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RESEARCH ARTICLE

'Impossible to provide an accurate estimate': the interested calculation of the Ottoman public debt, 1875–1881

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Abstract

When the Ottoman Empire defaulted on its public debt in 1875, British bondholders launched a campaign to win government intervention on their behalf. This article interprets the unprecedented success of this campaign as a matter of knowledge production. Mobilizing the newly established Corporation of Foreign Bondholders as a kind of 'centre of calculation', bondholders argued that they deserved assistance because of the unique size of the Ottoman default and the proportion of it that was held by British subjects. Yet neither of these numbers was easily calculated. In fact, influential bondholders worked closely with accountants and members of the Statistical Society to devise an accurate method for quantifying the Ottoman debt – and concluded that such a method did not exist. Historians of quantification and accounting have argued that the scientific status of nineteenth-century accounting depended on its disinterestedness. In the case of the Ottoman default, however, calculation was understood to be inseparable from material interest and political debate.

The Great Hall of the City Terminus Hotel, on Cannon Street in the City of London, witnessed an unusual scene on the evening of 19 October 1875. The hall was crowded with City elite: Members of Parliament, bankers and a variety of aristocrats, including several women. This was no polite social occasion, however, but a shareholders' meeting, and an unhappy one. 'Loud expressions of disapprobation' were heard, according to a newspaper account.[1] The assembled had all invested their money in one or more of a series of loans to the Ottoman Empire over the last twenty years – loans on which Istanbul had just announced its intention to suspend full interest payments. The bondholders had gathered on this evening to organize themselves so that they could pressure the British government to come to their defence.

The outlook for success was not promising. Upon meeting a delegation of bondholders two weeks after the City Terminus gathering, Lord Derby, the Foreign Secretary, articulated what he called 'the invariable rule' that the investment of individual British subjects

[1] Extract from the *Standard*, 20 October 1875, quoted in FO 424/35 No. 36, *Ottoman Loans Correspondence, 1875–1876*, at www.archivesdirect.amdigital.co.uk (accessed 29 July 2019).

in foreign loans did not merit government protection.[2] As Derby's words suggest, bondholders could hardly have been surprised by the Foreign Office's reluctance to embrace their cause. In the preceding half-century, foreign loan defaults had become a familiar ailment of London's booming market in international finance. As a matter of principle, these defaults were long reckoned to be the responsibility of the individual investors who had risked their money: a matter of private, not public, interest.[3]

Within three years, the bondholders of the Ottoman debt would shift the politics of international finance in their favour. At the Congress of Berlin, in 1878, the European powers agreed for the first time to negotiate with the Porte on the bondholders' behalf. The resulting financial provision of the treaty, Protocol XVIII, paved the way toward the establishment, in 1881, of the Ottoman Public Debt Administration (OPDA): an agency, administered by representatives of the bondholders, with full powers to collect more than one-quarter of Ottoman state revenue and distribute it directly to the creditors' banks.[4] A critical juncture in the history of the late Ottoman Empire, the Ottoman default and ensuing negotiations also marked a new chapter in the politics of investment in Europe.

This article seeks to explain how the Ottoman default shifted the politics of investment specifically in England, with reference to the rise of a new kind of corporate entity devoted to organizing and advocating on behalf of investors in foreign loans: London's Corporation of Foreign Bondholders.[5] Founded in 1868 by men with interests in the Ottoman loans, among others, the Corporation of Foreign Bondholders led the holders of public debt to become some of late nineteenth-century England's most politically influential investors. Despite the loud and conflicting statements among the investors who crowded into the City Terminus Hotel on that October evening in 1875, the meeting unanimously designated the corporation as the bondholders' representative. The corporation's council subsequently took the lead pressing the British government to intercede with Istanbul on the bondholders' behalf, in negotiating with the Ottoman government directly, and in representing the claims of the bondholders at the Congress of Berlin.

This article argues that the Corporation of Foreign Bondholders' political power depended, in part, on its privileged capacity to produce certain kinds of facts. Witness, for example, the statement of Cornelius Surgey, a lawyer and member of the corporation's council, who represented the corporation at the City Terminus meeting. According to Surgey, given that Ottoman revenue for 1875–6 was £21.7 million, with a deficit of £4.5 million, the total Ottoman foreign debt of £214.5 million was 'not a heavy burden for Turkey if she were only economically and wisely governed'. Moreover, Surgey argued (to applause), 'When such vast interests as 214½ millions of money were involved it was the duty of the [British] Government to interfere for the benefit of their subjects

[2] 'The Turkish loans', *The Times* (London), 6 November 1875, p. 7, Times Digital Archive, at http://tinyurl.galegroup.com/tinyurl/BE4gx8, accessed 10 July 2019.

[3] D.C.M. Platt, *Finance, Trade, and Politics in British Foreign Policy, 1815–1914*, Oxford: Clarendon, 1968.

[4] The OPDA's relationship with the Ottoman state has received detailed study in two recent works: Murat Birdal, *The Political Economy of Ottoman Public Debt: Insolvency and European Financial Control in the Late Nineteenth Century*, London: I.B. Tauris, 2010; Ali Coşkun Tunçer, *Sovereign Debt and International Financial Control: The Middle East and the Balkans, 1870–1914*, London: Palgrave Macmillan, 2015. On the OPDA in the social context of late Ottoman economic relations see Reşat Kasaba, *The Ottoman Empire and the World Economy: The Nineteenth Century*, Albany: SUNY Press, 1988, pp. 111–15.

[5] The most detailed account of the corporation's actions in the Ottoman Empire appears in Christopher Clay, *Gold for the Sultan: Western Bankers and Ottoman Finance, 1856–1881*, London: I.B. Tauris, 2000. On the corporation's role in the Egyptian default see Paul Meszaros, 'The Corporation of Foreign Bondholders and British diplomacy in Egypt, 1876–1882: the efforts of an interest group in policy-making', PhD dissertation, Loyola University of Chicago, 1973. The corporation may be more broadly understood as part of the rising political and cultural prominence of joint-stock corporations in England after 1844. Timothy Alborn, *Conceiving Companies: Joint-Stock Politics in Victorian England*, London: Routledge, 1998.

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who were creditors.' After all, Surgey posited, 'If a single British subject were murdered or maltreated in China we should take very good care that redress was obtained.'[6]

Surgey's comparison of the creditors' predicament to a case of a murdered British subject illustrates a key theme of this article: the bondholders' claims were simultaneously quantitative and political. The total size of the debt, and the proportion of the debt that was held by British subjects, were deemed to establish an obligation for the British government to act on the bondholders' behalf. As this article will show, however, neither of the two crucial quantities – the size of the debt, and the amount held in England – was transparent. To the contrary, informed observers, including members of the corporation, agreed at the time that a definitive calculation of either quantity was impossible. Moreover, as a variety of plans for resolving the Ottoman default came into play in the late 1870s, competing methods for quantifying the debt emerged as a strategy for making claims about which kinds of investors most deserved relief.

