

Special issue on war, taxes and finance in the long eighteenth century

Introduction: maximising revenues, minimising political costs – challenges in the history of public finance of the early modern period

MARJOLEIN 'T HART,* PEPIJN BRANDON** and
RAFAEL TORRES SÁNCHEZ***

**Huygens Institute for the History of the Netherlands and Vrije Universiteit Amsterdam*

***International Institute of Social History and Vrije Universiteit Amsterdam*

****Universidad de Navarra*

Taxation is accepted as a fact of modern life, despite recurring political conflict over the nature and direction of fiscal policies. Most financiers regard obligations issued by the state as a safe investment option. Neither taxation nor state obligations were taken for granted during much of the history of public finance, however, at least not before the early 1800s. The 'tax state' developed in fits and starts, driven by the exigencies of warfare, which provided the main rationale for raising state income. Although wartime fiscal innovations eventually facilitated the rise of an efficient military state, the options available for implementing such improvements and preferences for specific fiscal or financial instruments varied greatly across early modern states. Focusing on the 'long' eighteenth century, this introduction presents a framework for assessing these differences and introduces the other articles in this special issue.

Keywords: state finances, warfare, taxation, public debt, history

JEL classification: G18, H10, H21, H50, H63, N20, N40

M. 't Hart (corresponding author), Huygens Instituut voor Nederlandse Geschiedenis, Oudezijds Achterburgwal 185, 1012 DK Amsterdam, The Netherlands; email: m.c.t.hart@vu.nl; marjolein.thart@huygens.knaw.nl; web pages: www.huygens.knaw.nl/t-hart-marjolein/ and <https://research.vu.nl/en/persons/marjolein-t-hart>. R. Torres Sánchez, Departamento de Economía, Facultad de Ciencias Económicas y Empresariales, Universidad de Navarra, Spain. P. Brandon, International Institute of Social History, Amsterdam, and Department of History, Vrije Universiteit Amsterdam, The Netherlands. Several of the articles collected in this special issue were first presented at the international workshop 'The Economic Impact of War 1648–1815', which took place at the Netherlands Institute for Advanced Study on 4–5 December 2014, and was co-funded by NIAS and Huygens-ING Amsterdam. Further discussion took place at a session with the same title at the XVIIth World Economic History Congress in Kyoto, 3–7 August 2015. Editorial work on the special issue and the work on the introduction were executed with the help of a grant from the Spanish government, ref. HAR 2015–64165–C2–1–P, and an NWO Veni grant, no. 275–53–015. The latter grant also permitted the writing of Brandon's article.

Should foreigners, staring at English taxation,
 Ask why we still reckon ourselves a free nation,
 We'll tell them we pay for the light of the sun;
 For a horse with a saddle, to trot or to run; ...
 How great in financing our statesmen have been,
 From our ribbons, our shoes, and our hats may be seen ...
 One would think there's no room one impost to put,
 From the crown of the head to the sole of the foot;
 Like Job, thus John Bull his condition deplores,
 Very patient, indeed, and all covered with sores.
 (Anonymous *c.* 1784, quoted by Dowell 1888, p. 188)

This anonymous poem introduces one of the major challenges in the history of public finance: how to tackle increasing expenditure, especially the expenses caused by war, whilst ensuring that the population remains 'patient', like the 'very patient John Bull' of the last lines. The poem dates from the aftermath of the War of American Independence, which saddled the British with one of the highest tax burdens per capita in the world. The author could not have envisaged that yet more burdensome taxes would be added in the next decade, including the novelty of an income tax, caused by the exhausting and extremely expensive French and Napoleonic Wars (O'Brien 1988). The history of early modern public finance is an ongoing story of state rulers trying to maximise revenues whilst minimising the political costs, to paraphrase the political scientist Richard Rose (1985; cf. Irigoien and Grafe 2013). How state rulers tried to achieve that precarious balance was and continues to be a fascinating story, one that is recapped in this special issue, in which the challenge is viewed from different angles. In addition to taxation, the solutions for maintaining that balance included forming coalitions with other states, manipulating currencies, extracting even more revenues out of state enterprises or domains, developing a stable system of state credit, exploiting networks of financiers, economic warfare, the sale of offices, or engaging in severe austerity measures – to mention just the most common solutions. By the end of the eighteenth century, however, the most durable and flexible systems of public finance combined a variety of domestic taxes with domestic credit that was relatively easy to obtain, firmly grounded in a given territory; a combination that eventually facilitated the rise of nation states.

The consolidation of state finances occurred in fits and starts, and included a learning process whereby states copied other states. In the 1780s, the French minister of finance, Jacques Necker, wrote:

No nation has established at a single moment all the taxes and levies with which it is presently burdened. The contributions necessary for each state have been established in stages. Such stages are not equal, because expenses have increased as a result of wars and other extraordinary calamities. (Quoted in Bonney 1999, p. 2)

This special issue focuses on the 'long' eighteenth century that stretched from the final decade of the seventeenth century to the early years of the nineteenth century; an era

characterised by the crystallisation of various public finance instruments that would last into the twentieth century and help to shape the different models of the modern state. The individual contributions show how this period was one that featured an intensification of existing financial networks and new short-term credit instruments that eased transnational war transactions; how currency manipulation without safeguarding the stability of coin circulation led to high political costs; how severe austerity measures without proper innovations in public finance weakened the overall establishment; and how the escalating war expenses of the long eighteenth century sparked increasing debate about the relationship between war expenses and economic growth, accompanied by the rise of mercantilist state policies. In this introduction, a longer timeframe is employed in order to view these strategies in a wider context; it seeks to establish the conditions under which taxpayers came to tolerate increasing levels of taxation, and why creditors believed the state's commitment to paying the interest charges on public loans to be credible. Taxation brings about political disputes, whereas a developed system of public debt requires not only a specific institutional framework, but also decades of tried and compliant behaviour by state authorities. All in all, state rulers needed to fulfil two basic and often contradictory functions: stimulating the accumulation of capital within the state whilst maintaining the conditions for social peace (O'Connor 1973, p. 6).

The article starts by addressing the challenge posed by war finance and the resulting transition towards the tax state in its various forms. In doing so, the analysis draws upon recent quantitative studies. The second section addresses eighteenth-century innovations within government, especially centralisation and increased direct control, which resulted in new types of interaction between state, elites and taxpaying communities. The third part considers the innovative schemes that followed the Financial Revolution, enabling the rise of secure long-term debt, and discusses the role of parliaments and secondary financial markets. The final section introduces the articles in this special issue and summarises the major conditions underlying the rise of the modern tax state.

