



Financial scandals: a historical overview

Steven Toms

To cite this article: Steven Toms (2019) Financial scandals: a historical overview, *Accounting and Business Research*, 49:5, 477-499, DOI: [10.1080/00014788.2019.1610591](https://doi.org/10.1080/00014788.2019.1610591)

To link to this article: <https://doi.org/10.1080/00014788.2019.1610591>



© 2019 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group



Published online: 01 Jun 2019.



Submit your article to this journal [↗](#)



Article views: 22313



View related articles [↗](#)



View Crossmark data [↗](#)



Citing articles: 11 View citing articles [↗](#)

Financial scandals: a historical overview

STEVEN TOMS*

Business School, University of Leeds, Leeds, United Kingdom

I examine the incidence of fraud from c.1720 to 2009 and relate it to the occurrence of significant financial scandals. Focusing on the UK, and US prior to Enron, and using a detailed dataset of significant events and news content, underpinned by examination of specific watershed scandals, the paper highlights the regulatory response to scandals and the implications for accounting and financial reporting. The evidence reveals the incidence of fraud and financial scandal to be historically contingent and skewed towards certain sectors, particularly banking and finance, facilitated by complex group structures and international capital mobility, and mediated by managerial incentives and ownership concentration. Financial reporting and auditing can mitigate fraud opportunities in all sectors and businesses without complex group structures, and the accounting profession achieved some success in this respect up to the mid-1970s. Since then, the profession has been increasingly challenged by, and to some degree implicated in, the development of interconnected and international business networks, which, combined with wider financial deregulation, has led to a resurgence of fraud and financial scandal not previously experienced since the mid-nineteenth century.

Keywords: financial scandal; fraud; accounting manipulation; financial reporting audit; regulation

1. Introduction

I present a historical overview of financial scandals and offer an explanation of their frequency and extent. Financial scandals appear more prevalent in certain historical periods, cluster by type, and may constitute watersheds, determining the character of regulatory response. History also reveals periods when certain groups: shareholders, managers, or intermediaries, have been relatively more or less powerful, impacting on the extent and character of fraud and financial scandal. Financial reporting has an ambiguous role, limiting or facilitating opportunities for fraud and financial scandals.

A financial scandal typically has three components. First, it is an event or situation (the context in terms of time and place) involving the employment of financial resources, second, there is questionable ethical behaviour (judged against social norms of accepted behaviour), and third, there is wide public knowledge (the significance of its consequences).¹ For the purposes

*Corresponding author. Email: j.s.toms@leeds.ac.uk

of the present analysis, therefore, a financial scandal is defined as: A situation or event that has occurred as a result of financial resources being employed in a morally questionable manner where there are serious consequences for third parties, which are widely known. According to this definition financial scandals may involve accounting and financial market manipulation, multiple types of fraud, and accentuate the possibility of corporate bankruptcy. Morally questionable financial behaviour may be commonplace without being scandalous, so it is the effect on innocent third parties, and wider public knowledge of those consequences, that create the scandal. The financial impact must therefore be widespread, in terms of individuals affected losing their money, and diminution of trust in financial institutions to effectively safeguard the public's investments. The larger are the collateral losses of such behaviour, the greater is the scandal's perception, social impact, and public appetite for financial regulation and reform.

Using this definition, I contribute to the literature by quantifying the extent of fraud and financial scandal through time and offering an explanation of its variation. To do this, in section 2 I briefly review generic historical explanations of fraud and financial scandal. Section 3 presents new empirical evidence on the patterns of fraudulent behaviour over extended time periods, based on content analysis of contemporary news sources in the United Kingdom 1715–2009 and the United States, 1850–2009, and a database of 221 British corporate scandals, 1800–2009. Taken together, I use the trends in the data to contextualise five examples of major financial scandals, which had significant impacts on accounting and auditing practice, examined in detail in section 4. The scandals are drawn from the United Kingdom and the United States, reflecting the dominance of these jurisdictions in the relevant literature and their readiness to transfer accounting practices. I examine these chronologically: The South Sea Bubble, 1720; the City of Glasgow Bank, 1878; McKesson & Robbins, 1937; Penn Central, 1970 and Polly Peck International, 1990. I selected each case because it was a watershed, highlighted as such in the prior literature, such that their position could be re-evaluated in the context of historical trends, detailing the regulatory responses and the role of financial reporting. Section 5 concludes by summarising the historical evidence in relation to prior interpretations of the determinants of fraud and financial scandal, offering an explanation of why the opportunity to engage in fraudulent financial behaviour varies so much over time and setting out the implications for the accounting profession, regulation and financial transparency.

2. History of fraud: the long view

Notwithstanding recent interest in financial scandal and fraud following the global financial crisis, much of the literature remains time and case specific, only occasionally comparing experiences over many decades or centuries. This brief literature review therefore excludes case-specific research, which is instead dealt with, as applicable, in the discussion of example scandals in section 4.

Relatively few long run studies offer generalised explanations of fraudulent financial behaviour. Cooper et al. (2013) note also that there is little theorisation. Perhaps Jones (2011) offers the broadest perspective, based on 18 scandals across six geographical locations from the third millennium BC to the 1980s, complemented by a range of post-1980s studies. He concludes that fraud occurs in firms that are badly managed in some significant respect, leading to collapse and public opprobrium. Focusing on recent events on Wall Street, Gray et al. (2005) also provide some perspective from the earliest speculative bubbles of the eighteenth century, to contextualise unethical behaviour by leaders of corporations and investment institutions, conflicts of interest and poor regulation. Misplaced behaviour by corporate leaders, in the form of hubris, status seeking, or acting to cover mistakes, is a common feature of many longer run studies, and indeed a perennial feature, creating an enduring policy dilemma between promoting entrepreneurship and regulating against financial dissembling (Balleisen 2017, p. 13).

Other studies, albeit of more limited scope, have drawn similar conclusions. In nineteenth-century Britain, Taylor (2013) attributes the rise in fraud opportunity to the emergence of the joint stock company and the lack of funding for effective regulation. In similar vein, the growth of larger businesses, with more complex financial structures, was facilitated, according to Robb (2002), by a dominant *laissez faire* ideology that limited regulatory intervention. In the second half of the nineteenth-century financial crime was nonetheless recognised criminal category, requiring a specific response (Wilson 2014) and regulation was accordingly fashioned by lawyers rather than accountants (Lee et al. 2009, p. 416). Consequently, the regulatory framework evolved as business problems arose, often in the form of financial scandals.

Much of the literature then, equates fraud and financial scandal with the rise of the large corporation and weakness in knee jerk regulatory response. Lee et al. (2008) link financial manipulation to dominant senior managers in such large organisations in Britain, the US and Australia since the middle of the nineteenth century, highlighting executives' ability to neutralise governance and accountability mechanisms (Gwilliam and Jackson 2011). Skeel (2005, p. 7) identifies the 'Icarus' effect, where hubristic managers in large, complex and competitive corporations engage in excessive risk. In what Skeel characterises as a 'cat and mouse' game, regulators attempt to limit scandals by curtailing risk-taking, empowering market scrutineers, including accountants, and limiting the size of corporations. Scandals may thus be an antecedent to regulation, which as Hail et al. (2018) demonstrate, then typically fails to mitigate the incidence of future scandals, so that although the level of regulation quantitatively increases, it has no real effect.

Regulation then, including accounting regulation, cannot be judged according to its quantitative extent alone. Accounting regulation in particular, may be permissive as well as restrictive. For example, in five cases of accounting rule changes in the period c.1975–1990, there was no tendency towards restrictive standardisation or flexibility, only a cyclical pattern (Nobes 1991). In general, as accounting regulations are modified in either direction, these changes in turn may reflect wider contexts of deregulation and self-regulation, thereby impacting on fraud opportunity.

In such fashion, the emergence and growth of the accounting profession has been an important response to financial crime. Cycles of significant individual or clusters of scandals have thus spurred reform of regulation, accounting practice and the accounting profession (Clikeman 2013, p. 2, Carnegie and O'Connell 2014), but the changes have been insufficient to prevent new scandals. The choices of the accounting profession have reinforced these tendencies over time, informed by increasing dominance of business advice over shareholder protection, leading to the marginalisation of fraud detection and the emergence of the 'audit expectation gap' (Maltby 2009, pp. 234–235). Taking a transatlantic perspective and historical evidence dating back to the Italian Renaissance and before, Brooks (2018) suggests the expectation gap has a long history, compounded by conflict of interest and over-concentration of accounting firms.

In summary, these explanations, almost of necessity, deal with efficient market violations in some form. After all, as Ackerman (1978, p. 208) suggests: 'If the economy is fully competitive, then no corruption can occur'. Following similar logic, fraud, corruption, mis-selling, etc., are not possible in an efficient capital market. In such circumstances, transparency would ensure the alignment of risk and responsibility. Misalignments are explained for the most part in the literature discussed thus far by the presence of large, complex organisations, with dominant senior managers or insiders, posing problems for outside regulators. Many of these studies also suggest that financial scandals are cyclical, or even perennial. The more general literature on fraud and financial scandal gives substantial weight to generic models like the fraud triangle, informed by individual psychological and case-specific circumstances (for example, Murphy and Dacin 2011). Such explanations are clearly important, but might certain institutional configurations be more effective than others at mitigating the opportunities for individual fraudulent behaviour? In a major international comparative study of 26 countries, for the period 1800–2015, Hail et al.

(2018), show that country-specific characteristics of market development and legal tradition shape the effectiveness of regulatory response to scandals. Baumol (1996) uses another analytical approach to contrast major historical periods and jurisdictions which tended to promote the supply of ‘productive’, ‘unproductive’ and ‘destructive’ entrepreneurs, with fraudulent behaviour an example of the latter category. In an analysis of British evidence beginning in the early eighteenth century, Toms (2017) links fraud opportunity to the dynamic interaction of technical innovation and mechanisms of financial scrutiny.

Extending these approaches, the paper examines which institutional arrangements mitigate fraud, or promote it, for significant historical periods. Relatedly, it also considers whether or not prevailing institutional arrangements are established or punctured by major watershed scandals. Further, it considers how is accounting implicated in these watershed moments, as part of the problem and as part of the solution. To answer these questions, the next section of the paper considers first, the level and nature of fraudulent activity since the early eighteenth century. Once trends and turning points are established, in subsequent sections, I review watershed scandals in their wider context, and the response to them, including the consequences for accounting and financial reporting.

