

The Railway Mania: Fraud, disappointed expectations, and the modern economy

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1 Introduction

The railway history literature frequently associates the Railway Mania with fraud, with companies “paying dividends out of capital.” A paper by Arnold and McCartney has more than three dozen references to such claims¹. Often Arthur Smith is credited with deflating the bubble with his incendiary 1848 pamphlet, *The Bubble of the Age; Or, the Fallacies of Railway Investment, Railway Accounts, and Railway Dividends*, which claimed that railways were not making any profits at all². The standard and oft-cited example of managerial malfeasance is George Hudson, the “Railway King.” The most powerful figure in the railway industry, he was shown in early 1849 to have committed accounting fraud and to have stolen money from his shareholders. The phrase “to make things pleasant” that was used in one of his manipulations of financial statements was often cited in the next few decades as a synonym for fraudulent financial reporting.

One purpose of this paper is to demonstrate briefly that accounting fraud was not the fundamental cause of the investment disaster of the Railway Mania. Distorted financials helped mask for a while the disappointing returns that new railways produced for investors, but were not the reason for the lack of profits. The main problem was the headlong expansion during the Mania. It tripled British railway mileage, and the new lines cost more than expected and brought revenues lower than expected. Hence even well-run and profitable railways, which all participated in the expansion by building branches and acquiring other lines, saw their profits plummet.

The bulk of this paper is devoted to exploring the reasons that fraud has played such a prominent role in the popular impressions of the Railway Mania. This was likely due largely to the universal human tendency, in almost all disasters, to look for malfeasance by people in power as opposed to doing a more careful systemic investigations. We can see this tendency in the aftermath of the 2008 financial crisis. After the Railway Mania, George Hudson, the brash *nouveau riche* figure with an outsize prominence and outsize abuses, served as a convenient scapegoat, and allowed the public to avoid reflecting on their own mistakes³. However, there were additional reasons that may have led to the suspicions of fraud in the aftermath of the Railway Mania. The rise of the railway industry did involve extensive illegal activity, much of it widely known, and often condoned by

the government and society. There was also a lack of clear standards in accounting and other areas and many rosy promises by promoters that failed to be realized. Furthermore, railway investments in general were viewed as being on the fringe of respectability, as will be shown. In this atmosphere, it was natural for suspicion about the honesty of managers to be aroused by business reversals.

A study of this episode and its similarities with modern financial crashes provides interesting perspectives on the development of modern economy and society in general.

2 Railways as investments

There is no dispute that the Railway Mania was a disaster for most investors in railway common shares⁴. The best known index of railway shares prices declined from 167.9 in the summer of 1845 to 60.5 at the end of 1849, a drop of 64%⁵. In this latter period Charlotte Brontë, who, along with her sisters, had invested most of her small inheritance in one of Hudson’s lines, and was a heavy loser as a result, wrote that “[m]any—very many are—by the late strange Railway System deprived almost of their daily bread”⁶. This widespread problem was the result of relying on overoptimistic forecasts for both costs and revenues of the new lines built during the Mania.

Table 1. British railway industry in the late 1840s.

year	miles in service	construction cost per mile	annual revenues per mile
1844	2,240	£35,700	£3,280
1845	2,536	35,000	3,470
1846	3,142	31,800	3,300
1847	3,945	31,700	2,870
1848	5,127	34,200	2,560
1849	5,996	35,200	2,100
1850	6,621	35,200	2,080
1851	6,890	35,100	2,220

One of the more extreme examples of Railway Mania overoptimism was the East Anglian Railway. It was created in 1847 through a merger of the Ely & Huntingdon, Lynn & Dereham, and Lynn & Ely railways (and in turn became part of the Great Eastern Railway in 1862). All three were created by the same group of promoters and all were sanctioned by Parliament in 1845. The business plans they presented to Parliament envisaged total length for the three lines of 87 miles, construction costs of £764,400, gross annual revenues of £93,074, and profits of £58,506⁷. Thus the expected cost per mile to build the lines was to be £8,786, and revenues per mile were to be £1,070. By the end of 1848, the Mania was collapsing, after a few years of feverish railway buildout as well as general turmoil in the economy. At that stage, the East Anglian had 68 miles in service, and no ongoing construction. But the costs of those 68 miles came to £1,247,382, and thus to £18,342 per mile, slightly more than twice the initial estimate. As for revenues, those amounted to only

£46,694, or £687 per mile as late as 1855, after quite a few years of service, and a stable economy and stable relations with other railways⁸.