I

Taxation always involves conflict, since tax structures are part of what economists call 'property rights'. These structures also entail distributive effects, giving preference to one group over another (Alt 1983, p. 183). Historically, politicians have tended to be risk-averse and have preferred to avoid the contention and turmoil associated with new or higher taxes (Rose 1985). As a result, they have tried to maintain the status quo; yet the history of state formation shows that state rulers could not avoid the levying and restructuring of taxes.

The maxim that the king should 'live of his own' – that he should finance the state with the revenues from his own domains – dominated the political discourse in medieval Europe. The king could only levy taxes on a temporary basis, usually during wars. Historians and social scientists have described the transition from this situation to one in which tax revenues became 'ordinary' as the evolution from the 'domain state' to

the 'tax state' (Schumpeter 1918; Krüger 1987). The historians Bonney and Ormrod developed a broader conception of this process, starting with the *tributary state*, mainly financed by payments from dominated, foreign or external subjects; the *domain state*, based on the personal property and perquisites of the ruler; the *tax state*, with regular taxation on the inhabitants' properties; and finally the *fiscal state*, with a sophisticated credit structure for state loans (Ormrod, Bonney and Bonney 1999, pp. 4–8; cf. Monson and Scheidel 2015). Most of the literature, however, continues to focus primarily on the transition from domain states to tax states.

The economists Peacock and Wisemann explained the acceptance of gradually expanding levels of taxation with their thesis on the 'displacement effect':

People will accept, in a period of crisis, tax levels and methods of raising revenue that in quieter times they would have thought intolerable, and this acceptance remains when the disturbance itself has disappeared. (1961; Peacock 1997, p. 27)

They observed peaking tax levels during wars which were separated by plateaus in times of peace, whereby each new plateau was always higher than the previous one. Indeed, this is a trend that can be observed throughout the early modern period (Bonney 1995, p. 9; Kiser and Linton 2001, p. 432; Sabaté 2016, p. 295). The displacement effect diminished in the nineteenth and twentieth centuries, at least in the Western world, when tax levels had already reached substantial heights.

The transition towards gradually higher tax plateaus was not a uniform one, and it occurred in various time frames (Yun-Casalilla and O'Brien 2012, p. 17). Whereas tributary states dominated much of central Eurasia for centuries, China was already a tax state after the victory of the Qin in the third century BCE (Deng 2012; Liu 2015, p. 72). There was no true tax state to be found in medieval Europe, apart perhaps from city states that drew most of their revenues from regular taxation. It is not until the fifteenth century that we witness the embryonic rise of regular and 'ordinary' taxes in a number of territorial states, such as France. Tax states developed rapidly in the sixteenth and seventeenth centuries, especially in southern and western Europe; eastern Europe would maintain the dominant features of the domain state until the eighteenth century (Krüger 1987, p. 59; North 2012, pp. 158–9). In the Far East, Japan would essentially remain a domain state until the later nineteenth century (Nakabayashi 2012). The delimitation of a territorial entity constituted an important accompanying factor in the development of the tax state. In Europe, the sixteenth century marked a watershed in the rise of the proto-national territorial state with clearly defined borders; an essential precondition for legitimate taxation, all at the expense of the revenue-raising capacity of the landlords, churches and cities of the medieval period (Schulze 1995, p. 265; Körner 1995, p. 416).

In recent decades, numerous quantitative studies, based on extensive data from several European states, have established much firmer ground for such claims. The Wars of Religion in particular stand out, with a doubling of the per-capita tax burden calculated in its grain equivalents between 1560 and 1589, followed by another acute wave of rising war costs between 1620 and 1650, roughly coinciding

with the Thirty Years' War. Western Europe experienced the highest tax increases per capita between 1560 and 1650, with the significant exception of England; the English per-capita tax burden only took off in the eighteenth century (Gelabert 1995, p. 562; Ashworth 2003, p. 48). Eastern European countries such as Russia, Prussia and the Austrian Empire joined Britain in doubling their per-capita tax burden in the same period (Karaman and Pamuk 2013, p. 606).

All of these rising tax burdens were accompanied by redefinitions of property rights and new regulations regarding access to the 'state-making' process, causing disputes and widespread discontent ('t Hart 1995, p. 281). Violent clashes involving rebellious peasants and town-dwellers peaked in the sixteenth and seventeenth centuries (Mousnier 1971, p. 306; Zagorin 1982, p. 126). Gabriel Ardant, the French tax historian, remarked:

The letters of Richelieu, Mazarin, Séguier, Colbert, Charles V, or of Granvelle and of the officials who were their collaborators make clear their daily concerns: ... how they strove to predict revolts, to put them down, and to avoid their recurring. (Ardant 1975, p. 167)

Peasants often clashed with tax collectors, because taxes needed to be paid in coin, whereas feudal duties had usually been levied in kind. Monetisation advanced slowly, as much of Europe was dominated by subsistence farming. Nevertheless, by the eighteenth century the fiercest conflicts had subsided; the degree of monetisation had increased, not least because of the ongoing pressure of money taxes needed to pay soldiers in cash (Schumpeter 1918; Torres Sánchez 2016). People continued to resist taxation, but this resistance was integrated into broader political movements (Klooster 2009, p. 58). Demands for more equitable taxation and control over spending became louder, whilst complaints about the tax burden *per se* declined and taxation came to be regarded as a natural phenomenon.

Urban taxpaying communities tended to demand control over spending at an early stage. Charles Tilly divided the paths to European state formation into 'capital-intensive' and 'coercion-intensive' trajectories; the first was dominated by 'struggle, negotiation, and sustained interaction', with representatives – especially the governing bodies of municipalities – already controlling much of the tax revenue; the second was exemplified by vast agricultural territories with top-down, bulky and coercive bureaucracies (Tilly 1990). Karaman and Pamuk confirmed the logic of Tilly's trajectories on the basis of quantitative evidence from European states: 'it was authoritarian regimes in more rural economies and representative regimes in more urban economies that tended to better translate into state-building' (2013, p. 624). The rulers of Russia (Muscovy), for example, taxed the peasants by sending cavalrymen to collect the rent; Peter the Great introduced new land taxes and a poll tax, levied by state commissioners (Hellie 1999, pp. 485, 496). No middlemen managed and disbursed the funds, in contrast to most of urbanised western Europe.