3. Fraud: some long run empirical trends

The gaps in the above literature can be usefully addressed by examining long run trends. Figure 1 uses a popularity index of British newspapers to illustrate the relative incidence of the keyword search term ‘fraud’ from 1715 to 2009. ² Fraud is perhaps the most useful term for identifying trends spanning several centuries. It was used as an umbrella term in the nineteenth century, and had less specific contextual meaning than similar terms like ‘corruption’ (Taylor 2013, p. 2) and this remains true up to the present day. Other terms, like, ‘swindle’, ‘false balance sheet’, ‘financial scandal’, ‘creative accounting’ pass in and out of use. For example, a popularity index using ‘financial scandal’ showed few references to financial scandal in the press prior to 1890, notwithstanding events that conform to the definition set out earlier, and creative accounting only entered the public domain in the 1980s (Gwilliam and Jackson 2011, p. 380). There are also much earlier examples of terms passing out of use. So-called ‘Old Corruption’, associated with the sinecures of government office, had been pervasive in the period since the South Sea Bubble (Levy Peck 1989), but declined in the first half of the nineteenth century (Rubinstein 1983). Figure 2 shows that popularity index values for ‘corruption’ and other terms associated

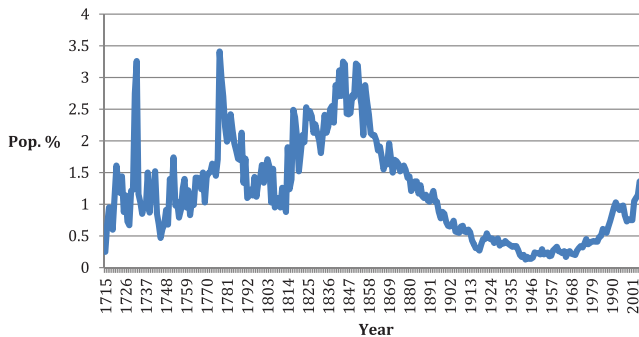


Figure 1. ‘Fraud’ popularity index, 1715–2009. Source: Calculated from Gale Cengage online database of British newspapers. Note: Popularity (Pop. %) = number of documents featuring ‘fraud’ divided by all relevant documents, where a relevant document is a news story published in the ‘News’, ‘Business News’ and ‘Opinion and Editorial’ section of a newspaper/periodical as defined by the Cengage database.

with petty financial crime, ‘forgery’ and ‘counterfeit’, declined substantially in the same period. So, although useful for highlighting particular patterns of behaviour in specific periods, unlike ‘fraud’ these terms do not provide a consistent long run measure.

Bearing in mind that fraud is a highly generic term, it constitutes a useful ethical barometer, if other context-specific forms of deceit are discounted. For example, in [Figure 2](#), I show that the generally high level of the popularity index for ‘fraud’ in the pre-1850 period appears to be associated with the trends for ‘forgery’, ‘corruption’ and ‘counterfeit’. Factoring the decline of these previously socially embedded types of fraud, [Figure 1](#) nonetheless suggests a sharp rise in fraudulent activity in the middle decades of the nineteenth century. The increase was associated with the spread of the joint stock company and two key sectors: railways and banking. In [Figure 3](#) I highlight the incidence of fraud in these sectors, which explains the mid-nineteenth century peak, and also the subsequent decline into the twentieth century, that feature in [Figure 1](#).

A further striking feature of [Figure 1](#) is the relatively low incidence of fraud in the middle decades of the twentieth century, particularly the period c.1940–1970. This ‘hiatus’ is robust to changes in the term used, such that the popularity index for any synonym for fraud demonstrates a similar pattern. Another feature is the apparent ‘rebound’, post-1970, which again is robust to alternative measurement using similar terms. Moreover, the hiatus and rebound pattern is observable in similar tests on US data.³ The turning point persists when examining the terms ‘financial scandal’ ([Figure 4](#)) and ‘creative accounting’. These terms are relatively new and supersede terms like ‘swindle’ and ‘false balance sheet’, both of which peaked prior to the 1940–1970 hiatus.⁴ [Figure 4](#) shows sharp increases in the appearance of ‘financial scandal’ in the British and US press after 1970. In a similar analysis, Hail et al. (2018) also identify sharp upturns for Britain and the US from the 1970s.⁵

To summarise the overall pattern in [Figures 1–4](#), up to c.1840 fraudulent activity was dominated by petty financial crime and corruption, not headline financial scandals, followed by a flurry of scandals in railways and banking in the period c.1840–1870 coinciding with economic expansion and joint stock finance. The period from c.1870 shows a secular decline, culminating in a post-1940 hiatus that persisted until 1970, followed by a rebound towards previous levels by the end of the century. It is also noteworthy in [Figure 2](#) that the long downward trend for ‘corruption’ is reversed in the later twentieth century and through the global financial crisis of 2007–2008.

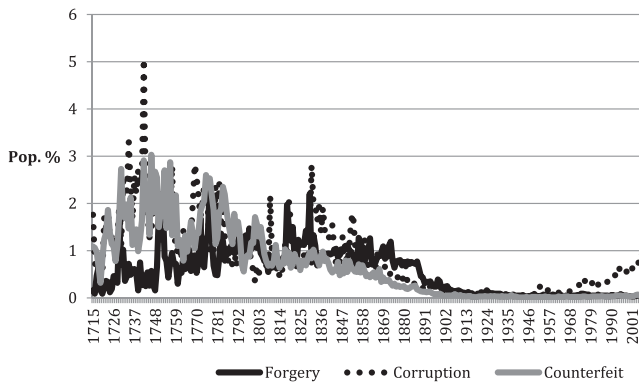


Figure 2. Generic financial crime, 1715–2009. Source: Calculated from Gale Cengage online database of British newspapers. Note: Popularity (Pop. %) for each term = number of documents featuring: ‘forgery’, ‘corruption’, ‘counterfeit’ divided by all relevant documents, where a relevant document is a news story published in the ‘News’, ‘Business News’ and ‘Opinion and Editorial’ section of a newspaper/periodical as defined by the Cengage database.

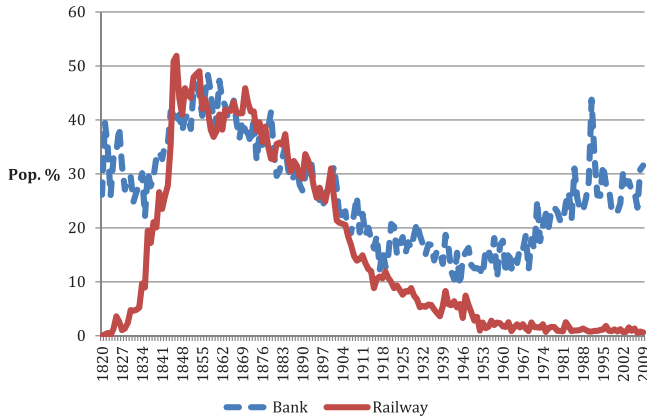


Figure 3. **‘Bank’ ‘Railway’ fraud popularity index, 1820–2009.** Source: Calculated from Gale Cengage online database of British newspapers. Note: Popularity (Pop. %) for each term = number of documents featuring: ‘bank’, ‘railway’ divided by all relevant documents featuring fraud (per figure 1).

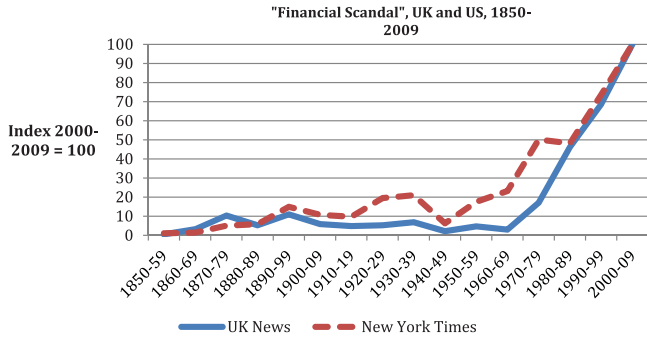


Figure 4. **‘Financial Scandal’, UK and US, 1850–2009.** Source: UK news calculated from Gale Cengage online database of British newspapers. New York Times calculated from Historical New York Times online database hosted by Proquest. Note: UK news popularity % = number of documents featuring ‘financial scandal’ divided by all relevant documents, where a relevant document is a news story published in the ‘News’, ‘Business News’ and ‘Opinion and Editorial’ section of a newspaper/periodical as defined by the Cengage database. New York Times = actual frequency of the term ‘financial scandal’. For purposes of comparison, both series are indexed to = 100 for 2000–2009.

The task of the remainder of the paper is to explain these trends, with a particular emphasis on the role of financial reporting, either as a mitigator, or as an enabler, of financial fraud. To do so, I constructed a database of corporate scandals based on the data in Figures 1 and 4 in conjunction with other sources, highlighting their dominant characteristics with reference to sector, structural and international dimensions (Appendix 1). In conjunction, landmark cases of financial fraud are reviewed, and reinterpreted in the context of the wider trends. The analysis in the next section below begins with the South Sea Bubble of 1720, which forms a backdrop to the period dominated by corruption and petty financial crime up to c.1840. I illustrate the character of fraud that persisted after the introduction of joint stock company legislation from the 1840s and the regulatory and institutional changes leading up to and following from the City of Glasgow Bank crash of 1878. I then review the effects of the Wall Street crash with a focus on a series of key frauds on both sides of the Atlantic, with a particular focus on the post-SEC McKesson

& Robbins scandal of 1937, identifying some reasons for the 1940–1970 hiatus period. Scandals of the late 1960s and early 1970s are considered next and I show how they reflected the rise of the market for corporate control, for example, the Pennsylvania Railroad (referred to as Penn Central) case of 1970. Finally, I explain the post-1970 rebound, with a focus on the wave of bank and accounting manipulation frauds in the UK after 1980, using the Polly Peck International case of 1990 as a specific example.

