations as a way of forcing 4 per cent and 5 per cent stocks on to the market, even though funding possessed the merit of reducing the loan and a smaller loan generally stimulated competition in the capital market. Later in the war from 1807-1815 the technique of mortgaging future revenue in order to finance current expenditure became an important part of policy which included a loan and one or more funding operations.[72]

Yet critics, observing the rapid accumulation of floating debt during the early and closing years of the war argued that at times the Treasury pushed unfunded borrowing to excessive lengths.[73] They fail to recognize that the accumulation of unfunded debt can be attributed in large measure to issues of bills by the army and navy. Despite some reforms to forecasting techniques, naval and military expenditure (over and above the budgetary provisions sanctioned by Parliament), continued to complicate the task of debt management. Only after 1808 did the Treasury deliberately resort to bill finance on any significant scale. Even then it would be difficult to prove that the employment of unfunded

[69] O'Brien (2000)
[70] Parliamentary Papers (1826)
[71] Parliamentary Papers (1810c)
[72] O'Brien (1967)
[73] Morgan (1797) 11-12, 16, 21, 31-33, 42; Parliamentary Debates (2) 244; (22) 1203-04, 1209; James (1835) 20-21

borrowing over the latter years of the war occasioned any rise in the overall and long run cost of borrowing.[74] In fact the opposite seems more likely. The only valid case that can be made against unfunded borrowing is that it exacerbated wartime inflation.[75] The Government might, however, be criticized for its failure to really reform the methods employed by the armed forces to predict expenditure. Their forecasts not only complicated the Treasury's financial operations but led directly to wasteful expenditures by the armed forces.[76]

To discern just how well the Treasury timed the release of securities onto the capital market seems almost impossible, largely because the question is concerned not simply with historical facts but involves an understanding and appraisal of numerous predictions made by the Chancellor and his advisers between 1793 and 1815.[77] In these highly unstable years the apparent failure (ex post) of a particular loan or funding operation cannot in all fairness be condemned if it can be attributed to factors the Treasury could neither control nor reasonably anticipate. Looked at in historical context the evidence marshalled to comprehend conditions in the capital market at the time when decisions were made suggests that historians might be able, ex post, to sustain a rather limited number of criticisms of the ways that Chancellors timed their borrowing operations between 1793 and 1815. For example, Pitt might be awarded black marks for not delaying the loan of 1793 until after the commercial crisis that accompanied the outbreak of war had run its course and reprimanded for minor mistakes in 1796 and 1805.[78] Petty failed to time the loan of 1806 to coincide with the payment of dividends in

[74] O'Brien (1967) 148-68
[75] Parliamentary Paper (1810a) and Fetter (1959)
[76] Parliamentary Papers (1805)
[77] Newmarch (1855)
[78] Grellier (1812)

April of that year.[79] While Vansittart appears to have been guilty of three serious errors of judgement between 1813 and 1815, errors which transferred a great deal of money from taxpayers into the pockets of loan contractors and bondholders.[80] This is not, however, a lengthy catalogue of managerial mistakes for 22 years of operations on a highly volatile capital market.[81]

Competition

When they observe that no less than 11 out of the 26 loans floated between 1793 and 1815 were not subject to competitive tender, historians may well agree with economists who dismissed the whole process as 'a mere façade'.[82] They may not realize, however, that competition constituted only one among several conflicting ways open to the Treasury for affecting reductions in the cost of borrowing. For example, if the Chancellor opted to time the sale of bonds so that loans overlapped with each other or with funding operations, competition often ceased to be possible, but the public might well have gained more from successful timing than it lost from the absence of competition. Similarly, decisions that sacrificed competition for the advantages of selling bonds of 4 per cent and 5 per cent denomination eventually paid off.[83]

Furthermore, ministers could not insist upon competitive tenders when faced with determined collusion among loan contractors and it did not pay to push competition to the point where contractors made losses and the capital market revised upwards its estimate of the risks involved in speculating in public securities.[84] Nevertheless Chancellors in charge of debt management over this period (with the possible exception of

[79] Parliamentary Debates (26) 576; (27) 107-08, 629
[80] Bank of England Minutes (1812-15 passim); Anon (1828); Silver (1813)
[81] O'Brien (1967) 148-68
[82] Ricardo (1820); McCulloch (1845)
[83] Anon (1828)
[84] Hargreaves (1930)