Accounting has always been a simultaneously quantitative, political and even moral exercise, as the word's multiple meanings in English indicate. To account for money is to hold someone accountable for it.[7] However, historians have generally shown that the authority of accounting in the nineteenth century depended on its disinterestedness. Good accounting was bloodless, defined by the absence of judgement.[8] For the growth of industrializing economies, the anonymous clerk – whose facelessness guaranteed the reliability of his work – was as essential as the steam engine.[9] Not coincidentally, the nineteenth century also saw the establishment of statistics as a discipline, amidst an 'avalanche of printed numbers' produced by new national bureaucracies.[10] Professions like accounting, which previously had relied on individual, expert judgement, came to employ quantification as a 'technology of trust', especially across the expanding distances of trade. As Ted Porter writes, quantification gave its practitioners authority, but specifically in the sense of 'power minus discretion'.[11] This idealization of good accounting as a disinterested science accorded with a period when 'objectivity' increasingly came to denote a representation of nature free of human judgement.[12] None of this, of course, is to say that accounting really became apolitical or impersonal in the nineteenth century. Rather, accountants and statisticians engaged in the kind of 'boundary work', characteristic of modern technical disciplines, whereby scientific claims are demarcated from other kinds of claims, such as the political or religious.[13] In this framework, to impose interests or preferences upon the numbers was the very definition of bad accounting.

In the case of the Ottoman loans, however, the typical boundary work came undone, and discretion was explicitly restored to the accountant's arsenal. Influential members of the Corporation of Foreign Bondholders, several of whom were also prominent in London's Statistical Society, acknowledged that there was no such thing as a disinterested calculation of the Ottoman debt. Rather, they freely stated, a variety of approaches were

6 Extract from the *Standard*, 20 October 1875, quoted in FO 424/35 No. 36.

7 Jacob Soll, *The Reckoning: Financial Accountability and the Making and Breaking of Nations*, London: Penguin Books, 2014.

8 Soll, op. cit. (7), pp. 174–5.

9 Michael Zakim, 'Producing capitalism: the clerk at work', in Michael Zakim and Gary Kornblith, eds., *Capitalism Takes Command: The Social Transformation of Nineteenth-Century America*, Chicago: The University of Chicago Press, 2012, pp. 223–47.

10 Ian Hacking, *The Taming of Chance*, Cambridge: Cambridge University Press, 1990.

11 Theodore Porter, *Trust in Numbers: The Pursuit of Objectivity in Science and Public Life*, Princeton, NJ: Princeton University Press, 1995, p. 98.

12 Lorraine Daston and Peter Galison, *Objectivity*, New York: Zone Books, 2010, p. 121.

13 Thomas Gieryn, 'Boundary work and the demarcation of science from non-science: strains and interests in professional ideologies of scientists', *American Sociological Review* 48 (1983), pp. 781–95.

possible, each of which not only led to a political position on how the default should be resolved, but also followed from a set of assumptions about what constituted a fair loan, who was to blame for the default, and which bondholders were most deserving of compensation. I employ the term 'interested calculation', rather than simply 'accounting', to highlight the extent to which bondholders' quantitative arguments were explicitly embedded in their political and material interests.

A full explanation for the shift in British financial politics in the 1870s is beyond the scope of this article. A comprehensive account would consider the changing social composition of the investing classes, the shifts in parliamentary politics in the late 1870s, and a series of defaults in other parts of the world, especially Latin America. Nor do I offer a direct explanation for the establishment of the OPDA, which historians have rightly situated in the long history of European efforts to dictate the reform of Ottoman administration in the context of great-power rivalry, as well as in the immediate context of Ottoman defeat in the 1877–8 war with Russia. However, to the extent that the Debt Administration owed its existence to diplomatic pressure applied by the great powers at Berlin and thereafter, it also represented the victory of bondholders in a prior domestic political struggle to make their losses a diplomatic concern. This article thus adds a layer of context to our understanding of the Debt Administration's origins by showing how the rising political power of bondholders in the 1870s flowed in part from new capacities for knowledge production.

The article focuses on the Corporation of Foreign Bondholders, a relatively understudied group of actors who had an outsized impact in Britain, one of two countries (with France) that played the greatest role in pushing the Ottomans to come to terms with their foreign creditors. Drawing on the corporation's published reports and correspondence, its archival records, the Foreign Office correspondence on the Ottoman loans, press accounts, proceedings of the Statistical Society, and pamphlets and other published work by individual bondholders, the article interrogates the Ottoman default as a site of contested knowledge production among British financiers, accountants and statisticians. After a brief overview of the origins of the Ottoman default, I situate my approach in relation to economic history, the history of science and the new history of capitalism. Subsequent sections show how the Corporation of Foreign Bondholders rapidly established itself as a nexus for information relating to foreign loans, and how bondholders mobilized this information both to produce and to contest the facts of the Ottoman debt.

The Ottoman default: a brief overview

The story of the Ottoman default is in some respects typical of the rise of public international borrowing in the century between the Napoleonic Wars and the Great War. Although the Ottomans resisted the allure of an external loan longer than many states in this period, once the Crimean War prompted a departure from this policy, the debt accumulated rapidly. The first loans were inked in 1854 and 1855, and further major loans followed in 1858, 1860, 1862, 1863, 1865, and every year from 1869 to 1874 (sometimes with more than one loan in a year).[14] Caught up in the global financial crisis that began in 1873, and beset by its own problems of poor harvests and palace intrigue in the years that immediately followed it, the Ottoman government partially suspended payments on its external debt in October of 1875 and fully defaulted in 1876. Much of this story unfolded similarly, albeit on varying timelines, in the nineteenth century's other beleaguered states, especially in the former Spanish Empire.

[14] For overviews see Roger Owen, *The Middle East in the World Economy*, revised edn, London: I.B. Tauris, 1993, pp. 102–5; and Şevket Pamuk, *The Ottoman Empire and European Capitalism*, Cambridge: Cambridge University Press, 1987, 74. For more discussion on each of the loans see Tunçer, op. cit. (4), pp. 54–60; and Donald Blaisdell, *European Financial Control in the Ottoman Empire*, New York: AMS Press, 1966.

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In some important ways, however, the Ottoman loans were unusual. First, they were large. Even in a period when Europeans invested between one-quarter and one-third of their wealth overseas, the Ottoman debt dwarfed most other foreign loans.[15] By 1875, the Ottoman government owed more to its external creditors than any other debtor country – in most cases, by an order of magnitude.[16] Unusually large, the Ottoman default also had unusual consequences. The Ottoman Public Debt Administration, established by the Decree of Muharrem (December 1881), assumed complete authority to collect taxes and other revenues amounting to approximately one-quarter of state revenue, and to distribute these revenues directly to the bondholders' banks.[17] The OPDA was staffed mostly by Ottoman subjects but overseen by a council representing the state's mostly European creditors. (One member represented the internal creditors, or 'Galata bankers'.) Despite the frequency of public defaults in the nineteenth century, international financial administration of a sovereign state was rare. The closest analogue was next door, in Egypt, where the Khedivial government ceded control of its finances to the Anglo-French Caisse de la dette publique in 1876.[18] Inasmuch as the Khedive was an Ottoman vassal, the Egyptian case underlines the extent to which Europeans tended to interpret Ottoman affairs specifically in terms of maladministration and a need for tutelage. But the fact that the Ottoman and Egyptian debt administrations were established within five years of each other also suggests that there was something different about the 1870s – the when, not only the where, of the Ottoman default – which enabled bondholders to achieve a political solution that had eluded them in the preceding half-century of foreign defaults.