4. Watershed financial scandals

4.1. *The South Sea Bubble and its aftermath*

The great South Sea Bubble scandal of 1720 marked a watershed event in British economic history, and is therefore a useful starting point for our analysis. The scandal had features that were common to many subsequent scandals and set the regulatory agenda for many decades. Investors were misled with false information, politicians were bribed, and dividends were paid out of capital (Jones 2011). The Bubble featured not just the South Sea Company, but also many other joint stock companies, often floated on prospectuses of dubious content (South Sea Company 1825). Losses were significant and widespread across society, ranging from famous individuals like Isaac Newton to small investors (Paul 2010). Meanwhile, the Act of 1720⁶ imposed significant restrictions on incorporation.

The general effect was a low incidence of corporate fraud after 1722 and through the early part of the nineteenth century. The only significant headline scandals were the cluster that occurred in 1731 surrounding the Charitable Corporation, York Building Company, and further fears surrounding the South Sea Company (Taylor 2013, p. 8), explaining the spike in Figure 1.⁷ More commonly, frauds were associated with individual confidence tricksters, and were transaction or product specific. Examples included counterfeiting, weights and measures, patent infringements, bills of exchange, petty bank fraud etc., explaining the pattern of generic financial crime into the early nineteenth century in Figure 2.⁸ By contrast, Robb (2002, p. 147) notes that elite misconduct was a relatively minor social ill.

The relatively low incidence of high-level corporate fraud and scandal during this period can be explained by effective shareholder scrutiny coupled with criminal sanctions for individual misdemeanours. As the Bubble had enriched insiders, temporarily at least, the balance now swung to the outside investor. There were three dimensions to this. First, groups of promoters were subject to greater political scrutiny. Limited liability was restricted, but not banned, such that proposed incorporations required parliamentary approval (Freeman et al. 2012). Second, fraudsters were subject to severe criminal penalties (Taylor 2018). Third, shareholders enjoyed rights to access and inspect company accounts in most joint stock companies and also a substantial number of unincorporated businesses (Freeman et al. 2012, pp. 214–215). Shareholders could access the books at the general meeting with the audit conducted at the same time (Taylor 2018), in what might be termed an ‘open-access’ system. A possible reason why such access rights were sustained, until the early nineteenth century at least, was that firms did not operate in a competitive environment. Once approved, a corporation might also be granted a monopoly over its specified activity, so there was no incentive for secrecy on the grounds of commercial confidentiality. Secrecy prevailed only in some sectors, notably financial services, where there was concern about providing competitors with access to policyholders’ details (Freeman et al. 2012, p. 216).

These protections for outside investors set the context for fraudulent behaviour for the century after the Bubble Act. Rules encouraged collusion between company promoters and political insiders leaving outside shareholders potentially vulnerable, for example to dishonest share appropriations. Following the East London Water Works Company failure of 1807, two dishonest

individuals, Mainwaring and Hubbard, were censured (Freeman et al. 2012, pp. 44–45), but there was no pressure for systemic reform. An important reason for this outcome was that the injured shareholders used legal process to recover the full value of their investments. The single large scandal of 1720 and its systemic impact contrast with subsequent smaller frauds where consequences could be easily isolated and deviant behaviour punished (Taylor 2013). In summary, the effectiveness of this model was based on shareholders, empowered through focused knowledge and intervention mechanisms, backed by criminal sanctions.

The financial crisis of 1825 illustrated some limitations of the narrow investment base, and of unlimited liability in the banking sector, which made the liquidity crisis much worse. The result was the introduction of limited liability joint stock companies, first in banking then in the wider economy in the 1850s (Turner 2014). Meanwhile, the active shareholder model gradually broke down as new, often middle-class investors, were drawn first into certain industries, banks and railways, and then the wider economy.

4.2. *Railways, banks and the City of Glasgow Bank scandal*

The spread of incorporation after the Acts of 1844 and 1855⁹ facilitated the new middle-class investors' involvement in railways and banks (Wilson 2014). New technology, the structure of financial institutions and a permissive regulatory framework with underdeveloped mechanisms of accountability for directors explain the mid-nineteenth century peak in frauds in Figure 1. The City of Glasgow Bank (CGB) of 1878 scandal was a watershed that marked the end of this period.

Before then, the rapidly expanding rail network demanded new capital on an unprecedented scale, and this was provided from the savings of new investors. Company promoters and other market insiders were in a strong position to exploit lax structures of regulation and accountability. In 1845, the first of the peak years in Figure 3 for railway associated frauds; the practice of securing shares certificates by deception became widespread.¹⁰ Speculation in railway shares contributed to the general financial crisis of 1847, resulting in a series of investigations, most notably into the Eastern Counties Railway (ECR) and its directors (Edwards 2013, p. 143). The ECR was one of George Hudson's companies, along with three others, in which fraud involved false reporting of financial results and the payment of dividends from capital (Jones 2011, p. 120), resulting in losses to investors on a scale not seen since the South Sea Bubble. Although Hudson was the highest profile case, these problems were widespread. Dividends became a device used by directors to reassure non-technical investors and avoid shareholder scrutiny (Robb 2002, p. 44, Turner et al. 2013),¹¹ but they also incentivised financial manipulation, resulting in systematic losses for substantial numbers of investors (Bryer 1991).¹²

From the 1860s, railway frauds declined (Figure 3) and this can be explained in part by prescriptive legislation on company accounts. From 1868, an Act required railways to publish standardised regulated and detailed accounts (Matthews 2006, p. 7).¹³ A measure of the effectiveness of this regulation is that, of 14 identifiable corporate scandals involving railways during the nineteenth century, all occurred prior to 1868.¹⁴

During the same period, banking frauds were of equal prominence and equally serious in terms of wider consequences. A series of bank failures culminated in the Royal British Bank collapse of 1856. The directors had been speculating in Welsh mining investments and paying dividends out of capital. The press interpreted these events as the failure of the whole system, referring to 'embezzlement mania' (Taylor 2007, Taylor 2013, p. 109).¹⁵ In similar vein, the Overend Gurney scandal of 1866 resulted in the failure of other financial houses and over 200 other joint stock organisations. The crisis was precipitated by the failure of the Joint Stock Discount Company, and one of the directors, James Freeling Wilkinson, was given an unprecedented

prison sentence under the Larceny Act. The press welcomed the sentence, but it sent a shockwave through the City, where company directors had considered themselves immune from prosecution (Taylor 2013, p. 138). The Overend Gurney crisis erupted when the directors issued a call for further capital. Shareholders objected, and formed a 'Defence Association' on the grounds that the directors had concealed the firm's insolvency in the prospectus (Barnes 2007, p. 35). William Gladstone, then Chancellor of the Exchequer, exemplified the mid-nineteenth century *laissez faire* response to the fraud. He argued that any shareholders bail out or prosecution of the executives by the government would undermine shareholder responsibility for good governance and prudent investment. In the subsequent private prosecution, the shareholders claims were dismissed and the directors acquitted (Taylor 2013, pp. 148–151).

The aftermath of Overend Gurney left shareholders with a heavy burden of responsibility, but without the required knowledge to intervene directly in the governance of increasingly complex organisations. The Overend Gurney collapse had followed a general boom in limited liability companies, which after the Companies Act 1862, became a preferred option for investors as government savings opportunities declined. However, the collapse now led to a significant economic slowdown arising from an increased perception of risk, compounded by the underdeveloped state of accountancy and auditing. (Robb 2002, Barnes 2007, p. 33, 36).

The CGB scandal of 1878 illustrated the consequences. It involved significant misstatement of accounts to cover up interpersonal lending and other bad loans granted by negligent directors. The results were significant losses to a large group of savers and effects on the wider economy (Robb 2002, p. 73). CGB had over 1200 shareholders (Lee et al. 2008), and the response to its failure has been partly attributed to an influx of low wealth individuals unable to meet calls in unlimited liability companies (Acheson and Turner 2008). Investors in the banking sector, vulnerable to the systemic risks of the CGB collapse, felt the consequences of lax auditing especially keenly, as typically high cash balances presented directors with embezzlement opportunities (Robb 2002, p. 129). According to Jefferys (1977), public opinion, expressed as sympathy for shareholders unable to meet calls, was instrumental in extending limited liability banking. Along with CGB, other banks also failed, and none had arranged audits of their accounts (Singh 2016, p. 154). As a consequence, there was an Act of parliament requiring banks to publish annual audited balance sheets (Edwards 2013, p. 147).¹⁶ The threat to banking stability promoted limited liability backed by: the principle of reserve liability, amalgamations, network centralisation, inspection control and increased professionalism, leading to a downward trend in bank fraud after 1880 (Robb 2002, pp. 74–75, Collins and Baker 2003, Inglis 1896, p. 602.). Also, the office of Director of Public Prosecutions was created in 1880, with responsibility to investigate significant and specialist cases. This marked a watershed in the law's attitude to criminalising false or non-disclosure, which, as demonstrated by the Overend Gurney outcome, it had previously regarded as a private matter between shareholders (Taylor 2013, p. 150).

The CGB case heralded a new era for accounting and audit. There was now a rapid increase in listed banks using professional auditors (Matthews et al. 1998, p. 48) from which the Institute of Chartered Accountants in England and Wales, founded in 1880, stood to benefit.¹⁷ Distinguishing diligent accountants from the actions of others likely to damage their reputation was an important motive for the establishment of the Institute (Edwards et al. 2005), and guarding reputation meant limiting auditors' responsibilities. The Kingston Cotton Mill case of 1896 showed that by characterising the fraud as 'ingenious' (Chandler and Edwards 1994),¹⁸ it followed that only the accounting profession, and not non-expert shareholder auditors, was sufficiently competent to investigate. Even so, this and other cases effectively signalled to the public that accounting manipulation could not necessarily be prevented by standard audit process, which was restricted by time and fee constraints (Lee et al. 2009). Following a series of high profile financial scandals in the early 1890s, the Davey Committee was established, and recommended compulsory audit for all companies.¹⁹

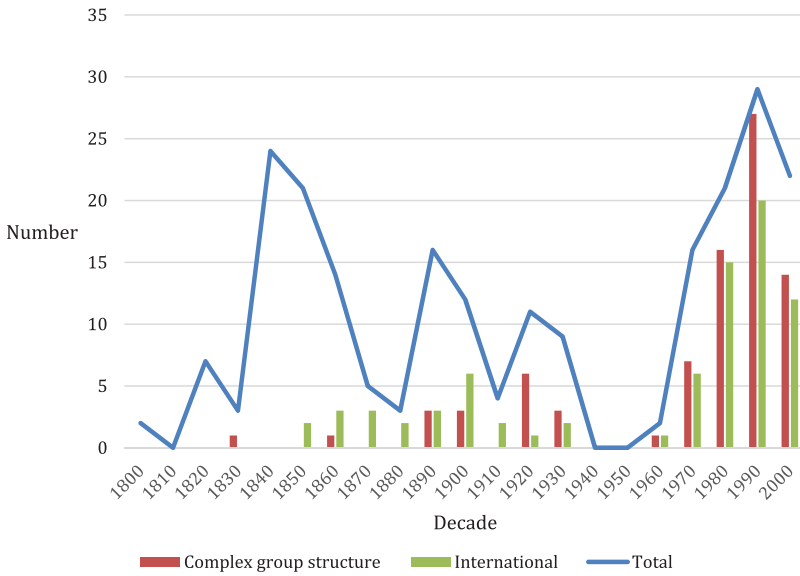


Figure 5. **Corporate Scandals in the Long Run, 1800–2009.** Source: Corporate Scandal database (Appendix 1, table A1). Notes: ‘Complex group structure’ is the number of scandals by decade featuring a complex group structure as defined in Appendix 1. ‘International’ is the number of scandals by decade featuring a significant international dimension as defined in Appendix 1. ‘Total’ is the total number of scandals, by decade, as defined in Appendix 1.