Perceval – advised by Huskisson) appear unduly conservative in experimenting with ways of stimulating competition, by such devices as dividing the loan, by strategic funding operations and by diverting revenues from the Sinking Fund in order to reduce the net supply of bonds marketed over the year.[85] Nevertheless, detailed surveys of conditions in the London capital market year by year from 1793 to 1815 led me to the post hoc conclusion that no more than two of the eleven departures from competition during the French wars can be termed indefensible. Both occurred with Vansittart in charge of negotiations in 1813 and 1814.[86]

Consols and bonds of higher denomination

During the long wars with France only a small proportion of the money borrowed by the Government came from the sale of bonds other than consols.[87] At the time several writers rebuked the Treasury for marketing too many consols compared with other stocks.[88] After the war when bond values appreciated and when falling prices made interest payments on the national debt a greater and regressive burden on taxpayers, this line of criticism, became more vehement.[89] But before support is given to such views (typified by McCulloch) it is essential to make two basic qualifications. First, the range of possibilities open to the Treasury should elucidated and secondly, the precise advantages, both in the short and the long run, of marketing 4 per cent and 5 per cent bonds must be clearly defined.

[85] Grenville (1828); Cookson (1975)
[86] O'Brien (1967) 99-168; Silver (1813)
[87] Parliamentary Paper (1857-58)
[88] Morgan (1795) 15-17; Morgan (1797) 24; Anon (1797) 73-4; Sinclair (1802) 457; Eliot (1807) 23; Hamilton (1812) 245-55
[89] Anon (1828) 75-9' Hopkins (1834) 72-6; McCulloch (1845) 448, 465, 474; Rickards (1855) 32-5; 76, 79, 80-82; Hargreaves (1930) 97, 108, 109, 111, 121

All the evidence suggests that possibilities for selling stocks other than consols were considerably more limited than critics allowed. As Parker correctly observed ‘contractors have uniformly opposed the funding of debt in stocks bearing a high rate of interest’.[90] They frequently resisted the Chancellor’s attempts to float the loan in stocks of 4 per cent or 5 per cent denominations, and at negotiations for the loan of 1806 the contractors pressured the Chancellor to change his offer between 3 per cent stocks because they claimed 3 per cent reduced were less marketable than consols.[91] They displayed extreme reluctance to experiment with any new forms of public securities such as debentures which first Huskisson and later Vansittart attempted to sell.[92] Their refusal was not a matter of conservatism. Throughout the war years between 60 per cent and 70 per cent of the national debt consisted of consols which gave that stock a much wider potential market than any other asset. Lower prices for consols widened the market still further and improved prospects for capital gains.[93] Certainly the stock exchange favoured consols and conducted forward dealings in no other assets.[94] Whenever the Treasury gave the market the option of subscribing to different kinds of bonds it invariably opted for 3 per cent stock. No doubt investors over the eighteenth century had been well schooled in the risk of conversion attendant upon the purchase of 4 per cent and 5 per cent bonds and knew that consols seldom rose above par.[95]

In the face of marked antipathy Pitt certainly made determined efforts to push unpopular stocks onto the contractors, with only a limited amount of success. For a decade from 1797 to 1807 and for the closing years of the war (1812-1815) the minutes of loan negotiations give no

[90] Parker (1809) 6
[91] Bank of England Report (25 March 1806)
[92] Huskisson Papers (38759)
[93] Pitt Papers (183)
[94] Eliot (1807) 10
[95] O’Brien (1967) 100-68

indication that Chancellors attempted to force 4 per cent and 5 per cent stocks onto the contractors.[96] Perhaps the relatively large loans of those years made such initiatives possible only at the expense of frustrating the system of competitive tender.

Throughout the war the Treasury achieved far greater success in marketing unpopular paper assets through the medium of funding operations. Unlike a loan contract, when converting bills into bonds the Government dealt directly with the wider and more atomized market, in which few opportunities exited for collusive refusal to accept particular types of public securities. Bill holders (bonds) seem less reluctant than contractors to purchase such bonds. They took only a small portion of amount of each individual issue and could take more time that contractors in disposing of it to a wider circle of clients.[97]

Between 1822-1854 conversion operations affected a saving of £3.6 million on an interest bill which then averaged about £28.6 million a year.[98] McCulloch calculated that if the Treasury had persisted with stocks other than consols between 1793 and 1815 the annual saving might have been pushed up to the £10 million mark.[99] Perhaps the Treasury could have marketed 4 per cent and 5 per cent bonds but only at the cost of additions to the annual interest bill until their conversion at some unknowable time in the future. As Ricardo pointed out 'the ultimate gain to taxpayers from borrowing in stock of high denomination depended on their relative prices compared with consols at the point of sale'.[100] For example, in February 1796, when 5 per cent consols were at par, money could be borrowed in the market at £4.7 shillings in 4 per cent bonds and at £4.3 in consols. Of course this differential between stocks varied over