The 'poor kings' of the medieval period eventually became 'rich kings' in the following centuries (Webber and Wildavsky 1986, p. 148), yet in order to stay in power, they needed to allow for the 'political ceiling of taxation' (Fujita 1961, p. 183; cf.

Irigoin and Grafe 2013). 'Rich kings' usually had various tax options at their disposal, especially in the more monetised and urbanised parts of Europe. The Reformation reduced the political cost of breaking the fiscal immunity of the clergy; monarchs confiscated church property on a vast scale, such as in sixteenth-century Sweden and England (Gelabert 1995, pp. 546–7). Countries with a substantial volume of foreign trade often resorted to customs duties, since these tax instruments tended to shift the burden of taxation to foreigners and a relatively small number of merchants (Centeno 1997; Bordo and Cortès 2001). Raising customs duties was long a prerogative of the English king and one that he exploited to the full, since it avoided the political cost of negotiating with Parliament; customs yielded about half of all English revenue. In the eighteenth century, after customs duties had become an instrument of Parliament, this levy again became a major pillar of the state (Aylmer 1973, p. 432; Brewer 1989, p. 98). Customs supported the Chinese Empire after the Opium Wars necessitated higher revenues, whilst the land tax was deliberately kept low in order to avoid political unrest (Deng 2012, p. 347). A wealthy society such as the Dutch Republic could refrain from levying high duties on trade and instead chose the instrument of excises, since raising customs was unpopular with the politically powerful merchant communities, who were keen to keep the costs of trade as low as possible ('t Hart 1993, p. 113). The rich Dutch East India Company paid hardly any customs, for instance, whilst monarchs elsewhere used such monopolistic trading agencies as milking cows for the state treasury.

Excises also taxed consumable goods, especially beer, wine, bread (or grain) and salt. In urbanised and commercialised Europe, excises became a regular occurrence, yielding substantial revenues. The infamous French salt tax or *gabelle*, for example, produced twice the total English revenue in 1641 (Hill 1967, p. 81). One negative aspect of excises was their regressive distributional effect, in that they burdened the lower classes disproportionately. Yet even in societies with no strong tradition of excises, the political costs of this instrument were low, as the link between state policies and higher consumer prices was not directly evident to the population at large. In the midst of the Civil War, for instance, England managed to introduce 'nationwide' excises at a low political cost (Wheeler 1999, p. 171). Nevertheless, excises did have their limits; in more agricultural and less populated areas, these taxes were notoriously difficult to levy, usually yielding meagre results; only duties upon consumer goods that were needed on a large scale, such as salt, were worth the costs of collection (Ardant 1975, p. 174).

The indirect duties on trade and consumable goods became the mainstay of almost all early modern states in western Europe (O'Brien 1988, p. 26). States could not avoid levying direct taxes on land, houses or property either, however. The 'direct' character of such levies confronted the individual taxpayer with state claims, which made them politically risky, in particular when raising or changing them. Yet certain countervailing factors could facilitate these levies; indeed, property taxes could function to strengthen claims to ownership (Alt 1983, p. 184). A Dutch manual from 1650 stressed that the wealthy rarely protested when they were placed in the highest tax category of

property-owners, since a 'capitalist' (the term used for this category) had more opportunities to obtain credit and was known as a trustworthy trading partner ('t Hart 1993, p. 123). Rates could also be kept deliberately low; one such example is the land taxes in China, made possible by its vast territory and the sheer size of the state budget in relation to those of the much smaller and weaker neighbouring states. Chinese treasury reserves could usually cover war budgets until the later eighteenth century (Wong 2012, p. 356; Kaske, this issue). The strength of the Ottoman Empire likewise rested upon its land taxes for as long as the state expanded its territories (Karaman and Pamuk 2010, p. 599; Fritschy 2017, p. 345). Yet in most European states, land taxes were based on former feudal or church levies and outdated registries, creating inequitable burdens with numerous exemptions or reduced rates for nobles, church officials and/or urban landowners. Be that as it may, all fiscal systems based largely upon land taxes proved vulnerable during lengthy wars, since duties could never be raised to the extent needed to continue to pay troops for longer periods of time (Alt 1983, p. 202).

II

In wartime, one financial emergency tended to follow another in rapid succession, resulting in a hodgepodge of revenue-raising methods. In addition to the raising of customs, excises and land or property taxes, currency debasements offered a tempting alternative. Ottoman, French and Prussian rulers, as well as the English Tudors, frequently resorted to currency manipulation in order to increase government revenue, often to the vexation of the trading community (Pamuk 2004; Bonney 1995, pp. 468–70; Félix, this issue). Domains, crown lands, trade privileges, monopolies and offices were leased or sold; the sale of offices provided as much as 55 per cent of French revenues in the 1630s. In order to obtain funds in due time, intermediaries such as tax farmers, financiers or army suppliers were given ample opportunity for private enrichment, and collusion between local magnates and local tax collectors was all too common. Although such methods limited central control by the state, they did sustain the development of territorial consolidation and larger military establishments throughout Europe. In fact, government receipts rose continually in real terms during the sixteenth and seventeenth centuries (Webber and Wildavsky 1986, p. 297).

Although the European state would not become truly centralised until the nineteenth century, the eighteenth century saw a substantial consolidation of the tax state, with state rulers aiming for increased control over the instruments to hand, instead of constantly raising taxes or creating new devices (Dincecco 2009; North, Wallis and Weingast 2009). Eighteenth-century innovations included the professionalisation of the financial administration by reducing the number of intermediaries and the replacement of tax farming with direct tax collecting, supported by new registries for property levies. Taxes became more equitable as the number of exemptions was reduced (Ashworth 2003, p. 355). Tax payment in kind became outmoded; by 1763,

for example, the Danish state required all tax payments in coin (Bonney 1995, pp. 464–6).

The most important goal was to centralise and consolidate the financial administration, supported by a stronger legal framework (Torres Sánchez 2015; Besley and Persson 2009, p. 1219). Much of Europe had been characterised by systems of multi-layered government, with semi-autonomous provinces, regions and towns. Powerful provincial estates, municipalities, tax farms and other corporations had managed and collected the funds. Central government often decided on how the apportioned funds were to be spent, yet the actual implementation lay in the hands of local authorities (Pezzolo 2012, p. 274; Muto 1995, p. 234; Brandon 2015, pp. 58–9). Few funds reached the central treasuries. In seventeenth-century France, for example, over 36 per cent of the yield of the *taille*, the main land tax raised in Languedoc, was paid directly to Languedoc notables in the form of interest payments, salaries, wages, pensions and compensation; of the remainder that ‘truly’ went to the king, again, over 50 per cent was used for the defence of Languedoc and never reached the central treasury (Beik 1985, p. 265). Taxation always proved difficult in peripheral provinces, with the result that ‘core’ areas, such as Castile in Spain, Holland in the Dutch Republic, and Île-de-France and the *pays d’élections* in France, were always taxed much more heavily than the outlying regions. The high political costs simply precluded the levying of similar taxes throughout the realm.