These changes increased the importance of the professional audit, and also underpinned a general decline in fraudulent activity. Figure 1 shows that a consistent downward trend in fraud followed the mid-century peak, as frauds associated with railways and banks also declined (Figure 3). To succeed, financial frauds now had to circumvent the new legal and audit safeguards, including the disclosure requirements arising from balance sheet publication.

Against a backdrop of general decline post 1880, headline scandals increasingly demonstrated new defining features. Figure 5 shows the frequency by decade of 221 separately identifiable corporate scandals in Britain in the period 1800–2009. As noted earlier, the 1868 Act was effective in reducing railway fraud, and bank fraud also declined following the regulatory tightening in the wake of CGB. In the period 1820–1879, the banking sector accounted for 63.5% of all identifiable corporate scandals (47/74), but this declined to 47.8% (22/46) in the period 1880–1929. Embezzlement, a dominant feature of banking frauds, declined, assisted by improved audit processes (Robb 2002, p. 137), although these were insufficient to remove the problem entirely (Hollow 2015) and the decline was less steep compared to railways (Figure 3). Figure 5 also shows that from around 1880, frauds increasingly featured the use of complex group structures, in which control of more than one business entity played a significant role in enabling the scandal and/or a significant international dimension. Control of multiple business units, transcending international borders, helped to promote insider dealing, hide losses and obfuscate the true financial position, posing new challenges for the accounting profession.

4.3. The Wall Street Crash and McKesson & Robbins

The rise of the large complex business, and the challenge to audit firms, was even more pronounced in the US in the early twentieth century. Dicksee’s (1905, p. 8) British model still stressed

that fraud detection ‘is a most important portion of the Auditor’s duties’. Three years earlier, an address by Arthur Lowes Dickinson, reflecting the influence of the American model, had already noted a shift towards the financial condition and earnings of an enterprise (Solsma and Flesher 2013, p. 306), such that, post 1905, fraud detection was more often allocated a secondary emphasis, with increasing recognition of internal control testing thereafter (Brown 1962, p. 696).

The supersession of the American model reflected the inefficiency of shareholder audits based on verification for businesses that were increasingly large, complex and owned by portfolio investors.

Fraudsters implicated in the Great Crash and its aftermath used complex business structures to hide liabilities and distort value. For example, British financier Clarence Hatry by using such methods, according to some accounts, indirectly triggered the Wall Street Crash. He developed a new scheme for refinancing local public authority loans, and formed a Trust to amalgamate steel firms and the collapse of these ventures in September 1929 resulted in the failure of several investment houses, pressure on bank liquidity and a sharp fall in share prices, undermining confidence of US overseas investors (Eichengreen 2014, pp. 111–112, Galbraith 1996, p. 91). Transatlantic financial contagion was nothing new. In 1857, the failure of Ohio Insurance almost resulted in the failure of CGB and other banks in the UK (Kelly and O’Grada 2000), but the activities of Hatry added a further dimension.

These linkages aside, the US bore the relative brunt of scandalous financial activity during and after the Great Crash. Figure 1 shows that the general decline in British fraud, begun in the mid-nineteenth century, continued during this period of new financial turmoil. Figure 5 confirms the trend for headline scandals, which, as the activities of Hatry and other headline fraudsters show, exploited complex group structures and also, limited disclosure requirements. These required only a balance sheet and not an income statement, thus facilitating window dressing transactions through inter-company transfers, and the use of secret reserves, illustrated respectively by the activities of Gerard Lee Bevan in the City Equitable case and Lord Kylsant in the Royal Mail case (Vander Weyer 2011, Arnold 1991).²⁰

By comparison, there was an upsurge in the US in the 1920s and 1930s, mirrored by the greater prominence of financial scandals shown in Figure 4. These include Samuel Insull who built up a pyramid of related companies [Insull Utility Investments Company (IUIIC)] using inflated asset values to water stock, and was then bankrupted in the aftermath of the crash, leading to the collapse of the Central Republic Trust in 1932 (the ‘Dawes Bank’) (Eichengreen 2014, pp. 160–161). Another prominent case was Ivar Krueger’s investment scam. Like IUIIC, Krueger’s empire (Krueger and Toll) consisted of a pyramid of hundred subsidiary companies (Lee et al. 2008, p. 690). Like the Hatry and other British scandals, US fraudsters made effective use of complex group structures, which became an increasingly prominent feature.

Also like Britain, US fraudsters exploited flexible accounting rules. Insull was acquitted, because he had complied with possible interpretations of current accounting rules.²¹ In drafting the Securities Act of 1933, legislators attributed the overvaluation of stocks prior to 1929 to accounting and now imposed conservative valuation rules (Zeff 1972). Meanwhile, the main Stock Exchanges, in conjunction with the American Institute of Public Accountants, issued guidelines requiring audited financial statements (Benston 1976). Audit scope otherwise reflected UK practice, limited by excuses about cost and reliance on internal control systems, of necessity administered by management.

However, the 1933 Act was only the first stage of regulatory tightening, and another watershed scandal catalysed additional responses. McKesson & Robbins (M&R) was a diversified drug company with operations in the US, controlled by its President F. Donald Coster, who constructed a Canadian operation with fictitious assets totalling \$17 m. The auditors, Price Waterhouse (PW), filed a clean report, but an SEC investigation highlighted PW’s failure to detect

the fraud (Baxter 1999). M&R was a watershed in that different interpretations of auditor responsibility were settled such that fraud detection was not a primary objective (Brown 1962, p. 700). Auditing standards were now developed following the SEC's reaction to the M&R scandal. They governed receivables and inventory verification, audit reports and appointments, but specified limitations in terms of responsibility to detect fraud and manipulation (Lee et al. 2008, pp. 691–692).

4.4. *Penn Central and the market for corporate control*

These changes inaugurated the hiatus of the period c.1940–1970, which is observable in each of Figures 1–5. The trend is partly explained by post-M&R professional auditing standards, and SEC adoption of conservative accounting rules, including a 30-year ban on upward asset valuations (Benston 1969). In Britain, legal interpretations of accounting conservatism gained ground from the late nineteenth century, as courts protected creditors from over-distribution of dividends and investors generally from bankruptcy risk (Edwards 2013, p. 110, Kitchen 1972),²² whilst investors were generally satisfied by steady dividends (Toms 2010). Zeff (2009, p. 6) notes that the ICAEW's 29 non-mandatory improvements in financial reporting practices issued between 1942 and 1969 tended to promote conservatism. In Britain and the US following the Royal Mail and M&K cases, companies expanded their range of accounting disclosure, and notwithstanding rising inflation, accounting practice remained wedded to historical cost (Ó hÓgarthaigh 2009, p. 170).

Accounting conservatism coincided with the concentration of the corporate economy and the consolidation of managerial control during the hiatus period, offering further explanations for the reduction in fraud and relative infrequency of corporate financial scandals. Cheffins (2015) highlights corporate executives' sense of duty and moral restraint in post-1945, as an effect of World War Two, tight regulation of banks, personal liability which dis-incentivised risk-taking in investment banks, and improved accounting practices and disclosure. Successful firms in this period invested in professional managerial structures and hierarchies (Chandler 1990) and 'corporatism' promoted monopoly in substantial sectors of the economy (Walker and Shackleton 1995). Conglomerate diversification internalised risk within the firm, balancing product portfolios based on mature life product cycles and stable markets. Tax structures encouraged the development of the corporate bond market (Coyle and Turner 2013). Consequently, corporate executives had a relatively low dependency on equity markets for new finance. These institutional arrangements did nothing to eliminate opportunities for accounting manipulation per se, which was facilitated by hybrid accounting rules (Chambers 1973), and corporate hierarchies could obfuscate systemic unethical behaviour (Needleman and Needleman 1979), but they nonetheless helped suppress headline financial scandals during the hiatus period. From the late 1960s, corporate executives increasingly exploited stock markets for the purposes of launching hostile takeover bids against rivals (Toms and Wright 2005, p. 101). To some extent, with its emphasis on extending the reach of managerially controlled firms, this new market for corporate control underpinned the structural features of the hiatus period.

However, conglomerate diversification also created the risk of over-extension, failure to integrate subsidiaries post-merger, and, as a consequence, new incentives for executives to hide poor performance. There were corresponding weaknesses in accounting practices relating to takeovers and mergers. Takeover transactions could be used to manipulate asset values, earnings per share and accounting rates of return on investment, for example Ling-Temco-Vought (LTV) and Wilson Foods 1966–67 and a series of 40 takeover transactions by Beatrice Foods in the early 1970s (Briloff 1969, Briloff and Engler 1979). In the UK, Stamp (1970) highlighted other US examples, pointing to cases in the UK offering similar flexibility in accounting treatment, including takeover

transactions of textile conglomerate Courtaulds and GEC-AEI. Slater-Walker embarked on a series of asset stripping takeover transactions, which relied heavily on accounting manipulation to hide poor underlying performance and boost the share price, resulting in a huge financial scandal and banking crisis in 1974–75 (Raw 1977, Toms et al. 2015). Although leading to stricter banking oversight regulation, Slater Walker merely heralded new scandals under new conditions in the post-1980 period.