A comprehensive picture of the Railway Mania investment disaster can be seen in Table 1⁹. Railway Mania investors were enticed with promises that the new lines would cost about £20,000 per mile to construct. (The East Anglian estimates were less than half of this average, reflecting local conditions, such as flat and inexpensive land and few engineering difficulties.) Actual costs tended to be between 50 and 100% higher (compared to 109% for the East Anglian). As one of the Rothschilds (who made much of their fortune financing railways around the world, although few British ones) is supposed to have said

*There are three roads to ruin: gambling, women — and engineers. The first two are more pleasant, but the last is the most certain.*¹⁰

In addition, while investors on average were promised annual revenues of £2,000 per mile, and apparently were frequently hoping for £3,000 per mile¹¹, revenues on the new lines appear to have been largely in the £1,000 - 1,500 per mile range. (The higher figures in Table 1 reflect performance of the old established lines, whose revenues appear to have stayed high and even climbed.) Thus on average, the British railway industry experienced an only slightly milder version of the East Anglian Railway disaster, with actual costs and revenues both disappointing investors.

Could the high costs of the lines built during the Railway Mania be due to corruption? There were certainly many accusations of self-dealing by railway directors, and there was likely some truth to them, even if less than during the earlier mania of the 1830s (which will be discussed below). However, it is unlikely to have been very large, since the costs of construction did not decline even after the collapse of the Railway Mania, when investors were much more vigilant, and professional accountants began to be widely employed in auditing accounts. As has been widely recognized by observers of this industry, British costs were high, much higher than in most other countries, because of numerous factors specific to Britain. These factors included the high cost of land, higher standards of construction (to provide for higher speeds, for example), and the need to avoid level crossings with roads. The entire system could have been designed more efficiently, as was argued by some contemporary observers, and more recently by Casson¹². However, that is hindsight, and is an issue separate from accounting fraud.

3 Railway Mania and accounting fraud

Although the basic problems of high costs and low revenues are clear, and appear to have been understood by many railway historians, literature is full of claims about fraudulent accounting during the Mania. However, they are generally not well documented, and more in the nature of folklore. Arnold and McCartney in the paper cited earlier looked at about three dozen claims of this nature, and found all of them deficient. “[M]ore than half (15) the references were simply wrong, either because they did not relate to the matter at hand ... or because the quotation was clearly taken out of its intended context or demonstrably failed to provide a basis for the conclusion reached.” That such inadequate claims are so frequent

even in the scholarly literature does show, though, that the impression of widespread fraud has been so widespread that normally careful writers did not feel the need to check that the references they were giving were truly substantiating their claims.

While the Arnold and McCartney paper does demonstrate the inadequacy of many claims about accounting fraud, their work could be taken as implying that the only well-documented cases of such transgressions during the Railway Mania were those on the lines run by George Hudson. There were others¹³. Furthermore, there were numerous somewhat more ambiguous cases of accounting abuse. There were no accounting standards in those days, and so the lines between solid reporting, wishful thinking, stretching the formal or informal rules, and outright fraud were fuzzy. For example, it appears that many railways were “making things pleasant” by shifting effective dates when expenses were recognized. A simplified sketch of what was done is as follows. An established and profitable line that had started out with 100 miles of track might, as a result of the Mania, be in the process of constructing another 200. Those 200 miles were financed through the issuance of new classes of shares (as well as borrowings). When a total of 250 miles of line were in service, the revenues of all 250 miles were taken into account in computing profits, but those profits were used to pay dividends on just the capital involved in constructing 150 miles, as the usual rule was that shares for a new branch were not entitled to dividends until the entire branch was open for service. A concrete example of such a maneuver is represented by the decision of the August 1847 shareholder meeting of the Eastern Counties Railway, mentioned later. Another example comes from the North British Railway¹⁴. Such moves produced unrealistically rosy pictures. (Sometimes this was done openly, with the concurrence of shareholders, as in the Eastern Counties Railway case of August 1847. As will be discussed below, much of the “massaging” of financials was done with the implicit or explicit knowledge of investors.)

Arthur Smith attained great notoriety with *The Bubble of the Age*. However, his critics were right, in that he was wrong. He claimed that all railway profits were illusory, that dividends were paid out of capital, and that once the inflows of new capital from investors stopped, so would dividends. As was noted by Robert Lucas Nash, a far more penetrating critic of railway accounting, “[t]hat improper uses have been made of the immense amounts of capital placed under the control of Railway Boards there can be little question; but that there is no such thing existing as profit arising from the working of a railways is preposterous”¹⁵. That Smith was wrong was shown by events, as by the early 1850s capital investment did essentially cease, while dividends of the major lines he was attacking declined, but did not vanish. Still, Smith’s incendiary claims about fraud caught attention and have gained him substantial prominence in accounts of the Railway Mania.

4 Corruption and the railway press

The rise of the railway industry was associated with extensive corruption in what was by modern standards a very corrupt society. What we now think of as “Victorian morality” was just beginning to emerge. The infamous “Old Corruption” was waning, and government jobs were becoming accountable positions with defined responsibilities, and not sinecures¹⁶. Standards for private commercial dealings were also evolving.