Decentralisation and indirect rule continued to hinder the Ottoman Empire until the later nineteenth century (Balla and Johnson 2009, p. 825; Karaman and Pamuk 2010, p. 607). European states, however, developed their coercive capacity during the eighteenth century; they possessed more fiscal and financial powers, enabling their militaries to act more purposefully in more peripheral areas. Centralised regimes assumed direct control over the majority of the resources (O’Brien 2012, p. 443). In doing so, states clearly learned from copying each other. The British enlargement of the tax base, for example, was inspired by Holland:

For it is from that country that we have borrowed the great department of the stamps, the taxes on carriages, horses, and servants, the duties on goods by auction or acquired by collateral succession, together with some of the regulations in the late tobacco act, and other means of securing revenue. (Sinclair 1804, III, p. 151)

In the end, ‘Britain ... became, like her main rivals, a fiscal-military state, one dominated by the task of waging war’ (Brewer 1989, p. 27). The country’s achievements rendered it a model ‘fiscal military state’ with instruments that were, in turn, copied by other states (Torres Sánchez 2015, p. 129; Storrs 2009). It was in this centralised polity that the first nationwide income tax was introduced in 1797. The measure was extremely unpopular, yet, as one receiver of the tax noted: ‘Among responsible people there was a growing recognition of the fact that, however unpleasant, the Income Tax was necessary for the duration of the War’ (quoted by Hope-Jones 1939, p. 17). This corroborates the Peacock–Wisemann thesis mentioned earlier. In order to mitigate the political costs, the tax was intended as a temporary

measure and applied a rather low flat rate. Nevertheless, owing to its complicated nature, the levy necessitated far-reaching innovative devices within the financial apparatus (Hope-Jones 1939, p. 46). As was so often the case, war proved to be a gestation period for new ideas (Kiser and Linton 2001, p. 433). Voting in Parliament facilitated these ideas by regulating political support, as a contemporary observer noted:

It is a singular circumstance attending despotic governments, that however arbitrary they may be in other respects, yet it is very difficult for them to impose new taxes on their subjects ... Such is the confidence placed by the public at large in the British Parliament, that the raising of money, when once voted, never meets with any opposition. (Sinclair 1804 III, pp. 317–18)

Recent quantitative historical research confirms that representative institutions did indeed achieve higher tax revenues, even when GDP per capita was kept constant (Dincecco 2015, p. 914; Besley and Persson 2009, p. 1239; Karaman and Pamuk 2013).

III

Loans eased the financing of wars, shifting much of the cost of military campaigning onto a more peaceful future and lowering the burden of wartime taxation. Stable government revenue played an indispensable role in sustaining this long-term public debt, its viability resting upon future tax revenue. Medieval European towns had ‘invented’ a debt model that circumvented the impediments posed by the church: they concealed interest payments as annual compensation through annuities, the funds for the debt charges being met by their rewarding urban excises (Munro 2003). The tradition of urban annuities exerted a profound influence on the fiscal history of the more urbanised parts of Europe and ingrained the notion of a collective guarantee for public loans backed up by regular taxation, which was known as ‘funded debt’ (Ucendo and Limberger 2012, p. 2).

Funded debt could flourish only in tax states. In domain states, public loans were backed only by the personal surety of the prince, resulting in short-term contracts. The prince’s death often implied a repudiation of the bonds, which led to higher rates of interest; the relative burden of debt charges in the budget was quite high. Tax states with poor credit reputations likewise had to offer higher interest rates in order to make the bonds worthwhile for investors (Drelichman and Voth 2014). Even high returns, however, could not prevent numerous Genoese financiers from suffering severe losses following the Spanish-Habsburg bankruptcy of 1627, and Genoa lost its leading position as major financial centre as a result (Muto 1995, p. 247).

Autocrats did not wish to depend upon powerful creditors at home, and thus refrained from establishing long-term public debt (Macdonald 2006, p. 7). Bonds were usually held by a limited group of government officials, privileged state bankers, religious institutions and foreign bankers. In eighteenth-century Bavaria, for example, the church and charitable institutions constituted the main creditors; private investors owned just 10 per cent of the securities (Ullmann 1987, p. 78).

Beyond Europe, public credit hardly gained ground; neither China nor Japan issued long-term bonds before the mid nineteenth century. The Ottoman state did not rely on public credit either, although the sale of offices and tax-farming arrangements constituted hidden means of contracting loans from moneyed elites (Pamuk 2004). Such measures did not encourage the development of a transparent financial market, however, a difficulty that was also faced by certain European states. The French secondary market for government bonds was particularly opaque, due to the multitude of loans issued against all sorts of conditions by the crown, tax farmers, tax receivers, financiers, sub-financiers and numerous intermediaries, also resulting in rather high rates of interest (Félix 2015). In order to obtain funds more cheaply, the Provincial Estates of Burgundy agreed beneficial long-term contracts with the crown, secured by the province's regular tax revenues, thus creating a more transparent form of public debt (Potter and Rosenthal 1997, p. 591). Around 1720, the Scottish financier John Law aimed to reform French credit by developing an efficient, centralised system, using the *Compagnie d'Occident* as a major intermediary. Although the project failed, it proved an unexpected boon to the crown, since much of the state debt was wiped out instantly with the failure of the *Compagnie*. Despite unfortunate events such as these, the Paris financial market recovered and thrived between 1726 and 1789, thanks to the effective information networks established by notaries (Hoffman, Postel-Vinay and Rosenthal 2000; Neal 2000, pp. 133, 136).

During much of the seventeenth century, English debts were also marked by a lack of transparency and carried high interest rates. The introduction of excises in the 1640s undoubtedly facilitated the development of funded debt at a later stage. The reforms introduced by Sir George Downing in the 1660s, based on the Dutch example, convinced Londoners to provide loans to the state on longer terms than they had previously done (Wheeler 1999, p. 56). Additional reforms in the wake of the Glorious Revolution furthered the development of the financial market, thanks above all to the intermediation of the Bank of England and Parliament's firm grip on taxation, and not least on excises and customs. The new 'limited' government was unable to act without the consent of Parliament (North and Weingast 1989).