Economic history, the history of science and the new history of capitalism

Economic historians and scholars of political economy have interpreted the politics of European investment in the Ottoman Empire in a variety of ways. An early and still influential view characterized the Ottoman loans, and the exercise of international financial control through the OPDA, as forms of 'economic imperialism'.[19] Such a view drew strength, in part, from the nearby example of Egypt, where the agents of the Caisse de la dette, appointed by the British and French governments, helped bring about the British occupation of the country in 1882.[20] Recent scholarship, however, has offered a more nuanced interpretation by disaggregating both Ottoman and European actors. Thus Murat Birdal questions the unitary nature of 'economic imperialism' by pointing out that bondholders, who were inclined to prioritize the financial position of the Ottoman state, sometimes took Istanbul's side in advocating against the treaty privileges

[15] Jeffrey A. Frieden, *Global Capitalism: Its Rise and Fall in the Twentieth Century*, New York: W.W. Norton, 2006, p. 20.

[16] Hyde Clarke, *Sovereign and Quasi Sovereign States: Their Debts to Foreign Countries*, London: E. Wilson, 1879, p. 32.

[17] Birdal, op. cit. (4), p. 7. The OPDA's proportion of state revenue grew under the terms of state loans issued after 1881. See Tunçer, op. cit. (4), pp. 74–5.

[18] The classic account of the Khedive's default is David Landes, *Bankers and Pashas: International Finance and Economic Imperialism in Egypt*, New York: Harper Torchbooks, 1958. The debt administrations in Greece and Serbia came later in the nineteenth century and were less comprehensive than the Ottoman and Egyptian examples. See Tunçer, op. cit. (4). The case of the slightly earlier Tunisian administration is surprisingly understudied and merits further work.

[19] Blaisdell, op. cit. (14); and Landes, op. cit. (18), building on John Gallagher and Ronald Robinson's classic interpretation of Victorian imperial expansion, 'The imperialism of free trade', *Economic History Review* (1953) 6(1), pp. 1–15.

[20] Owen, op. cit. (14), p. 134. See also Roger Owen, 'Egypt and Europe: from French expedition to British occupation', in Albert Hourani, Philip S. Khoury and Mary C. Wilson, eds., *The Modern Middle East: A Reader*, Berkeley: University of California Press, 1993, pp. 111–24.

of European merchants.[21] In a comparative analysis of the OPDA and similar institutions in Egypt, Greece and Serbia, Ali Coşkun Tunçer argues that international financial control actually served as a tool of the late Ottoman state, with declines in the cost of borrowing reflecting the imperial government's cooperation with its international financial administrators.[22]

Much of this existing literature on the Ottoman default relies on certain kinds of statistics. For example, in the standard reference on late Ottoman economic history, Şevket Pamuk provides a table containing the most basic facts of the Ottoman debt: the date of issue, nominal value and nationality of 'major purchasers' of each loan.[23] As Pamuk himself acknowledges, however, some of the data in this table are problematic.[24] In fact, as we will see, the difficulty of accounting for the distribution of Ottoman bondholders by nationality was a topic of serious debate in the 1870s – as was the utility of 'nominal value' as an appropriate way to quantify the total debt. For the purposes of economic history, however, such imperfections must be bracketed. If the goal is to answer questions about the favourability of various loan restructuring agreements, or about economic performance more broadly, one can hardly work without economic statistics. Indeed, the recent revisionist interpretations of the Ottoman debt have flowed largely from quantitative methods that rely on such statistics.[25]

For historians of science, however, the very debates that transform uncertainty into settled figures lie at the foreground of analysis. Rather than bracketing debates over how to account for the size and distribution of Ottoman debt in the 1870s, I am interested in illuminating why these debates mattered, and for whom. By turning our attention to debates over the proper methods for quantifying Ottoman debt, rather than simply accepting the resolution of those debates, we gain new perspective on how lenders successfully argued that their private investments were entitled to public protection.

This approach builds on recent scholarship at the intersection of history of science and the 'new history of capitalism'.[26] The latter field has animated much recent discussion in Middle East studies, with scholarship probing the construction of economic expertise, the uses of Islamic law in financing trade networks, and the relationship between economic and literary change, to identify only a sample of contributions.[27] What history of science brings to this project, as the editors wrote in a recent *Osiris* issue on *Science and Capitalism: Entangled Histories*, is a particular ability to interrogate the close relationship between the production of markets and the production of knowledge.[28] The point is not merely that

[21] Birdal, op. cit. (4), p. 15.
[22] Tunçer, op. cit. (4), p. 150. For another comparative approach, focused on the different political economies of the OPDA and Egypt's Caisse de la dette, see Joseph Yackley, 'Bankrupt: financial diplomacy in the nineteenth-century Middle East', PhD dissertation, University of Chicago, 2013.
[23] Pamuk, op. cit. (14), p. 74.
[24] Pamuk, op. cit. (14), 72.
[25] Birdal, op. cit. (4); Tunçer, op. cit. (4).
[26] For a broad definition of the 'new history of capitalism' see Sven Beckert, 'History of American capitalism', in Eric Foner and Lisa McGirr, eds., *American History Now*, Philadelphia, PA: Temple University Press, 2011; for a discussion of some of the field's limitations see Eric Hilt, 'Economic history, historical analysis, and the new history of capitalism', *Journal of Economic History* (June 2017) 77(2), pp. 511–36.
[27] Timothy Mitchell, *Rule of Experts: Egypt, Techno-politics, Modernity*, Berkeley: University of California Press, 2002, especially Chapter 2; Fahad Ahmad Bishara, *Sea of Debt: Law and Economic Life in the Western Indian Ocean*, Cambridge: Cambridge University Press, 2017; Elizabeth Holt, *Fictitious Capital: Silk, Cotton, and the Rise of the Arabic Novel*, New York: Fordham University Press, 2017. For an overview see Omar Y. Cheta, 'The economy by other means: the historiography of capitalism in the modern Middle East', *History Compass* (2018) 16(4), https://doi.org/10.1111/hic3.12444.
[28] Lukas Rieppel, William Deringer and Eugenia Lean, 'Introduction: the entangled histories of science and capitalism', *Osiris* (2018) 33, pp. 1–24.

science takes shape around the material foundations and economic relations of its society, nor that capitalism's success should be understood as the application of scientific methods to production. Rather, heeding the call for 'symmetric analyses' of the development of ways of knowing and ways of making money, this article foregrounds the two-way relationship between efforts to account for foreign debt in statistical terms and efforts to account for default in terms of its political causes and consequences.[29]

The corporation of foreign bondholders: a financial center of calculation

Statistically informed disagreements about foreign debt became possible in the 1870s thanks in part to the work of the Corporation of Foreign Bondholders. Founded as a council in 1868 and incorporated in 1873, the corporation functioned as a kind of scientific society – complete with a major library, a global collections effort and statistical publications – but animated more by the spirit of Victorian capitalism than by the gentlemanly ethos of the learned societies on which it was partially modelled. The corporation's emergence as a key node of financial intelligence was crucial to its efforts to effect a shift in the politics of foreign loans, whereby investments that had long been considered a private concern of individual British subjects would become the duty of the British government to protect.