A paper by John Palmer¹⁷ showed (in the words of its posthumous editor, H. Paar) that “the origins of the Victorian railway periodicals were closely bound up with the formative history of the Eastern Counties Railway and the life of its first secretary, Joseph Clinton Robertson.” Furthermore, as Palmer demonstrated, all three were disreputable, with Robertson one of the more colorful rogues of that period. It is a great pity that Palmer did not live long enough to write his planned biography of that character.

The Palmer paper took the story of the early railway press only to 1844, the beginnings of the Railway Mania. Goulven Gilcher, drawing extensively on Palmer’s archives, gave a short account of the Press Mania that accompanied the Railway Mania¹⁸. For a brief period, in the fall of 1845, there were over two dozen specialized railway periodicals in the UK. Two of them were even published daily! This was in addition to the extensive coverage of railways in the regular press. The railway press had a very poor reputation, and deservedly so. Gilcher sketches the various ways that favorable publicity for railway promotions was propagated by the press, often stimulated by “material inducements.” Palmer’s archives have much more material, with additional colorful stories, for example about Thomas Littleton Holt, a character of the caliber of Joseph Clinton Robertson, and about Holt’s *Iron Times*.

A particularly instructive case is that of John Robertson and the *Railway Record*, which does not appear to be in Palmer’s archives. Unlike most of the material collected by Palmer, or cited by Guilcher, it concerns the most respectable part of the railway press. John Robertson, apparently no relation to the Joseph Clinton Robertson cited above¹⁹, was first a reporter and then the editor at the *Railway Times* (which had been started by the other Robertson, together with John Braithwaite, the engineer for the Eastern Counties Railway). In 1844, John Robertson left the *Railway Times* and established the *Railway Record*. His claim then was that the *Railway Times* was becoming too closely identified with a particular railway. (This line was the London and Birmingham, although Robertson did not spell this out.) He asserted that the key need for a railway journal was “*confidence in the honesty and impartiality of its conductors*” and that his new venture would be characterized by “INTEGRITY–IMPARTIALITY–INDEPENDENCE”²⁰. Palmer singled out the *Railway Record* as “the paper with the highest contemporary reputation” “in the mid forties” in the paper cited above, and other scholars agreed. John Robertson was regarded as an expert, and was “much consulted by leading railway parties” according to a contemporary source²¹.

Robertson also positioned himself as a guardian of morality in the railway press. At the end of 1845, *The Times*, the main opponent of the Railway Mania, published a letter “How to conduct a bubble newspaper” alleging that the editor of some paper was being paid for supporting a new railway project²². As was usual in the press of the time (and surely due to a large extent to the strict libel laws in the UK), the letter did not name any names. Still, this letter created quite a stir. Robertson wrote that “[s]ome parties, without hesitation, set down the whole story as fabulous, asserting that the letter had been manufactured in the office of the *Times*. We were not of this number.” He reported that an investigation by the *Railway Record* confirmed the accuracy of the letter, and named Thomas Holt and the *Iron Times* as the responsible parties. He thus effectively challenged Holt to sue (which

apparently Holt did not do, in spite of making some threats to do so). This was a very rare step in the British press of that time²³.

The speculative excitement and the attendant gushers of advertising money that led to the Press Mania dried up at the end of 1845. Most of the railway papers folded right away, some after just a handful of issues. (Palmer's thesis²⁴ details the fast collapse of that segment of the press, with just a few papers left by mid-1846.) Those that remained usually had to struggle with a load of bad debts. In early 1846, John Robertson filed a lawsuit against Thomas Piers Healy, who was a lawyer and the proprietor of *Medical Times*. At the height of the Mania, in 1845, Healy had, in his attorney's words, "like many other people, ... dabbled a little in railways."²⁵ Robertson asked the court to compel Healy to pay twelve and a half pounds for the publication in the *Railway Record* of a "puff," a favorable story composed by Healy. It was printed as if it were coming from the staff of the *Railway Record*. It was about a new railway that Healy was promoting²⁶. The Healy "puff" consisted of an extended (and acknowledged) quote from *The Times*, which had a very high reputation for honesty and also for opposition to the Railway Mania, followed by the passage:

We may add, that Mr. Braithwaite is at present actively engaged in the survey, which offers the less difficulty, inasmuch as the whole was carefully surveyed in 1839 at an immense expense, for a project then started. The whole results of the survey are in Mr. Braithwaite's hands. We observe that Monday is the last day for receiving applications for shares.

By the standards of the time, this was a very mild "puff," and when it was read in court, the judge interjected: "That is what you may call a puff? (Laughter.)" Still, the testimony by Robertson's clerk, who took Healy's order, implied that accepting such "puffs" was a routine procedure at the *Railway Record*. It thus provides an interesting insight into the standards of the most reputable railway paper of the time. That Robertson filed a lawsuit that was bound to put on public record these standards, and did it for what was a relatively modest sum of twelve and a half pounds²⁷, provides another interesting insight, this one into the financial pressures on the railway press as the Railway Mania was deflating²⁸.