[96] Bank of England Minutes (1797-1815)
[97] Ricardo (1820)
[98] Parliamentary Paper (1868-69) 794-5
[99] McCulloch (1845) 574
[100] Ricardo (1820) 184

time, but if prices of 3 per cent and 5 per cent bonds are compared for dates just prior to loan negotiations conducted at that time it can be shown that the Government would have paid 0.57 per cent more for the privilege of raising money in unpopular assets.[101] And to have persisted with 4 per cent or 5 per cent bonds would undoubtedly have depressed their value still further. Such a policy might also have frustrated the system of competitive tender and raised the rate of interest on loans by as much as 1 per cent. This involved the imposition of more taxes at a time when Chancellors found it extremely difficult to discover productive sources of tax revenue.

McCulloch and his fellow critics should in all fairness have tried to appreciate the time horizons of Pitt and his fellow Chancellors who regarded bonds sold during the war years as assets with defined maturities. They anticipated each and every issue of government stocks would eventually be redeemed through the operation of Pitt's established Sinking Fund. They had no clear notion of when wars would end, or when 5 per cents would rise sufficiently above par to present Governments in the future with opportunities for converting public debt to lower rates of interest. Their strategic problem was to weigh possible gains from reductions in the interest bill through conversion operations sometime later in times of peace against the disadvantage of paying more interest at least while warfare continued and possibly longer.

To illustrate the point, let us take the loan of 1804. Addington then had a choice of borrowing in consols or a 5 per cent stock. From his perspective the duration of the war must have seemed indefinite. Yet he expected bonds issued in 1804 to be redeemed after 40 years through the operation of the Sinking Fund. If he opted for consols the State could expect to pay £227 in interest over the life of a single bond, but by choosing 5 per cent stock, the Chancellor would have increased the total

[101] Bond prices are from Annual Register

interest paid per bond to £243. At that point in time he could not be certain that any possible conversion operation after the war would affect a sufficient reduction in the total interest bill to compensate for the difficulties of and additions to taxes in war time. Of course from the high vantage of the mid nineteenth century with external security taken for granted, and when the Sinking Fund had been dismissed as a 'delusion', it was all too easy to assert that 'the grand error of our Finance Ministers … consisted in their attempting to secure an inconsiderable advantage at great ultimate cost'.[102] During the war the problem appeared considerably more complex and the possibilities for marketing stocks other than consols much more limited than economists with hindsight are wont to admit.[103] Perhaps, however, they might argue that the Sinking Fund deluded Chancellors into not attending assiduously enough to the options open to them to reduce the burdens of servicing debt carried by future generations of the kingdom's taxpayers.

<u>Pitt's infamous Sinking Fund</u>

Between 1793-1815 the Treasury sold bonds worth £447 million and over the same period another public body, the Commissioners for the Sinking Fund purchased £176 million of bonds.[104] Since these securities continued to be issued as perpetual annuities, legally redeemable at the option of the state, the Government's clear policy to borrow and pay back money at the same time appears *prima facie* curious. Repayment of debt in war time represented, moreover, a complete departure from traditional policies for debt management.[105] Yet the policy received unanimous approbation from contemporaries and condemnation from almost all

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[102] Anon (1828) 83
[103] McCulloch (1845) 474
[104] Commissioners for the Sinking Fund Reports (1793-1815); Parliamentary Paper (1890-91)
[105] Parliamentary Paper (1868-69) 710-715; Hargreaves (1930)

economists and historians who subsequently examined the financing of the French wars. McCulloch referred to it as a ‘miserable juggle’, and Doubleday as a ‘contemptible hocus pocus’. Lord Grenville, who supported the policy during the war later called it ‘the greatest of all misconceptions’ and Newmarch ‘a hallucination’.[106] Recent more and historical studies by authors like Hargreaves, Acworth and Reese have lent their support to this tradition of castigation.[107]