Bondholder committees were, in some respects, nothing new. As early as 1721, investors in the South Sea Company hired their own accountant, Charles Snell, to investigate the company's finances during its collapse.[30] With the growth in international lending and London's rise as the global financial centre after the Napoleonic Wars, however, such committees proliferated. Perhaps the most prominent example, prior to the Ottoman bondholder committees, was the series of such committees that sought to negotiate with the Mexican government in the wake of the latter's default in 1827.[31] Whereas many of the foreign loans in this period were funded by the same network of capitalists, the membership of different loan committees often overlapped. For example, Haim Guedalla, a nephew and close associate of the banker Moses Montefiore, chaired both the Committee of Mexican Bondholders and the English Committee of the Turkish General Debt Five-Percent Loans.[32]

Contemplating the long record of frustration that such bondholder committees had accumulated by the late 1860s, a group of capitalists led by the Prussian émigré Isidore Gerstenberg envisioned the need for a council that would act as a central agency for assisting investors in foreign debt. Gerstenberg served as founding chairman of the Corporation of Foreign Bondholders until his health failed; the Liberal statesman Edward Pleydell-Bouverie succeeded him in 1877. The increasingly professional character of the corporation in the 1870s can be seen in the decision to pay the council members, as well as to hire a paid staff, located in a council house on Moor-gate Street.[33] Hyde Clarke, a

[29] Rieppel, Deringer and Lean, op. cit. (28), p. 4.

[30] Soll, op. cit. (7), 111. On the South Sea Company crisis in the context of quantification in public discourse see William Deringer, *Calculated Values: Finance, Politics, and the Quantitative Age*, Cambridge, MA: Harvard University Press, 2018.

[31] Michael P. Costeloe, *Bonds and Bondholders: British Investors and Mexico's Foreign Debt, 1824–1888*, Westport, CT: Praeger, 2003; Richard Salvucci, *Politics, Markets, and Mexico's 'London Debt', 1823–1887*, Cambridge: Cambridge University Press, 2009.

[32] Costeloe, op. cit. (31), p. 183.

[33] Corporation of Foreign Bondholders, *Seventh Annual General Report of the Council of the Corporation of Foreign Bondholders*, London: Wertheimer, 1880, p. 9. Funds came from membership subscriptions, loans from founding members and fees collected from bondholders and debtor states in exchange for the corporation's services.

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former commissioner of the Cotton Supply Association of Turkey and Egypt, served as secretary to the council. The staff in 1875–6 comprised eleven 'officers and clerks'.[34]

Notwithstanding the many other countries in which the corporation had business, the size of the Ottoman debts made them a central preoccupation for council members. Gerstenberg himself was chair of the Joint Commission on the Ottoman Loans of 1858 and 1862. Of the corporation's twenty-six council members in 1875, eleven sat on one or more of the various Ottoman loan committees. As much as the corporation would play a crucial role in resolving the Ottoman default, it is equally the case that the Ottoman default shaped the emergence of the corporation and launched it to prominence as a force in British politics and finance.

While negotiating with debtor governments was the corporation's most urgent and controversial task, its quotidian labour centred on the collection and circulation of information. Indeed, the need for such a centre of information for investors in foreign loans was one of the primary justifications for the corporation's existence. As the council noted in its annual report for 1879,

> The numerous appeals also, which are daily made, by individual Bondholders, to the Council for information and advice, on all matters connected with the functions of the Corporation, are in themselves a strong proof how much their help, in this respect, is needed and appreciated; and how important it is to have some common centre, where it is known that the materials for information are constantly being collected whence action can be readily taken, and to which recourse can be had at any moment.[35]

The corporation realized this vision of a 'centre … whence action can readily be taken' in several ways, but first and foremost through the rapid development of a library, which was intended to 'include all that is requisite to illustrate the financial and industrial conditions of each country in the world'.[36] By the end of 1876, this collection had swelled to over 1,500 published volumes, several hundred unpublished volumes of loan documents and company prospectuses, and a variety of charts, especially railway and mining maps.[37] The council purchased some of these items, but most of the library's rapid growth came in donations: from the Foreign Office; from the US Treasury Department; from presidents, ministers and governors of colonies and foreign states; from consuls; and from authors of relevant studies.[38] By the end of the decade, 17 Moor-gate Street boasted the world's most extensive library of state finance: 'nowhere else is to be found, so large and instructive a general collection of material, for the financial modern history of the States to which they relate'.[39] As for states in default, the council claimed 'that they have now collected and recorded in their archives an amount of detailed information … which is unrivalled in its character and extent'.[40]

34 Minutes of the Council of the Corporation of Foreign Bondholders, 1873–1880, p. 144, London Metropolitan Archives, CLC/B/060/MS15749/001.

35 Corporation of Foreign Bondholders, op. cit. (33), p. 6.

36 Corporation of Foreign Bondholders, *First Report of the Council of the Corporation of Foreign Bondholders*, London: s.n., 1874, p. 58.

37 Corporation of Foreign Bondholders, *Fourth Annual General Report of the Council of the Corporation of Foreign Bondholders*, London: s.n., 1877, p. 57.

38 E.g. Corporation of Foreign Bondholders, op. cit. (36), p. 76; Corporation of Foreign Bondholders, *Fifth Annual General Report of the Council of the Corporation of Foreign Bondholders*, London: Wertheimer, 1878, p. 47; Corporation of Foreign Bondholders, *Sixth Annual General Report of the Council of the Corporation of Foreign Bondholders*, London: Wertheimer, 1879, p. 58.

39 Corporation of Foreign Bondholders, *Sixth Annual General Report*, op. cit. (38), p. 58.

40 Corporation of Foreign Bondholders, op. cit. (33), p. 6.

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As part of this comprehensive effort to document state financial information in a central location, the Corporation of Foreign Bondholders operated a large and well-organized newspaper cuttings service. For the 1870s alone, these cuttings were drawn from at least twenty-two periodicals.[41] Though almost all were in English, the more specialized financial journals regularly reprinted items of interest from the Ottoman press, including English-language periodicals and Reuters dispatches from Istanbul and Alexandria. Thus, in the summer of 1874, readers in the council house library could peruse articles from the *Levant Herald*, as reprinted in the July issues of the *Financier*, addressing agricultural taxation in Turkey, and a new loan from Galata bankers to the Porte.[42]

The corporation's Records Department invested in organizing the financial information it collected, and in making it usable by members. Each volume of newspaper cuttings contained an alphabetical subject index. The library itself was indexed and a catalogue distributed to corporation members upon request.[43] Readers included bondholders, of course, but also bankers, loan contractors and foreign agents.[44] Members could request the research services of the council secretary, thereby accessing the collection without having to travel to London.[45]

The corporation also assembled financial intelligence from an international network of agents, some of whom were paid. In the first year of its existence, this financial consular service already boasted ten members, who covered territories including South America (Colombia, Bolivia), the United States (Virginia), Europe (Spain, Germany), North Africa (Tunis), Ottoman and former Ottoman territories in Europe (Romania, Greece, Serbia) and, of course, Anatolia and Egypt.[46] Its agent in Istanbul, Simon Stab, was a Transylvanian-born former captain in the Ottoman Army, who had served with British forces in the Crimean War and subsequently worked for the Foreign Office. His ties to the Corporation of Foreign Bondholders appear to have been forged in the 1860s, when he was Clarke's assistant commissioner for the Cotton Supply Association of Turkey and Egypt.[47]

The centrality of financial data collection to the corporation's efforts helps make sense of the connections that developed between its members and London's Statistical Society – another institution that emerged amidst the enormous uptick in the quantification of social phenomena that nineteenth-century state bureaucracies unleashed. The Statistical Society's treasurer in the 1870s and 1880s, R.B. Martin, was simultaneously a corporation council member. Other council members or corporation staff who were also members of the Statistical Society included Hyde Clarke, Sir John Lubbock and Sir George Balfour. Not coincidentally, the Statistical Society papers contained a distinct subgenre on matters of finance.[48] The society regularly debated papers on the analysis of

[41] Corporation of Foreign Bondholders, *The Newspaper Cuttings Files of the Council of Foreign Bondholders in the Guildhall Library*, vol. 2, London: Guildhall Library, n.d.