It appears that every time a bubble collapses, substantial financial abuses are uncovered. Whether that is because the players (whether company managers, accountants, or journalists) get more greedy as the bubble inflates, or become convinced that "everybody does it," or there is less scrutiny from investors and regulators as "everybody gets rich," or whether the collapse leads to losses that force the abuses into the open, is something we do not have to consider in detail here. The point of this section is to show that investors and the general public had plenty of evidence that the press, especially the railway press, could not be trusted in reporting on railways. However, there were other reasons for them to be suspicious as well.

5 Railways and early Victorian commercial morality

The Palmer paper cited above describes some of the extensive corruption involved in the construction of the Eastern Counties Railway. It was not known to the contemporary public

(and it is still not known in its entirety, and will surely never be known, given the lack of records), but there was recognition or at least suspicion of widespread corruption on this and other lines. To a large extent railway directors were known to have engaged in questionable transactions, and were expected to do so. The birth of the railway system was smoothed by the lubricating effect of corruption, or near-corruption. While that was a period of *laissez faire*, it was not pure *laissez faire*, as the free-marketers were still storming the last bastions of feudalism. Peter Lecount was an engineer on the pioneering London and Birmingham Railway. In his history of the line, he described how it was approved by the House of Commons in 1832, but was blocked by the House of Lords in that year, because of opposition from some noble landowners. The next year, it went through without opposition, and

the means the directors were obliged to resort to, must be left to the imagination of the reader; suffice it to say, that no variation, sufficient to account for the different features of the case, took place in the numerical value of the assenting or dissenting landowners.²⁹

Not all the transactions that needed to be kept hidden involved outright bribery, or at least what was regarded as outright bribery then. Directors routinely had available to them a substantial number of shares to be used at their discretion to distribute as necessary among landowners, to lessen their opposition. Shareholders understood the need for such shares, and for discretionary control. But they did get upset when they learned the directors had used such shares for their own benefit.

There was also a perception that in the earlier, and very successful, railway mania of the 1830s, investors had been lured towards what turned out to be a very bumpy ride, through overly rosy promises. Thus a review of a book about railways by Whishaw claimed in 1841 that

no doubt there is truth in what Mr. Whishaw relates when he says, “We have heard it frequently remarked that if real estimates had been sent forth to capitalists, not a tithe of the present extent of railway communication would have been effected.” We must therefore congratulate the country on the result, however much the mystification practised by projectors, contractors, and committees is to be blamed.³⁰

Because of the financial success of those lines, such creation of “beautiful illusions” was forgiven, but not completely forgotten. Hence whenever doubts arose about the current or future finances of a railway, shareholders were quick to suspect not just the competency, but also the honesty, of management (meaning the directors).

The railway mania of the 1830s, mentioned above, played a key role in shaping the attitudes of investors and the public during the Mania of the 1840s. It was huge, it was wildly speculative, and it took a long time to complete the lines that it gave rise to. In the end, though, it was perceived as successful for investors, in spite of all the corruption and “mystification” that it was associated with. This mania faced extensive skepticism and opposition, including widespread allegations of accounting fraud³¹. The most prominent advocate in the 1830s of the view that railways were complete financial failures, with share prices propped by dividends paid out of capital, was Richard Cort. He published several

pamphlets in the 1830s that claimed to prove, through voluminous processing of published statements, that railway directors were “cooking” their accounts³². He was silent during the Mania of the 1840s. After Hudson’s extensive frauds were revealed in 1849, he came out with a pamphlet claiming those events vindicated his earlier warnings³³. Arthur Smith in his *The Bubble of the Age* pamphlet was basically repeating Cort’s claims from the 1830s. There were many other people in the intervening years who were also warning, either for specific railways, or for the entire industry, that railway accounting might be leading investors astray³⁴. Therefore it was quite natural that when railway share prices went down, and reports of Hudson’s malversation started circulating, the public decided all those earlier warnings had been correct.

Many of the warnings about accounting abuses could be discounted as the work of rival railways or other opponents, or else unreasonable. But often very questionable financial maneuvers were done with explicit shareholder approval. Thus at the August 1847 regular semi-annual meeting of the Eastern Counties Railway, George Hudson, the Chairman, recommended that “the interest on No. 2 shares should [not] be charged on the present half-year’s dividend,” but should come out of capital, because the line built with money from those shares “has not yet received the advantages that will be derived from an effective working of the through traffic over it.”³⁵ As long as such questionable maneuvers were regarded as temporary, just smoothing the way to a steady stream of dividends and closed capital accounts, little protest was raised.

