

Public finance in China and Britain in the long eighteenth century

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Introduction

The brief comparison of the systems of public finance of Britain and China that I present in this article is an off-shoot of my research, as an economic historian, into the origins of the Great Divergence, i.e. the emergence of huge differences in wealth, growth and development between Western countries and most countries in the rest of the world during the eighteenth and nineteenth centuries as a consequence of Western industrialisation.¹ In my view, current research into that topic tends to neglect the role of institutions, first and foremost the state. In my research that role is prominent. To find out about the importance of the state, I study Western Europe and East Asia, the two most advanced parts of the global economy in the very long eighteenth century, i.e. the period from the 1680s to the 1840s. Britain became the most powerful and developed major country in the West during that period and was the first one to industrialise. In East Asia the most powerful and developed major country was China. This makes these two countries perfect objects for a comparative analysis as exemplified in this article. For Britain the period covered here is that from the Glorious Revolution of 1688, which introduced major changes in its political and economical system, till the repeal of the Navigation Acts in 1849, which epitomises the end of its mercantilist policies. For China the focus is on the period from the consolidation of Qing rule over the entire country in 1683, till the outbreak of the First Opium War (1839-1842).²

As indicated, institutions and institutional differences tend to get rather short thrift in recent analyses of the Great Divergence. That is explicitly the case in the work of Andre Gunder Frank who emphatically claims that "... institutions are not so much determinant of, as they are derivative from, the economic process and its exigencies, which are only institutionally instrumentalized rather than determined.", but actually also in that of Kenneth Pomeranz.³ Roy Bin Wong in his influential *China transformed* sets out to show how different state and state formation were in China and Europe, but claims these differences did not make any significant

¹ For the meaning of this term see Kenneth Pomeranz, *The Great Divergence. China, Europe, and the making of the modern world economy* (Princeton 2000). For my opinion on the book see my: 'Are coal and colonies really crucial? Kenneth Pomeranz and the Great Divergence,' *Journal of World History* 12 (2001) 407-446.

² For my analysis of the Great Divergence and in particular the role that institutions and the state (may have) played in it, see my 'The role of culture and institutions in economic history: can economics be of any help?' *NEHA Jaarboek* 64 (2001) 28-60. Also published on <http://www.lse.ac.uk/collections/economicHistory/GEHN/GEHNWorkshops.htm>; *Via Peking back to Manchester. Britain, the Industrial Revolution, and China* (Leiden 2003); 'Is California the measure of all things global? A rejoinder to Ricardo Duchesne', *World History Connected*, May 2005; 'The California School and beyond: how to study the Great Divergence?', *Journal für Entwicklungspolitik* vol. 24, 4 (2008) 6-49; of which a somewhat adapted English version was published in *History Compass* 8,7 (2010) 730-751; 'Global economic history: a survey', *Österreichische Zeitschrift für Geschichtswissenschaft / Austrian Journal of History*, 20, 2 (2009) 133-169; and finally *Zur politischen Ökonomie des Tees. Was uns Tee über die englische und chinesische Wirtschaft der Frühen Neuzeit sagen kann* (Vienna 2009).

³ Andre Gunder Frank, *ReOrient: global economy in the Asian Age* (Berkeley, Los Angeles and London 1998) page 206. For Pomeranz's analysis see note 1.

economic difference before the Industrial Revolution.⁴ My claim would be that these scholars and most other members of the so-called California School⁵ tend to overlook the impact of various major institutional differences between Britain and China, the two countries that hold centre stage in analyses of the Great Divergence, *before* and *during* industrialisation.

This analysis, however, can also be relevant for those who are primarily interested in the history of public finance of European states in the early modern era. The Chinese case presents them with a state that was quite successful up until the nineteenth century, but that in almost all relevant financial aspects was completely different from states in Europe at the time. The evidence I have collected with regard to Qing China until the 1850s flies flatly in the face of many if not most of the assumptions that have dominated thinking about fiscal history in the Western world. Let me just refer to Schumpeter's distinction between domain states and fiscal states, and its amendments by E. Ladewig Petersen and Kersten Krüger; or to the Ormrod, Bonney and Bonney-model with its distinction between tribute state, domain state, tax state and fiscal state and its underlying assumption that fiscal history would as a rule be characterised by a self-sustaining dynamism that pushes it towards ever increasing taxes and the creation of increasingly sophisticated credit structures.⁶ That 'push' had already been noticed more than a hundred years ago by the German economist Adolph Wagner (1835-1917) who formulated the 'law' that over time public expenditure increases as a percentage of GDP.⁷ In the 1980s, political scientist Margaret Levi formulated the 'postulate' that states would be predatory and always try to maximize revenue extraction.⁸ Institutional economist Douglass North and political scientist Mancur Olson, two extremely influential scholars in their fields, basically held the same view: if not 'tamed', the state would be predatory, or in Olson's words act as a 'stationary bandit', with a natural tendency to maximise revenue and expenditure and to interfere with property rights. In institutional and mainstream economics this assumption has become all but undisputed.⁹

Experts in the field know that Europe's fiscal history was not that straightforward. It did *not* always go neatly through certain successive stages.¹⁰ In certain regions of Europe, like several Swiss Cantons or Poland, taxes and government expenditure, in the early modern era, were *not* constantly on the increase.¹¹ But the concepts and assumptions I briefly sketched continue to function as point of departure in most studies. That, as I will show, is surprising for various reasons. Firstly because they appear to have hardly any, often even no bearing at all on the case of Qing China, home to about one third of the globe's population around 1800, notwithstanding

⁴ Roy Bin Wong, *China transformed. Historical change and the limits of European experience* (Ithaca and London 1997) *passim*, in particular page 151.

⁵ For the ideas of those historians see my 'The California School and beyond'.

⁶ See for an introduction into the historiography and theory of fiscal development, Richard Bonney, 'Economic systems and state finance' in: Richard Bonney, ed., *Economic systems and state finance* (Oxford 1995) 1-18, and *idem*, 'Introduction: The rise of the fiscal state in Europe, c.1200-1815' in: *idem*, ed., *The rise of the fiscal state in Europe* (Oxford 1999) 1-17. The reader can find all relevant references there.

⁷ For this 'law' see Jürgen G. Backhaus, ed., *Essays in social security and taxation. Gustav von Schmoller and Adolph Wagner reconsidered* (Marburg 1997).

⁸ Margaret Levi, 'The predatory theory of rule', *Politics and Society* 10 (1981) 435-461.

⁹ For a recent analysis of Douglass North's ideas see Ingo Pies and Martin Leschke, eds., *Douglass Norths ökonomische Theorie der Geschichte* (Tübingen 2009). For those of Mancur Olson, see e.g. his 'Dictatorship, democracy, and development' in: Mancur Olson and Satu Kähkönen, eds., *A not-so-dismal science. A broader view of economies and societies* (Oxford 2000) 119-137, and *idem*, *Power and prosperity. Outgrowing communist and capitalist dictatorship* (New York 2000). Compare Geoffrey Brennan and James M. Buchanan, *The power to tax: Analytical foundations of a fiscal constitution* (Cambridge 1980).

¹⁰ See e.g. Mark Spoerer, 'The revenue structures of Brandenburg-Prussia, Saxony and Bavaria (fifteenth to nineteenth centuries). Are they compatible with the Bonney-Ormrod model?' in: Simonetta Cavaciocchi, ed., *La fiscalità nell'economia europea secc. XIII-XVIII = Fiscal systems in the European economy from the 13th to the 18th century* (Florence 2008) 781-792.

¹¹ See e.g. Martin Körner, 'The Swiss Confederation' and Anna Filipczak-Kocur, 'Poland-Lithuania before Partition', both in Bonney, *Rise of the fiscal state*, 327-358 and 443-480.

the long tradition of describing the country in terms of ‘oriental despotism’ and of claiming that taxes there were oppressively high because it lacked representative institutions.¹² Secondly because post-Glorious Revolution Britain with its powerful Parliament and its representative institutions became the country with the *highest* taxes and the *highest* government debt in Europe, both of them far higher than they ever were in Qing China.

I will open my text by referring to a couple of striking differences between the systems of public finance and more in general economic policy of Britain and China. I will then make some comments on the ‘ideologies’ or ‘economic philosophies’ that apparently buttressed those differences and on what may have caused them. Finally, I will indicate what those differences might have meant for (economic) development of both countries.

Public finance in (Great) Britain

Adam Smith (1723-1790) is claimed to have said: “Little else is required to carry a state to the highest degree of opulence from the lowest barbarism, but peace, easy taxes, and a tolerable administration of justice.”¹³ This was not exactly a description of the situation in Great Britain at the time. Ever since the epochal study by John Brewer we know that eighteenth-century Britain was developing into Europe’s most prominent fiscal-military state.¹⁴ This type of state that was so typical for early modern Europe, has recently been at the hearth of intense historiographical debate. I will not discuss here how exactly it is or should be defined, and refer for further explanation to the literature.¹⁵ What is clear, though, is that, in the Charles Tilly’s terminology, over the eighteenth-century Britain became a fiscal-military state of the capital-intensive variety.¹⁶ Its taxes became very high and that its government borrowed large sums of money from its wealthy subjects, and from foreigners. There is now a massive literature in which this is substantiated.¹⁷

¹² For information on China and ‘oriental despotism’ see Gregory Blue, ‘China and Western social thought in the modern period’ in: Timothy Brook and Gregory Blue, eds., *China and historical capitalism. Genealogies of sinological knowledge* (Cambridge 1999) 57-109; Ho-fung Hung, ‘Orientalist knowledge and social theories: China and European conceptions of East-West differences from 1600-1900’, *Sociological Theory* 21 (2003) 254-280, and Joan Pao-Rubiés, ‘Oriental despotism and European Orientalism: Botero to Montesquieu’, *Journal of Early Modern History* 9, 2 (2005) 109-180. The classic text of course is Karl A. Wittfogel, *Oriental despotism. A comparative study of total power* (New Haven and London 1957).

¹³ John A. Hall, ‘States and economic development: reflections on Adam Smith’ in: idem, ed., *States in history* (Oxford 1986) 154-176, page 154.

¹⁴ John Brewer, *The sinews of power. War, money and the English state 1688-1783* (London 1988).

¹⁵ I only refer to the following edited volumes: Bonney, *Economic systems and state finance*; idem, *Rise of the fiscal state*; Cavaciocchi, *Fiscalità nell’economia europea secc. XIII-XVIII*; Christopher Storrs, ed., *The fiscal-military state in eighteenth-century Europe. Essays in honour of P.G.M. Dickson* (Farnham UK. and Burlington US. 2009) and Rafael Torres Sánchez, ed., *War, state and development. Fiscal-military states in the eighteenth century* (Pamplona 2007) and the article by Mark Dincecco, ‘Fiscal centralization, limited government, and public revenues in Europe, 1650-1913’, *The Journal of Economic History* 69, 1 (2009) 48-103;

¹⁶ Charles Tilly, *Coercion, capital and European states. AD 990-1990* (Cambridge Mass. and Oxford 1990). Tilly contrasts this kind of state with coercion-intensive states.

¹⁷ See in alphabetical order: Brewer, *Sinews of power*; Forrest Capie, ‘The origins and development of stable fiscal and monetary institutions in England’ in: Michael D. Bordo and Roberto Cortés-Conde, eds., *Transferring wealth and power from the Old to the New World: monetary and fiscal institutions in the 17th through the 19th centuries* (Cambridge 2001) 10-58; Martin Daunton, *Trusting Leviathan: the politics of taxation in Britain, 1799-1914* (Cambridge 2001); Philip Harling and Peter Mandler, ‘From “fiscal-military” state to laissez-faire state, 1760-1850’, *Journal of British Studies* 32 (1993) 44-70; Allen Horstman, ‘“Taxation in the Zenith”: taxes and classes in the United Kingdom, 1816-1842’, *The Journal of European Economic History* 32 (2003) 111-137; Robert M. Kozub, ‘Evolution of taxation in England, 1700-1850: a period of war and industrialization’, *The Journal of European*

In my analysis I will only refer to total revenue of *central* government, that is all the resources that are fully at the disposal and disposition of central government, wherever they actually are and whoever is handling them on behalf of that government.¹⁸ That income is the best indicator of the economic weight and clout of the state in society. The focus of the analysis of the British situation will be on tax revenue and government borrowing. Other forms of revenue will not be heeded. That is not problematic as over the period discussed government revenue in Britain almost entirely consisted of taxes and loans. Other sources of revenue were all but irrelevant. For the Chinese case, we will have to take on board other sources of income.

The general trend of Britain's fiscal history at the time is quite clear. Over the entire eighteenth century government revenue was on the increase, in whatever way one measures it. During the Napoleonic Wars, government's tax collecting (as well as its borrowing) hit a ceiling. From then on, taxes decreased in absolute terms and as a percentage of GDP. Over the very long eighteenth century as a whole, the inhabitants of Britain and of what we now call the Netherlands were the most heavily taxed people in Europe.