[42] See the excerpts from the *Financier* of 13 July 1874 and 10 August 1874, in Corporation of Foreign Bondholders, *The Newspaper Cuttings Files of the Council of Foreign Bondholders in the Guildhall Library*, vol. 3, London: Guildhall Library, n.d. The *Bullionist* also reprinted extracts from the *Levant Herald*, as in the cutting from 15 August 1874.

[43] Corporation of Foreign Bondholders, *Third Annual General Report of the Council of the Corporation of Foreign Bondholders*, London: s.n., 1875, p. 76; Corporation of Foreign Bondholders, *Fifth Annual General Report*, op. cit. (38), p. 47.

[44] Corporation of Foreign Bondholders, *Second Annual General Report of the Council of the Corporation of Foreign Bondholders*, London: s.n., 1874, p. 78.

[45] Corporation of Foreign Bondholders, op. cit. (44), p. 11.

[46] Corporation of Foreign Bondholders, op. cit. (36), pp. 53–4.

[47] *Journal of the Society of Arts*, 26 April 1889, p. 531.

[48] For a listing of officers and papers up to 1884 see Frederic J. Mouat, 'History of the statistical society of London', *Journal of the Statistical Society of London* (1885) jubilee volume, pp. 14–71, 359–71.

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public debt, while many more papers addressed closely related topics, such as the economic resources of foreign countries.

The corporation's intelligence network enabled it to serve actual and potential bondholders through the publication of its own reports. In 1877, for example, the corporation produced a detailed and indexed table of all foreign loans issued in London since 1822. In the same year the corporation began distributing the monthly statements of Egyptian revenues and debt receipts.[49] The council also reprinted (and, if necessary, translated) major statements and reports affecting bondholders' interests, such as the Decree of Muharrem and the Bourke report in 1881.[50] Occasionally, where a loan was connected to a specific piece of territory, such as a railway or mining claim, the corporation even published its own maps.[51]

In his influential theorization of techno-scientific networks, Bruno Latour articulated the importance of 'centres of calculation', where 'specimens, maps, diagrams, logs, questionnaires and paper forms of all sorts are accumulated and are used by scientists and engineers'.[52] Examples in the natural sciences include the botanical garden, the astronomical and geophysical observatory and the laboratory. The signature capacity of such centres of calculation is to render global information available to small numbers of people in specific locations. 'Every time an instrument is hooked up to something, masses of inscriptions pour in, tipping the *scale* once again by forcing the world to come to the centres – at least on paper.'[53] One way of understanding the intelligence activities of the Corporation of Foreign Bondholders, and the debates that its members conducted in venues like the Statistical Society, is as an effort to establish a science of foreign debt: a set of shared technologies, methods and institutions for collecting, analysing and interpreting the information that investors required to make decisions. We do not have to accept the corporation's rhetoric alone; the evidence largely supports its claim to have assembled, in the 1870s, an unmatched centre for the calculation of foreign debt. Its members would use this centre as their fulcrum with which to dislodge a cornerstone of British diplomacy.

Accounting for the Ottoman debt

In the weeks following the Ottoman announcement suspending full interest payments, British bondholders flooded the Foreign Office, as well as newspaper editorial pages, with letters demanding their government's intervention with the Porte.[54] Even James Redhouse, the famed Turkish lexicographer, compiled a table of the Ottoman loans and a proposal for resolving the crisis, which he sent to the Foreign Office.[55] However, though all bondholders shared the goal of winning British government intervention, their interests did not overlap completely. Even as the Corporation of Foreign Bondholders sought to represent all investors in Ottoman loans, at least three classes of such investors simultaneously organized themselves and worked to ensure that any settlement would accord with

[49] Corporation of Foreign Bondholders, *Sixth Annual General Report*, op. cit. (38), p. 22; Corporation of Foreign Bondholders, *Fifth Annual General Report*, op. cit. (38), p. 19–21.

[50] Council of Foreign Bondholders, *Ninth Annual General Report of the Corporation of Foreign Bondholders*, London: Wertheimer, 1881, p. 69.

[51] See, for example, the map of the Peru littoral in the annual report for 1880.

[52] Bruno Latour, *Science in Action*, Cambridge, MA: Harvard University Press, 1987, p. 233.

[53] Latour, op. cit. (52), p. 233, original emphasis.

[54] Many of these letters are preserved in Corporation of Foreign Bondholders, op. cit. (42), as well as in FO 424/35, e.g. nos. 25, 32, 48.

[55] J.W. Redhouse to Lord Tenterden, 29 October 1875, FO 424/35 no. 60; J.W. Redhouse to Lord Tenterden, 22 November 1875, FO 424/35 no. 92 and inclosure.

their particular interests. The 'Egyptian Tribute bondholders' held one or more of the loans of 1854, 1855 and 1871, each of which was secured on a portion of the tribute that the Sultan received from the Khedive of Egypt. Meanwhile, the bondholders of the 1858 and 1862 loans organized together, because these loans had also been issued on special security (tobacco, salt and customs revenues). Investors like Guedalla, however, had put their money into 'general-debt' bonds, secured on the revenue of the Ottoman Empire but with no specific asset standing behind them. In the unsettled period between the 1875 default and the establishment of the OPDA in 1881, each of these different classes of bondholder strenuously protested any hint of a proposal that would place their group at a disadvantage.[56] At one point, suspicion was so intense that a minority within the Corporation of Foreign Bondholders sought (unsuccessfully) to remove the corporation's agent in Istanbul, Captain Stab, accusing him of being 'disloyal' to their interests.[57]

When the corporation's representatives corresponded or met with the Foreign Office, they drew on their intimate knowledge of the loans market to underline the size of British holdings in the specific loan with which they were concerned. G.K. Corfield, representing the bondholders of the loans of 1858 and 1862, argued to Lord Derby that bondholders stood to be 'defrauded' of £80 million, of which £1 million was in the hands of the (British) 1858 and 1862 investors alone.[58] Guedalla, writing in his capacity as chairman of the English Committee of the General Debt of Turkey Five Per Cent Loans (1865–74), impressed upon Lord Derby that these loans amounted to £80 million, 'of which nearly half is held in the United Kingdom'.[59] The chairman of the General Committee of English Bondholders of the Turkish Debt, C.F. Hamond, once complained bitterly to the Foreign Office, 'may I therefore take the liberty of asking the grounds upon which I am refused the request I have made on behalf of bondholders representing 120,00,000 pounds sterling, or two-thirds of the debt of Turkey'.[60] In letter after letter, and deputation after deputation, the corporation's representatives underlined the size of the loans and the proportion that was held specifically in British hands.