Steady dividends were highly valued and expected. The use of reserves to smooth those dividends was acceptable, but conflicted with the suspicions about the trustworthiness of managers. Thus during a GWR semi-annual meeting in 1844, the directors recommended a dividend for the preceding half-year

leaving a balance of ..., which balance the Directors did not consider would be more than sufficient to enable them next half year to divide 3 per cent, and therefore they earnestly and unanimously recommended that it should be retained, as it was most important that the dividends should be as nearly as possible equalized. (Hear.)³⁶

The reason the directors had to implore shareholders to retain a reserve is that investors were afraid their funds might be misused if left in the control of management. The literature on railway accounting does discuss the question of depreciation funds, and how some lines that had them in the early 1840s abandoned them later in the decade. What this literature usually does not explain is that much of the push to eliminate depreciation reserves came from this same distrust. Thus *Herapath* in 1848 wrote of a depreciation fund that it “had regarded it as one of those figments, unmercantile in fact, unjust in operation, towards the Shareholders, and a nest-egg from which a remedy for other evils might be hatched.”³⁷

The distrust of corporate managers was part of a general distrust of joint stock companies. In the early 19th century, joint stock companies were looked at with great general suspicion, and only a very limited role was envisaged for them. This attitude is seen very clearly in Adam Smith’s *The Wealth of Nations* and persisted well past the middle of the 19th century. Smith claimed that joint stock companies were suitable only for businesses in “which all the operations are capable of being reduced to what is called a routine.” Even for a canal, he seemed unsure whether its construction was not beyond the proper sphere

of operations of such bodies. But once made, “the management of it becomes quite simple and easy, and it is reducible to strict rule and method,” and could be entrusted to a joint stock company.

Railways also engaged in some openly illegal activities. This was not uncommon at the time, as laws were treated reverently on one hand, and frequently flouted on the other. In share dealings, much that was common was illegal. Still, when some investors tried to avoid paying up for their losses by claiming (correctly) that the transactions they had engaged in were illegal, *The Times*, the famous bastion of respectability, thundered that this was a dishonorable way to avoid responsibility for one’s actions³⁸. It also urged wide circulation of the names of those who behaved in such shameful ways so they could be shunned. Of other illegal activities, smuggling in particular was widespread. It was even engaged in by some MPs, such as James Morrison³⁹. Morrison was one of the most prominent, and most feared (by the railway interest) opponents of the Railway Mania. A self-made man, he was regarded as the richest commoner of the 19th century. He was a pioneer in lowering prices by making “small profits on a large trade.” At least some contribution to those low prices came from smuggling⁴⁰.

While smuggling continued to be fought, some activities were either tolerated or even legalized. For example, many of the railways that came out of the mania of the 1830s engaged in illegal borrowings to fund construction cost overruns. Parliament retroactively legalized those loans in 1844. Further, almost all railway promotions involved flagrant trespass on private property. Parliament required submission of detailed plans before it would consider sanctioning a new railway. However, it did not grant the promoters the right to enter private property to make the necessary surveys. Hence promoters had to resort to negotiations, and when those proved unavailing, to bribery, subterfuge, or even force. The celebrated Battle of Saxby Bridge was just the most famous of the resulting physical altercations between railway surveyors and landowners’ servants⁴¹.

Quite a few observers looked askance even at the basic legal activity of railways. By sanctioning railways, Parliament was using the right of eminent domain to take land from private owners and give it to private entities, ones that, moreover, ended up with perceived monopolies on transport. The public policy issues this raised were taken seriously. On balance, the desirability of a much improved transportation system won the argument, but there were numerous dissenters. The most vociferous was Colonel Sibthorp. Something of a buffoon, this MPs railed unceasingly against railways. For example, in early 1845, he declared in Parliament that “[h]e had felt it his duty always to stand in opposition to every proposition of every railroad whatever ... He considered it to be the duty [of government] to take all possible precautions against the gross attacks and inroads that were made upon that which, until railways were introduced had been always held sacred—the rights of private property”⁴². While Sibthorp was extreme, many others sympathized with his position.

The low repute of railway enterprise can be seen in the low level of involvement in it of London bankers. Disraeli wrote in *Endymion* about railway expansion of the second quarter of the 19th century:

What is remarkable in this vast movement in which so many millions were produced, and so many more promised, is, that the great leaders of the financial world took

no part in it. The mighty loan-mongers, on whose fiat the fate of kings and empires sometimes depended, seemed like men who, witnessing some eccentricity of nature, watch it with mixed feelings of curiosity and alarm. Even Lombard Street, which never was more wanted, was inactive, and it was only by the irresistible pressure of circumstances that a banking firm which had an extensive country connection was ultimately forced to take the leading part that was required, and almost unconsciously lay the foundation of the vast fortunes which it has realised, and organise the varied connection which it now commands. All seemed to come from the provinces, and from unknown people in the provinces.

While *Endymion* is a novel, this passage is accurate⁴³.