Almost all criticism of the operation of the Sinking Fund between 1793 and 1815 leans heavily upon Hamilton’s famous essay, *An Inquiry Concerning the Rise and Progress, the Redemption and Present State of Management of that National Debt*, written in 1812. The most important section of this essay is concerned to demolish the ideas of Richard Price.[108] Price had published views categorically opposed to any suspension of the sinking funds in war time. He considered that war increased its efficacy because in war time money was borrowed at higher rates of interest and bonds bearing elevated rates of interest could be redeemed in less time than debt contracted with the same initial Sinking Fund but contracted at lower rates of interest.[109] An example will clarify his argument: a loan of £10 million at interest of 6 per cent would be redeemed by a Sinking Fund equal to 1 per cent of the loan, or £100,000 in 33 years. If the rate of interest was only 3 per cent, with the same initial 1 per cent Sinking Fund, redemption would take 47 years. Under the Price Plan when the cost of borrowing went up the absolute sum transferred annually by the Treasury to the Sinking Fund also rose and obviously accelerated debt repayment. Price virtually ignored the annual charges involved. If the rate of interest rose to 6 per cent the Government

[106] McCulloch (1845) 482; Doubleday (1847) 177; Grenville (1828) 7; Newmarch (1855) 25
[107] Hargreaves (1930) 110., 121, 148; Acworth (1925) 42-4; Reese (1921) 16-17
[108] Hamilton (1812)
[109] Cone (1951) 244; Hargreaves (1930) 91-5, 97, 101, 104

would have to meet every year interest and sinking fund payments of £700,000 compared with £400,000 if the rate of interest had remained at 3 per cent and the overall cost of amortizing a loan of £10 million at an interest rate of 6 per cent would be nearly a third higher.[110] War made the Sinking Fund efficacious simply because more taxes would be transferred to it annually for debt redemption. Yet the additional revenue required to operate the fund could only be obtained either by the imposition of new taxes or borrowed. With the disappearance of surplus revenue from taxation after 1792 all allocations to the Sinking Fund could only be financed with borrowed money. If the annual income for the Sinking Fund is borrowed at the same rate of interest as the original loan the Government will simply be adding to the national debt an amount identical to that redeemed in any given year. If money is borrowed at a rate of interest higher than that formerly paid on redeemed bonds, the national debt and the interest bill will increase.

Even before the war the flaws embodied in some of these arguments had been exposed.[111] Later Hamilton and his followers showed how Price had become confused by compound interest to the point of arguing as if it alone provided the Government with funds to redeem debt. But if the historians concern is not Richard Price but with Government policy, one crucial question about the Sinking Fund and debt management during the French wars has never been answered. They must surely enquire as to how far Pitt and his fellow Chancellors shared the opinions of Price. Was the Sinking Fund maintained in operation in war time for the reasons Price proposed, or were there other and perhaps more sensible political arguments for its retention? The question need emphasis because Hamilton and his followers tacitly assumed that because the Price Plan looks illogical Governments of the day also

[110] Hamilton (1812) 188-9
[111] Anon (1787) 404, 408

suffered from his delusions. Upon examination, their condemnation of the Sinking Fund is often based upon little more than a refutation of the worst errors of Richard Price.[112]

Yet evidence that the men in charge of finances during the French wars shared Richard Price's more irrational views on the Sinking Fund is entirely thin. On the contrary, their budget speeches demonstrate an awareness that income for the Sinking Fund came from taxation or had to be borrowed.[113] To credit statesmen of the calibre of Pitt, Perceval and Huskisson with an incapacity to perceive the Sinking Fund had failed to reduce the national debt, is to malign their intelligence. Had Pitt not established his original Sinking Fund with surplus revenue?

But if the Sinking Fund did not in fact decrease accumulation of public debt, what then was its function in war time? On several occasions Pitt publicly answered this question. 'All other wars left a burden to posterity the successful institution of the Sinking Fund has made a most material alteration to that system'. 'We ought to consider', he said in 1797, 'how far the effort we shall exert … will enable us to transmit the inheritance of posterity unencumbered with those burdens which would cripple their vigour'.[114] To this end Pitt, as early as May 1790, decided that 'We ought to aim at providing new funds not just for the interest but also sufficient so that *the period of the discharge of the debt* may not be altered'. 'Our debt may be considered', he told Parliament, '*as an annuity for a limited number of years'.*[115]

Pitt made provisions in 1786 to pay off the existing capital of the National Debt over a finite number of years.[116] Six years later at the very beginning of the war he introduced legislation designed to transform all