If these figures do not appear to be entirely consistent, however, it is because bondholders encountered basic difficulties in their attempts to quantify the Ottoman debt – but used the resulting ambiguities only to press their case. The reality that financial statistics are artefacts, composed of malleable assumptions and incomplete data, was no secret to the elite bondholders who sat on the corporation's council, nor to interlocutors – from institutions like the Board of Trade and Customs House – with whom they conversed in meetings of the Statistical Society. As Hyde Clarke, founding secretary of the corporation, remarked archly in a Statistical Society paper, 'to many persons figures are figures and facts, and when in print are invested with the highest sanctity', yet such figures often fail to support the 'facts' that they are believed to authorize.[61]

A notable subset of the corporation's most influential bondholders gathered regularly at the Statistical Society to discuss the challenges that foreign loans posed to statistical analysis. At these meetings, bondholders frankly agreed that the Ottoman debt, like foreign loans in general, was not precisely quantifiable. The most publicly accessible metrics

[56] On the various proposals of this unstable period 'between the decrees' see Clay, op. cit. (5), esp. Chapters 6–10.

[57] 'Report of the special sub committee of the council on the following resolution of the general Turkish committee, 29 May 1876', in Minutes of the Council of the Corporation of Foreign Bondholders, 1873–80, p. 192, LMA CLC/B/060/MS15749/001.

[58] G.K. Corfield to Earl of Derby, 9 October 1875, FO 424/35 no. 18.

[59] H. Guedalla to Earl of Derby, 30 January 1878, FO 424/36 no. 265, in *Ottoman Loans: Further Correspondence, Part II*, at www.archivesdirect.amdigital.co.uk (accessed 29 July 2019).

[60] Hamond to Tenterden, 8 April 1876, FO 424/36 no. 28.

[61] Clarke, op. cit. (16), p. 24.

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for each loan were the nominal value, interest rate and quantity of bonds issued. But often a loan was not fully 'subscribed', meaning that a portion of bonds went unpurchased.[62] For those bonds that were purchased, their nominal value was often greater than their purchase price, the amount that bondholders had actually paid. Moreover, as Clarke observed, even if one somehow knew exactly how many bonds were purchased and at what price, one still might not know how much the debtor government had received from a given loan. The latter figure required intimate knowledge of the loan's finer terms, including the commission granted to the loan contractor, as well as any special arrangements made with private syndicates (more on whom below). This kind of detailed information about loan terms was often unavailable to the public – for good reason. In extreme cases, Clarke alleged, 'the foreign Government received next to nothing', and the bonds should not be understood as loans to states so much as they were 'loans from the public to the persons concerned in their concoction'.[63]

Clarke did not argue here that publicly available metrics should yield to a more nuanced quantification because the latter method allowed for a disinterested accounting. Rather, as I elaborate below, he and his associates argued that methods of accounting for the Ottoman debt should take the right interests into account. Their point – explicitly – was that any method of accounting for the Ottoman debt represented certain interests over others; in this circumstance, they argued, what defined good accounting was the extent to which it represented the interests of those who had suffered injury rather than those who had committed harm. Put another way, debates over how to quantify foreign loans were understood to be inseparable from debates over who bore responsibility for defaults and who deserved compensation.

Clarke was among a group of investors associated with the Corporation of Foreign Bondholders who harshly criticized the terms of some of the Ottoman loan agreements. These complaints followed a specific logic that transformed investment loss into a form of injury deserving compensation. Had the Ottoman government simply been unable to meet its debts, bondholders would have had to bear the consequences of making a bad loan. 'Investors must take care of themselves', as the president of the Statistical Society declared in one debate.[64] Meanwhile, bondholders could hardly allege that the interest rates on the Ottoman loans were usurious; the prospect of a high return was what had led bondholders to purchase the loans to begin with. By critiquing the commissions of bankers and other contractors who had facilitated the loans, however, bondholders argued for a third possibility: the Ottomans and their creditors had agreed to fair loans, which the Ottomans would have been able to repay – but for the interference of exploitative actors, or 'manipulators of false loans', in Clarke's words.[65]

In the hands of Haim Guedalla, the argument against loan 'manipulators' became particularly important for bondholders of the general debt. Guedalla had long experience organizing disgruntled investors. In addition to his work on the Mexican bondholders' committee, he had played a leading role among shareholders in the 'gold bubble' mining companies of California and Australia during the 1850s.[66] As a major investor in Ottoman and other foreign debt, Guedalla turned his sights in the 1870s to arguing that lenders and borrowers had both been had. In an essay on 'Mitigating and extenuating circumstances in the recent Turkish default', published in 1876, Guedalla compared the amount of money

62 Clarke, op. cit. (16), p. 17.
63 Clarke, op. cit. (16), p. 23.
64 Clarke, op. cit. (16), p. 48.
65 Clarke, op. cit. (16), p. 49.
66 John Woodland, *Money Pits: British Mining Companies in the Californian and Australian Gold Rushes of the 1850s*, Burlington, VT: Ashgate, 2014.

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that the government had actually received on each loan with the amount it had since paid on the loan. For all but the most recent two loans, the Ottomans had more than repaid the principal, reckoned as the amount that the government actually received at price of issue.

To draw out the implications of his approach more starkly, Guedalla reprinted a table of 'Reduced amount Turkey would still owe on each Loan if the money it actually received had been an ordinary borrowing at 6 per cent', next to a table of 'Amount still due by Turkey … which it has covenanted to pay'. Excepting the most recent loan, the figures in the latter table were at least twice the corresponding figures in the former table, and were frequently ten to twenty times as large. Had the 1862 loan been contracted as an 'ordinary' loan at 6 per cent, it would have been entirely paid off by 1876, rather than being over £5 million in default. For the 1858 loan, only £73,605 would have remained to be paid off, rather than £3,728,351. Of course, Guedalla acknowledged, 'if the lenders themselves had bargained for such terms, they could scarcely be entitled to much sympathy. But they did not do so, for they had no part in the contract upon which the Bonds were issued'.[67]

Guedalla's tables were based on the work of Arthur Scratchley, a life insurance actuary who published several guides for Victorian investors.[68] In addition to his work on foreign debts, he also wrote extensively on benefit building societies and life assurance societies.[69] In Scratchley's own view, the amount that the Ottomans still nominally owed on loans whose capital had been more than repaid was evidence that 'Turkey … [ought] not to trouble herself about her creditors for the present', as Scratchley himself later counselled the British Foreign Secretary.[70] In Guedalla's view, however, the tables illustrated a different tale, in which the unethical practices of certain banks and loan contractors bore the blame for defrauding both the Ottoman government and its creditors.