Yet another confirmation that railways were on the fringes of respectability comes from a quantitative measure of involvement of prominent people in railway promotions. Literature is full of claims that all spheres of British society were engaged in speculation in the Railway Mania. Thus *Endymion* claimed that “the gambling was universal, from the noble to the mechanic. It was confined to no class and to no sex.” That was true, railway speculation did penetrate all classes. But it appears to have been confined to just fractions of those classes. For example, when the list of investors who subscribed for £2,000 or more to any one project before Parliament in 1846 was published, it was discovered that it contained 157 MPs, “nearly one-fourth of the entire House of Commons!”⁴⁴ Clearly the writer used the exclamation mark to express astonishment at such a high proportion. But it might be more appropriate to be surprised this proportion was not higher. These were people who subscribed at the height of the Railway Mania, in 1845. At that time railway promoters were searching for anyone prominent to add to their provisional committees. An interesting example was a chap whose qualifications included FRS and a few similar titles, who advertised (anonymously, with just initials and a temporary hotel address given for correspondence) that he was “willing to allow himself to be advertised as one of a provisional committee, or a director of any railway or other public company, upon condition that he is secured a certain number of disposable shares, at a premium of not less than 5 per cent., without any risk to himself”⁴⁵. MPs were valued more highly than Fellows of the Royal Society as members of provisional committees, and there was nothing illegal about railway promotion. In fact, as indicated above, Parliament was supporting railway expansion to the extent of condoning extensive illegal activities. So why did only a quarter of the MPs get involved? Perhaps because they were astute enough to guess the future was not going to be as rosy as promoters promised, but most likely because railway investments were not very respectable.

It was not just railways that were on the fringes of respectability in the early Victorian times. So were share investments of any kind. Land ownership had the highest prestige. National debt, “the Funds,” came next. (It makes for an interesting perspective to note that “Consols” and similar government obligations were a far higher fraction of GDP than today’s supposedly unsupportable national debts.) Joint stock investments were just beginning to spread, and were extremely suspect. As just one small example, consider the business column (“City article”) of *The Times* on 14 Nov., 1845, which was surely written by its famous business editor, Thomas Massa Alsager. This piece reluctantly admitted that

there was some utility to the London Stock-Exchange, as “it facilitated real business.” However, it argued that even that institution “has also promoted gambling, and so far has become a great, though not an unmixed evil.” On the other hand, that column unreservedly condemned all the provincial stock exchanges, claiming they were unnecessary and had “degenerated into mere gambling.”

6 Conclusions

Paying dividends out of capital or fraudulent accounting in general were not the reasons for the investment disaster of the Railway Mania. Its rise and collapse were due to overoptimistic business plans, plans that forecast lower costs and higher revenues than were realized.

The public perception that fraud was a central element of the Railway Mania was likely motivated by a desire to find a convenient scapegoat and avoid having to reflect on the real causes of the investment disappointment. This line of thinking was amplified by the general atmosphere of illegal or shady proceedings of railway companies, and the many rosy promises of promoters and engineers that were almost invariably broken.

Overall, the reaction to the collapse of the Railway Mania provides interesting perspectives on the modern economy. A key institution in essentially all countries, with the exception of a few outliers such as North Korea, is the joint stock company⁴⁶. Up until 1825, it was illegal to form such businesses without an Act of Parliament or a Royal Charter. That changed in 1825, but general limited liability did not become available until the mid-1850s. (Railways and canals almost always had it through their Parliamentary Acts, though.) This evolution was not easy, as there was extensive controversy and debate. The prejudice against joint stock companies that is so prominent in Adam Smith’s writings, was widely held. The most famous of the complaints about corruption in railway management is Herbert Spencer’s *Railway Morals and Railway Policy*, published in 1854, a few years after the collapse of the Railway Mania. It is less about direct fraud, and more about the conflicts of interest he saw between railway shareholders, who were left with a pittance, and all the other agents who were doing well; managers foremost, but also engineers, lawyers, surveyors, and the like. Were Smith and Spencer to come alive, they would surely feel their opinions had been proven correct. The Railway Mania illustrates how British society managed to overcome its often well-founded prejudices and accept new institutions and social and economic relations in order to benefit from the revolutionary railway technology.

Note

This article draws extensively on the material in the author’s “Collective hallucinations and inefficient markets ...,” (<http://ssrn.com/abstract=1537338>), and “The collapse of the Railway Mania, ...,” *Accounting History Review*, vol. 21, no. 3, Nov. 2011, pp. 309-345, and (<http://ssrn.com/abstract=1625738>).

Notes

¹A. J. Arnold and S. McCartney, ““It may be earlier than you think”: Evidence, myths and informed debate in accounting history,” *Critical Perspectives on Accounting*, vol. 14, 2003, pp. 227–253.