Tabelle 1

This table shows that the inhabitants of England and Wales, in first two decades of the nineteenth century, when Ireland and Scotland - with 1.6 million inhabitants in 1801 and 2.8 in 1851 - were not yet really integrated in a common tax system, per capita paid as much as five pounds sterling in taxes to central government. A pound sterling over the entire period discussed here amounted to 111 grams of silver. An unskilled labourer in London, where wages were higher than anywhere else in Great Britain in those decades, on average, earned less than eighteen grams of silver per day. Total tax income of central government may have been over twenty per cent of GDP then. In 1850, after a period of more than thirty years of overall substantially sinking prices, more or less constant income and a growing GDP, this percentage still was over ten percent.

Abbildung 1

It is not irrelevant what exactly was taxed. Averaged over the entire period, roughly two thirds of tax revenue was collected as excise and customs. Income from domains and state property was so small as to be almost irrelevant. The relevance of land taxes soon became relatively minor. An income tax was experimented with during the Napoleonic Wars, when it became quite important. In 1816 it was abolished, to be re-introduced in the 1840s.

Economic History 32 (2003) 363-387; Peter Mathias and Patrick K. O'Brien, 'Taxation in Britain and France, 1715-1810. A comparison of the social and economic incidence of taxes collected for central government', *Journal of European Economic History* 5 (1976) 601-650, and Patrick K. O'Brien, 'The political economy of British taxation, 1660-1815', *Economic History Review* 41 (1988) 1-32. Finally I would want to refer to the articles by O'Brien, Hoppit, Capie, Dauntton and Peden in: Donald Winch and Patrick K. O'Brien, eds., *The political economy of British historical experience, 1688-1914* (Oxford 2002) and the articles dealing with Britain in the publications mentioned in note 15.

¹⁸ For the sake of convenience I will as a rule refer to 'Britain' in this text. Up until the beginning of the nineteenth century, that basically means England and Wales as Scotland kept most of its taxes to itself notwithstanding the Unification of 1707. Ireland, from a public-finance perspective, only became integrated in the United Kingdom of Great Britain and Ireland from the 1820s onwards.

Tax collecting overall was quite efficiently i.e. the difference between what taxpayers paid to central government and what central government actually received was small. According to an estimate it was about ten per cent during the period 1788-1815.¹⁹ Earlier on the percentage in all probability was higher. There were fluctuations over time but orders of magnitude did not change much. In 1850, collection costs were less than ten percent of total expenditure.²⁰

One of the reasons why Britain's taxes were collected so efficiently resides in the professionalism of its collectors. Tax farming had become a thing of the past and venality of office and sinecures had become rare. One actually has to be more precise: in fact only the collectors of the Excises, the most important taxes in Britain, at least from the 1710s until the 1830s, were quite efficient. Collecting excises were surprisingly cheap: 15.8 per cent of gross revenue in 1684; 7.7 per cent in 1730; 6.5 per cent in 1760, and only 5 per cent in 1787.²¹ Excises were collected by the entirely state-run Excise Department. This in all probability was the closest thing to a real bureaucracy in the early modern world. According to William Ashworth it was "... characterized by a well-trained army of officers subject to strict regulations, within a clearly structured hierarchy ... characterized by an element of merit, a regular wage, and an emphasis on a technical method of revenue collection."²²

Britain's land taxes, and a couple of small other taxes, were assessed by lay commissioners. This happened on a far less bureaucratic and professional basis. But as land taxes were only a small and decreasing percentage of total tax revenue that was not a very serious problem. They were *de facto* fixed at the end of the seventeenth century and had no relation to the actual value of land or agricultural produce.²³ The system of collecting customs was quite complicated, involved many sinecurists and was much less bureaucratic. It was considered quite corrupt and notoriously inefficient.²⁴ Nevertheless they yielded about one fifth to a quarter of total tax revenue in the eighteenth century. From the 1820s onwards, their importance increased steeply. They began to amount to more than one third of total government revenue till the end of period discussed here.²⁵

Collection costs of the income tax were quite low.

At the local level, Britain continued to rely on self-rule and the 'gentlemanly amateurism' of its elites up until far into the nineteenth century. When it came to collecting revenue for central government matters were quite different. Considering what was normal at the time that was done by a surprisingly large number of government professionals. Michael Mann suggests there were some 20,000 civilian personnel working for central government in Great Britain in the 1760s.²⁶ According to Hardling and Mandler, there were 16,267 (civil) public officers in 1797 and 24,598

¹⁹ Mathias and O'Brien, 'Taxation in Britain and France', page 642, and O'Brien, 'Political economy of British taxation', page 3.

²⁰ Kozub, 'Evolution of taxation in England, page 377.

²¹ The figures are by S.E. Fine, *Production and excise in England 1643-1825* (unpublished PhD thesis Harvard 1937). I found them in William Ashworth, *Customs and excise. Trade, production and consumption in England, 1640-1845* (Oxford 2003) page 363.

²² Ashworth, *Customs and excise*, page 382. For an analysis of Britain's tax bureaucracy and the characteristics of its personnel, see Brewer, *Sinews of power*, chapter three, and his 'Servants of the public - servants of the crown: officialdom of eighteenth-century English central government' in: John Brewer and Eckhart Hellmuth, eds., *Rethinking Leviathan. The eighteenth-century state in Britain and Germany* (Oxford 1999) 127-148.

²³ John V. Beckett, 'Land tax or excise: the levying of taxation in seventeenth- and eighteenth-century England', *English Historical Review* 100 (1985) 285-308, and Eric J. Evans, *The forging of the modern state. Early industrial Britain, 1783-1870* (Harlow 1983) page 413. For the actual collecting of land taxes, see Patrick O'Brien, 'Taxation for British mercantilism from the Treaty of Utrecht (1713) to the Peace of Paris (1783)' in: Torres Sánchez, *War, state and development*, 295-356.

²⁴ Ashworth, *Customs and excise*, Part III.

²⁵ In the 1820s, the tax system was reformed and various products like wine, foreign spirits, coffee, cocoa, pepper and tobacco that were first taxed by the Excise, now came under Customs.

²⁶ Mann, *Sources of social power. Volume II*, page 393.

in 1815. They, however, only refer to Britain.²⁷ All other estimates are in the same order of magnitude. Overall, tax officers formed some eighty percent of all officials.²⁸ After the Napoleonic Wars, there was a general feeling that the fiscal-military state should be dismantled. In the case of officials working for central government, this, apparently, was not easy. Their number still grew in the 1820s and 1830s: in 1827 there were forty-three per cent more of them than in 1797, costing twice as much in real terms.²⁹ The number of military and civilian officials in the Department of State rose from 9,700 in 1782-83 to 24,598 in 1815 and 29,000 in 1849.³⁰ By far the majority of all people working for government were not civilian bureaucrats but military personnel. The following figures can serve as an illustration of the incredible amount of power that Britain, as a relatively small country, could mobilise. They all refer to the period of the height of the Napoleonic Wars. The number of regular British and foreign soldiers in Britain's army at the time amounted to over 250,000 whereas some 150,000 men were serving in the Royal Navy.³¹ That navy was exceptionally large and efficient. In 1810, its war fleet numbered 152 battleships, 183 cruisers, and 63 small ships.³² In total it consisted of about 1,000 vessels.³³ Britain's armed forces were not confined to men in direct government service. They also included the armed forces of the East India Company. These forces, only to a small extent consisting of Britons, grew in number from almost 90,000 in 1793 to 230,000 in 1820.³⁴ Then there were so-called privateers.³⁵ Although they were private 'entrepreneurs', they were actively supported by the British state and often acted as auxiliary to the Royal Navy. In the period from 1793 to 1815, the Admiralty issued 4,000 letters of marque.³⁶ In the years from 1803 to 1806 alone, 47,000 men were given protection from impressment because they were active as privateers.³⁷

On top of that, there were a couple of hundred thousand men, who in part-time and volunteer units were expected to defend the home front against the French. The chief tasks of defence

²⁷ Harling and Mandler, 'From "fiscal-military" state to laissez-faire state', page 54.

²⁸ See, for example, the figures, in this case for Britain, in Julian Hoppit, 'Checking the Leviathan, 1688-1832' in: Winch and O'Brien, *Political economy of British historical experience*, 267-294, page 284.

²⁹ Philip Harling, *The waning of Old Corruption: the politics of economic reform in Britain 1779-1846* (Oxford 1996) page 177.

³⁰ Peter Jupp, *The governing of Britain 1688-1848* (London 2006) page 136.

³¹ See for some estimates Evans, *Forging of the modern state*, under 'army size' and 'navy strength'; Christopher D. Hall, *British strategy in the Napoleonic War, 1803-1815* (Manchester 1992) chapter one; Richard Harding, *Sea power and naval warfare, 1650-1830* (London 1999) page 139, and N.A.M. Rodger, *The command of the ocean. A naval history of Britain, 1649-1815* (London 2004) 636-639.

³² Harding, *Sea power and naval warfare*, appendix, 289-295. For detailed information see Rodger, *Command of the ocean*, 606-617, and Michael Duffy, 'World-wide war and British expansion, 1793-1815' in: P.J. Marshall, ed., *The Oxford History of the British Empire. The eighteenth century* (Oxford 1998) 184-207, table 9.1 on page 199, and table 9.3 on page 204. If one measures the tonnages of sailing vessels over 500 tons and in 000 displacement tons, in 1815, Britain's fleet was almost as big as all the fleets of other European naval powers combined. For the Navy's efficiency see Daniel A. Baugh, 'Naval power: what gave the British navy superiority?' in: Leandro Prados de la Escosura ed., *Exceptionalism and industrialisation. Britain and its European rivals, 1688-1815* (Cambridge and New York 2004) 235-260.

³³ Hall, *British strategy in the Napoleonic War*, chapter one.

³⁴ Lawrence Stone 'Introduction' in: Lawrence Stone, ed., *An imperial state at war* (London 1994) 1-31, page 30. See also Duffy, 'World-wide war and British expansion', table 9.2 page 202.

³⁵ A privateer is a private person or private warship authorized by a country's government by letters of marque to attack foreign shipping. Privateers were only entitled by their state to attack and rob 'enemy' vessels during wartime. For general information see Janice E. Thomson, *Mercenaries, pirates and sovereigns. State-building and extraterritorial violence in early modern Europe* (Princeton 1994).

³⁶ A letter of marque is an official warrant or commission from a government authorizing the designated agent to search, seize, or destroy specified assets or personnel belonging to a foreign party that has committed some offense under the laws of nations against the assets or citizens of the issuing nation and has usually been used to authorize private parties to raid and capture merchant shipping of an enemy nation. See for this definition Wikipedia.

³⁷ Hall, *British strategy in the Napoleonic War*, page 11.

always fell to the professional soldiers but these forces were not unimportant. Over the period 1804 to 1813, on average, there were some 80,000 of them. Next to this militia, there was an Army of the Reserve that at times numbered some 30,000 men. The so-called Sea Fencibles were the equivalent for the Navy of the volunteering home defence. Their number at times reached 25,000.³⁸ At no moment in time at the height of the Napoleonic Wars was the number of men serving in British units in the European arena below 500,000 - not including those serving in the Royal Navy. Actually, Britain's war effort was even bigger: the country also supported allies on the Continent. In the years 1812 to 1815, it sustained about 500,000 of them, mostly Russians, Prussians and Austrians. Just as a reminder: The population of Great Britain was just over 12.5 million in 1811; that of Ireland somewhat over five million.

But let us return to taxation. The high efficiency of British tax collecting was not just a matter of professional personnel. It was also enhanced by the fact that the tax regime was uniform over the entire country. There were no internal tolls and there were no differences in tax incidence according to place or social status. *Actual* payments of course depended heavily on property, income and consumption. Britain's land tax was collected somewhat *ad hoc*. That could and often did result in regional differences. But for all other taxes the country had one national system in which status and rank made no difference. Nor did geographical location: that is in Britain. Scotland and Ireland often had specific arrangements. Efficiency was further increased by the fact that taxes were always collected in money in a monetised economy that had uniform laws and *fairly* uniform weights and measures. It was only in 1824 that common measures were created for the whole country.³⁹

No interest group could feed on the state and redirect public money to private coffers. There no longer existed the possibility to use or create (semi-)feudal sources of power and income. Feudal exemptions, privileges and immunities were unknown. The state of Britain had already acquired the monopolies of legitimate violence, public administration and public revenue collecting that count as constitutive for a modern state. It no longer had *any* competitors in *any* public domain. Aristocrats as a rule did not levy any feudal dues and in 1534 the right to collect 'first-fruits and tenths' had gone from the Pope and the monasteries to the Crown. Only the state collected revenue that one might call 'public' and almost *all* of that revenue stayed at *its* disposal. All local self-government notwithstanding, the administration of the British fiscal state was 'centripetal', uniform and centralized.⁴⁰

In the mid-eighteenth century, local taxes totalled about ten per cent of central government levies, rising to fourteen to fifteen per cent on trend between the 1770s and the 1830s.⁴¹ Local government, however, often was un-monetized, as in much of the judicial system and minor road maintenance. We do see an increase of local collection and spending after the Napoleonic Wars: in 1840 local expenditure amounted to 21.9 per cent of total government expenditure. In 1910, it had increased to no less than 49.7 per cent.⁴²

Much is always made in the literature, in particular by scholars who are under the spell of institutional economics, of the fact that Britain's public finances would have been transparent and subject to checks and balances. Adherents of this view like to hail the Glorious Revolution as the moment when Parliament became sovereign and 'No taxation without representation' was

³⁸ The information presented so far in this paragraph is from Hall, *British strategy in the Napoleonic War*.