One tactic that Guedalla critiqued was the practice, adopted by certain loan contractors, of enticing investors to purchase bonds through the promise of 'redemption-at-par' drawings. Bonds would be issued at a discount, and periodic drawings, typically beginning in the first year of the loan, would select certain of these bonds to be redeemed at their full face value. Through this practice, on a nominally 5 per cent or 6 per cent long-term loan, lenders could hope to realize something like a 20 per cent short-term gain. As another critic pointed out, these drawings represented 'an exact reproduction of the old lottery business'.[71] Meanwhile, the Ottoman government was doubly injured: the discounted offerings meant that it received far less than the contracted value of the loan, while 'redemption at par' required it to repay the full value long before the date of maturity.

While redemption-at-par drawings attracted criticism of the banks that floated the loans, Guedalla heaped even greater scorn on loan 'syndicates', associations of investors who contracted with banks to guarantee the subscription of a loan (either in whole or in part). In return for this guarantee, syndicate investors received a substantial discount on the purchase price of their bonds, which they immediately sold at a higher price to the public. Both the borrowing government and ordinary bondholders suffered from this arrangement: the former, once again, because a substantial amount of revenue from

[67] H. Guedalla, *Mitigating and Extenuating Circumstances in the Recent Turkish Default, to Which Are Added Various Statistical Facts Relating to Turkey and Her Debt*, London: Witherby, 1876, p. 9.

[68] Arthur Scratchley, *On Average Investment Trusts and Companies Dealing with Stock Exchange Securities … With an Exposition of the Financial Principles Involved in Stock Exchange Securities and Foreign Government Loans*, London: Shaw, 1875, pp. 2–3.

[69] E.g. Arthur Scratchley, *Treatise on Benefit Building Societies and Life Assurance Societies*, London: Charles and Edwin Layton, 1867.

[70] Arthur Scratchley to Salisbury, 9 January 1880, FO 424/93 no. 131, in *Ottoman Loans: Further Correspondence, Part III*, at www.archivesdirect.amdigital.co.uk (accessed 29 July 2019).

[71] Arthur Crump, quoted in Guedalla, op. cit. (67), p. 10.

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the loan was effectively diverted to a third party; the latter, because the presence in the market of a large proportion of bonds purchased at discount tended to depress the price of their investment in the long term.[72] Meanwhile, according to Guedalla, the typical investor 'is in nearly every case completely ignorant' of such hidden deals; 'he is playing against a species of loaded dice'.[73]

Haim Guedalla was a member of one of England's most prominent banking families and had been investing money overseas for twenty years before the Ottoman default. It is hard to imagine that he bought Ottoman bonds only because he was blind to the reality of loan syndicates, redemption-at-par drawings or any of the other details of the business that he chose to publicize in 1876. Evidently, it was when loans went bad that Guedalla, and other influential bondholders associated with the corporation, invoked the typical investor as a victim, to make a political case that investors deserved relief. What is interesting is not whether Guedalla was right or wrong, however, but rather how quantitative information – and specifically the ability to selectively move such information from the private domain to public audiences – functioned as a strategic asset in the negotiations that ensued when loans were not repaid.

Guedalla's use of Scratchley's tabulation of the Ottoman debt to denounce the loan syndicates lent political ammunition to a class of bondholders who especially needed it: the investors in the general debt. Between 1876 and 1877, the Egyptian Tribute bondholders (1854, 1855 and 1871 loans) were gaining traction with the Foreign Office through legal arguments that attached to their very particular circumstance. Because the British and French governments had guaranteed the 1855 loan (during the Crimean War), the Ottomans had exempted this loan from the default, which meant that the Khedive was still paying into an account at the Bank of England set aside for service specifically on the tribute loans.[74] Given this unique circumstance, the British government found it increasingly difficult to maintain that only the 1855 bondholders could be paid from this account without violating the rights of the 1854 and 1871 investors. Moreover, the 1854 loan had enjoyed public support from leading British statesmen during the Crimean War. Although this support did not amount to a legal guarantee, it gave women and men a powerful claim to their government's support when the default came. One such investor in the 1854 loan was Clara Mockler, whose late husband had served as a lieutenant colonel in the 4th West India Regiment. Mockler corresponded with the Foreign Office for at least three years, at one point informing Lord Salisbury that the Ottoman default had left her 'in actual want of means to pay for my children's education'.[75] She took her case public in March 1877, publishing her plea in the *Daily Telegraph* as a 'widow of one of her Majesty's officers, with four children … with the little all of my fatherless children invested in the Turkish 1854 Loan'.[76] Nor was Mrs Mockler the only woman to lobby the Foreign Office directly on behalf of ordinary British subjects who stood to lose their savings to the Ottoman default.[77]

[72] H. Guedalla, *Syndicates and Their Baneful Influence on Foreign Loans and Public Companies, As Regards Both the Borrowers and Ultimate Lenders*, London: s.n., 1873, pp. 16–17. This section of the pamphlet quotes liberally from *The Economist*, with Guedalla's commentary intermixed.

[73] Guedalla, op. cit. (67), pp. 3, 1.

[74] The mechanics of this arrangement are illustrated in the ledger 'Turkish guaranteed loan: provision for dividends and sinking fund', Bank of England C40/269.

[75] Clara Mockler to Lord Salisbury, 6 November 1879, FO 424/93 no. 109.

[76] Clara Mockler, 'To the editor of *The Daily Telegraph*: the Turkish loan of 1854', *Daily Telegraph*, 29 March 1877, in Corporation of Foreign Bondholders, op. cit. (42). The circumstances surrounding the 1854 loan, which had been implicitly, though not formally, backed by the British government, won its bondholders unique public support.

[77] Mary Brown to Lord Derby, 12 January 1876, FO 424/35 no. 160.

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If the Egyptian Tribute bondholders enjoyed a special claim to the British government's backing, the 1858 and 1862 bondholders felt that they were hardly less deserving. This class of bondholders claimed that the suspension of their interest payments was no mere default, but rather had become a matter of 'theft' once the Ottoman government sought to raise new loans based on the securities that had already been pledged to them. The 1858 and 1862 bondholders hired a 'professional auditor and accounting consultant', J.A. Franklin, who consistently pressed this argument with the British government.[78] Franklin was affiliated with the London Institution, an outgrowth of the Victorian 'useful-knowledge' movement that sought to engage the working classes in politically safe, scientific learning.[79] As with the Statistical Society, bondholders' relationship with a member of the London Institution illustrates how financial interests both patronized and benefited from the growth of scientific institutions no longer wedded to the ideal of the disinterested gentleman.

In a context in which both the Egyptian Tribute bondholders and the 1858 and 1862 bondholders articulated privileged claims to British government support, Guedalla's calculations were an attack on such special pleading. Guedalla pointedly argued that Scratchley's tables showed the hefty profits already made on the 1858 and 1862 loans, among others. Lacking the special legal standing of the other bondholder groups, the general-debt bondholders put forward a new accounting of the Ottoman loans to argue that any settlement of the default should be comprehensive, addressing the interests of all bondholders rather than only some.

Who owned the Ottoman debt?