[112] Hargreaves (193) 104, 112
[113] Parliamentary History (33) 1052; (34) 997; Parliamentary Debates (11) 264
[114] Parliamentary History (33) 1041; (34) 1059
[115] Pitt Papers (187); Ehrman (1969) 76-87
[116] Parliamentary History (34) 1060

future debt contracted by the state into terminable annuities. Pitt's scheme committed the Government to the imposition of taxes sufficient to pay interest and amortization charges over a period of 45 years on all loans negotiated after 1792. The money was to come from additional taxes equal to 1 per cent of the nominal capital of any loan, together with continued payment of annual interest on bonds redeemed.[117] Although Pitt persisted with the complex administrative device of allocating interest on redeemed bonds into a fund to redeem more bonds, the essential idea behind his legislation was *to impose taxes sufficient to place all future loans into a regular course of redemption*.[118] As George Rose, Pitt's minister at the Treasury, wrote in 1806, 'every debt is now reduced to an annuity and a large proportion of the persons in existence at the time of debt being created must, in the ordinary course of nature, live to see the end of it'.[119]

Pitt aimed to relieve posterity from the burden of interest payments on the National Debt, a goal which received the universal praise from his contemporaries and his legislation provided a model for all subsequent policy regarding the Sinking Fund.[120] Those who lectured the Governments of the day for failing to see 'the only means of redeeming the National Debt is to reduce expenditure and increase taxes' or to perceive 'a Sinking Fund can only operate in peace time' were mistaken if they supposed Chancellors of the day could not understand such an elementary point.[121] Their criticism is irrelevant because Pitt, Addington, Perceval and Vansittart regarded the Sinking Fund as a political device for making provision to taxation (even in the midst of the most expensive

[117] Ehrman (1969) 76-87; Parliamentary Papers (1868-69) 711-2
[118] Vansittart (1796); Hamilton (1812) 144, 199; Parliamentary Paper (1868-69) 712
[119] Rose (1806) 21; Dacres-Adams Ppaers (7)
[120] Fairman (1816) 180
[121] McCulloch (1845) 487; Ricardo (1820) 152, 175

war in the kingdom's history) for the *ultimate* redemption of the entire National Debt.[122]

No other interpretation can make sense of their speeches and legislation after 1792. For example, in 1802, when Addington repealed provisions of the original Sinking Fund Act of 1786 (which promised relief from taxation when £4 million of bonds were being redeemed annually) he explained to the Commons they had a choice of providing for the repayment of more debt or affording the country relief from immediate rising taxation. With a few dissenting voices the Chancellor secured Parliamentary approval for continuing taxes previously used to pay dividends on redeemed debt to buy up still more bonds.[123]

When Grenville's Government assume office in 1806 they sought to avoid the imposition of more taxes, and the Chancellor of the Exchequer produced a 'New Plan of Finance' which expressly involved borrowing money to pay both interest and the amortization charges on all future loans. Petty's scheme modified existing policy under which the Government imposed sufficient taxes to redeem every loan over a set period of time, but he met the objection that he had departed from Pitt's Sinking Fund by a proposal to continue to employ 'war taxes' to redeem bonds after the end of the war. Thus, under the New Plan (which did not survive the fall of the Ministry of All Talents) bonds sold during the war would be redeemed in peace time with taxes that Parliament and the public classified as temporary or war taxes. The National Debt remained an aggregation of annuities but the time taken for their redemption grew longer.[124]

Perhaps nothing illustrates the essence of war time policy with regard to debt redemption better than Perceval's scheme of 1808 which

[122] Hamilton (1812) 205, Grenville (1828); Wakefield (1797) 32
[123] Ehrmann (1996); Parliamentary History (36) 451, 890-95
[124] Auckland Papers (34457); Parliamentary Debates (9) 427, 813-15; Eliot (1807) 47-9

gave creditors the option of exchanging their bonds for life annuities payable out the Sinking Fund.[125] Yet another revealing discussion on the Sinking Fund emerged at the end of the war when Vansitrtart proposed to divert income from the Sinking Fund towards the payment of interest and redemption charges on loans contracted after 1813.[126] Both Lord Liverpool and his Chancellor pleaded the necessity for respite from additional taxation, but also argued that the income of the Sinking Fund could become excessively large. They thought it undesirable to devote £30 million a year *in peace time* to debt repayment.[127] For political reasons Vansittart presented his plan as a 'restoration' of Pitt's original intentions to limit the annual sum devoted to debt redemption but his critics insisted he had departed from the great man's later ideas.[128] Baring, Thornton, Huskisson and Petty claimed that Liverpool's Government had broken faith with public creditors who had loaned it money on the understanding that a progressively increasing sum would be devoted to the repayment of debt each year.[129] Vansittart, argued however that bond holders had no right to expect taxes used to meet interest upon a debt incurred before 1786 would continue to be employed to redeem loans contracted after that date, and insisted that part of the income of the Sinking Fund could be diverted without violating faith.[130]