Scholars dispute the causes of the spectacular rise of British public debt in the eighteenth century. Whether the security of property rights constituted the crucial factor remains inconclusive (Clark 1996; Cox 2012; Allen 2009, p. 5). The policies of King William of Orange did not cause a rapid decline in interest rates, either (Sussman and Yafeh 2006; Cox 2012, p. 584; 't Hart 1991). The political scientist David Stasavage has argued that representative institutions gave voice to creditors' interests and thus enabled the expansion of long-term public debt (2016, p. 14). Although Parliament's expanding role did matter in the British case, the fact that creditors were reassured that revenues would be steady and forthcoming might have been even more important. Political representation did not exist in the Papal State, for example, yet it managed to contract enormous public debts at the very low rate of 4 per cent, since the budget was backed up by a great variety of solid revenues,

including tithes, taxes on the clergy and *annates*. As a result, even small artisans were willing to furnish loans (Pezzolo 1999, pp. 242–6).

More important than political representation was the presence of a viable secondary money market that could absorb government bonds, such as the Roman market for papal debts (Partner 1999, p. 375). In general, extensive domestic government borrowing was only possible in an economy in which creditors had become accustomed to lending, with a network of financiers to facilitate the transfer of funds on the secondary market (Ardant 1975, p. 189; Gelderblom and Jonker 2004). Even eighteenth-century British credit was dependent upon the presence of the strong secondary market in London. The infamous South Sea Bubble foreshadowed an imminent state bankruptcy around 1720, which was weathered only because of the high degree of marketability of the securities. On their own, Parliament and the Bank of England failed to provide the necessary credible commitment (Carlos and Neal 2006). Dutch public debt was strong, too, relying on a widespread network of semi-private receivers and other intermediaries, even though the secondary market for securities was much more fragmented and less centralised than the London one (Van Bochove 2013; Feenstra 2015). In addition, the British and the Dutch enjoyed the advantage of having numerous intermediaries linking the Amsterdam and London markets. In fact, each was strong in its own respect: London for the more risk-loving capital-seekers, Amsterdam for portfolios with a secure backing. Combined, they boosted all kinds of financial transactions in northwestern Europe throughout the eighteenth century (Neal 2000, p. 135; Carlos and Neal 2011, pp. 31, 42; Neal and Quinn 2001, p. 6; Brandon, this issue).

A thriving financial market could even absorb the forced government loans that had been pressed upon the financial elite, and usually disregarded property rights. Venetian and Florentine public credit, for example, flourished thanks to the possibility of selling such forced bonds easily (Pezzolo 2012, p. 281). In this regard, Stasavage has suggested that small-scale oligarchic polities had an enormous advantage when furthering public credit, because of the short distances to decision making (2011, p. 2). Numerous other towns failed to establish secure public credit, however; and Florentine creditors continued to believe in the myth of their infallible funded public credit, despite being confronted by obvious signs of decline (Veseth 1991, p. 199; De Vijlder and Limberger 2014).

The existence of long-term public debt contracts increased the interdependency between the state and its domestic creditors, as receipt of regular interest payments bound the latter more consciously to the fate of the state ('t Hart 1993, p. 1). It was even said that 'Bishop Burnet ... advised William III to run the nation into debt, in order to secure the support of the wealthiest individuals in the kingdom' (Sinclair 1803, I, p. 363). Contemporaries criticised the political influence of the financial elite; as early as 1705, the complaint was being heard that 'the Bank [of England] and the East India Company had interlocking directorates, whose joint powers gave the companies a sinister control of the City and the Parliamentary elections' (quoted by Dickson 1967, p. 19). Apart from the potential political implications, public debt in

general implied a transfer from the poorer taxpayers to financiers with government bonds, since most debt charges were paid out of receipts from land taxes, which were paid disproportionately by the peasantry, or from excises, which were paid largely by the urban lower and middle classes. In Venice, the allocation of interest upon government bonds even exceeded the sums paid by state investors in taxation (Lane 1979, pp. 74, 79).

Public credit thus secured the accumulation and concentration of capital; and once established, it seemed to expand easily, even in times of war. The merchant banker and philosopher Isaac de Pinto said of the British public debt: 'The enormous sum, of which the national debt is composed, never existed at once ... The public funds have literally a magnetic virtue with respect to money' (1774, p. 20). This 'magnetic virtue', the proliferation of all sorts of government bonds, served the rise of the state and private capital accumulation simultaneously.

IV

All of the contributions in this issue examine how the governments of the long eighteenth century tried to maintain a balanced budget during wartime, whilst avoiding political risks. Although it was shown in the previous section how financial markets could back up state finances, wartime emergency measures often threatened the viability of the financial sector directly, not least through currency manipulation. Joël Félix describes the French monetary policies that were intended to avoid tax increases, because of the imminent threat of tax revolts during the wartime decades around 1700. The first monetary reform of 1689 proved to be successful; all coins issued since 1640 received a stamp, after which they increased in value, the difference being pocketed by the state to pay the troops. Subsequent reforms, however, were introduced at short intervals and disturbed the financial market. The issue of paper money was a novel expedient in 1702; a state bank, the *Caisse des emprunts*, issued receipts for coins that needed to be stamped anew. The value of the paper money in circulation spiralled, however, whilst the French economy suffered from a scarcity of coins, resulting in interest rates on cash as high as 25 per cent. In the end, the solution was to convert bank bills into loan bonds managed by semi-state officials who enjoyed the trust of the market. Despite such complications, French soldiers received their pay in relatively timely fashion and the political power of the French state was not diminished.

Paying soldiers was not only a matter of paying on time, but also of transferring massive sums over vast distances. In the long term, war costs could be covered by state loans issued on the public market, but emergency payments during wartime demanded rapid solutions. Travelling with chests full of cash (soldiers were always paid in cash) was not an option. Pepijn Brandon reveals how Dutch and English financial networks solved the problem of how to get pay to distant troops by using increasingly interlocked networks of transnational intermediaries. On the English side, these networks extended outwards from a relatively centralised system under

the Paymaster-General, whereas the Dutch used a more decentralised and privatised system of semi-private financiers under government contract. All financiers relied heavily upon personal networks within the financial market, as exemplified by the dealings of the English Paymaster-General James Brydges and the Dutch intermediaries Paulus Gebhardt, Hendrik van Heteren and the Amsterdam-based merchant banker Andries Pels. Although these four men made substantial private profits from their activities, they also boosted the capacity of the state to pay the troops on time over great distances, stimulating cross-Channel financial interdependency at the same time.