By contrast, the Penn Central scandal in the US was an important turning point. Under pressure to maintain dividends in the face of poor performance, in 1970 the company became the largest bankruptcy in history following a failed merger with New York Central and other unsuccessful attempts at diversification (Cheffins 2015, p. 725). Congressional pressure, in the wake of Penn Central and other large frauds, led the SEC to establish the Financial Accounting Standards Board with a view to standardising and reducing variability of accounting treatments (Clikeman 2013, p. 73). In the face of accounting flexibility on both sides of the Atlantic, auditors encountered growing criticism for their apparent blindness in accepting the view of senior executives (Stamp 1970). In the Penn Central case, the firm's auditors (Peat, Marwick, Mitchell & Co.) failed to follow up questionable transactions following an agreement over lunch between Peat Marwick's Chairman and Penn CEO, Stuart Saunders. Peat Marwick had also collected \$600,000 from Penn for consulting work, further compromising auditor independence (Lovings 2006, p. 86). In response, in 1972, the SEC now strengthened recommendations first mooted after McKeeseon Robbins for mandatory audit committees composed of independent directors (DeZoort 1997, p. 211), whilst the 1977 Metcalf Report into the 'Accounting establishment' on behalf of Congress called for more independent oversight of accounting and auditing standards.²³

There were parallel developments in the UK. The London and Counties Securities fraud in 1973 revealed weaknesses in self-regulated audit processes, leading to a tightening of regulation, albeit of questionable effectiveness (Matthews 2005). The scandal at Robert Maxwell's Pergamon Press also had common features with Penn Central, most notably flattering profits for the purposes of a takeover transaction and, again, compromised auditor independence (Rutherford 2007, p. 5). Raw (1977, p. 196) notes parallels between Slater Walker and LVT in the 1960s in terms of accounting manipulation in subsidiary companies. The Pergamon scandal, along with the GEC-AEI affair and others added to the demand identified by Stamp (1970) for greater uniformity and comparability of accounting treatments, leading to the establishment of the Accounting Standards Committee and the development of Statements of Standard Accounting Practice (SSAPs).

Penn Central and other scandals of the late 1960s and early 1970s marked the beginning of an era of self-regulation through agreed standards. They also marked the end of the hiatus, and a new period of increasing fraud, financial scandal and corruption. Accounting and auditing standards were at best a necessary condition for limiting this new wave of scandal; at worst, they now became part of the problem.

4.5. *The big bang and Polly Peck*

The hiatus period was ending by the early 1970s, and the incidence of financial scandals climbed dramatically thereafter (Figures 1, 4 and 5). Financial repression, or the constraints on the development of financial markets imposed through monetary policy and bank regulation that prevailed in the 1950s and 1960s, was now reversed (Crafts 2016). Changes in regulatory and market structure around this time created new opportunities for accounting manipulation, used to great effect in the wave of scandals of the later 1980s, of which Polly Peck was a leading example. Not only did fraud and financial scandal increase, but their character also changed dramatically.

Earlier scandals had sometimes featured an overseas element, which evolved in parallel to changing geopolitical conditions. For example, Slater Walker had taken advantage of the Bahamas and Jersey in the late 1960s to avoid exchange controls and facilitate speculative investment in Hong Kong (Raw 1977, p. 309, 317–319). Such capital transfers were commonly routed through the Bahamas up until 1973, when a change of government led to their diversion, mostly to the Cayman Islands (Shaxson 2012, p. 106). As the British Empire declined, the City of London also shifted its international priorities. London and international banks increasingly turned their attention to the growing Eurodollar market in the 1960s (Cain and Hopkins 2016, p. 12),²⁴ which exploited a loophole in the Bretton Woods system. Meanwhile, the end of formal Empire, and the contraction of the Sterling Area in 1972 led to the encouragement of new financial services activities in the residual British administered overseas territories. Developments in air transport and office technology, such as facsimile machines and later computerisation, facilitated the transfer of funds via the Cayman Islands and similar offshore centres (Palan et al. 2010, pp. 140–141; Shaxson 2012, p. 108). Removal of restrictions on the international movement of capital in 1979 facilitated such transactions. Prior to that, from 1947 legislation restricted monetary transactions with foreign territories, which under Bretton Woods,²⁵ meant in practice to those accompanying trade in goods (Bank of England 1977).

From around 1980 the internationalisation of finance provided greater scope for accounting manipulation, and lay at the heart of a majority of financial scandals (Figure 5). Of 88 scandals in the database post-1970, 60.2% (53/88) featured a significant international dimension.²⁶ Similar and complementary opportunities were provided by deregulation of the banking and corporate sectors, encouraging further restructuring. Smith (1992) points to the dramatic increase in takeover and other corporate restructuring transactions, which, following deregulation, were hatched in the City's corporate finance departments rather than boardrooms. Removal of restrictions on financial assistance for the purchase of a company's own shares accelerated the buyout market in the 1980s, facilitating the disposal of subsidiaries, and the business of buying and selling companies more generally (Toms et al. 2015).²⁷ Figure 5 shows that complex group structures featured in the substantial majority of corporate scandals post-1970. Of the 88 scandals, 72.7% significantly involved complex structures.²⁸

Internationalisation and restructuring facilitated accounting manipulation (Smith 1992), which, taken together, are illustrated by the Polly Peck scandal. The company was floated in 1982 with chief executive Asil Nadir retaining a dominant 25% stake. It then expanded rapidly through takeover transactions, including two significant ones in 1989: Del Monte and Sansui. Requirements for further associated restructuring placed pressure on Polly Peck's relationship with 100 or so bank creditors. Substantial deposits held in northern Cyprus were inaccessible to creditors and assets held there were of questionable value. The Polly Peck share price collapsed as the banks disposed of shares held as security on their loans. The shares were suspended on 20th September 1990, and the ensuing bankruptcy left the shareholders with a deficit of £384 m (Smith 1992, pp. 7–8; 221–223). In 1990 a Serious Fraud Office investigation revealed a £927 m shortfall in inter-company balances, caused by Nadir's private transfers via Turkish subsidiaries, exploiting SSAP20²⁹ rules to exaggerate their asset values (Gwilliam and Jackson 2011). Like Polly Peck, Mirror Group (Robert Maxwell), Coloroll, Bank of Credit Commerce International (BCCI), and British & Commonwealth, all reported profits compliant with accounting standards before going bust (Smith 1992).

The developing pace of corporate restructuring and internationalisation of the financial sector coloured these and most other financial scandals of the 1980s. The Johnson Matthey banking collapse and Bank of England bailout of 1984 arose from risky lending and overexposure to the Pakistani shipping magnate and international commodity trader, Mahmud Sipra, whose El Saaed group was protected using a Liberian registration.³⁰ Ivan Boesky, the New York-based

arbitrageur, and officers of Morgan Grenfell, were implicated in the Guinness share support scandal of 1986 (Naylor 2004, pp. 396–397). The Barlow Clowes scandal of 1988, which was effectively a Ponzi scheme, featured a Jersey affiliate used to book non-existent software sales (Brooks 2018, p. 89). Also in 1988, five executives of Bank of Credit Commerce International (BCCI) were indicted in Florida on charges of international money laundering, centred on London, but operating through offshore accounts including the Cayman Islands and Luxembourg (Beaty and Gwynne 1993, p. 213). The investigation culminated in 1991, then described as ‘the largest bank fraud in world history’³¹ and to a large degree explains the spike in the bank fraud index for that year in Figure 3. Robert Maxwell’s business empire, which collapsed in 1991, consisted of hundreds of interlocked companies, controlled via family trusts registered in Lichtenstein (Blowfield and Murray 2008, p. 172). In all these cases, the construction of a complex group structure across international jurisdictions created new opportunities for shifting funds and profits, thereby escaping accountability.

Polly Peck and coterminous frauds showed that flexibility in accounting standards gave executives the means to satisfy stock market expectations of growth, at the same time hiding poor performance arising from risky investments and over-expansion. Executives could transfer assets and liabilities between international affiliates and secure protection using secrecy jurisdictions, further attenuating audit scrutiny, and increasing auditor dependence on senior management. Such were the challenges for Polly Peck’s auditor, Stoy Hayward, which placed undue reliance on subsidiary auditors and uncorroborated assurances from Nadir (Gwilliam and Jackson 2011, p. 398). Deficient auditing was also implicated in the Johnson Matthey collapse, leading to calls for enhanced audit scrutiny for financial institutions, and PW were criticised for lack zeal in the face of international banking secrecy and links to Arab Gulf states in the BCCI case.³² Coopers & Lybrand’s audit staff were required to be at the ‘beck and call’ of Maxwell and his staff (Brooks 2018, pp. 88–91). Given such difficulties, auditors could be forgiven for wishing to limit their risks and potential liabilities, and were assisted when the Caparo case limited their responsibilities towards investors and employees on grounds of remoteness.³³

Following Polly Peck and other scandals of the late 1980s, there were moves to improve accounting standards and corporate governance. Reform of the former would restrict opportunity for accounting manipulation, and the latter would potentially reign in the excesses of over-powerful CEOs like Nadir and Maxwell. The newly formed Accounting Standards Board revised accounting practice highlighted as deficient in the Polly Peck case, including cash flow statements, off-balance sheet finance and foreign currency translation. The emphasis of these changes, on principles rather than rules, differentiated the UK from the US. A similar impetus was given to the reforms initiated by the Cadbury Committee on Corporate Governance (Gwilliam and Jackson 2011, pp. 399–400). The combined consequence of these scandals was that the UK had begun to tackle accounting and governance reform ahead of the US, where similar developments, in the form of the Sarbanes Oxley Act, followed the wave of scandals involving Enron and others in the early 2000s (Toms and Wright 2005).

The wider effectiveness of national level reforms in the UK and US remains open to question. Even if acknowledged as moves in the right direction (the subject of some debate, see, for example, Spira 2003, Unerman and O’Dwyer 2004), the opportunities for financial subterfuge arising from international loopholes in the rebound phase continue to mount. From zero in 1977 the number of offshore shell companies registered annually by Mossack Fonseca in Panama alone reached a peak of 13,287 in 2005.³⁴ The growth of quasi-legal spaces and regulatory avoidance, originating with the London Euromarket, was further strengthened by the development of unregulated financial intermediation (Palan and Nesvetailova 2014), which played a crucial role in the financial crisis of 2007–2008 and its associated collapses and scandals.