Huskisson, probably the most reliable guardian of Pitt' intentions, clarified for the last time the character of the war time Sinking Fund. Its operation had, he argued, 'made loans equivalent to annuities, repayable over 45 years'. It also induced contractors to offer better terms to the public because redemption was clearly provided for in each loan contract. He criticized Vansittart for being over-concerned with temporary respite

[125] Parliamentary Debates (11) 262
[126] Liverpool Papers (38363)
[127] Parliamentary Debates (24) 1083; (25) 766
[128] Silver (1813) 315-18; Huskisson (1813) 20-22, 25-35
[129] Parliamentary Debates (24) 1102, 1096; (25) 352, 769
[130] Parliamentary Debates (24) 1086

from taxation; 'Pitt', he said 'would never shrink from imposing taxes' and concluded by recommending that taxes be continued after the war to redeem the national debt.[131]

Once Pitt had persuaded Parliament to regard bonds as debts of a defined maturity, it became difficult for anyone to see anything illogical in redeeming them with borrowed money. After all, if Governments had traditionally contracted debts in terminable rather than irredeemable annuities, the Treasury would have been compelled long before 1786 to repay and borrow money at the same time. Agreed, as Petty observed, 'the Sinking Fund could be used as the country likes'.[132] Had the annuity concept been abandoned at the outbreak of the long wars with France, no revenue would have been raised between 1793 and 1815 to redeem debt and the total sum borrowed reduced by a corresponding amount. Why then did Ministers persist with the annuity concept during such a long and expensive war?

The only plausible answer is that statesmen of the day regarded the Sinking Fund as a device to allay fears about the growing size of the national debt. From even a cursory reading of contemporary newspapers and pamphlets, published from 1783 – 1819, it is apparent that people living at the end of the eighteenth century felt much less sanguine about the national debt that we are today. Anxiety became widespread during the American War when the nominal capital of the debt increased by early 100% in little over six years.[133]

Against a background of widespread unease in 1786 Pitt had introduced plans for its ultimate redemption. Previous Sinking Funds had failed because statesmen diverted their income to other uses.[134] In order

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[131] Huskisson (1813) 208-11, 231, 241-7
[132] Parliamentary Debates (8) 579
[133] Grenville (1828) 18-20; Morgan (1801) 32; Binney (1958) 113-4; Hargreaves (1930) 91
[134] Sinclair (1802) 496-99

to assure the public of the seriousness of his plan, Pitt promised Parliament the Sinking Fund would become inviolable.[135] By *quasi* constitutional statutes and administrative arrangements he endeavoured to keep that promise.[136]

When the Government began in 1793 to borrow more than ever before anxieties about one known and large fact, namely the absolute size of the nominal capital of the national debt intensified. Prophets of woe appeared on every side employing false analogies from private debt to argue 'the country stood on the verge of bankruptcy' or 'brought to the brink' by the immense size of the National Debt. As William Frend said of these pundits 'they … confidently asserted and arithmetically proved we are ruined'.[137]

Apprehension about the mounting burden of taxes imposed to pay interest look more realistic. 'The evils already produced by taxes to pay interest on funds are likely to prove fatal to our national prosperity', exclaimed one writer in 1799. His fears found echoes both inside and outside Parliament and gave rise to more than a century of intense debate about the wisdom of accumulating national debt. What is striking about this discussion is that pessimists (who thought the burden of debt would become unbearable) and optimists (who argued that burdens had diminished with the general rise in income) both found solace in contemplating its ultimate redemption, through Pitt's Sinking Fund. 'The experience of this country has shown', wrote a bishop in 1797, 'that a debt which would at one time have overpowered the resources of the nation, may at another from its increased agriculture, manufactures and commerce be scarcely felt as a burthen'.[138] Three years later he felt

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[135] Grenville (1828) 59; Parliamentary History (30) 560, 1259; (36) 459; Parliamentary Debates (6) 6
[136] Ehrman (1969); Rose (1806) 21-4; Hamilton (1812) 141; Huskisson (1813) 20
[137] Frend (1817) 17
[138] Bird (1799) 16; Wakefield (1797) 60