²One example is H. Ellis, *British Railway History: An Outline from the Accession of William IV to the Nationalisation of Railways*, 2 vols., George Allen and Unwin, 1954, vol. 1, p. 162.

³*The Times*, a stern critic of Hudson and the Railway Mania in general, claimed shortly after his downfall, in a leader, 10 April, 1849, pp. 4–5, that “neither the other officials nor the shareholders must hope to escape censure under the cover of a personal onslaught upon Mr. Hudson. The system is to blame. It was a system without rule, without order, without even a definite morality. In 1845 respectable men did monstrous things, and were thought very clever. Thousands rejoiced in premiums which they believed to have been puffed up by mere trickery, collusion, and imposture.” Note that even though *The Times* argued against placing all the blame on Hudson, it still emphasized fraud, and not the fundamental issues of the industry.

⁴But not for lenders, nor for purchasers of preference shares. Leverage in railway investments was limited by Parliamentary rules, and so there were very few bankruptcies.

⁵A. D. Gayer, W. W. Rostow, and A. J. Schwartz, *The Growth and Fluctuations of the British Economy, 1790–1850: An Historical, Statistical, and Theoretical Study of Britain’s Economic Development*, 2 vols., Oxford Univ. Press, 1953.

⁶M. Smith, ed., *The Letters of Charlotte Brontë, with a Selection of Letters by Family and Friends: Vol. II, 1848–1851*, Oxford Univ. Press, 2000, p. 267.

⁷Taken from a convenient table of railway lines authorized in 1845 in the *Railway Chronicle*, 16 August, 1845, p. 1015. From 1836 to 1845 all railway projects had to demonstrate to the satisfaction of Parliamentary committees, in adversarial hearings, that they did have viable business plans.

⁸Construction costs from H. Scrivenor, *The Railways of the United Kingdom Statistically Considered, in Relation to their Extent, Capital, Amalgamations, Debentures, Financial Position, ...*, Smith, Elder, 1849, pp. 349–357. Revenue figures from *Herapath*, 15 Sept., 1855, pp. 945–6 and 8 March, 1856, p. 285. In 1855, there were still no dividends for the holders of common shares, and even some of the preference shares were not getting the full promised payout.

⁹Table 1 is derived from the table on p. 352 of vol. 5 of T. Tooke and W. Newmarch, *A History of Prices, and of the State of Circulation, During the Nine Years 1848–1856*, 2

vols., vols. 5–6 of Tooke’s *The History of Prices from 1792 to the Present Time*, Longman, Brown, Green, Longmans, and Roberts, 1857.

¹⁰Translated and slightly paraphrased from A. Detoef, *Propos de O. L. Barenton, Confiseur*, Editions du Tambourinaire, 1950, pp. 124–125.

¹¹For a discussion of investor attitudes and demand forecasting methodology used at that time, see A. M. Odlyzko, “Collective hallucinations and inefficient markets: The British Railway Mania of the 1840s,” 2010 manuscript available at <http://ssrn.com/abstract=1537338>.

¹²M. Casson, *The World’s First Railway System: Enterprise, Competition, and Regulation on the Railway Network in Victorian Britain*, Oxford Univ. Press, 2009.

¹³A. M. Odlyzko, “The collapse of the Railway Mania, the development of capital markets, and the forgotten role of Robert Lucas Nash,” *Accounting History Review* (formerly *Accounting, Business & Financial History*), vol. 21, no. 3, Nov. 2011, pp. 309–345. An extended preprint, with additional material (primarily two appendices), entitled “The collapse of the Railway Mania, the development of capital markets, and Robert Lucas Nash, a forgotten pioneer of accounting and financial analysis,” is available at <http://ssrn.com/abstract=1625738>.

¹⁴A. M. Odlyzko, “The collapse of the Railway Mania, ...”

¹⁵*London Weekly Railway Share List*, July 1, 1848, p. 2. For information on the practically unknown Nash and his contributions to the revolutions in railway accounting, see A. M. Odlyzko, “The collapse of the Railway Mania, ...”

¹⁶P. Harling, *The Waning of ‘Old Corruption’: The Politics of Economical Reform in Britain, 1779–1846*, Oxford Univ. Press, 1996.

¹⁷J. E. C. Palmer (edited by H. W. Paar), “Authority, idiosyncrasy, and corruption in the early railway press, 1823–1844,” *J. Railway and Canal Historical Society*, July 1995, pp. 442–457.

¹⁸G. Guilcher, “The Press Mania during the Railway Mania, 1844–45,” *J. Railway and Canal Historical Society*, no. 191, March 2005, pp. 26–33.

¹⁹There is some disagreement on this point. The Palmer paper cited before states they were not related, while the *Post Office Railway Directory for 1847*, Kelly and Co., 1847, claims they were.

²⁰*Railway Record*, 13 April, 1844, p. 13. Italics and capitals as in original.