Contestation over quantifying the total Ottoman debt extended to the more specific problem of quantifying the national distribution of bondholders. In the British press, it became a commonplace in the 1870s to warn of the dire losses that British investors were suffering in foreign loans. The *Standard*, for example, cited a report that roughly 40 per cent of Egyptian debt was held 'in English hands'.[80] Some observers, however, took issue with such generalizations. The nationality of bondholders was not recorded at purchase. Most of the numbers in circulation that claimed to represent the proportion of debt held by subjects of one country or another were based on the location of the exchange where the bond was purchased. Thus Ottoman bonds were presumed to be in English hands if purchased at London, in French hands if at Paris and so forth. (In this respect, Pamuk's modern assessment adopts the practice of the historical actors.) Yet, as Clarke noted, London had become the global centre of financial credit in the middle of the nineteenth century, 'not on the vulgar faith that John Bull's enormous wealth enables him to supply money to all foreigners, but because this has become the great centre for lending the money of foreigners to foreigners'.[81] Statistics claiming to show how much foreign debt was held by the British public in fact showed only how much had been issued or converted in London, 'on English and foreign account'. By one measure, Clarke found (concerning an Austrian loan), less than 10 per cent of this debt was British-owned.[82] Taking note of this methodological problem, *The Economist*, lamenting the rapid

[78] J.A. Franklin to Earl of Derby, 7 September 1875, FO 424/35 no. 4a; J.A. Franklin to Earl of Derby, 24 October 1875, FO 424/35 No. 53; J.A. Franklin to Derby, 19 March 1877, FO 424/36 no. 180.

[79] J.N. Hays, 'Science in the City: the London Institution, 1819–1840', *BJHS* (1974) 7(2), pp. 146–62; James Secord, *Victorian Sensation: The Extraordinary Publication, Reception, and Secret Authorship of* Vestiges of the Natural History of Creation, Chicago: The University of Chicago Press, 2000, pp. 48–50; Alan Rauch, *Useful Knowledge: The Victorians, Morality, and the March of Intellect*, Durham, NC: Duke University Press, 2001.

[80] Clarke, op. cit. (16), p. 24.

[81] Clarke, op. cit. (16), p. 5.

[82] Clarke, op. cit. (16), p. 25.

depreciation of Ottoman and Peruvian loans in 1876, frankly remarked that it was 'impossible to say how much of [the loss] may have extended to Great Britain'.[83]

In April of 1878, the Statistical Society debated a paper by Clarke, in which he proposed an alternative method for quantifying the amount of British-held foreign debt. Clarke's idea was to use the parliamentary return on annual income tax assessments, which distinguished dividends on British, Indian, colonial and foreign stocks.[84] This procedure, however, was denounced as 'absolutely fallacious' and 'unreliable' by the paper's audience.[85] Critics pointed out that the income tax assessment underestimated British holdings by omitting any dividends paid out at foreign exchanges, while overestimating British holdings by including dividends paid to foreigners in London. It came down to the original problem: the only data recorded about nationality in financial transactions was the location of the transaction itself; what this implied about the parties to the transaction was a matter of speculation. At the end of the Statistical Society's debate, the position of the society's president was frankly pessimistic: 'It would be extremely interesting to know the real investments of Englishmen in foreign funds and investments; but he thought it was impossible to arrive at an accurate estimate as to what these were.'[86]

These debates over the British share in foreign debts must be understood in at least two different contexts, in which bondholders held different interests. On the one hand, debates over the national share in foreign loans were part of a larger controversy over whether the practice of lending to foreign states diminished the national wealth. Mercantilism still resonated for some Victorian economic thinkers and public officials, many of whom worried about the spectre of British savings lining the coffers not only of allies like the Ottomans but also of adversaries like Russia. Bondholders, of course, were anxious to rebut the notion that their investments ran contrary to British interests. Among several arguments they made on this front, one was simply that estimates of the British share in foreign loans were overblown.[87]

However, when it came to requesting governmental assistance, bondholders also had an interest in emphasizing the size of the British share in foreign loans, including the Ottoman loans in default between 1875 and 1881. Not only was the size of the potential loss to British investors key to the bondholders' efforts to persuade the Foreign Office to represent their interests, as we have seen. The outsized portion of debt in British hands also laid the basis for British investors' eventual claim to privileged representation on the OPDA. (With the French, the British bondholders would hold a rotating presidency of the administration.) Other national bondholder groups quickly grasped the importance of putting a number on their holdings, with the Italian bondholders especially active in pressing their case – successfully – for representation on the OPDA council.[88] In an era when no one actually recorded the nationality of bondholders, such quantitative and political claims stood in a circular relation to each other. Calculation both followed from and supported the conviction that specific groups of bondholders were entitled to protection.

Conclusion

For historians accustomed to the notion that bondholders played an important role in driving British policy toward the Ottoman (as well as Ottoman Egyptian) state in the

83 *The Economist*, 1 April 1876, p. 30.
84 Clarke, op. cit. (16), pp. 11–12.
85 Clarke, op. cit. (16), pp. 44, 47.
86 Clarke, op. cit. (16), p. 47.
87 See Clarke, op. cit. (16), p. 27, for arguments more on the economic merits.
88 See Salisbury to Paget, 15 March 1879, FO 424/93; Lyons to Salisbury, 18 March 1879, FO 424/93, no. 42.

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1870s and 1880s, it may be disconcerting that the amount of Ottoman debt, both as an absolute number and as a proportion held in England, was never firmly quantified; that, indeed, bondholders in some contexts rejected the very possibility of settling on a reliable number. My point, however, has not been to cast doubt on the fact that the Ottoman debt was large, or that British subjects owned a significant proportion of it. Rather, I have aimed to illuminate the work that went into producing these facts in the latter half of the 1870s, in the wake of the Ottoman default. The problem of addressing the default, which preoccupied European governments, financiers and ordinary women and men who had invested their savings, included fundamental problems of knowledge. Recognizing this fact, English bondholders mobilized an international network of agents to assemble a new kind of 'centre of calculation' at 17 Moor-gate Street in the City of London: a nexus of statistical reports, maps, prospectuses and all manner of information bearing on the credit of foreign nations. At the same time, bondholders patronized the flourishing world of Victorian accountants and actuaries, and bondholders formed a small but recognizable constituency in the growth of the Statistical Society. Their privileged capacity to assemble public facts out of the closely held details of the foreign-loans market served as indispensable ammunition in the bondholders' struggle to secure their interests.

For historians of science, what is perhaps most unusual about this struggle is the explicitly interested nature of quantification in a late nineteenth-century context. Actuaries like Scratchley and investor–advocates like Guedalla did not argue that their calculations of the debt were less interested and therefore more objective than other calculations. Rather, their point was that any quantification of the Ottoman debt proceeded, by necessity, from a political analysis. Was the failure of the loans to be blamed on the Ottomans, and hence also on the poor judgement of bondholders? Or was the default instead to be blamed on financial conspirators, to whom both the Ottomans and their creditors had fallen victim? And who was more deserving of compensation: those whose loans were backed by special security, but which the Ottomans (assuming 'fair' terms) had already more than repaid – or those who held 'general debt', which had been lent on more equitable terms but without special security? Of course, any stance on such questions was likely to be situated in a set of material interests, as Guedalla's case illustrates. But in debates over calculating the Ottoman debt, neither political posturing nor material interest disqualified the scientific status of quantification. Bucking the trend that idealized objective accounting as impersonal 'power minus discretion', bondholders turned to calculation explicitly as a form of politics. By functioning as a centre of calculation, the new Corporation of Foreign Bondholders gave its members privileged access to this form of power, and helps explain the unprecedented success of British bondholders in gaining their government's support in the wake of the Ottoman default.

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