‘happy in the conviction … that the nation’s debts are in regular course of repayment’.[139] Statesmens’ papers indicate an almost obsessive interest in schemes to reduce the debt.[140] Their speeches eulogized he Sinking Fund and their Annual Finance Resolutions invariably contained an obligatory rhetorical paragraph to the effect that its income was rising as a proportion of the national debt.[141] ‘Your Committee’, exclaimed Parliamentary report of 1797, ‘ have great satisfaction in contemplating the large means which are now annually employed for the redemption of public debt’.[142]

Public opinion could not be ignored by a warring state, concerned to maximize yields from taxes. Budgets of the period classified all taxes imposed between 1793 and 1815 into ‘war taxes’ which Ministers claimed would terminate with the war and ‘permanent taxes’ imposed to meet the interest on loans. Pitt certainly realized how useful the Sinking Fund had been in persuading people to expect relief even from permanent taxes within their own lifetimes. As he more than once observed, ‘it animated the hopes of commercial men’.[143] When Philip Francis expressed criticism of the Sinking Fund in 1806, he was challenged by Castlereagh ‘to recollect any period in the history of the country when discontent was less apparent and when the nation submitted with more share of manliness and even satisfaction to every sacrifice the exigency has imposed’.[144] One positive function of the Sinking Fund was to divert the attention of industrialists, farmers and commercial men away from gloomy contemplation of the national debt and to create a climate of opinion which reduced their strong inclinations to evade taxes.

139 Wakefield (1800) 33
140 Pitt Papers (107, 275); Huskisson Papers (38759, 38760); Liverpool Papers (38256, 38363, 38366) Vansittart Papers (31237); Auckland Papers (34457)
141 Parliamentary History (33) 1052-53; (34) 977; (36) 890-95; Parliamentary Debates (3) 528; (8) 574
142 Parliamentary Papers (1797) 217
143 Pitt Papers (197); Parliamentary History (31) 13143; Ehrman (1996)
144 Parliamentary Debates (6) 626

Undoubtedly the basic criticism against the war time Sinking Fund was that it wasted public money and in the long run lead to higher levels of taxation. Whenever the price at which the Government sold bonds fell below the price Commissioners for the Sinking Fund paid to redeem bonds, the difference represented a loss to taxpayers which could have been avoided by abandoning the promise of debt redemption. Since contractors demanded a premium for the risks and trouble attached to marketing a loan over the year, the Treasury sometimes sold bonds more cheaply than the prices paid by its Commissioners.[145] Losses were, however, neither invariable nor persistent. They depended on day to day movements in security prices. If prices fell, after contracts for loans had been concluded, the Government might still profit, despite premiums paid to contractors.[146]

Treasury opinion maintained that the operations of the Sinking Fund kept up the price of bonds and enabled loans to be floated on better terms.[147] Against this view, Hamilton argued that 'if payment be made by means of borrowing it can produce no alteration in the price of bonds at all. Demand and supply cancel out'.[148]

Ricardo was more pessimistic and maintained the larger loan, occasioned by expenditure on a Sinking Fund, encouraged contractors to sell *omnium* forward before negotiations opened which depressed bond prices and, since the contracts' determined their bid by reference to the price of bonds on the day of the contract, this raised the overall cost of borrowing.[149] Ricardo's view deserves respect because it belongs not only to a famous economist but to a prominent loan contractor. And it could also be argued that smaller loans might have reduced the cost of

[145] Anon (1796) 50; Grenville (1828) 9; Hargreaves (1930) 110-111
[146] Ricardo (1820) 171
[147] Parliamentary History (31) 1314; Parliamentary Debates (3) 528; (6) 657; (11) 262; Vansittart (1796) 30; Huskisson (1813) 223-34
[148] Hamilton (1812) 193
[149] Ricardo (1820) 171

borrowing by stimulating greater competition among contractors. Grenfell suggested using the revenue of the Sinking Fund for just this purpose in 1814, but Vansittart retorted that he had made better bargains without resorting to such operations.[150]

Even if demand and supply did cancel out and greater competition was stimulated, the conception of a Sinking Fund as a device for transforming the debt from perpetual to terminable annuities constituted a completely new element in the capital market after 1786, which may well have led to more optimistic tenders for bonds. City opinion, represented other loan contractors like Walter Boyd and Sir Francis Baring seem more disposed to the Treasure view than Ricardo. The maintenance of a 'constitutionally' inviolable Sinking Fund certainly assured the money market that the supply of new bonds would not reach unlimited amounts. The Government's creditors knew that its revenues would not be diverted towards tax relief, but employed year after year to buy up ever increasing amounts of bonds, guaranteeing augmented levels of demand whenever they wished to realize their assets. In war time when security prices fluctuated violently and unpredictably the Sinking Fund provided for an element of stability in a very uncertain situation.[151] When Petty, Perceval and Vansittart diverted the income from the Sinking Fund their policy occasioned alarm in the capital market and accusations of bad faith with those who had loaned money to the Government.[152]