³⁹ Julian Hoppit, 'Reforming Britain's weights and measures', *The English Historical Review* 108 (1993) 82-104.

⁴⁰ See the analysis by Alan Macfarlane, 'The cradle of capitalism' in: Jean Baechler, John A. Hall & Michael Mann, eds., *Europe and the rise of capitalism* (Oxford and Cambridge 1988) 185-203.

⁴¹ Peter Mathias, 'Taxation and industrialization in Britain, 1700-1870' in: idem, *The transformation of England. Essays in the economic and social history of England in the eighteenth century* (London 1979) 116-130, page 117. Information given by Julian Hoppit points at a same order of magnitude. See Hoppit, 'Checking the Leviathan', page 280.

⁴² Daunton, 'Trusting Leviathan', page 342.

inscribed as fundamental principle in British politics.⁴³ This too is supposed to have enhanced efficiency and ease of tax collecting. An increasing number of aspects of public finance and economic policy indeed became subject to bargaining, often institutionalised, between government and societal elites. Wealthy and powerful subjects, the ‘moneyed interests’ i.e. the merchants and, numerically still far more important, the ‘landed interests’ i.e. the aristocratic landowners, indeed now were the ruling class of the country. To suggest, however, that after the Glorious Revolution Parliament was in full control of public finance, is quite exaggerated. The costs of the royal household and civil government, for example, were a wholly private matter of the Crown, till the 1780s, whereas national debt was regarded in terms of a contract between the state and individuals. Expenditure, unlike revenue collection, was *not* subject to parliamentary supervision, even after the constitutional revolution. In practice, there was an almost complete ministerial control of public finance initiatives and a clear primacy of the Treasury.⁴⁴ It was possible for Members of Parliament to scrutinise and collect information and debate it.⁴⁵ Considering the lack of standardised bookkeeping practices in government departments that, however, was far from easy. If the examples presented by Stephen Conway are indicative, Members of Parliament were not fanatical in using of their rights.⁴⁶

The frequent references by institutional economists and economic historians to taxation, representation and credible commitment create the impression that those who paid (the bulk of) taxes and those who were represented were identical. That definitely was not the case. The majority of Members of Parliament till far into the nineteenth century were aristocratic landowners. The rest consisted of ‘moneyed interests’. Land taxes were quite low and an income tax only existed during the emergency of the Napoleonic Wars and from the 1840s onwards. The bulk of taxes were collected on consumer goods that weren’t real necessities but no real luxuries either.⁴⁷ They therefore tended to be regressive. When Members of Parliament decided on taxes, those overall hit other people far harder than they hit them. When it came to serving the country in Army and Navy the moneyed interests normally were conspicuously absent. Only when it came to providing government with loans, was the situation quite different. Here those represented indeed paid. Not surprisingly: buying bonds amounted to making a safe investment rather than paying a levy. We will return to that later on.

When discussing Parliamentary control in this context, the subject of corruption is bound to pop up. Although, as we will see, it was far more rampant and widespread in Qing China than in Britain, it would be naïve to suggest it was ‘an oriental vice’. On the contrary, what was called ‘the system of old corruption’, with its patronage, speculation and sinecures, was notorious. Its fountainheads were the sovereign and his ministries. Venality and corruption were not unknown, to put it mildly, in, for example, the British Navy.⁴⁸ We already referred to the inefficiency and corruption of the Customs Service. The British state continued to be reliant on contractors for matters as different as running prisons or naval and military victualling. Their role increased as the growth of the army outstripped the state’s administrative machine to provide the supplies.

⁴³ For this interpretation - associated with the names of Douglass North and Barry Weingast - and many other interpretations of 1688, see Steven A. Pincus, *1688. The first modern revolution* (New Haven and London 2009), in particular chapter 12.

⁴⁴ See for further information on the exact powers and activities of Parliament, Wenkai He, *Paths toward the modern fiscal state: England (1642-1752), Japan (1868-1895) and China (1850-1911)* chapter three. The original version of this text was a PhD thesis at the Department of Political Science at MIT. It is now under revision. I refer to the version the author sent me on 12-6-2008. .

⁴⁵ Hoppit, ‘Checking the Leviathan, 1688-1832’

⁴⁶ Stephen Conway, ‘Checking and controlling British military expenditure, 1739-1783’ in: Torres Sánchez, *War, state and development*, 45-68.

⁴⁷ O’Brien, ‘Triumph and denouement of the British fiscal state’.

⁴⁸ Daniel A. Baugh, *British naval administration in the age of Walpole* (Princeton 1965) chapters eight and nine.

There of course were malpractices but the situation clearly improved.⁴⁹ ‘Old corruption’ in all its varieties was tackled, and from the 1780s onwards one can see some successful reforms. What is more important: the forms of corruption, we are dealing with here, did not fundamentally undermine the administrative efficiency of the state in having a major negative influence on its room to manoeuvre.⁵⁰

Expenditures and debts of the British fiscal-military state

Over the entire period from 1688 to 1850, the British, with the Dutch, on average paid the highest taxes of all Europeans. We already hinted at the fact that apparently it was not enough. Britain’s government tended to spend substantially more than the revenue it collected. Averaged over the eighteenth century, about thirty percent of the money it spent was borrowed.⁵¹ The bulk of expenditure was war-related. Over the period from 1750 to 1850 average spending on past, present and future wars i.e. the Army, The Navy, Ordinance and war-related debts, easily absorbed some three-quarters cent of government expenditure. It was only after the Napoleonic Wars that a slow ‘civilianization’ of expenditure set in.⁵² War was the driving force behind the growth of the fiscal-military state. It became a business, run by a combination of businessmen and bureaucrats, with most of the actual fighting being done by mercenaries or people pressed into service. Its costs dwarfed all other expenditures and made Britain’s state the biggest consumer, producer and investor in the country. This quote by Peter Matthias illustrates that brilliantly

Consider the single statistic that the total military costs of the French Wars for Britain between 1793 and 1815 amounted to approximately 1,000 million pounds sterling, with over 500 million pounds sterling in mobilized savings produced for government loans by way of the long-term capital market, spread over twenty-to years, whereas the total accumulated capital in the canal system, from 1750 to 1820, was about twenty million pounds sterling. Moreover, transport investment was one of the ‘lumpiest’ forms of productive investment to be undertaken. In 1809-1810 it was reckoned that the annual investment in fixed capital in the entire cotton industry was 0.4 million pounds sterling. That was less than one percent of the military budget of forty-five millions spent during that year.⁵³

Not all spending was on war - and the court, though. A substantial amount of money was allocated for poor relief. The British system of poor relief may have been organized on a parish base, but it rested on national, secular legislation with Parliament setting the rates. It was a compulsory charity paid out of taxation on property, collected and spent in Britain’s 15,000

⁴⁹ For complaints about corruption see Conway, ‘Checking and controlling British military expenditure’. For a more ‘optimist’ picture see Gordon E. Bannerman, *Merchants and the military in eighteenth-century Britain: British army contracts and domestic supply, 1739-1763* (London 2008).

⁵⁰ For ‘old corruption’ see Harling, *Waning of ‘old corruption’*, and Ashworth, *Customs and excise*, chapter eighteen.

⁵¹ D. Eckart Schremmer, ‘Taxation and public finance: Britain, France and Germany’ in: Peter Mathias and Sidney Pollard, eds., *The Cambridge Economic History of Europe. Volume VIII. The industrial economies: The development of economic and social policies* (Cambridge 1969) pages 314-494, page 319, for the entire period. For periods of war see, Paul Kennedy, *The rise and fall of great powers* (New York 1987) page 81.

⁵² Harling and Mandler, ‘From ‘fiscal-military’ state to ‘laissez-faire state’’, page 56 Table 5.

⁵³ Peter Mathias, ‘Financing the Industrial revolution’, in: Peter Matthias and John A. Davis, eds., *The first industrial revolutions* (Oxford and Cambridge Mass. 1989) 69-85, page 72.

parishes. The amount of money involved was substantial and may have helped in dampening social unrest.

In 1777, rate-based expenditure on the poor in England and Wales amounted to 1.2 million pounds sterling. In 1787, it was more than two million, in 1803 more than four million pounds. Over the period 1814-1833, it on average was about six million pounds sterling per year. For the period discussed in this article, it reached a peak in 1818 when it amounted to 7,871,000 pounds, the equivalent of over seventy grams of silver per capita.⁵⁴ In terms of silver, that is about half the total land tax income of the Chinese empire at the time.

Poor relief expenditures per year expressed as a percentage of the GDP of England and Wales.⁵⁵

1688	1.22
1749	0.99
1776	1.59
1783-1785	1.75
1801-1803	2.15
1811-1813	2.58
1820-1821	2.66
1830-1832	2.00
1840	1.12
1850	1.07

The massive over-spending had to result in a big national debt. In the century after the Glorious Revolution, Britain's debt rose with only a few peacetime pauses to 215 per cent of national income in 1784. After a brief peacetime decline in the following decade, it rose again to 222 per cent of national income in 1815 and reached a peak of 268 percent in 1821, which would be more than 800 million pound sterling.⁵⁶ Other estimates for the period 1815-1820, vary between 800 to 900 millions pounds sterling.⁵⁷ The government of Britain started making debts already quite early on. In 1697, for example, at the end of the Nine Years War, it had 12.2 million pounds unfunded short-term liabilities and 5.1 million pounds funded long-term borrowings. Annual government income in the 1690s was some four million pounds.⁵⁸

A national debt of (more than) 800 million pounds sterling is the equivalent of 88.8 billion grams of silver. Per capita, *including* Ireland, that amounted to about 4200 grams of silver. Excluding Ireland which is more realistic, we are talking about over 6300 grams of silver per capita. The amount of money actually borrowed will have been lower as many bonds were sold at a substantial discount. The Napoleonic Wars brought national debt to an unprecedented level, but between 1760 and 1860 Britain's it was never lower than 100 per cent and from approximately

⁵⁴ Evans, *Forging of the modern state*, page 426.

⁵⁵ Peter H. Lindert, 'Poor relief before the welfare state: Britain versus the Continent, 1780-1880.' *European Review of Economic History* 2 (1998) 101-40, page 114.

⁵⁶ I paraphrase Niall Ferguson, *The cash nexus. Money and power in the modern world, 1700-2000* (London 2001) page 129.

⁵⁷ See e.g. Glyn Davies, *History of money. From ancient times to the present day* (third edition with revisions: Cardiff 2002) page 304; Patrick O'Brien, Fiscal and financial preconditions for the rise of British naval hegemony, 1485-1815, Working Papers in Economic History. Department of Economic History, London School of Economics and Political Science November 91/05, page 23; and Schremmer, 'Taxation and public finance', page 354.

⁵⁸ Wenkai He, *Paths toward the modern fiscal state*, chapter III, page 38.

1780 to 1845, never lower than 150 per cent of GDP.⁵⁹ In 1850, it still was some 800 million pound sterling.⁶⁰ Budget deficits then, however, had become a thing of the past.

A good way of illustrating the dimensions we are talking about is to compare the figures just referred to with China's GDP. The estimate for China's GDP that is closest to 1821 is that for 1833 of some four billion *taels*.⁶¹ In grams of silver that would be almost 150 billion grams. The figure for China's GDP is a fairly wild guesstimate: but there can be no doubt that Britain, with a population substantially lower than that of several Chinese provinces, managed to keep its economy afloat *and* start industrialising in the first half of the nineteenth century, with a debt that, expressed in silver, was more, - in all probability substantially more - than half of China's total GDP at the time. In per capita terms the figures become even more astounding. A GDP for China in the 1830s of four billion *taels* would boil down to about ten *taels* or about 370 grams of silver per Chinese. The national debt of the United Kingdom of Great Britain *and* Ireland in 1821 per capita, expressed in silver, then would be more than eleven times as high as the average annual earnings of a Chinese. If we do not include Ireland the figure would be about seventeen times. These are estimates at best and the fact that the purchasing power of silver in China was higher than in Britain - probably some three times as high - has to be taken into account. But even if figures would be more precise and more comparable, the gist of my argument would *not* collapse: Per capita in real terms, Britain's government always spent *far more* than its Chinese counterpart - in my estimates at least, excluding Ireland, seven times as much at the height of the Napoleonic wars -, accumulated an enormous debt, *and* got away with it.