Reconsidering the longer run trends in [Figures 1–5](#), there are several possible explanations for the U-shape of fraud and financial scandal in the twentieth century. The pattern corresponds quite closely to other prominent trends in the financial sector for the same period including the level of regulation and the character and remuneration of financial labour. The level of financial (de)regulation in Philippon and Reshef's (2012) index coincides not only with the observable pattern of fraud in the period 1910–2010, but also with wages in the financial sector. They explain the relative decline in financial sector wages up to c.1975 by deskilling and routinisation, a trend which overlapped with the post-1945 rise of the techno-structure and associated research and technical work in large industrial corporations (Galbraith 1967). From the mid-1970s onwards, finance sector employment was increasingly characterised by higher-level decision-making and analytical job complexity, associated with a rapid rise in relative wages and internationalisation. Concomitantly, these increases have rapidly outstripped the wages paid to staff in regulatory functions (Philippon and Reshef 2012).³⁵ In identifiable headline scandal cases, bank fraud, having declined up to 1980, began to rise again thereafter (table A1), a trend also observable in [Figure 3](#). In the period 2000–2009, banking and finance accounted for 14 of 22 headline frauds, or 63.6%, a figure comparable with banking's unregulated phase in the mid-nineteenth century. Taken together, the evidence suggests that the increasing scale and complexity of the finance sector, and associated power imbalances between regulator and regulated explain the rebound in fraud and financial scandals in the second half of the twentieth century, up to and including the global financial crisis.

5. Conclusions

The above discussion has focused on opportunity, without mapping the motivations and rationalisations of the individuals involved onto the long run trends. Further research might address these points, along with changes in social norms and standards of ethical behaviour that go beyond the broad trends indicated in [Figures 1 and 2](#). Media reports have been used to quantify these trends, but another area of further research would be to analyse the role of such reports in constructing the response narrative following major scandals. These caveats aside, in the 300 years or so covered in [Figures 1–5](#), assuming that human nature and the fraction of individuals in society pre-disposed to fraudulent behaviour has remained reasonably constant, the evidence reveals that the opportunity set available to potential fraudsters, their modus operandi and factors enhancing or mitigating the risks they face have changed dramatically.

The history of fraud and financial scandal in the long view calls some prior interpretations into question. Whereas there are cycles, there is also a longer run secular element, reflecting institutional configurations, and not just scandals or clusters of scandals. Skeel's (2005) 'cat and mouse' analogy, in which regulators respond to scandals by empowering market scrutineers, including accountants, only works within specific time bounds and jurisdictions. It does not explain why the incidence of fraud and financial scandal declined after the South Sea Bubble as a function of focused shareholder knowledge and empowerment, nor why corporate executives eschewed manipulative financial behaviour in the 1950s and 1960s. Indeed, the hiatus period is problematic for most behavioural interpretations, including those based on the actions of dominant senior management (for example Lee et al. 2008). Corporate managements were at the height of their power and built large technocratic hierarchies in the absence of significant shareholder or financial market scrutiny. Only occasionally, typically during a takeover situation, did managers resort to accounting manipulation to enhance their bids or to hide poor performance. Balleisen's (2017) dilemma, of striking a regulatory balance between promoting risk-taking and entrepreneurship and the discouragement of financial manipulation, is well illustrated. Corporate hierarchies and tight financial regulation mitigated fraud after 1933, but they also

caused Schumpeter (1942) to lament the demise of the entrepreneur, which was compounded by the rise of the technocrats of Galbraith's (1967) 'new industrial state'.

Since the mid-1970s, the 'cat and mouse' analogy seems to hold better. Certainly, there were focused attempts to improve accounting and auditing standards in direct response to specific scandals at Penn Central and inter alia, Polly Peck. However, the expansion, complexity, internationalisation and economic dominance of the financial sector have created an oversize mouse stalked cautiously at a distance by the scrawny malnourished regulatory cat. These changes have also created a plethora of business advice type opportunities for the accounting profession, but also present much greater risk in terms of the possibility of fraud and difficulty in its detection.

Fraud opportunity and risk is a function of specialisation, growth, diversification and business complexity and regulatory effectiveness. Where investors' wealth is wholly and exclusively committed to a business that is also functionally specialised, arguably such opportunities and risks can be minimised, as demonstrated by the effectiveness of shareholder investigation committees before 1845. Mature product markets and improved regulation can also combine to reduce the incidence of fraud as demonstrated by the secular decline in fraud in the second half of the nineteenth century. Accounting conservatism, legislated in the UK during this time, and in the US post-1933, provided effective protection for diversified investors interested mostly in steady dividends. Similarly, if managers can satisfy their wealth targets through controlled diversification, as in the period c.1940–1970, their predisposition to fraud and accounting manipulation may diminish, even in the absence of outside investor scrutiny. Whereas fraud and scandal may reduce in such conditions, there are nonetheless trade-offs in terms of sub-optimal shareholder value outcomes. The imperative to release such value, coupled with increased complexity associated with financial innovation and deregulation, has been associated with an upsurge in fraud and financial scandal since the mid-1970s.

Acknowledgements

I would like to thank the editors and a reviewer for helpful guidance and constructive comments, and the participants at the ICAEW Information for Better Markets Conference, 17–18 December 2018 and at a seminar at Leeds University Business School. I would also like to thank Alison Dundjerovic, Robert Hodgkinson, and Gillian Knight for helpful feedback on the development and direction of the research, and, for further useful comments, Mark Billings, Alan DeRicquebourg, Mike Jones, Richard Macve, Gillian Tett and Steve Zeff.

Disclosure statement

No potential conflict of interest was reported by the author.

Notes

1. The second and third elements follow from the definition of 'scandal': <https://en.oxforddictionaries.com>, with the addition of 'financial' implying the involvement of financial resources.
2. Throughout the paper, keyword search terms are indicated in double quotes.
3. I conducted similar tests using the *New York Times* historical online database hosted by Proquest, covering the period 1850–2009.
4. 'Swindle' peaked in 1877 and 'false balance sheet' in 1893; occasional earlier references aside, 'creative accounting' only entered general use after 1983 (Gale Cengage online database of British newspapers).
5. See Hail et al. (2108) figures 3 and 4 respectively, based on 'scandal' and related terms in the *Financial Times*, 1888–2015 and *New York Times*, 1850–2015.
6. Known as the *Bubble Act, 1720* (c.18, Geo. I, 6).

7. A further peak in 1777 was fuelled in part by government officials' corruption in military procurement, and also the activities of the fraudster David Brown Dignan, made famous for fabricating a conspiracy to kill the king in which the Duke of Suffolk and the Earl of Shelburne were named as co-conspirators (Jackson 1795, p. 237).
8. The *Newgate Calendar* (Jackson 1795), chronicles instances of forgery and swindling as headline classes of crime during the eighteenth century.
9. *Joint Stock Companies Registration and Regulation Act 1844* (c.110, Vict. 7 & 8) permitted incorporation of companies by registration. *Limited Liability Act 1855* (c.133, Vict., 8 & 19) permitted incorporation of companies with limited liability for the first time.
10. British Parliamentary Papers, 'Irish Great Western Railway Bill', *House of Lords Hansard Sessional Papers*, 1845, 25th and 29th July, 1845; 'The staggering system', *The Times*, 1st August, 1845, p.5.
11. Railway investors incorporated dividends into net return calculations on aggregated classes of capital to assess comparative performance (Toms 2010, Tyler 1873).
12. In *Burnes v. Pennell* (1849) 2 H.L.C. 497, financial statements could not be fraudulent where they accounted for 'certainties but not risks' (Reid 1987, pp. 26–27).
13. *Regulation of Railways Act, 1868* (c.119, Vict. 31 and 32).
14. Corporate scandal database, appendix 1; a further isolated railway fraud, not specifically covered by the 1868 Act, occurred in connection with a tramway flotation by Ernest Terah Hooley in 1904.
15. Larceny is defined as the application of company funds for own use; embezzlement is defined as the receipt of money by the company with intent to defraud (Taylor 2013, p. 111).
16. *Companies Act 1879* (c.76, Vict. 42 and 43).
17. Restrictions on entry to embryonic societies meant that London dominated the Institute from the beginning (Matthews et al. 1998, p. 59).
18. *Re Kingston Cotton Mill Company* (No.2) Ch.331, *The Accountant Law Reports*, 23rd May, 1896, p.78.
19. *Companies Act 1900* (c.48, Vict. 63 and 64). Following the Barings crisis of 1890, these scandals were centred largely on individual financial promoters, including Jabez Balfour, Ernest Terah Hooley and Horatio Bottomley (Johnston 1934).
20. *Re City Equitable Fire Insurance Co.* (1925) Ch. 407; *R. v. Kylsant*, (1931) 48 T. L. R. 62. For further examples of Hatry's activities, see Swinson (2017).
21. In the Royal Mail case, for similar reasons, Kylsant was found not guilty of accounting manipulation. *R. v. Kylsant*, (1931) 48 T. L. R. 62.
22. The *Trevor v Whitworth* (1887, 12 AC 409 HL) case, explicitly endorsed capital maintenance on the grounds of creditor protection. The conservatism principle was formally stated by L.J. Buckley in 1906: *Newton vs. Birmingham Small Arms Co Ltd* (2 Ch 378:22 T.L.R. 664)
23. Senate Report No. 95–34 (1977), *The Accounting Establishment: A Staff Study*, prepared by the Subcommittee on Reports, Accounting and Management of the Committee on Government Operations.
24. Now referred to as the Euromarket; London remains at its centre.
25. *Exchange Control Act 1947* (ch.14, Geo. VI. 10/11); the system of fixed exchange rates and capital controls was inaugurated in 1944 (Helleiner 2015); controls were abolished under the *Exchange Control (General Exemption) Order*, 13th December, 1979.
26. The equivalent pre 1970 figure was 23.3% (31/133). Of the 53 post 1970 scandals, over half (30) involved offshore secrecy jurisdictions.
27. Legislation on financial deregulation included the *Companies Act 1981*, which introduced exceptions to the financial assistance rules and the *Financial Services Act* (c.60, 1986), and which facilitated diversification and integration of banking and financial services,
28. The equivalent figure for pre 1970 was 13.5% (18/133).
29. *Statement of Standard Accounting Practice 20: Foreign Currency Translation*, in force between 1983 and 2003.
30. *Wall Street Journal*, 31st October 1984.
31. David Lascelles and Richard Waters, 'BCCI shutdown', *Financial Times*, 30th July 1991, p.6.
32. Clive Woolman, 'In search of fresh paths through the fraud jungle', *Financial Times*, 15th March 1986, p.8; Alex Brummer, 'A Banking Scandal with Global Signals for the Regulators', *Guardian*, 6th July, 1991.
33. *Caparo Industries PLC v Dickman* [1990] UKHL 2. At around the same time LLPs were allowed in the US, which Brooks (2018) attributes to a state-by-state regulatory race to the bottom.
34. The cumulative total during this period was over 200,000. <https://www.weforum.org/agenda/2016/04/where-are-the-worlds-tax-havens-and-what-are-they-used-for/> (accessed 1st November 2018).