On the other side of Eurasia, governments also engaged in wartime reforms and innovations in order to keep budgets balanced. Elisabeth Kaske has studied how the Chinese Empire aimed to achieve 'cheap government', specifying relatively low quotas for land tax levies in order to avoid political unrest. The threat of war nevertheless resulted in soaring deficits in the early nineteenth century. Without the possibility of increasing taxes (because of the wish to remain austere) or raising funds on a public financial market (because such instruments did not exist), the government resorted to selling offices and academic degrees; merchant elites were granted trading monopolies in return for 'gratitude contributions'. These policies resulted in a weakening of the military establishment, as army commanders received less funding in practice. The monopolies and sold offices limited the available options, and China failed to respond forcefully to the British invasion during the Opium War. The combination of low taxes and austere government turned out to be a disaster, one that remained limited only because the British military was unable to conquer China as a whole.

During wars, governments also aimed to weaken the economic position of their opponents whilst simultaneously strengthening their own, a practice especially common in the European mercantilist states that dominated much of the eighteenth century. The question remains, however, as to how wars affected the economy. This long-standing debate, one that is closely related to the debate about the rise of the West, is picked up by Patrick O'Brien. How were Europeans able to engage in such long and costly wars, and nevertheless gain so much in terms of international economic power? Most economists have tried to answer this question with the help of models based on twentieth-century data, but such analyses cannot be made for the period prior to the 1800s, since serial data on GDP, factors of production, real prices or even population figures are fragmented or non-existent. Wars also tended to last much longer than those of the twentieth century, meaning that the economic impact was always an accumulated one. Nevertheless, O'Brien observes wartime innovations in financial intermediation, in the agglomeration of economic activity in maritime cities, in the efficiency of taxation and in the mobilisation of revenues. Public credit played a facilitating role, especially in Britain, which did not suffer from wartime crowding-out effects, as interest rates remained modest. All of these measures later proved useful for non-war purposes and thus strengthened the political economy and the state. In fact, mercantilist warfare seems to have paid off in the long term.

This brings us to an overview of the conditions that enabled states to conduct expensive wars at a relatively low political cost during the long eighteenth century. A picture of favourable circumstances emerges from the study of the literature above and the contributions to this issue: the existence of a tax state with regular ordinary taxation; monetisation; urbanisation; foreign trade; the centralisation and professionalisation of government; limited government with representative institutions; public credit with secondary financial markets; and economic growth in general. Population growth may have contributed, too, but only in combination with economic growth (Ardant 1975, pp. 174–9; Goldstone 1991, p. 414). States were able to do without some of these factors, since each factor in itself was never sufficient, and each had its obvious limits. Taxes had a ‘political ceiling’ and could be of little use when governments feared the political consequences of tax increases, as the examples of both China (Kaske, this issue) and France (Félix, this issue) show. Monetisation furthered the payment of all taxes, yet frequent monetary manipulation threatened the economy as a whole, as shown by Félix in this issue.

Despite such adverse policy choices, the factors listed above undoubtedly widened the available options for increasing taxes and issuing public loans. Urbanisation implied an environment that facilitated the levying of customs and excises, whilst the availability of urban-based capital and financial networks eased the mobilisation and transfer of funds needed to pay troops. The secondary market played a decisive role in the success of public credit both in the Netherlands and in Britain. O’Brien has demonstrated the crucial role played by more efficient and centralised government, not least in advancing economic growth through foreign trade. Pre-war economic growth also promoted rapid post-war recovery (O’Brien 1988). In the end, the consolidation of the nation state in the nineteenth century was tied to the financial consequences of warfare, with wars constituting the main rationale for raising state income in previous centuries in Europe, Asia and the former colonies in the New World alike.

References

- ALLEN, R. (2009). *The British Industrial Revolution in Global Perspective*. Cambridge and New York: Cambridge University Press.
- ALT, J. E. (1983). The evolution of tax structures. *Public Choice*, **41**, pp. 181–222.
- ARDANT, G. (1975). Financial policy and economic infrastructure of modern states and nations. In C. Tilly (ed.), *The Formation of National States in Western Europe*. Princeton, NJ: Princeton University Press.
- ASHWORTH, W. (2003). *Customs and Excise: Trade, Production and Consumption in England 1640–1845*. Oxford: Oxford University Press.
- AYLMER, G. E. (1973). *The State's Servants: The Civil Service of the English Republic, 1649–1660*. London: Routledge & Kegan Paul.
- BALLA, E. and JOHNSON, N. D. (2009). Fiscal crisis and institutional change in the Ottoman Empire and France. *Journal of Economic History*, **69**, pp. 809–45.