A very substantial amount of government expenditure simply had to consist of debt servicing. With the War of Spanish Succession (1702-1713) debt payments reached a level of fifty per cent of total expenditure. That percentage never became lower than thirty-five during the period till 1790.⁶² Between 1816 and 1850 debt servicing almost without exception was more than fifty percent of the annual budget. Directly after the Napoleonic Wars it was over sixty percent of tax income. Default looked inevitable, but it did not occur. It was not just that the growth of the economy made even such a burden manageable: the big creditors were all represented in Parliament. Government actually *never* defaulted in the period under discussion. The amounts of money involved were enormous.⁶³ Over the period 1700 to 1709 *annual* average debt charges were 1.3 million pounds. This increased to an annual average of almost thirty million pounds sterling over the period 1810 to 1849. In terms of silver that is more than the entire annual - official - tax income of China's government.⁶⁴

Someone had to provide government with all the money it borrowed. In the middle of the eighteenth century, there were 50,000 to 60,000 public creditors in Britain. The electorate at the time was close to 300,000. By the end of the Napoleonic Wars debt holders with around 300,000

⁵⁹ See James Macdonald, *A free nation deep in debt. The financial roots of democracy* (Princeton and Oxford 2006) 348-355. Compare Gregory Clark, *A farewell to alms. A brief economic history of the world* (Princeton and Oxford 2007) figure 8.8, page 158.

⁶⁰ Peter Mathias, *The first industrial nation. An economic history of Britain, 1700-1914* (London 1969) page 463.

⁶¹ For estimates, that of course all are very shaky, see, in chronological order: Chung-li Chang, *The income of the Chinese gentry* (Seattle 1962) page 196; Albert Feuerwerker, *The Chinese economy, ca. 1870-1911* (Ann Arbor 1969) page 2; Yuru Wang, *Economic Growth and Structural Change in Modern China 1880s-1930s*. 13th Economic History Congress, Buenos Aires, 22.-26. Juli 2002, <http://eh.net/XIIICongress/Papers/Wang.pdf> [consulted 22.09.2010], and Kent Deng, 'The Nanking Treaty System; Institutional change and improved economic performance', to be published. Then finally there is the estimate by Kent Deng of China's GDP in 1830/1833 that I use here, given at a workshop at The London School of Economics and Political Science on June 5 in 2006. There are good reasons to believe that China's GDP was not higher in the 1880s than it was in the 1830's.

⁶² See for the first period, Brewer, *Sinews of power*, page 117, and for the second, Ferguson, *Cash nexus*, 140-141.

⁶³ Britain saw some examples of government trying not to pay back its debts. But, overall, its history from the Glorious Revolution onwards is fairly impeccable. For some comments, see Ferguson, *Cash nexus*, 146-147.

⁶⁴ Mathias, *First industrial nation*, page 463.

were a majority of the electorate.⁶⁵ Not all government debt was in British hands. But foreigners, in particular from the Dutch Republic, never owned more than a quarter, normally substantially less. One of the ways of creating confidence amongst potential buyers of government bonds was by 'funding' debt. This means that the repayment of loans was linked to a specific tax which served as its security or 'fund'. Each loan had to be backed by a selected tax, which set a limit to borrowing.⁶⁶ Another 'method' that was experimented with, was the creating of a 'sinking fund'. It was introduced by Robert Walpole in 1716 and worked quite effectively in the 1720s and early 1730s. In principle, the fund was to receive whatever surplus occurred in the national budget each year. Too often, however, it was raided by the Treasury when that needed money quickly. In the 1780s, it was re-introduced by William Pitt the Younger with better legislation that prevented ministers from raiding it. Administration was placed in the hands of Commissioners. The scheme worked well between 1786 and 1793 with the Commissioners reducing the debt by more than ten million pounds. It was abandoned only in the 1820s. During the Napoleonic Wars government needed such enormous amounts of money at very short notice that it had to resort to introducing an income tax and to raising money via short-term, 'unfunded' obligations that were not secured by earmarked taxes and which it tried to fund over time to make them less costly.⁶⁷

There was a lot of improvising and things could easily have gone wrong. Many prominent Britons feared they would. They did not. Between 1688 and 1815 interest rates on British government bonds were halved, while taxes and national debt were both high and increasing and inflation substantial.⁶⁸ This is a clear indicator that people with money to spare trusted government and considered its fiscal system efficient.⁶⁹

Central government in Britain would never have been able to collect so much money had not major institutional changes, collectively known as the 'financial revolution', occurred.⁷⁰ This revolution began in the second half of the seventeenth century, and accelerated after the Glorious Revolution. Let me just point at the main innovations: the creation of a national bank, a funded national debt and a sinking fund, improvements in the use of bonds and shares, more sophisticated systems of insurance, changes in the functioning of corporate law, e.g., the creation of a New East India Company, and the development of better ways of gathering and using information with regard to country and economy.

The income of China's central government

The situation in Qing China was strikingly different. As compared to Britain, *official* tax income for central government was and continued to be very low. These are the estimates (rounded off) average official central tax income thirty-five million *taels* during the reign of the Kangxi emperor (1662-1722); about forty million during the reign of the Yongzheng emperor (1722-1735), and during the reign of the Qianlong emperor (1736-1795) some forty-three to forty-

⁶⁵ Macdonald, *Free nation deep in debt*, pages 227 and 351.

⁶⁶ Martin J. Daunton, *Progress and poverty. An economic and social history of Britain, 1700-1850* (Oxford 1995) page 511.

⁶⁷ Michael D. Bordo and Eugene N. White, 'A tale of two currencies: British and French finance during the Napoleonic Wars', *The Journal of Economic History* 51 (1991) 303-316.

⁶⁸ Daunton, *Trusting Leviathan*, page 47.

⁶⁹ See Stephan R. Epstein, 'The rise of the West' in: John A. Hall and Ralph Schroeder, eds., *An anatomy of power. The social theory of Michael Mann* (Cambridge 2006) 233-259, pages 250 and 251. Compare his *Freedom and growth. The rise of states and markets in Western Europe, 1300-1750* (London 2000).

⁷⁰ For this revolution see, in chronological order, P.G.M. Dickson, *The financial revolution in England* (London 1967); Henri Roseveare, *The Financial Revolution, 1660-1760* (London and New York 1991) and Bruce G. Carruthers, *Politics and markets in the English Financial Revolution* (Princeton 1996).

eighth million *taels*. At the very end of the eighteenth century, the figure is estimated to have been forty-three to forty-four million *taels*. It continued to be at that level for about half a century: in 1849 it was forty-two million *taels*. Then in the 1850s, it started to increase substantially to reach 300 million in 1911.⁷¹ James Lee estimates that total revenue of the Qing government till the First Opium War hovered at between sixty and eighty million *taels*.⁷² Pierre-Étienne Will, Roy Bin Wong and Mark Elliott refer to this estimate and apparently accept it.⁷³ They clearly have only taxes – and surcharges taxes – in mind.⁷⁴ Chung-li Chang estimates that annual government revenue as recorded by central government in the 1880s still was only some eighty million *taels*.⁷⁵

Per capita and in real terms it *de-* rather than increased over most of the period discussed here.⁷⁶ In the literature, central government's tax revenue including those so-called 'surcharges' as a rule without much ado is identified with government's revenue per se. That is not correct. There is a whole range of other sources of income, admittedly very hard to quantify exactly, that have to be taken on board if one wants to have a realistic view of the means at the disposal of China's central government. To begin with there is the income of the Imperial Household in the Emperor's treasury that, although it was private, was often filled at the expense of the emperor's subjects and on the other hand also often used to pay for public expenses.⁷⁷ Government also collected income via the sale offices, titles and the right to collect taxes. Overall income from these sources tended to become *more* important from the end eighteenth century onwards.⁷⁸ There were all sorts of ad-hoc methods to mobilise labour.

We lack good serial data that inform us about total government revenue – and expenditure. The fiscal system of the Qing was complicated and in-transparent. The first official budget was only published in 1908. My educated – and very high – guess, amplified in a forthcoming book, would be that total income of the Qing government before the First Opium War was never more than 300 million *taels*. I have never come across such a high figure in the literature. What is striking about it is that as compared to the income of Britain's central government it is so extremely *low*.

⁷¹ See for these figures, Immanuel C.Y. Hsü, *The rise of modern China* (sixth edition; Oxford and London 2000) 59-65; Evelyn S. Rawski, 'The Qing formation and the early-modern period' in: Lynn A. Struve, ed., *The Qing formation in world-historical time* (Cambridge Mass. and London 2004) 207-240, pages 213-218, and Wong, *China transformed*, pages 155-156.

⁷² James Z. Lee, *The political economy of a frontier: Southwest China 1250-1850* (Cambridge 2000) table 1.6.

⁷³ Mark C. Elliott, *The Manchu way. The eight banners and ethnic identity in late imperial China* (Stanford 2001) page 489, and Pierre-Étienne Will and Roy Bin Wong, with James Lee, *Nourish the people. The state civilian granary system in China, 1650-1850* (Ann Arbor 1990) page 494.

⁷⁴ For an explanation of the concept 'surcharges', see Yeh-chien Wang, *Land taxation in imperial China, 1750-1911* (Cambridge Mass. 1973) chapter two, in particular page 33.

⁷⁵ Chung-li Chang, *Income of the Chinese gentry*, page 328.

⁷⁶ For, very differing figures with regard to China's population growth over the period see James Lee and Wang Feng, *One quarter of humanity. Malthusian mythology and Chinese realities, 1700-2000* (Cambridge Mass. and London 1999); Kent G. Deng, 'Unveiling China's true population statistics for the pre-modern era with official census data', *Population Review* 43, 2 (2004) 1-38 and Ramon H. Myers and Yeh-chien Wang 'Economic development, 1644-1800' in: Willard J. Peterson, ed., *The Cambridge History of China. Volume 9. Part One. The Ch'ing Dynasty to 1800* (Cambridge 2002) 563-645, pages 565-566. For the development of prices see Yeh-chien Wang, 'Secular trends of rice prices in the Yangzi delta, 1638-1935' in: Thomas G. Rawski and Lillian M. Li, eds., *Chinese history in economic perspective* (Berkeley, Los Angeles and Oxford 1992) 35-68. From the 1820s onwards, real tax pressure increased even though taxes nominally remained identical because taxes now had to be paid in silver that was becoming much scarcer and thus more expensive.

⁷⁷ See Te-ch'ang Chang, 'The economic role of the imperial household in the Ch'ing dynasty', *Journal of Asian Studies* 31 (1972) 243-273. His assessment of the overall importance of the revenue of this household is very optimistic i.e. high and finds no support in any of the literature I read.

⁷⁸ See Elisabeth Kaske, 'The price of an office: Venality, the individual and the state in 19th-century China' in: Nanny Kim and Thomas Hirzel, eds., *Metals, monies, and markets in early modern societies: East Asian and global perspectives* (Berlin 2008) 279-304, and Yeh-chien Wang, *Land taxation in imperial China*, chapter one.

That will certainly come as a surprise for all those who still see Qing China as an example of oriental despotism.

Of this revenue only a minor part ever actually reached Peking. A major part of it never left the province where it was collected and stayed at the disposition of officials of central government there. Transporting it to Peking would have been too laborious and expensive.⁷⁹ In this respect one must realize how big the autonomy of the provinces was in matters of taxation, and how different their tax systems could function.

Here too it is not irrelevant to point out what exactly was taxed. It is also quite simple: Over the entire period taxation on land continued to provide the bulk of all tax revenue. It was levied on the basis of an assessment of amount and quality of the land and paid by the owner. That sounds simpler than it was as in China at the time ownership could be quite a complicated matter but that need not concern us here. Assessment was rather inflexible and its principles of levying remained almost unchanged.⁸⁰ The rest of tax income consisted of taxes on salt, grain tribute, customs and many small miscellanea.

Efficiency of tax collecting was quite high considering the difficult circumstances, but lower than in Britain. It is estimated that collecting the land tax consumed one-fifth to one-fourth of the total amount of taxes that were collected.⁸¹ Tax collecting was meant to be cheap and tax pressure low: when I nevertheless describe China's system of tax collecting as inefficient that is not because too little of the official quotas landed in the hands of the government but because the overwhelming majority of China's population actually paid government officials and their personal secretaries, clerks and runners, much more – in money, kind or services – than was officially due to them. China's officials and semi-officials pocketed a manifold of the money they transferred to government. Point is not that people paid all sorts of 'unofficial' fees, but that they did so without receiving a *commensurate* amount of public services in return. They had to because China's administrative system as a whole, all appearances notwithstanding, was inefficient. A scholar like Roy Bin Wong, who time and again describes it as efficient and bureaucratic, at least up until 1800, simply ignores the gap between theory and practice.⁸²

Part of the inefficiency of tax collectors can be explained by their lack of professionalism and by the typical organisational structure in which they had to operate. On paper it looks as if Qing China was ruled by a fairly modern bureaucracy. To get a job as official one had to pass highly competitive exams. But what they had to learn to pass those exams hardly prepared candidates for the nitty-gritty of their job. Besides, selling of offices, titles and the right to collect taxes was on the increase from the end of the eighteenth century onwards. By 1800, to just give an example, there were an estimated 350,000 holders of purchased degrees in the empire, and that number would spiral upward as the government became more fiscally strapped in the nineteenth century.⁸³ Every three years officials were transferred to another district where they were not supposed to have any relatives. As strangers they easily became dependent on the local gentry-elite. The fact that they were heavily under-staffed only tended to increase that dependency. They had to personally hire and pay secretaries, in particular for financial matters. Government did not provide them with sufficient money to do so. They therefore had to allow those secretaries to

⁷⁹ See for the complex decentralised system of tax collecting in China in which government controlled from afar i.e. left the bulk of the taxes in the provinces but made its officials decide how most of them would be spent, and always left too little for local expenses, Yeh-chien Wang, *Land taxation in imperial China*, pages 12-19, and Madeleine Zelin, *The magistrate's tael. Fiscal reform in eighteenth-century Ch'ing China* (Berkeley, Los Angeles and London 1984) chapter 2, in particular pages 26-37.