Criticisms of the day to day operation of the Sinking Fund maybe more valid. The Exchequer transferred income to the Commissioners for the Sinking Fund quarterly, but their purchases, contrary to what Sinclair

[150] Parliamentary Debates (28) 66-8
[151] Parliamentary Papers (1807) 100; House of Commons Journals (1793-1815), Sinclair (1802) 530
[152] Parliamentary History (32) 805-06; Commissioners for the Sinking Fund Reports (1793-1815)

supposed, were spread evenly over each quarter.[153] The Commissioners bought stock whenever the transfer books at the Bank were open and they made no attempt to reduce the cost of borrowing by purchasing those stocks the Treasury offered contractors. More often than not, the Commissioners arranged their purchases to interfere as little as possible with negotiations for loans. If, for example, the Chancellor planned for a loan in consols, they purchased 3% reduced stock or south sea annuities in the weeks before he met with contractors.[154] Only Perceval when he endeavoured to persuade the market to accept 4 per cent bonds, applied the Sinking Fund to buy up large amounts of the same stock before and after a loan. Surely sophisticated and continuous use might have been made of the Fund to stimulate competition, to persuade contractors to accept bonds of higher denomination and to influence the terms for loans.

When the war ended and the Government found itself in receipt of £13 million of taxes set aside for debt redemption, Ricardo and others favoured using the money as Pitt intended, to make substantial reductions in the National Debt. [155] But the times did not favour high taxation. Prices had fallen. Agriculture was in a state of depression and unreformed Parliaments of landowners, no longer lead by men like Pitt, were unwilling to pay taxes for the remote benefits of debt redemption. Once the policy had been abandoned and a rising national income made taxes easier to pay, men forgot the anxieties of their forebears and began to scoff at the steps they had taken to protect them from burdens of a national debt.[156] Aristocratic politicians advised by economists turned to *laissez-faire* as a cheap ideology to protect their power and interests from further accumulations of public debt.[157] Fortunately for them by then the

[153] Parliamentary Papers (1890-91) 39; Vansittart (1796) 34
[154] Ricardo (1820) 172; Parliamentary Papers (1828) 566
[155] Acworth (1925); Gordon (1976)
[156] O'Brien (1997); Porter (1994); Daunton (2003)
[157] Porter (1983)

debt had done the job anticipated for the fiscal and financial system reconstructed in the wake of a republican interregnum by restored monarchical governments and the dramatic shift in geopolitical strategy that flowed from the execution of Charles I and William III's *coup d'état* of 1688.[158]

[158] Porter (1994); O'Brien (2007)

Notes

[a] Vide the speeches of politicians including Fox, Tierney and Sheridan before the House of Commons and Lauderdale and King to the House of Lords. Outside Parliament the debate can be surveyed in that favoured eighteenth century made of communication – the pamphlet. At the Goldsmith's Library of the University of London one literally hundreds of pamphlets concerned with the national debt.

[b] Nearly every budget speech opened with a statement by the Chancellor that economy was flourishing and the country possessed the resources required to prosecute war. His assurances are echoed in pamphlet after pamphlet in the Goldsmith's (Kness) collections of pamphlets in political economy.

[c] Vide citation to all these pamphlets

[d] This long section of the thesis endeavours to reconstruct conditions on the London capital year by year 1793-1815

[e] Monetary policy formed the subject of three reports to Parliament (Parliamentary Papers (1826), (1810c) and the whole debate is covered by Erhrman (1996), O'Brien (1967 and 2000).

[f] Departmental administration connected to the budgetary process was investigated by Select Committees on Finance and is covered in 35 reports to the House of Commons in 1797-98 (vide Reports from the Committees of the House of Commons, vols.11-13); by Commissioners' Select Committees on the expenditures of the armed forces in Parliamentary Papers 1805(2), 181 (2) , 1810-11(4). The administration, collection and despatch of tax revenues were investigated long after the war see Parliamentary Papers 1820(6), 1821(10), 1822(11), 1822(12), 1822(13), 1823(7), 1823(9), and 1824(9), 1826(10), 1828(5) etc. etc.

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