- BEIK, W. (1985). *Absolutism and Society in Seventeenth-Century France*. Cambridge: Cambridge University Press.
- BESLEY, T. and PERSSON, T. (2009). The origins of state capacity: property rights, taxation and politics. *American Economic Review*, **99**, pp. 1218–44.
- BONNEY, R. J. (ed.) (1995). *Economic Systems and State Finance*. Oxford: Clarendon Press.
- BONNEY, R. J. (ed.) (1999). *The Rise of the Fiscal State in Europe c. 1200–1815*. Oxford: Oxford University Press.
- BORDO, M. D. and CORTÉS, R. (eds.) (2001). *Transferring Wealth and Power from the Old to the New World: Monetary and Fiscal Institutions in the 17th through the 19th Centuries*. Cambridge: Cambridge University Press.
- BRANDON, P. (2015). *War, Capital, and the Dutch State (1588–1795)*. Leiden: Brill.
- BREWER, J. (1989). *The Sineus of Power: War, Money and the English State 1688–1783*. London: Unwin Hyman.
- CARLOS, A. M. and NEAL, L. (2006). The micro-foundations of the early London capital market: Bank of England shareholders during and after the South Sea Bubble, 1720–25. *Economic History Review*, **59**, pp. 498–538.
- CARLOS, A. M. and NEAL, L. (2011). Amsterdam and London as financial centers in the eighteenth century. *Financial History Review*, **18**, pp. 21–46.
- CENTENO, M. A. (1997). Blood and debt: war and taxation in nineteenth-century Latin America. *American Journal of Sociology*, **102**, pp. 1565–1605.
- CLARK, G. (1996). The political foundations of modern economic growth: England, 1540–1800. *Journal of Interdisciplinary History*, **26**, pp. 563–88.
- COX, G. W. (2012). Was the Glorious Revolution a constitutional watershed? *Journal of Economic History*, **72**, pp. 567–600.
- DENG, K. (2012). Continuation and efficiency of the Chinese fiscal state, 700 BC – AD 1911. In B. Yun-Casalilla and P. K. O'Brien (eds.), *The Rise of Fiscal States: A Global History, 1500–1914*. Cambridge: Cambridge University Press.
- DE PINTO, I. (1774). *An Essay on Circulation and Credit*. London: Ridley.
- DE VIJLDER, N. and LIMBERGER, M. (2014). Public or private interest? The investment behaviour of public officials in Antwerp during the early modern period. *Financial History Review*, **21**, pp. 301–26.
- DICKSON, P. G. M. (1967). *The Financial Revolution in England: A Study in the Development of Public Credit, 1688–1756*. London: Routledge.
- DINCECCO, M. (2009). Fiscal centralization, limited government, and public revenues in Europe, 1650–1913. *Journal of Economic History*, **69**, pp. 48–103.
- DINCECCO, M. (2015). The rise of effective states in Europe. *Journal of Economic History*, **75**, pp. 901–18.
- DOWELL, S. (1888). *A History of Taxation and Taxes in England*, vol. II. London: Longmans.
- DRELICHMAN, M. and VOTH, H.-J. (2014). *Lending to the Borrower from Hell: Debt, Taxes, and Default in the Age of Philip II*. Princeton, NJ: Princeton University Press.
- FEENSTRA, A. (2015). Hiding in a twilight zone: credible commitment in the Dutch Republic and Groningen's 1680s default. *Histoire et Mesure*, **30**, pp. 79–116.
- FÉLIX, J. (2015). Paths to fiscal transparency: control, knowledge and communication in early-modern polities. *Histoire et Mesure*, **29**, pp. 3–23.
- FRITSCHY, W. (2017). *Public Finance of the Dutch Republic in Comparative Perspective*. Leiden and Boston: Brill.
- FUJITA, S. (1961). Political ceiling on income taxation. *Public Finance*, **16**, pp. 183–8.
- GELABERT, J. (1995). The fiscal burden. In R. J. Bonney (ed.), *Economic Systems and State Finance*. Oxford: Oxford University Press.
- GELDERBLOM, O. and JONKER, J. (2004). Completing a financial revolution: the finance of the Dutch East India trade. *Journal of Economic History*, **64**, pp. 641–71.
- GOLDSTONE, J. (1991). *Revolution and Rebellion in the Early Modern World*. Berkeley: University of California Press.
- HELLIE, R. (1999). Russia, 1200–1815. In R. J. Bonney (ed.), *The Rise of the Fiscal State*. Oxford: Oxford University Press.

- HILL, C. (1967). *Reformation to Industrial Revolution: A Social and Economic History of Britain, 1530–1780*. London: Weidenfeld and Nicolson.
- HOFFMAN, P. T., POSTEL-VINAY, G. and ROSENTHAL, J.-L. (2000). *Priceless Markets: The Political Economy of Credit in Paris, 1660–1870*. Chicago: University of Chicago Press.
- HOPE-JONES, A. (1939). *Income Tax in the Napoleonic Wars*. Cambridge: Cambridge University Press.
- IRIGOIN, A. and GRAFE, R. (2013). Bounded Leviathan: fiscal constraints and financial development in the early modern Hispanic world. In D. Coffman, A. Leonard and L. Neal (eds.), *Questioning Credible Commitment: Perspectives on the Rise of Financial Capitalism*. Cambridge: Cambridge University Press.
- KARAMAN, K. K. and PAMUK, Ş. (2010). Ottoman state finances in European perspective, 1500–1914. *Journal of Economic History*, **70**, pp. 593–629.
- KARAMAN, K. K. and PAMUK, Ş. (2013). Different paths to the modern state in Europe: the interaction between warfare, economic structure, and political regime. *American Political Science Review*, **107**, pp. 603–26.
- KISER, E. and LINTON, A. (2001). Determinants of the growth of the state: war and taxation in early modern France and England. *Social Forces*, **80**(2), pp. 411–48.
- KLOOSTER, W. (2009). *Revolutions in the Atlantic World: A Comparative History*. New York: New York University Press.
- KÖRNER, M. (1995). Expenditure. In R. Bonney (ed.), *Economic Systems and State Finance*. Oxford: Oxford University Press.
- KRÜGER, K. (1987). Public finance and modernisation: the change from domain state to tax state in Hesse in the sixteenth and seventeenth centuries – a case study. In P.-C. Witt (ed.), *Wealth and Taxation in Central Europe*. Leamington Spa: Berg.
- LANE, F. (1979). *Profits from Power: Readings in Protection Rent and Violence-Controlling Enterprise*. Albany: State University of New York Press.
- LIU, W. G. (2015). The making of a fiscal state in Song China, 960–1279. *Economic History Review*, **68**, pp. 48–78.
- MACDONALD, J. (2006). *A Free Nation Deep in Debt: The Financial Roots of Democracy*. Princeton, NJ: Princeton University Press.
- MONSON, A. and SCHEIDEL, W. (eds.) (2015). *Fiscal Regimes and the Political Economy of Premodern States*. Cambridge: Cambridge University Press.
- MOUSNIER, R. (1971). *Peasant Uprisings in Seventeenth Century France, Russia and China*. London: George Allen & Unwin.
- MUNRO, J. (2003). The medieval origins of the Financial Revolution: usury, *rentes*, and negotiability. *International History Review*, **25**, pp. 505–62.
- MUTO, G. (1995). The Spanish system: centre and periphery. In R. J. Bonney (ed.), *Economic Systems and State Finance*. Oxford: Oxford University Press.
- NAKABAYASHI, M. (2012). The rise of a Japanese fiscal state. In B. Yun-Casalilla and P. K. O'Brien (eds.), *The Rise of Fiscal States: A Global History, 1500–1914*. Cambridge: Cambridge University Press.
- NEAL, L. (2000). How it all began: the monetary and financial architecture of Europe during the first global capital markets, 1648–1815. *Financial History Review*, **7**, pp. 117–40.
- NEAL, L. and QUINN, S. (2001). Networks of information, markets, and institutions in the rise of London as a financial centre. *Financial History Review*, **8**, pp. 7–26.
- NORTH, M. (2012). Finances and power in the German state system. In B. Yun-Casalilla and P. K. O'Brien (eds.), *The Rise of Fiscal States: A Global History, 1500–1914*. Cambridge: Cambridge University Press.
- NORTH, D., WALLIS, J. and WEINGAST, B. (2009). *Violence and Social Orders: A Conceptual Framework for Interpreting Recorded Human History*. Cambridge: Cambridge University Press.
- NORTH, D. and WEINGAST, B. (1989). Constitutions and commitment: the evolution of institutions governing public choice in seventeenth-century England. *Journal of Economic History*, **49**, pp. 803–32.
- O'BRIEN, P. K. (1988). The political economy of British taxation, 1660–1815. *Economic History Review*, **41**, pp. 1–32.
- O'BRIEN, P. K. (2012). Afterword: reflexions on fiscal foundations and contexts for the formation of economically effective Eurasian states from the rise of Venice to the Opium War. In B. Yun-Casalilla and P. K. O'Brien (eds.), *The Rise of Fiscal States: A Global History, 1500–1914*. Cambridge: Cambridge University Press.