⁸⁰ Yeh-chien Wang, *Land taxation in imperial China*.

⁸¹ Yeh-chien Wang, *Land taxation in imperial China*, page 72.

⁸² See for example Wong, *China transformed*, pages 134, 157 and 282. There is not a single reference to corruption in Wong's *magnum opus*.

⁸³ William Rowe, *China's last empire. The great Qing* (Cambridge Mass. and London 2009) page 114.

‘improvise’ and procure a large part of their income themselves.⁸⁴ To actually administer their district on a day to day basis they had to fall back on literally hundreds of clerks and runners who were *not* in government service and had *no* official income but lived by the fees they could collect from the population.⁸⁵ It simply was impossible for officials to do a decent job, considering their funding and their staff. Nor could they lead a decent life with their income. China’s administration can hardly be called an efficient bureaucracy. To extensively sketch its inefficiency at the local level would require more space than is available here, so I refer to the literature and my comments on corruption.⁸⁶

The number of officials supposed to administer China was surprisingly small. The co-ordinating bureaucratic offices in Peking and the provinces were tiny. I only found figures for 1895. But there is reason to believe the situation would have been different earlier on. The number of the employees working for the Board of Revenue in Peking plus those employed in the provinces to manage taxes, i.e. the number of ‘financial’ officers for entire China, was only 1800.⁸⁷ The number of civil ‘public servants’ in China, who also had to function as tax officers, continued to be nearly constant and amounted, depending on the exact definition and on the sources one uses, to between 20,000 and 30,000 people, a number that is *roughly* equal to that of British civil servants at the time.⁸⁸ If we deduct the number of officials that stayed in Peking, no more than some 10,000 to 15,000 officials were supposed to run the country with its hundreds of millions of people in the provinces. In China Proper in the middle of the nineteenth century, each county magistrate responsible for one of the approximately 1500 districts, ruled over, on average, some 250,000 people. In the 1880s the number of officials still was in the same order of magnitude.⁸⁹ Roy Bin Wong’s claim that China’s bureaucracy “... certainly (was) the world’s largest eighteenth-century civilian state operation ...”⁹⁰, sounds somewhat overenthusiastic.

At least from the perspective of a ruler keen on maximising revenue, methods of tax collecting left much to be desired. Under-registration of land was notorious. Till the 1850s, central government had no up-to-date cadastral surveys and no trustworthy information with regard to the land market and actual property relations. The last nationwide land census dated back to the years 1578-82, and the results were considered sacrosanct ever since for all practical purposes.⁹¹ Yeh-chien Wang ventures a nation-wide estimate and concludes that “at least a third of the newly cultivated land in the first century of the Qing dynasty and about four fifths in the next one and a half centuries went unregistered.”⁹² Moreover, there were huge differences between societal

⁸⁴ For these secretaries see Kenneth E. Folsom, *Friends, guests and colleagues: the Mu-fu system in the late Ch’ing period* (Berkeley 1968).

⁸⁵ For clerks and runners, see Bradley W. Reed, *Talons and teeth. County clerks and runners in the Qing dynasty* (Stanford 2000).

⁸⁶ For a succinct sketch I refer to S.E. Finer, *The history of government. III Volumes* (Oxford 1997) Volume III, pages 1129-1162.

⁸⁷ Marianne Bastid, ‘The structure of financial institutions of the state in the late Qing’ in: Stuart R. Schram, ed., *The scope of state power in China* (London and Hong Kong 1985) 51-80, page 70.

⁸⁸ For these figures, which are not contested, see Myron L. Cohen, ‘State and society during the Qing dynasty, 1644-1911’ in: Ainslie T. Embree and Carol Gluck, eds., *Asia in Western and world history. A guide for teaching* (New York and London 1997) 523-560, page 530. Compare Kent Deng in his Sweet and sour Confucianism, Paper presented at the Tenth Global Economic History Conference September 2006 in Washington, page 9.

⁸⁹ See e.g. Chung-li Chang, *Income of the Chinese gentry*, chapter one.

⁹⁰ Roy Bin Wong, The changing fiscal regime of Qing dynasty China. Paper presented at the conference Toward the twentieth century in Asia: Comparative perspectives on politics, economy and society in China and India. May 19-22, 2005, Durham, Duke University, page 14.

⁹¹ Pierre-Étienne Will, *Bureaucracy and famine in eighteenth-century China* (Stanford 1990) page 243.

⁹² Yeh-chien Wang, *Land taxation in imperial China*, pages 26-27. See for some telling regional examples Anne Osborn, ‘Property, taxes and state protection of rights’ in: Madeleine Zelin, Jonathan K. Ocko and Robert Gardella, eds., *Contract and property in early modern China* (Stanford 2004) 120-159 and 154-155 and Robert B. Marks, *Tigers, rice, silks & silt. Environment and economy in Late Imperial South China* (Cambridge 1998) under ‘Guangdong’.

groups, between provinces amongst each other and between provinces and regions outside China Proper.⁹³ Members of the gentry⁹⁴ paid far less taxes than ordinary subjects. So did members of banner armies.

A substantial amount of taxes continued to be collected in kind, especially the grain tribute. That was quite expensive and liable to fraud. Kent Deng claims that ten times the official rice tax for stipends for soldiers and officials was collected.⁹⁵ The total lack of standardisation of weights and measures also was not very helpful. There was no lack of internal bureaucratic checks and balances and supervision from Peking. But it often was simply impossible to see what was going on at the grass-roots level.

In the end all this resulted in an enormous gap between *pays legal* and *pays réel*. For the end of the nineteenth century actual levies are estimated to have been three to four times the professed returns.⁹⁶ Wilhelm Wagner, in his book on Chinese agriculture writes that he would not be surprised if actual land and poll tax payments would have been six times as high as official taxes at the end of Qing rule and suggests things were not that different in previous decades.⁹⁷ According to the expert on Chinese military history in the Qing era, Van de Ven, it has been estimated that at the end of that era no less than two-thirds of revenue-collection took place 'informally'.⁹⁸ In 1854 a censor estimated that the costs of corruption by clerks and runners and of extra payments for private secretaries alone amounted to about eight million *taels*, which according to him would be one fifth of the state's total annual revenue.⁹⁹ Grain tribute tax payments at that time apparently were 2.5 times the official, legal payment.¹⁰⁰ For the early nineteenth century, studies of provinces in the Lower Yangtze Valley suggest that the land tax collections reported to Peking were only half or a third of the actual payments by the population to the magistrate and his staff.¹⁰¹ Collecting salt tax also provided ample opportunities for enrichment. Again, in the early nineteenth century, Lianghuai, the salt tax collection turned over to government, was a little over two million *taels*, while the actual tax collected was about eight million *taels*.¹⁰² Cases where merchants, foreign as well as Chinese, were confronted with squeeze and corruption were only all too normal. China's Customs' too were rife with squeeze and corruption.¹⁰³

⁹³ For an overview that revels in the complexity of Chinas tax system, focusing on the nineteenth century but also informative for earlier periods, see Hosea Ballou Morse, *The trade and administration of the Chinese empire* (London 1908) chapter four. I used the Elibron Classic edition of 2005, edited in New York.

⁹⁴ For information on this group of literati-landowners see Chung-li Chang, *The Chinese gentry. Their role in nineteenth-century Chinese society* (Seattle and London 1955); Tsung-su Ch'ü, *Local government in China under the Ch'ing* (Cambridge, Mass. 1962) and Benjamin A. Elman, *A cultural history of civil examinations in Late Imperial China* (Berkeley, Los Angeles and London 2000).

⁹⁵ Kent Deng, The Qing state and the Chinese economy. Great Divergence Conference, London School of Economics and Political Science June 26. A *shi* is 133.3 pounds.

⁹⁶ Bastid, 'Structure of financial institutions of the state', page 74.

⁹⁷ Wilhelm Wagner, *Die chinesische Landwirtschaft* (Berlin 1926) page 141. Compare Morse, *Trade and administration of the Chinese Empire*, chapter four.

⁹⁸ Hans van der Ven, 'The onrush of modern globalization in China' in: A.G. Hopkins, ed., *Globalization in world history* (London 2002) 167-193, page 180.

⁹⁹ Man-houng Lin, *China upside down. Currency, society and ideologies, 1808-1856* (Cambridge Mass. and London 2006) page 138.

¹⁰⁰ T'ung-tsu Ch'ü, *Local government under the Ch'ing* (Cambridge Mass. 1962) page 141.

¹⁰¹ Albert Feuerwerker, *State and society in eighteenth-century China. The Ch'ing empire in its glory* (Ann Arbor 1976) pages 90-92.

¹⁰² Rhoads Murphey, *The outsiders. The western experience in India and China* (Ann Arbor 1977) page 115.

¹⁰³ See for examples Chung-li Chang, *Income of the Chinese gentry*, chapter six; Paul A. van Dyke, *The Canton trade. Life and enterprise on the China Coast, 1700-1845* (Hong Kong 2005) under 'corruption', and Huang Guosheng, 'The Chinese maritime customs in transition, 1750-1850' in: Wang Gungwu and Ng Chin-keong, eds., *Maritime China in transition 1750-1850* (Wiesbaden 2004) 169-190.

Few people would want to deny that these things happened in China during the nineteenth century, especially in the second half of it. But the situation was already quite bleak earlier on. Rumour has it that Ho-shen (or He-shen), the imperial bodyguard of the Qianlong emperor, amassed 800 million *taels*.¹⁰⁴ In fact corruption was evident already before his rise to a position of power. Already in the eighteenth century it was not uncommon for the taxes collected to be many times the official quotas and for ordinary peasants to be squeezed by the tax collector and the local gentry.¹⁰⁵ Possibilities for magistrates to cheat and extort were limitless. For 1753 the amount of 'miscellaneous taxes' actually collected was five times as big as the amount reported.¹⁰⁶ Reading Tolbert's book on the Imperial Household Department, one is confronted with complaints indicating that this institution too was rife with corruption already before 1800.¹⁰⁷

People in China at the time were only too aware of malpractices, and one can find countless complaints and, increasingly also protests.¹⁰⁸ This is a comment by Hong Liangji (1746–1809) a scholar and statesman who became known for the critical essay he sent to the Jiaqing emperor (1795-1820):

What is really going on is that the magistrate is taking advantage of the authority vested in him by his superiors to extract money from the people: half of what he collects goes to the higher echelons but he keeps the other half to himself.¹⁰⁹

In the Qing *Veritable Records* for 1806 it reads:

It has been reported that when the tribute grain is collected, the local officials in the provinces collect more than the amount sanctioned by law. They make arrangements to have gentry of bad character act as their agents in coercing payment. They first make enquiries as to who, among the gentry, are habitually fond of meddling. Then they bribe them in advance, granting them the right to contract a certain portion of the tribute grain. The rustics and the poor have a redoubled burden because these persons can levy an excess amount from them just as the please.¹¹⁰

In her article on corruption in eighteenth-century China, Nancy Park writes that observers, foreigners as well as Chinese, at the time believed corruption to be a ubiquitous and serious problem within the Chinese state. These negative images were not just figments of fantasy. She concludes her article with this sentence:

¹⁰⁴ Hsü, *Rise of modern China*, pages 124-125. Compare Mark C. Elliott, *Emperor Qianlong. Son of heaven, man of the world* (New York 2009), 153-157. See for a much lower figure, Te-ch'ang Chang, 'The economic role of the imperial household', pages 267-268. For an extensive description see David S. Nivison, 'Ho-shen and his accusers: ideology and political behaviour in the eighteenth century' in: David S. Nivison and Arthur F. Wright, eds., *Confucianism in action* (Stanford 1959) 209-243.

¹⁰⁵ Hsü, *Rise of modern China*, page 125.

¹⁰⁶ Yeh-chien Wang, *Land taxation in imperial China*, page 71.

¹⁰⁷ Preston M. Torbert, *The Ch'ing Imperial Household Department. A study of its organization and principal functions, 1662-1796* (Cambridge Mass. 1977).

¹⁰⁸ For criticisms by Chinese officials and scholars see e.g. James M. Polachek, *The Inner Opium War* (Cambridge Mass. 1992). Song Yun, an important official with a long and distinguished career, also pointed at the existence of widespread and serious corruption. See Sabine Dabringhaus, *Das Qing-Imperium als Vision und Wirklichkeit. Tibet in Laufbahn und Schriften des Song Yun (1752-1835)* (Stuttgart 1994) page 74. For criticism by Commissioner Lin, who played such an important role in the First Opium War, see Hsin-pao Chang, *Commissioner Lin and the Opium War* (New York 1964) under 'China, official corruption'.