35. The ratio of executive compensation in finance (the top regulated) to the highest salaries paid to (non-politically appointed) regulators (the top regulators) grew from 10 in 1980 to over 60 in 2005 (or 40, excluding bonuses; Philippon and Reshef 2012, p. 1606).

References

- Acheson, G.G. and Turner, J.D., 2008. The deathblow to unlimited liability in Victorian Britain: the City of Glasgow failure. *Explorations in Economic History*, 45 (3), 235–253.
- Ackerman, S.R., 1978. *Corruption: A Study in Political Economy*. New York: Academic Press.
- Arnold, A.J., 1991. Secret reserves or special credits? A Reappraisal of the reserve and provision accounting policies of the Royal Mail Steam Packet company, 1915–27. *Accounting and Business Research*, 21 (83), 203–214.
- Balleisen, E.J., 2017. *Fraud. An American History From Barnum to Madoff*. Princeton: Princeton University Press.
- Bank of England, 1977. *A Guide to United Kingdom Exchange Control*. London: Bank of England.
- Barnes, P., 2007. Minsky's financial instability hypothesis, information asymmetry and accounting information: the UK financial crises of 1866 and 1987. *Accounting History*, 12 (1), 29–53.
- Baumol, W.J., 1996. Entrepreneurship: productive, unproductive, and destructive. *Journal of Business Venturing*, 11 (1), 3–22.
- Baxter, W.T., 1999. Mckesson & Robbins: a milestone in auditing. *Accounting, Business & Financial History*, 9 (2), 157–174.
- Beatty, J. and Gwynne, S.C., 1993. BCCI: The trial. *Time*, 141 (15), 42–43.
- Benston, G.J., 1969. The value of the SEC's accounting disclosure requirements. *The Accounting Review*, 44 (3), 515–532.
- Benston, G.J., 1976. *Corporate Financial Disclosure in the U.K. and the U.S.A.* Lexington, MA: Lexington Books.
- Blowfield, M.E. and Murray, A., 2008. *Corporate Responsibility: A Critical Introduction*. Oxford: University Press.
- Briloff, A.J., 1969. The “funny-money” game. *Financial Analysts Journal*, 25, 73–79.
- Briloff, A.J. and Engler, C., 1979. Accountancy and the merger movement: A symbiotic relationship. *Journal of Corporate Law*, 5, 81–103.
- Brooks, R., 2018. *Bean Counters: The Triumph of the Accountants and How They Broke Capitalism*. London: Atlantic Books.
- Brown, R.G., 1962. Changing audit objectives and techniques. *Accounting Review*, 37 (4), 696.
- Bryer, R.A., 1991. Accounting for the “railway mania” of 1845—a great railway swindle? *Accounting, Organizations and Society*, 16 (5-6), 439–486.
- Cain, P. and Hopkins, A.G., 2016. *British Imperialism: 1688-2015*. Abingdon: Routledge.
- Carnegie, G.D. and O'Connell, B.T., 2014. A longitudinal study of the interplay of corporate collapse, accounting failure and governance change in Australia: early 1890s to early 2000s. *Critical Perspectives on Accounting*, 25 (6), 446–468.
- Chambers, R.J., 1973. *Securities and Obscurities: A Case for Reform of the Law of Company Accounts*. Sydney: University Press. reprint 2006.
- Chandler, A.D., 1990. *Scale and Scope: The Dynamics of Industrial Capitalism*. Cambridge, MA: Harvard.
- Chandler R.A. and Edwards, J.R., 1994. *British Audit Practice 1884–1900: A Case Law Perspective*. New York: Garland Publishing.
- Cheffins, B.R., 2015. Corporate governance since the managerial Capitalism Era. *Business History Review*, 89 (04), 717–744.
- Clikeman, P.M., 2013. *Called to Account: Financial Frauds That Shaped the Accounting Profession*. New York: Routledge.
- Collins, M. and Baker, M., 2003. *Commercial Banks and Industrial Finance in England and Wales, 1860–1913*. Oxford: University Press.
- Cooper, D.J., Dacin, T., and Palmer, D., 2013. Fraud in accounting, organizations and society: extending the boundaries of research. *Accounting, Organizations and Society*, 38, 440–457.
- Coyle, C. and Turner, J.D., 2013. Law, politics, and financial development: the great reversal of the UK corporate debt market. *The Journal of Economic History*, 73 (3), 810–846.
- Crafts, N., 2016. Reducing high public debt ratios: lessons from UK experience. *Fiscal Studies*, 37 (2), 201–223.
- DeZort, F., 1997. An investigation of audit committees' oversight responsibilities. *Abacus*, 33 (2), 208–227.

- Dicksee, L.R., 1905. *Auditing: A Practical Manual for Auditors (Authorized American Edition)*. New York: Robert Montgomery. Reprinted 1976.
- Edwards, J.R., 2013. *A History of Financial Accounting*. Abingdon: Routledge.
- Edwards, J.R., Anderson, M., and Chandler, R., 2005. How not to mount a professional project: the formation of the ICAEW in 1880. *Accounting and Business Research*, 35 (3), 229–248.
- Eichengreen, B., 2014. *Hall of Mirrors: The Great Depression, the Great Recession, and the Uses and Misuses of History*. New York: Oxford University Press.
- Freeman, M., Pearson, R., and Taylor, J., 2012. *Shareholder Democracies: Corporate Governance in Britain and Ireland Before 1850*. Chicago: University Press.
- Galbraith, J.K., 1967. *The New Industrial State*. New York: Signet.
- Galbraith, J.K., 1996. *The Great Crash 1929*. New York: Houghton Mifflin.
- Gray, K.R., Frieder, L.A., and Clark, G.W. Jr., 2005. *Corporate Scandals. The Many Faces of Corporate Greed*. St. Paul: Paragon House.
- Gwilliam, D. and Jackson, R.H., 2011. Creative accounting - The UK experience. In: M. Jones, ed. *Creative Accounting, Fraud and International Accounting Scandals*. Chichester: John Wiley & Sons, 379–406.
- Hail, L., Tahoun, A., and Wang, C., 2018. Corporate scandals and regulation. *Journal of Accounting Research*, 56 (2), 617–671.
- Helleiner, E., 2015. Controlling capital Flows “At both Ends”: A Neglected (but newly relevant) Keynesian innovation from Bretton Woods. *Challenge*, 58 (5), 413–427.
- Hollow, M., 2015. *Rogue Banking: A History of Financial Fraud in Interwar Britain*. Basingstoke: Palgrave.
- Inglis, R.H., 1896. *Dictionary of Political Economy*. University Press: Cambridge. reprinted 2015.
- Jackson, W., 1795. *The Newgate Calendar, Vol.5*. London: Chetwynd.
- Jefferys, J.B., 1977. *Business Organisation in Great Britain 1856–1914*. New York: Arno Press.
- Johnston, T., 1934. *The Financiers and the Nation*. London: Methuen.
- Jones, M., 2011. Taking the long view: accounting scandals over time. In: M. Jones, ed. *Creative Accounting, Fraud and International Accounting Scandals*. Chichester: Wiley, 115–134.
- Kelly, M. and O’Grada, C., 2000. Market contagion: evidence from the panics of 1854 and 1857. *American Economic Review*, 90 (5), 1110–1124.
- Kitchen, J., 1972. The accounts of British holding company groups: development and attitudes to disclosure in the early years. *Accounting and Business Research*, 2 (6), 114–136.
- Lee, T.A., Clarke, F., and Dean, G., 2008. The dominant senior manager and the reasonably careful, skilful, and cautious auditor. *Critical Perspectives on Accounting*, 19 (5), 677–711.
- Lee, T.A., Clarke, F., and Dean, G., 2009. Scandals. In: J.R. Edwards, and S.P. Walker, eds. *The Routledge Companion to Accounting History*, Abingdon: Routledge, 408–430.
- Levy Peck, L., 1989. Corruption and political development in early modern Britain. In: A. Heidenheimer, M. Johnston, and V. LeVine, eds. *Political Corruption: A Handbook*. New Brunswick: Transaction, 219–232.
- Lovings, R., 2006. *The Men who Loved Trains*. Bloomington: Indiana University Press.
- Maltby, J., 2009. Auditing. In: J.R. Edwards and S.P. Walker, eds. *The Routledge Companion to Accounting History*, Abingdon: Routledge, 224–243.
- Matthews, D., 2005. London and County Securities: a case study in audit and regulatory failure. *Accounting, Auditing & Accountability Journal*, 18 (4), 518–536.
- Matthews, D., 2006. *A History of Auditing: The Changing Audit Process in Britain From the Nineteenth Century to the Present Day*. Abingdon: Routledge.
- Matthews, D., Anderson, M., and Edwards, J.R., 1998. *The Priesthood of Industry: The Rise of the Professional Accountant in British Management*. Oxford: University Press.
- Murphy, P.R. and Dacin, M.T., 2011. Psychological pathways to fraud: Understanding and preventing fraud in organizations. *Journal of Business Ethics*, 101 (4), 601–618.
- Naylor, R.T., 2004. *Hot Money and the Politics of Debt*. Montreal: McGill-Queen’s University Press.
- Needleman, M.L. and Needleman, C., 1979. Organizational crime: Two models of criminogenesis. *The Sociological Quarterly*, 20 (4), 517–528.
- Nobes, C., 1991. Cycles in UK standard setting. *Accounting and Business Research*, 21 (83), 265–274.
- Ó hÓgartaigh, C., 2009. Financial accounting practice. In: J.R. Edwards and S.P. Walker, eds. *The Routledge Companion to Accounting History*. Abingdon: Routledge, 162–188.
- Palan, R. and Nesvetailova, A., 2014. Elsewhere, ideally nowhere: shadow banking and offshore finance. *Politik*, 16 (4), 26–34.
- Palan, R., Murphy, R., and Chavagneux, C., 2010. *Tax Havens: How Globalization Really Works*. Ithaca: Cornell University Press.