- O'CONNOR, J. (1973). *The Fiscal Crisis of the State*. New York: St Martin's Press.
- ORMROD, W. M., BONNEY, M. M. and BONNEY, R. J. (eds.) (1999). *Crises, Revolutions, and Self-sustained Growth*. Stanford, CA: Shaun Tyas.
- PAMUK, Ş. (2004). The evolution of fiscal institutions in the Ottoman Empire, 1500–1914. *Financial History Review*, **11**, pp. 7–32.
- PARTNER, P. (1999). The Papacy and the Papal States. In R. J. Bonney (ed.), *The Rise of the Fiscal State*. Oxford: Oxford University Press.
- PEACOCK, A. ([1961] 1997). *The Political Economy of Economic Freedom*. Cheltenham: Edward Elgar.
- PEZZOLO, L. (1999). Government debts and trust: French kings and Roman popes as borrowers, 1520–1660. *Rivista di Storia Economica*, **15**, pp. 233–61.
- PEZZOLO, L. (2012). Republics and principalities in Italy. In B. Yun-Casalilla and P. K. O'Brien (eds.), *The Rise of Fiscal States: A Global History, 1500–1914*. Cambridge: Cambridge University Press.
- POTTER, M. and ROSENTHAL, J.-L. (1997). Politics and public finance in France: the estates of Burgundy, 1660–1790. *Journal of Interdisciplinary History*, **28**, pp. 577–612.
- ROSE, R. (1985). Maximizing tax revenue while minimizing political costs. *Journal of Public Policy*, **5**, pp. 289–320.
- SABATÉ, O. (2016). Does military pressure boost fiscal capacity? Evidence from late-modern military revolutions in Europe and North America. *European Review of Economic History*, **20**, pp. 275–98.
- SCHULZE, W. (1995). The emergence and consolidation of the tax state: the sixteenth century. In R. J. Bonney (ed.), *Economic Systems and State Finance*. Oxford: Oxford University Press.
- SCHUMPETER, J. A. ([1918] 1991). The crisis of the tax state. In R. Swedberg (ed.), *Joseph A. Schumpeter: The Economics and Sociology of Capitalism*. Princeton, NJ: Princeton University Press.
- SINCLAIR, J. (1803–4). *The History of the Public Revenue of the British Empire*, vols. II–III. London: Cadell and Davies.
- STASAVAGE, D. (2011). *States of Credit: Size Power, and the Development of European Polities*. Princeton, NJ: Princeton University Press.
- STASAVAGE, D. (2016). What we can learn from the early history of sovereign debt? *Explorations in Economic History*, **59**, pp. 1–16.
- STORRS, C. (2009). *The Fiscal Military State in Eighteenth Century Europe*. Farnham and Burlington, VT: Ashgate.
- SUSSMAN, N. and YAFEH, Y. (2006). Institutional reforms, financial development and sovereign debt: Britain 1690–1790. *Journal of Economic History*, **66**, pp. 116–40.
- 'T HART, M. (1991). The devil or the Dutch? Holland's impact on the Financial Revolution in England, 1643–1694. *Parliaments, Estates and Representation* **11**, pp. 39–52.
- 'T HART, M. (1993). *The Making of a Bourgeois State: War, Politics and Finance during the Dutch Revolt*. Manchester: Manchester University Press.
- 'T HART, M. 1995. The emergence and consolidation of the tax state: the seventeenth century. In R. Bonney (ed.), *Economic Systems and State Finance*. Oxford: Oxford University Press.
- TILLY, C. (1990). *Coercion, Capital, and European States, AD 990–1990*. Oxford: Blackwell.
- TORRES SANCHEZ, R. (2015). *Constructing a Fiscal-Military State in Eighteenth-Century Spain*. Basingstoke: Palgrave Macmillan.
- TORRES SANCHEZ, R. (2016). *Military Entrepreneurs and the Spanish Contractor State in the Eighteenth Century*. Oxford: Oxford University Press.
- UCENDO, J. I. A. and LIMBERGER, M. (2012). *Taxation and Debt in the Early Modern City*. London: Pickering & Chatto.
- ULLMANN, H.-P. (1987). The emergence of modern public debts in Bavaria and Baden between 1780 and 1820. In P.-C. Witt (ed.), *Wealth and Taxation in Central Europe*. Leamington Spa: Berg.
- VAN BOCHOVE, C. (2013). Configuring financial markets in preindustrial Europe. *Journal of Economic History*, **73**, pp. 247–78.
- VESETH, M. (1991). *Mountains of Debt: Crisis and Change in Renaissance Florence, Victorian Britain, and Postwar America*. New York and Oxford: Oxford University Press.
- WEBBER, C. and WILDAVSKY, A. (1986). *A History of Taxation and Expenditure in the Western World*. New York: Simon and Schuster.
- WHEELER, J. S. (1999). *The Making of a World Power: War and the Military Revolution in Seventeenth-Century England*. Stroud: Sutton.

- WONG, R. B. (2012). Taxation and good governance in China, 1500–1914. In B. Yun-Casalilla and P. K. O'Brien (eds.), *The Rise of Fiscal States: A Global History, 1500–1914*. Cambridge: Cambridge University Press.
- YUN-CASALILLA, B. and O'BRIEN, P. K. (eds.) (2012). *The Rise of Fiscal States: A Global History, 1500–1914*. Cambridge: Cambridge University Press.
- ZAGORIN, P. (1982). *Rebels and Rulers 1500–1660*, vol. 1. Cambridge: Cambridge University Press.