¹⁰⁹ Susan Mann Jones, *Hung Liang-Chi (1746-1809). The perception and articulation of political problems in late eighteenth-century China* (Michigan 1972) page 176. Currently his name is written as Hong Liangji.

¹¹⁰ Mark Elvin, *Another history. Essays on China from a European perspective* (Canberra 1996) 15-16.

Thus the fiscal need for corruption, compounded by the ineffectiveness of the criminal laws to prevent it and the professional benefits of engaging in it, contributed to the omnipresent corruption problem that plagued the eighteenth-century Chinese state and society.¹¹¹

Dissatisfaction was widespread. It erupted into a major social conflict at the end of the eighteenth century with the White Lotus Rebellion. That was only the first of many uprisings.¹¹²

The Chinese state under the Qing increasingly began to present the worst of both worlds to its tax-paying population: high payments and few public goods in return. Via their so-called 'conspicuous charities' officials did give back money to society that was used to provide for public goods, but one need not be a cynic to expect that those charities will have cost less than the extra revenues from which the official paid for them.

Madeleine Zelin succinctly described the predicament of China's officials working in the provinces:

In the end if local officials were to do their jobs, they had only two options. Either they siphoned off funds allocated by the central government for other purposes or earmarked for remittance to the central treasuries, or they squeezed the necessary revenue from the people in the process of collecting taxes. In fact, they did both.¹¹³

To be able to fulfil everything that was expected from him a magistrate had to be a genius: which of course he very rarely was.¹¹⁴ This was all the more problematic as deficits in treasuries or granaries or failures to meet certain quotas often were effectively redefined as moral failures of the officials and their helpers.¹¹⁵ But one should not exaggerate the troubles of China's mandarins: literally millions of people continued to study hard in an almost desperate effort to pass the required exams and in the end get a job as official. As we saw, an increasing number of people paid to get such a job or to just get the promise they might get one sooner or later. In 1800, there were only around 20,000 official posts in the empire, drawing on a talent pool of over 1, 4000,000 upper and lower degree holders.¹¹⁶ After the Taiping Rebellion there were no less than 1.5 million literati with a degree and about three million candidates for the biennial qualifying examinations.¹¹⁷ It is easy to see why: being a government official provided ample opportunities for enrichment. In the beginning of the 1880s, when corruption and self-enrichment by officials in all probability were even more widespread than in the period this text deals with, regular income of officeholders, according to Chung-li Chang, totalled 6,295,000 taels, whereas their extra income was over 120 million taels. On average, gross income of an officeholder amounted to more than 5,000 taels per annum at a time when the total annual income of a labourer was five to ten taels, in addition to the food provided by his employer.¹¹⁸

¹¹¹ Nancy E. Park, 'Corruption in eighteenth-century China', *The Journal of Asian Studies* 56 (1997) 967-1005, page 999.

¹¹² See Susan Mann Jones and Philip A. Kuhn, 'Dynastic decline and the roots of rebellion' in: John K. Fairbank, *The Cambridge History of China. Volume 10, Late Ch'ing, 1800-1911, Part I* (Cambridge 1978) 107-132, and Ho-fung Hung, 'Contentious peasants, paternalist state, and arrested capitalism in China's long eighteenth century' in: Christopher Chase-Dunn and Eugene N. Anderson eds., *The historical evolution of world-systems*. (New York 2005) 155-173.

¹¹³ Zelin, 'The Yung-cheng reign', page 207.

¹¹⁴ Etienne Balazs, *Political theory and administrative reality in traditional China* (London 1965) page 54. See for a more structural/ sociological analysis of what caused 'corruption' and how it worked, Edgar Kiser and Xiaoxi Tong, 'Determinants of the amount and type of corruption in state fiscal bureaucracies. An analysis of Late Imperial China', *Comparative Political Studies* 25 (1992) 300-331.

¹¹⁵ Thornton, *Disciplining the state*, chapter two.

¹¹⁶ William Rowe, *China's last empire. The great Qing* (Cambridge Mass. and London 2009) page 152

¹¹⁷ B.A. Elman, *A cultural history of civil examinations in late imperial China* (Berkeley, Los Angeles and London 2000) page 584.

¹¹⁸ Chung-li Chang, *Income of the Chinese gentry*, chapter one: pages 42 and 12.

Military and social expenditure compared

Expenditure of China's central government too was primarily war-related. One finds differing estimates in the literature but orders of magnitude are fairly clear. Some fifty to seventy per cent of the official budget of central government went to the army. Most experts agree that official and regular military expenditure, during roughly the period 1750 to 1850, amounted to an annual average of between twenty-eight to thirty-two million taels.¹¹⁹ Irregular, extra costs like campaign expenses often were paid from reserves. According to Peter Perdue, the major Qing campaigns between 1747 and 1805, in total, cost about 300 million taels.¹²⁰ On average, we are only talking about some five million taels per year. There, of course, had been campaigns before 1747. The seven-year campaign of the Yung-chen emperor (1723-1735) against the Zunghars, according to a high estimate, cost nearly 130 million taels or eighteen million taels per year.¹²¹ In the first half of the nineteenth century the costs of military campaigns appear to have decreased substantially. The costs of the Qing defence campaigns during the First Opium War till the Treaty of Nanking, in total were thirty million taels.¹²²

The figures presented here imply that, as compared to Britain, China's military expenditure – ordinary *and* extra-ordinary expenditure combined – was quite low. Over the period from the 1740s to the beginning of the nineteenth century that Perdue covers, annual regular costs on average were, if take a high estimate, some thirty-two million taels. If we add some five million taels on average per year for additional campaign costs, total costs would be thirty-seven million taels per year. In terms of domestic purchasing power, that is about the same as thirty-seven million pounds sterling in Britain. That means that that with roughly twenty times as many inhabitants, China, in real terms, per year on average only spent roughly 1.8 times as much on the military as Britain did during the period from the 1760s to the 1820s. *Per capita in real terms* Britain thus spent more than *ten* times as much on its army and navy than China.

China's government did not consider itself to be surrounded by dangerous enemies or competitors, especially not after it had beaten the Zunghars in the 1760s. From then on the professionalism and efficiency of the army increasingly left to be desired. For detailed descriptions and analyses I refer to the literature.¹²³

¹¹⁹ For a 'systematic' analysis see Elliott, *Manchu way*, 308-310. James Lee claims that on average over the eighteenth century annual regular military expenditure amounted to between twenty-eight and thirty million taels. See Lee, *Political economy of a frontier*, Table 1.6. Figures in the same order of magnitude are found in Van der Ven, 'Onrush of modern globalization', pages 179-180. He just like Elliott bases his estimates on Chen Feng, in Chinese, *A study of military expenditures during the Qing dynasty* (Wuhan 1992). For the middle of the nineteenth century we have the calculation by Thomas Wade who claims that the disbursements of the Board of War amounted to 30,874,540 taels. See T.F. Wade, 'The army of the Chinese empire', *The Chinese Repository*, 20, no 5, 6, 7 (1851) pages 250-280, 300-340, 363-422. I found this reference in Ralph L. Powell, *The rise of Chinese military power, 1895-1912* (Princeton 1955) page 19.

¹²⁰ Peter C. Perdue, China's environment, 1500-2000: is there something new under the sun? Paper presented at the conference Toward the twentieth century in Asia: Comparative perspectives on politics, economy and society in China and India. May 19-22-2005, Durham, Duke University, table 1. For somewhat different figures, that, however, are in the same order of magnitude, see Susan Naquin, *Millenarian rebellion in China: the Eight Trigrams Uprising of 1813* (New York 1976) pages 359-61, note 194: Van der Ven, 'Onrush of modern globalization', pages 179-180, and Will, *Bureaucracy and famine*, page 291.

¹²¹ Beatrice S. Bartlett, *Monarchs and ministers: the grand council in mid-Ch'ing China, 1723-1820* (Berkeley 1991) pages 121-122.

¹²² Deng, *Sweet and sour Confucianism*, page 28.

¹²³ There is an enormous amount of literature. I confine my reference to Elliot, *Manchu way*; Pamela Kyle Crossley, *Orphan warriors. Three Manchu generations and the end of the Qing world* (Princeton 1990) and to my view still very helpful, Powell, *Rise of Chinese military power*.

How big China's army actually was, is hard to determine. The numbers given here are only estimates, but they represent the current state of knowledge. In recent publications we find figures of the following order of magnitude for the two parts of which China's army existed. The so-called Banner Armies are supposed to have numbered a good 200,000 soldiers and the Green Standard Army some 600,000 to maybe 700,000.¹²⁴ The actual size of the Banner Armies is very hard to determine as it is unclear how many of those who received stipends or land people as banner men actually can be considered real soldiers. Scholars now agree that many, very probably even the bulk can not.¹²⁵ For the Green Standard troops, these are the paper strength i.e. official allotted numbers:

1662-1722	590,000
1764	630,000
1785	590,000
1812,	660,009
1825	618,000 ¹²⁶

Just before the Taiping Rebellion (1850-1864) the number was 585,000. Here too what really counts in case of a conflict is the actual strength of an army. There is consensus in all literature that this was much lower. There was no navy to speak of, not even at the eve of the First Opium War.

Britain's central government not only spent far more than China's on war-related affairs, it also did on 'social policies', notwithstanding the fact that Wong time and again claims that China in this respect would show "... commitments to material welfare beyond anything imaginable, let alone achieved, in Europe ..."¹²⁷ That China's rulers wanted their subjects to live in security and wealth and therefore kept taxes low, gave tax rebates and tax holidays, helped the population in times of penury, transferred tax money from rich to poor provinces and put pressure on rich subjects to give to the poor, is undeniable; what this in the end all boiled down to is impossible to measure. The figures presented on page 10 provide us with the opportunity to at least compare *official* and *regular* expenditures of China's government on poor relief with those of its British counterpart. According to Peter Lindert, the grain relief from China's famous granaries – the cornerstones of imperial social policy - that was provided to the population during the eighteenth century, in terms of money never amounted to as much as half a percent of China's GDP.¹²⁸ At the end of the eighteenth century, the storage system began to function less well and distribution, just like other kinds of poor relief by government decreased. When we look at *structural, institutionalised* arrangements, Britain's government apparently spent *more* on welfare than China's.

Looking at the available information with regard to revenue and expenditure of China's central government one can again only wonder what empirical basis Roy Bin Wong's has for his claim that: "The Chinese state developed an infrastructural capacity to mobilise and disburse revenues quite beyond the imagination, let alone the abilities, of European state makers at the moment."¹²⁹

¹²⁴ For figures in these orders of magnitude, see Man-houng Lin, *China upside down*, page 130; F.W. Mote, *Imperial China 900-1800* (Cambridge Mass. and London 1999) page 860-861, in particular note 13; Hsü, *Rise of modern China*, page 62; Van der Ven, 'Onrush of modern globalization', page 179; Alexander Woodside, 'The Ch'ien-lung reign' in: Peterson, *Cambridge History of China. Volume 9. Part One*, 230-309, pages 268-269.

¹²⁵ See Elliott, *Manchu way* and Kyle Crossley, *Orphan warriors*.

¹²⁶ Powell, *Rise of Chinese military power*, 11-13. The information originally comes from Wade, 'The army of the Chinese empire'. The figures are rounded off.

¹²⁷ See for the quote Wong, *China transformed*, pages 98-99.

¹²⁸ For his precise estimates for 1735 and the period 1735-1780, see Peter H. Lindert, 'De bonnes idées en quête de nombres. Response à Gilles Postel-Vinay et R. Bin Wong', *Annales. Histoire, Sciences Sociales* 62, 6 (2007) 1417-1423, pages 422-423. Lindert bases his estimates for China on data provided by Wong and Will.

¹²⁹ Wong, *China transformed*, page 132.

Never, except at the very end of period discussed here, did China's central government spend more than it collected in revenue. It never borrowed any money and therefore never had to think about methods how to deal with debts. The Kangxi (1662-1722) and Yongzheng (1722-1735) emperors even had the habit of providing loans to merchants. This practice stopped during the rule of the Qianlong emperor (1735-1796).¹³⁰ Even at the end of the rule of the Daoguang emperor (1826-1850), central treasuries were not empty. As a rule expenditures were simply adapted to income and in case of problems one resorted to ad-hoc solutions. There was absolutely nothing that resembled Britain's financial revolution. No new institutions were created to facilitate bargaining between elites and government over matters of public finance. Checks and balances like those in Britain did not emerge nor did the system become more transparent. With only one very short-lived exception central government never printed any paper money. It coined no currency. There was no national bank. Neither were there chartered companies, the predecessors of the modern firm.