- Paul, H., 2010. *The South Sea Bubble: An Economic History of its Origins and Consequences*. Abingdon: Routledge.
- Philippon, T. and Reshef, A., 2012. Wages and human capital in the US finance industry: 1909–2006. *The Quarterly Journal of Economics*, 127 (4), 1551–1609.
- Raw, C., 1977. *Slater Walker*. London: Andre Deutsch.
- Reid, J.M., 1987. Judicial views on accounting in Britain before 1889. *Accounting and Business Research*, 17 (67), 247–258.
- Robb, G., 2002. *White-Collar Crime in Modern England: Financial Fraud and Business Morality, 1845–1929*. University Press: Cambridge.
- Rubinstein, W.D., 1983. The end of “old corruption” in Britain 1780–1860. *Past & Present*, 101 (1), 55–86.
- Rutherford, B.A., 2007. *Financial Reporting in the UK: A History of the Accounting Standards Committee, 1969–1990*. Abingdon: Routledge.
- Schumpeter, J.A., 1942. *Socialism, Capitalism and Democracy*. London: Allen & Unwin. Reprinted 1967.
- Shaxson, N., 2012. *Treasure Islands: Tax Havens and the Men who Stole the World*. London: Vintage.
- Singh, D., 2016. *Banking Regulation of UK and US Financial Markets*. Abingdon: Routledge.
- Skeel, D., 2005. *Icarus in the Boardroom: The Fundamental Flaws in Corporate America and Where They Came From*. Oxford: University Press.
- Smith, T., 1992. *Accounting for Growth*. London: Century.
- Solsma, L.L. and Flesher, D.L., 2013. Exploring the clientele of an accounting firm in early twentieth century America. *Accounting History Review*, 23 (3), 295–315.
- South Sea Company, 1825. *The South Sea Bubble*. London: Boys.
- Spira, L.F., 2003. Audit committees: Begging the question? *Corporate Governance: An International Review*, 11 (3), 180–188.
- Stamp, E., 1970. Reforming accounting principles. In: E. Stamp and C. Marley, eds. *Accounting Principles and the City Code: The Case for Reform*. London: Butterworths, Part 2.
- Swinson, C., 2017. *Regulation of the London Stock Exchange: Share Trading, Fraud and Reform 1914–1945*. Abingdon: Routledge.
- Taylor, J., 2007. Company fraud in Victorian Britain: The Royal British Bank scandal of 1856. *English Historical Review*, 122 (497), 700–724.
- Taylor, J., 2013. *Boardroom Scandal: The Criminalization of Company Fraud in Nineteenth-Century Britain*. Oxford: University Press.
- Taylor, J., 2018. White-collar crime and the law in nineteenth-century Britain. *Business History*, 60 (3), 343–360.
- Toms, S., 2010. Calculating profit: A historical perspective on the development of capitalism. *Accounting, Organizations and Society*, 35 (2), 205–221.
- Toms, S., 2017. Fraud and financial scandals. In: J.F. Wilson, S. Toms, A. de Jong and E. Buchnea, eds. *The Routledge Companion to Business History*. Abingdon: Routledge, 358–372.
- Toms, S. and Wright, M., 2005. Divergence and convergence within Anglo-American corporate governance systems: evidence from the US and UK, 1950–2000. *Business History*, 47 (2), 267–295.
- Toms, S., Wilson, N., and Wright, M., 2015. The evolution of private equity: corporate restructuring in the UK, c. 1945–2010. *Business History*, 57 (5), 736–768.
- Turner, J.D., 2014. *Banking in Crisis: The Rise and Fall of British Banking Stability, 1800 to the Present*. Cambridge: Cambridge University Press.
- Turner, J.D., Ye, Q., and Zhan, W., 2013. Why do firms pay dividends? evidence from an early and unregulated capital market. *Review of Finance*, 17 (5), 1787–1826.
- Tyler, C., 1873. Railway statistics furnished by Captain Tyler. *Journal of the London Statistical Society*, 36, 259–270.
- Unerman, J. and O’Dwyer, B., 2004. Enron, WorldCom, Andersen et al.: a challenge to modernity. *Critical Perspectives on Accounting*, 15 (6–7), 971–993.
- Vander Weyer, M., 2011. *Fortune’s Spear: The Story of the Blue-Bloded Rogue Behind the Most Notorious City Scandal of the 1920s*. London: Elliott & Thompson.
- Walker, S.P. and Shackleton, K., 1995. Corporatism and structural change in the British accountancy profession, 1930–1957. *Accounting, Organizations and Society*, 20 (6), 467–503.
- Wilson, S., 2014. *The Origins of Modern Financial Crime: Historical Foundations and Current Problems in Britain*. Abingdon: Routledge.
- Zeff, S.A., 1972. Chronology of significant developments in the establishment of accounting principles in the United States, 1926–1972. *Journal of Accounting Research*, 10 (1), 217–227.
- Zeff, S.A., 2009. Editor’s introduction. In: S.A. Zeff, ed. *Principles Before Standards: The ICAEW’s ‘N Series’ of Recommendations on Accounting Principles, 1942–1969*. London: ICAEW, 5–8.

Appendix 1

The appendix describes the steps involved in constructing a database of headline corporate scandals in the United Kingdom, for the period 1800–2009 and provides a summary of the characteristics of the resulting sample.

Construction of the sample

I identified headline accounting scandals using keyword searches from online newspaper archives (hosted by Cengage) and featuring inter alia the *British Library Newspaper Archive*, 1800–1950, *The Times Digital Archive*, 1800–2009, the *Financial Times Historical Archive* (1888–2009) and *The Economist Historical Archive*, 1843–2009.

Key search terms:

‘Fraud’, ‘corruption’, ‘embezzlement’, ‘Financial scandal’, ‘accounting scandal’, ‘false balance sheet’, ‘creative accounting’.

‘Board [Department] of Trade investigation’ (1840–1969) ‘Department of Trade Investigation’, ‘Department of Trade and Industry Investigation’ (1970–2007), ‘Serious Fraud Office Investigation’ (1987–2009).

Keywords for ‘Financial scandal’ identified only isolated instances prior to 1850. I complemented the keyword searches with searches of secondary literature. The following works were significantly relied upon for this purpose: Freeman et al. (2012), Gwilliam and Jackson (2011), Jones (2011), Johnston (1934), Lee et al. (2008), Robb (2002), and Taylor (2013).

Once identified, I subjected each scandal to further keyword searches with reference to the name of the organisation(s) involved, dates, and key individuals.

The keyword searches and secondary literature were also used to ascertain the major features of each scandal. To be classified as a financial scandal an event must involve the use of financial resources, in a morally questionable or illegal fashion, with significant impact on third parties, and attract wide publicity. To meet the latter criterion, there must have been at least one headline reference in a national newspaper.

The date of the scandal was assigned according to the year in which the facts of the case were publicised as headline news (often sometime after the fraud was actually perpetrated; often sometime before the case was resolved and offenders punished). Scandals that featured more than one business unit, either as consolidated subsidiaries or associated group members, or as connected via an individual significantly implicated in the scandal, were classified as ‘complex group’. This term is used a) to distinguish from scandals involving a single business unit and b) to reflect the compounding of fraud opportunity where potential perpetrators can transfer resources and liabilities to differently constituted legal entities. Where the use of more than one international legal jurisdiction was a necessary condition for a material part of the scandal, including crown dependencies and overseas territories with significant independence from the UK in terms of financial regulation, the scandal was classified as having an ‘international dimension’. In each case the non-UK jurisdiction was noted in the database. Scandals involving businesses whose core activities included banking and financial services were classified as ‘banking/finance’.

Using this approach, 221 headline corporate scandals were identified. Their pattern of occurrence by decade is similar to that demonstrated by the data collected by Hail et al. 2018, also listed for comparative purposes in Table A.1 below.

Table A1. Headline scandals by decade

Decade	(1) Total	(2) Complex Group	(3) Int. Dimension	(4) Banking/ finance	(5) Hail et al.
1800	2	0	0	0	0
1810	0	0	0	0	1
1820	7	0	0	2	2
1830	3	1	0	3	2
1840	24	0	0	15	11
1850	21	0	2	16	16
1860	14	1	3	9	9

(Continued)

Table A1. Continued.

Decade	(1) Total	(2) Complex Group	(3) Int. Dimension	(4) Banking/ finance	(5) Hail et al.
1870	5	0	3	2	5
1880	3	0	2	1	8
1890	16	3	3	6	21
1900	12	3	6	4	12
1910	4	0	2	3	11
1920	11	6	1	8	6
1930	9	3	2	4	6
1940	0	0	0	0	0
1950	0	0	0	0	0
1960	2	1	1	0	3
1970	16	7	6	5	30
1980	21	16	15	9	23
1990	29	27	20	13	23
2000	22	14	12	14	23
Total	221	82	78	114	212

Sources: First section of Appendix 1: ‘Construction of the sample’; Hail et al. (2018) online appendix: <https://research.chicagobooth.edu/-/media/research/arc/docs/journal/online-supplements/htw-online-appendix.pdf?la=en&hash=3425BEDF072AEF29C3E8927AA5C5A6BE45B8913B> table A25.2 (accessed 25th October, 2018).

Notes:

(1) The total number of scandals, by decade, identified by the procedure described in the first section of the appendix.

(2) Scandals by decade that fall into the ‘complex group’ category identified by the procedure described in the first section of the appendix.

(3) Scandals by decade that fall into the ‘international dimension’ category identified by the procedure described in the first section of the appendix.

(4) Scandals by decade that fall into the ‘banking and finance’ category identified by the procedure described in the first section of the appendix.

(5) Hail et al. identify a total 212 scandals, which they analyse by decade, but without disclosing the details of each scandal. Significant overlaps, but also some differences are therefore likely. The Pearson (Spearman) correlation co-efficient for the data in columns (1) and (5) is 0.814 (0.877).