Mercantilism and agrarian paternalism

Some comments on the justification given for differing policies are in order. In Britain the underlying philosophy of fiscal policies clearly was - and till the 1840s continued to be - mercantilist. The policies of central government were geared to turning Britain into a strong state. Mercantilism was a form of economic nationalism keen on increasing national production and exports to thereby increase the amount of income that government might tax. It was more than a simple-minded obsession with bullion, and although it contained no concrete ideas how to generate *general* economic growth as it tended to think in terms of zero-sum games, it did contain practicable prescriptions how to make a *specific* economy grow. It implied permanent efforts to strengthen the state apparatus and change society in the interest of the state. The production and export of goods with a high added value or increasing returns was supported in order to create a positive balance of trade.¹³¹ Trade wars and real wars were considered simple facts of life. 'Power' and 'plenty' were inseparably connected.¹³² Everyone of any importance in Britain was convinced that the state should defend, support and promote trade, if need be with help of army and navy. It need not surprise that mercantilist interstate competition became a global phenomenon as several European states began to build overseas empires. This creation of overseas peripheries has been so extensively described and analysed in general and for the specific case of Britain, that it will not be discussed separately here.¹³³

¹³⁰ See e.g. Wenkai He, *Paths toward the modern fiscal state*, chapter six.

¹³¹ For a brief introduction see Elise S. Brezis, 'Mercantilism' in Joel Mokyr, ed., *The Oxford Encyclopaedia of Economic History Volume 3* (Oxford 2003) 482-485. For a multi-volume one, see Lars Magnusson, *Mercantilism. Critical concepts in the history of economics* (London 1996). For mercantilism and state finances see Richard Bonney, 'Early modern theories of state finance' in: idem, ed., *Economic systems and state finance*, 163-230. For an analysis in which the author focuses on mercantilism as an often successful policy of promoting growth and development see Erik S. Reinert, *How rich countries got rich ... and why poor countries stay poor* (New York 2007). For an interpretation of mercantilism as primarily a form of rent-seeking see Robert P. Ekelund and Robert D. Tollison in *Mercantilism as a rent-seeking society; economic regulation in historical perspective* (College Station Texas 1981) and *Politicized economics: monarchy, monopoly and mercantilism* (College Station Texas 1997).

¹³² Fortunately modern authors have begun to realise that this is true for all economic history. See e.g. Ronald Findlay and Kevin O'Rourke, *Power and plenty. Trade, war, and the world economy in the second millennium* (Princeton/ Oxford 2007).

¹³³ For an analysis of European empire-building see David B. Abernethy, *The dynamics of global dominance. European overseas empires 1415-1980* (New Haven and London 2000). For the case of Britain, I refer to the five volumes of *The Oxford History of the British Empire*.

If one looks for the reasons for the behaviour of European rulers, including those of Britain, one cannot fail to refer to the extreme competitiveness and bellicosity of the European state-system. That is not exactly original and seems fairly obvious, although *as such* state-systems need not be so competitive and violent.¹³⁴ Nor is it obvious – to already refer to the Chinese case after the 1760s – that a huge country without serious enemies would therefore have to be non-expansionist and fairly peaceful. Its rulers might just as well decide to try and conquer the land of all its weak neighbours. In brief: governments may also have other than simple strategic or geo-political reasons for the choices they make in foreign politics.

The reason for the rulers of Qing China to behave the way they did in financial matters was quite plain. Almost without exception they departed from the principle that government should be cheap. The Kangxi emperor, to just give an example, is supposed to have remitted 100 million *taels* during the first forty-nine years of his reign and decreed an empire-wide amnesty that excused each province in turn from remitting its annual land tax once in a three-year cycle.¹³⁵ Famous and very consequential is his promise in 1713 that the head and poll taxes would be permanently based on the quotas of 1712.¹³⁶ The Qianlong emperor was keen on showing how ‘frugal’ and ‘benevolent’ he was.¹³⁷ Fiscal history of the Qing knows quite a number of ‘tax holidays’, ‘tax exemptions’ and government grants.¹³⁸ Lilian Li refers to a “generous” estimate that in the period from the last decades of the seventeenth century through the Daoguang period, (1820-1850), the total amount of tax remissions may have amounted to 150 to 200 million *taels*, and that of famine relief to 446 million *taels*.¹³⁹ Emperors and officials almost without exception agreed that taxes should be kept to a minimum and that expenditure should simply be determined on the basis of income.¹⁴⁰ Claims that taxes were too low were quite exceptional.¹⁴¹

The philosophy behind the policies of China’s rulers at the time can be best described as ‘agrarian paternalist’.¹⁴² Law and order and the military obviously were important. But

¹³⁴ See Michael Mann’s comments in his ‘Putting the Weberian state in its social, geopolitical and militaristic context: a response to Patrick O’Brien’, *Journal of Historical Sociology* 19, 4 (2006) 365-373.

¹³⁵ Thornton, *Disciplining the state*, page 31.

¹³⁶ Hsü, *Rise of modern China*, page 60.

¹³⁷ William T. Rowe, *Saving the world. Chen Hongmou and elite-consciousness in eighteenth-century China* (Stanford 2001) pages 333 and 342. For examples of the Qianlong emperor’s benevolence and frugality, see Zelin, *Magistrate’s tael*, 262-263, and Helen Dunstan, *State or merchant. Political economy and political process in 1740s China* (Cambridge Mass. and London 2006) 444-452.

¹³⁸ Dunstan, *State or merchant*, under ‘land tax, universal remissions of’. Will, in his *Bureaucracy and famine*, page 292, refers to exemptions from the land tax granted in 1710, 1745, 1777, 1790 and 1795 for a total of more than twenty-eight million *taels*. For exemptions and disaster relief, see Myers and Wang, ‘Economic developments, 1644-1800’ page 603, and Deng, Sweet and sour Confucianism, *passim*. For grants see e.g. Rawski, ‘Qing formation and the early-modern period’, page 221, and Te-ch’ang Chang, ‘The economic role of the imperial household’, page 272.

¹³⁹ Lilian Li, *Fighting famine in North China. State, market and environmental decline, 1690s-1990s* (Stanford 2007) page 448.

¹⁴⁰ See for some quite explicit quotes Rowe, *Saving the world*, pages 191, 260 and 332; Helen Dunstan, *Conflicting counsels to confuse the age. A documentary study of political economy in Qing China, 1644-1840* (Ann Arbor 1996) pages 151 and 189, and *idem*, *State or merchant*, page 445.

¹⁴¹ See e.g. Dunstan, *Conflicting counsel*, pages 155 and 188-191. For further information see Yang Lien-sheng, ‘Economic justification for spending. An uncommon idea in traditional China’, *Harvard Journal of Asiatic Studies* 20 (1957) 36-52.

¹⁴² For ‘agrarian paternalist’ interpretations of the role of the Qing state in economic life, I refer to, in chronological order: Susan Mann, *Local merchants and the Chinese bureaucracy, 1750-1950* (Stanford 1987); Will and Wong, *Nourish the people*; Jane K. Leonard and John R. Watt, eds., *To achieve security and wealth. The Qing imperial state and the economy, 1644-1911* (Ithaca, New York 1992); Gang Deng, *The premodern Chinese economy. Structural equilibrium and capitalist sterility* (London and New York 1999); Pierre-Étienne Will, ‘Chine moderne et sinologie’, and ‘Développement quantitatif et développement qualitatif en Chine à la fin de l’époque impériale’, *Annales. Histoire, Sciences Sociales* 49 (1994) 7-26 and 863-902; Dunstan, *Conflicting counsels*; Wong, *China transformed*; *idem*, ‘The political economy of agrarian empires and its modern legacies’ in: Brook and Blue, *China*

government was not engaged in an arms race. It did not bother about building a strong navy. Up until the 1810s, the country imported more bullion than it exported and government saw no reason to worry about exports as its European counterparts did. Agriculture was seen as the fundament of economy *and* society. Rulers considered it their duty to care for 'people's livelihood', i.e. to provide for the security and wealth of their subjects. They had to be restrained and interpret the state's mandate as one of managing and stabilising wealth rather than controlling and extracting it. They were supposed to tax lightly and to not interfere at the local level. 'Controlling from afar' by means of lean government was the motto.¹⁴³ The idea that Qing rule in China, at least at the central level, would be a kind of oriental despotism is no longer widely supported.¹⁴⁴

The Qing rulers had no intention to fundamentally change the economy and make it more competitive. By and large, they regarded it as their task to leave well alone as long as the existing order was not threatened.¹⁴⁵ Mobilising the masses on behalf of state and nation was not on their agenda. Scholars like Wong and Thornton rightly emphasise the moral foundations and logic of China's system of rule.¹⁴⁶ Thornton even describes the state as "*the* moral agent ... in modern Chinese history" whose normative agenda's were just as important as military goals in the country's state-making.¹⁴⁷ Those agenda's definitely were not mercantilist. In several respects they were more *laissez-faire* than those of their Western counterparts.¹⁴⁸ The objective, however, was "less one of *letting* the market accomplish its task than of *making* it do so."¹⁴⁹ When traders were supposed to endanger the existing moral and political order, government intervened. For foreign trade this meant that it could be confined to specific places: for overseas trade with Westerners increasingly almost exclusively Canton. It could also mean that government put a limit to certain exports or taxed silver imports. China's rulers did not encourage Chinese merchants to go abroad and did not come to their rescue in case they got in trouble there. China's empire-building, except in the case of Taiwan, was overland and primarily security-driven not as in Western Europe overseas and profit-driven. The Chinese state was more likely to invest in its 'peripheries' than to extract resources from them.¹⁵⁰ It did not want to invest much money in imperialist activities, and was very ambivalent when it came to policies that might provoke aggressive reactions. No Chinese emperor would even consider creating chartered companies and delegate sovereignty to merchants. The potential yield of various regions was anything but obvious. But whatever the exact reason, the regions that the Qing absorbed into their empire were not (turned into) cash cows.

In the case of Tibet, the tiny cost for the Qing of controlling the region were borne by the region itself, but nothing was taken out of it, nor were there any initiatives to exploit it.¹⁵¹ Xinjiang never became self-sufficient and never became truly integrated with the interior by private

and historical capitalis, 210-245, and idem: 'The search for European differences and domination in the early modern world: a view from Asia', *The American Historical Review* 107 (2002) 447-469. Finally, I want to refer to Robert J. Antony and Jane Kate Leonard, eds., *Dragons, tigers, and dogs. Qing crisis management and the boundaries of state power in late imperial China* (Ithaca, New York 2001) and Dunstan, *State and merchant*.

¹⁴³ Leonard, *Controlling from afar*, chapter two.

¹⁴⁴ See under note 12.

¹⁴⁵ See C.K. Yang, 'Some characteristics of Chinese bureaucratic behaviour' in: Nivison and Wright, *Confucianism in action*, 134-164.

¹⁴⁶ For Wong's ideas, see Wong, *China transformed*, Part Two. For Thornton see the next note.

¹⁴⁷ Thornton, *Disciplining the state*, 'Introduction'. See page 2 for the quote.

¹⁴⁸ See for China's version and some may even say invention of *laissez-faire*, Christian Gerlach, Wu-wei in Europe. A study of Eurasian economic thought, London School of Economics, Department of Economic History. Working Paper no 12/05, 2005.

¹⁴⁹ See for this quote Rowe, *Chen Hongmou*, page 162.

¹⁵⁰ Wong, *China transformed*, page 148.

¹⁵¹ Dabringhaus, *Das Qing-Imperium als Vision und Wirklichkeit*, page 212.

trade.¹⁵² Overall, costs of occupying it were higher than yields. In the nineteenth century, the drain only got bigger. For regions like Mongolia and current Qinghai I never saw any indication that the situation would have been fundamentally different. Frontier regions like Guizhou and Yunnan attracted many Han Chinese. There were frequent conflicts between settlers and the original population but they were never systematically turned into a ‘Wallersteinian’ periphery.¹⁵³ The same goes for Taiwan, where government policies went back and forth between restraint and exploitation.¹⁵⁴ Manchuria cost the government money.¹⁵⁵ For most of the period permanent settlement was not allowed there. The region, twice as big as France, very fertile and rich in resources, continued to be almost empty. It was an enormous *un-exploited* ecological windfall.¹⁵⁶

There were reasons for the policies of China’s rulers. The fact that they collected far less taxes than Britain’s rulers to some extent was a *choice*. Taxing the population lightly was regarded as a sign of benevolent rule and one needed far less money to engage in wars than Britain’s rulers. It may, however, to a large extent also have been *inevitable*. The ruling Manchus were a tiny foreign elite of a couple of million people in a huge country that over the nineteenth century on average had far over 350 million inhabitants. They in particular had to be careful not to upset China’s peasants. Low taxation fitted into that strategy, although the Qing never became so peasant-friendly that they supported peasants who refused to pay rents to their landlords. They knew that landowners were the ones who paid the taxes and could only do so when peasants paid their rents.¹⁵⁷ That their administration was less efficient and more ‘corrupt’ than that of Britain in matters of public finance, to a large extent resulted almost directly from the ‘decision’ to govern as cheaply and with as few officials as possible. The fact that they feared that expanding the formal system of administration might weaken the power of the state by increasing opportunities for clerical self-engrossment and subversion of central policies also played its part.¹⁵⁸ Officials in function often wanted to stay ‘scarce’ and for that reason they too tended to oppose enlarging their number.¹⁵⁹

Most inefficiencies and malpractices in all probability were almost unavoidable, considering the huge size of Qing China, its large population and the state of technology at the time. To rule Qing China as a modern, bureaucratic and centralised state was beyond the logistic capacities, not just

¹⁵² Perdue, *China marches West*, page 397. See further e.g. Joseph Fletcher, ‘Ch’ing Inner Asia c.1800’ in: John K. Fairbank, ed., *The Cambridge History of China. Volume 10. Late Ch’ing, 1800-1911. Part One* (Cambridge 1978) 35-106, page 61; James A. Millward, *Beyond the pass. Economy, ethnicity and empire in Qing Central Asia, 1759-1864* (Stanford 1998) 58-61, and idem, *Eurasian crossroads. A history of Xinjiang* (London 2007) 102-105.

¹⁵³ See e.g. John E. Herman, *Amid the clouds and mist. China’s colonization of Guizhou, 1200-1700* (Cambridge Mass. and London 2007); Robert D. Jenks, *Insurgency and social disorder in Guizhou. The “Miao” Rebellion, 1854-1873* (Honolulu 1994) and C. Patterson Giersch, *Asian Borderlands. The transformation of Qing China’s Yunnan frontier* (Cambridge 2006).

¹⁵⁴ See J.R. Shepherd, *Statecraft and political economy on the Taiwan frontier, 1600-1800* (Stanford 1993) for the period till 1800, and Sucheta Mazumdar, *Sugar and society in China. Peasants, technology and the world market* (Cambridge Mass. and London 1998) chapter seven, for the different ways in which the Chinese and the Japanese behaved as colonial rulers on the island.

¹⁵⁵ See e.g. Christopher Mills Isett, *State, peasant, and merchant in Qing Manchuria, 1644-1862* (Stanford 2007) chapter one, and James Reardon-Anderson, *Reluctant pioneers. China’s expansion Northward, 1644-1937* (Stanford 2005) 58-59 and 72.

¹⁵⁶ Yong Xue, A “fertiliser revolution”? A critical response to Pomeranz’s theory of “geographic luck”, *Modern China* 33 (2007) 195-229, passim.

¹⁵⁷ See for this thesis Kathryn Bernhardt, *Rents, taxes, and peasant resistance. The Lower Yangzi region, 1840—1950* (Stanford 1992) chapter 1, in particular 27-30.

¹⁵⁸ See e.g. Thornton, *Disciplining the state*, page 49.

¹⁵⁹ See for some further explanation, in alphabetical order: Folsom, *Friends, guests and colleagues*, pages 31 and 32; Philip A. Kuhn, *Origins of the modern Chinese state* (Stanford 2002) 23-24; Alexander Woodside, *Lost modernities. China, Vietnam Korea, and the hazards of world history* (Cambridge Mass. and London 2006) 51-52, and Yang, ‘Some characteristics of Chinese bureaucratic behaviour’.

of China, but of *any* pre-industrial society. To be able to ‘control from afar’ in all probability was the best the Qing could hope for. In that respect they were not very different from most rulers in the - much smaller - states of Western Europe before the French Revolution. Britain in many respects was an exceptional state, also in Europe.

Consequences

What can all this have meant for economic development and growth? Qing China’s state even during its heydays under the Kangxi, Yung-chen and Qianlong emperors was too weak to directly and systematically influence what happened on the ground level of the empire. Even then, it had to - and in various respects *chose* to - rely on an enormous amount of indirect rule and non-bureaucratic, non-professional support. The system functioned quite well for quite some time. The Qing Empire was a successful and expanding polity that, according to the standards of the time, enabled its subjects to lead a decent life.¹⁶⁰ It also represented a certain moral order and apparently did so to the satisfaction of its subjects, again for quite some time.

From the final decades of the eighteenth century onwards, however, things began to change. Traditional government and its ways of handling affairs became less effective and it looked like ‘the mandate from heaven’ was slipping away. Corruption was on the increase. The granary system began to function less efficiently. Certain regions became over-populated what caused ecological problems. The country’s infrastructure deteriorated. There was increasing unrest and from the second decade of the nineteenth century silver began to flow out of the country. Most of the problems clearly already began *before* the First Opium War. That is *before* Western powers could directly interfere in China’s domestic affairs.¹⁶¹ That war showed how completely unprepared the Chinese state was for a confrontation it should have seen coming for decades. Its army was under-funded, badly equipped, trained and organised and not exactly motivated. There was still no navy to speak of.

A state like that of Qing China, lying like a tin veneer over society, is not well-equipped to quickly mobilise society and its resources. In Britain the state was sufficiently embedded to have, in Michael Mann’s terms, a surprisingly large amount of ‘infrastructural power’. Mann contrasts this ‘infrastructural power’ with ‘despotic power’. He defines ‘infrastructural’ power as the capacity of rulers to actually penetrate civil society and to implement political decisions logistically throughout the realm. Despotic power concerns the range of actions which rulers can undertake without resorting to routine, institutionalised negotiation with civil society groups. It basically concerns the extent to which rulers can do as they please with their subjects. In that respect of course China’s state was stronger than that of Britain: as a rule a state with strong despotic power is infrastructurally weak and vice versa.¹⁶²

In Britain, the elites were permanently - and via institutionalised channels - bargaining with government over public finance. They had become used to investing enormous amounts of

¹⁶⁰ For the thesis of the California School that the richest parts of Western Europe would not have been wealthier and more developed than the richest parts of Asia see my ‘How to study the great divergence?’ and Bishnupriya Gupta and Debin Ma, ‘Europe in an Asian Mirror: The Great Divergence’ in: Stephen Broadberry and Kevin O’Rourke eds., *The Cambridge Economic History of Modern Europe Volume I, 1700-1870* (Cambridge 2010) 264-285.

¹⁶¹ I fully endorse the view by William Rowe: “... it is undeniable that systemic failures within the Qing empire itself became manifest around the turn of the nineteenth century ... which made the nineteenth-century divergence not merely a matter of being left behind by Europe in relative terms but also of an intrinsic and absolute loss of capacity.” See Rowe, *China’s last empire*, 149-150.

¹⁶² Michael Mann, ‘The autonomous power of the state: its origins, mechanisms and results’ in: Hall, *States in history*, 109-136. The definition is on page 113; idem, *Sources of social power*. Volumes I and II, *passim*.

money in a state in which they had a clear stake. Permanent warfare was quite effective in involving large parts of the population in state- and nation-building and creating feelings of patriotism, or, as some would claim, nationalism.¹⁶³ In Qing China, taxes to a very large extent were fixed. There was no institutionalised bargaining between rulers and subjects and subjects did not have any stake in the state. Fighting against foreign enemies was quite sporadic and never involved a substantial part of the population. Up until the second half of the nineteenth century it was not about the survival of the nation. There was no policy of state- or nation-building in which local elites might get involved. A sense of national identity or purpose therefore was lacking. Leaders could not unite the country behind them. There often was mistrust between Manchus and Han.¹⁶⁴ Provincial autonomy, moreover, was quite substantial. 'Barbarian affairs' resorted under the provincial governments. There are several examples of conflicts in which central government was involved but that parts of the country simply regarded as not their business.

A strong sense of national identity and the existence of nation-wide representative institutions are also of immense economic importance. The big upheavals caused by economic modernisation and international competition can be weathered much better by people who feel they are unified in a nation than by a polity whose population lacks a clear sense of cohesion, identity and purpose.¹⁶⁵ In Britain apparently that sense had developed. Its system of government in the end was 'accepted' by a sufficiently large part of the population, even if sometimes only as necessary evil. Its elites were locally embedded as well as integrated in or at least connected to central government. In China, the Qing government lacked institutions and mechanisms to influence its subjects, just like subjects lacked ways of influencing government apart from protest and rebellion. In Britain a strong state and a strong nation had emerged, almost as a kind of unintended side-product of the long process of building a strong fiscal-military state. In China nothing of the kind happened. One might extensively discuss whether, *as such*, Britain's system of rule at the time should be preferred to that of China. What is clear, though, is that in case of a confrontation, China, militarily and economically, would be no match for Britain and that modernization would be even more problematic and painful for China than for Britain.

China's government continued to be lean: it did not grow in terms of resources, personnel or spheres of engagement whereas territory, population and challenges did. If we only confine ourselves to monetary and financial matters it is quite clear that the efficiency and effectiveness of central government when it came to dealing with emergencies and implementing changes in those realms were seriously impeded by absence of all sorts of institutions that existed in Britain.¹⁶⁶ When government needed more money at fairly quick notice the existing system of collecting the bulk of taxes on land proved inflexible and inefficient. The newly introduced tax

¹⁶³ See Linda Colley, *Britons. Forging the nation, 1707-1837* (New Haven and London 1992) and Liah Greenfeld, *Nationalism. Five roads to modernity* (Cambridge Mass. and London 1992).

¹⁶⁴ See for such claims e.g. Jeremy Black, *War and the world. Military power and the fate of continents 1450-2000* (New Haven and London 1998) page 181; Folsom, *Friends, guests and colleagues*, page 61, and Kyle Crossley, *Orphan warriors*, 54-55.

¹⁶⁵ For a recent analysis of the connection between modernisation, nationalism and industrialisation, see Liah Greenfeld, *The spirit of nationalism. Nationalism and economic growth* (Cambridge Mass. and London 2000).

¹⁶⁶ See for the government's monetary and financial problems and its frequent inability to deal with them effectively in chronological order; C. John Stanley, *Late Ch'ing finance: Hu Kuang-Yung as an innovator* (Cambridge Mass. 1961); Frank H.H. King, *Money and monetary policy in China, 1845-1895* (Cambridge Mass. 1965); Yeh-chien Wang, 'Evolution of the Chinese monetary system, 1644-1850' in: Chi-ming Hou and Tzong-shian Yu, eds., *Modern Chinese economic history* (Taipei 1979) 425-452; Zelin, *Magistrate's tael*; Peng Xinwei, *A monetary history of China*. (Bellingham Washington 1994); Harriet Zurndorfer, 'Imperialism, globalization and public finance: the case of late Qing China'. Paper for the Leverhulme Trust sponsored Global Economic History Network Workshop 'Imperialism and economic change, ca. 1750-1950', Irvine California 15-17 January 2004; Man-houng Lin, *China upside down*; Wenkai He, *Paths toward the modern fiscal state*; Hirzel and Kim, *Metals, monies, and markets in early modern societies*.

on trade in the end, from the perspective of central government proved too little too late. In the first half of the nineteenth century China's state became weaker and no longer was up to even its fairly small traditional tasks. Finding money to modernize society in the sense of e.g. creating a better infrastructure with roads, railways, ports and funding extensive education not surprisingly proved too much of a challenge.¹⁶⁷ The drain of silver that began in the 1810s need not have caused the major problems it did, if the country would have had a more sophisticated monetary and financial system. The public debts that China incurred from the Opium Wars onwards and that were tiny as compared those of Britain need not have had major consequences if mechanisms to tap internal wealth and trust between rulers and ruled had existed. Britain's service sector was so highly developed that it could compensate the almost permanent deficit on its commodity trade balance. China had developed nothing of the sort. Good financial institutions - public and private - promote growth and development. In this respect the differences between Britain and China during the very long eighteenth century were major: to the clear disadvantage of China.¹⁶⁸

¹⁶⁷ Dwight H. Perkins, 'Government as an obstacle to industrialisation: the case of nineteenth-century China', *Journal of Economic History* 27 (1967) 478-492.

¹⁶⁸ Peter L. Rousseau and Richard Scylla, 'Financial systems, economic growth and globalisation' in: Michael Bordo, Alan Taylor, and Jeffrey Williamson, eds., *Globalization in historical perspective* (Chicago and London 2003) 373-416.

Tabelle 1: Staatseinnahmen, Staatsausgaben und Bevölkerung Großbritanniens 1700-1849

Jahrzehnt	Staatseinnahmen in Millionen Pfund Sterling*	Netto-Staatsausgaben in Millionen Pfund Sterling*	Bevölkerungszahlen Großbritanniens in Millionen**	Bevölkerungszahlen Großbritanniens und Irlands in Millionen
1700–1709	5,1	6,1	5,3	
1710–1719	5,7	7,7	5,4	
1720–1729	6,1	5,9	5,6	
1730–1739	5,8	5,4	5,5	
1740–1749	6,6	9,5	5,8	
1750–1759	7,4	8,9	6,1	
1760–1769	10,1	13,8	6,4	
1770–1779	11,1	12,8	7,0	
1780–1789	14,6	21,6	7,4	
1790–1799	21,0	33,4	8,2	
1802–1809	50,3	60,6	11,5	17,0
1810–1819	70,2	81,3	13,0	19,5
1820–1829	58,2	51,8	15,0	22,5
1830–1839	51,6	49,7	17,0	25,4
1840–1849	55,1	51,0	19,0	27,0

*Großbritannien 1700–1800, Vereinigtes Königreich 1802–1850; ** Bis 1800 nur England und Wales.
Alle Zahlen im Zehnjahresdurchschnitt. Ausschließlich Angaben zur Ebene der Zentralregierung.

Abbildung 1: Verteilung der Steuern in Großbritannien nach verschiedenen Einnahmen in Prozent (1696–1875)