²¹The source is *Post Office Railway Directory for 1847*. However, this source did note that Robertson and his paper had become strong partisans of the London and North Western Railway, a successor of the London and Birmingham, whose involvement with the *Railway Times* led to Robertson’s departure from that paper in 1844.

²²*The Times*, 21 Nov., 1845, p. 5. See also the leader the next day, p. 4 about this issue.

²³*Railway Record*, 29 Nov., 1845, p. 1808. See additional leaders and correspondence with Holt there on 3 Dec., p. 1830 and 6 Dec., p. 1858.

²⁴J. E. C. Palmer, “Railway periodicals of the nineteenth century published in the British Isles: A bibliographical guide,” thesis, University College London, 1959. Online copy available at <http://www.dtc.umn.edu/~odlyzko/rrsources/>.

²⁵Report of the Robertson *v.* Healy trial, *Daily News*, 16 May, 1846, p. 7. This is the source for all the following quotes in this paragraph. The “puff” itself appeared in the *Railway Record*, 24 Sept., 1845, p. 1183.

²⁶Healy’s railway project was the notorious Direct London and Exeter Railway. A person involved with *The Times* was involved in promoting this line, and *The Times* did mention it favorably in its columns, in the passage cited in the Healy “puff.” Therefore the railway press used this incident to argue that *The Times*, the scourge of the Railway Mania, was just as corrupt as it accused others of being.

²⁷In today’s money, this is a trivial amount. In the 1840s, it was about two weeks of income for a lower middle class family, and about half a year’s wages for an unskilled worker.

²⁸As an aside, the jury ruled in favor of Robertson, but the printed record does not reveal whether he managed to collect his twelve and a half pounds. The issue at the trial was not whether Robertson was owed his money, that was admitted by Healy, but rather whether Healy could be held solely responsible for the debt, as he was just one of a group of promoters of this line. This was just one of innumerable trials centered on legal technicalities that were spawned by the Railway Mania.

²⁹P. Lecount, *The History of the Railway Connecting London and Birmingham: Containing its Progress from the Commencement. To Which is Added, a Popular Description of the Locomotive Engine: And a Sketch of the Geological Features of the Line*, Simpkin, Marshall, and Co., 1839, p. 22.

³⁰Anonymous, “Whishaw on railways,” *Monthly Review*, Feb. 1841, pp. 215–220.

³¹For a brief but general overview of this episode of investor exuberance that turned out to be rational, see the previously cited work by the author, “Collective hallucinations ...,” and “This time is different: An example of a giant, wildly speculative, and successful investment mania,” *B. E. Journal of Economic Analysis & Policy*, vol. 10, issue 1, 2010, Article 60. Preprint available at <http://ssrn.com/abstract=1573974>.

³²For example, R. Cort, *Rail-road Impositions Detected: Or, Facts and Arguments to Prove that the Manchester and Liverpool Railway Has Not Paid One per cent. Nett Profit;*

And that the Birmingham, Bristol, Southampton, Windsor, and Other Railways, are, and must for ever be, only Bubble Speculations, 2nd ed., W. Lake, 1834.

³³R. Cort, *Railway Reform: In a Letter to William Chaplin, Esq., M.P. Chairman of the London and South-Western Railway Company, Showing that the Liverpool and Manchester Railway Company Has Not Paid a Single Dividend Except Out of Borrowed Money; And that all other Railways are, and must be, in the Same Predicament. ...*, Effingham Wilson, 1849.

³⁴As just one example, consider the off-hand remark that “[t]he Bristol and Exeter is an instance on which even a year later half the dividend had been paid out of the capital,” S. Shaen, Jr., *A Review of Railways and Railway Legislation at Home and Abroad*, William Pickering, 1847, p. 76. As another example, consider the long leader about the Great Western Railway, GWR, in *Herapath*, 14 Aug., 1847, pp. 937–39. Point #20 there has a strong insinuation that some items charged to capital account should have been classed with working expenses.

³⁵*Railway Times*, 14 Aug., 1847, p. 1039.

³⁶*Railway Times*, 17 Feb., 1844, p. 195. Three and a half years later, this same line used reserves, ones that had not not been cited explicitly before, to make up a dividend that profits did not justify. The *Railway Chronicle*, 21 Aug., 1847, p. 807 commented approvingly that it was “long aware that the Great Western Company were in possession of such a fund, derived from profits on the sale of shares, and we are glad to see it distributed among the shareholders at a time when it is most welcome.”

³⁷*Herapath*, 2 Sept., 1848, pp. 929–30, in a leader entitled “Depreciation fund. Captain Huish’s report.”

³⁸*The Times*, 1 July, 1846, p. 3.

³⁹R. S. Sephton, “‘Small profits on a large trade’: James Morrison MP,” *J. Railway and Canal Historical Society*, part 1: Nov. 2003, pp. 364–367, part 2: March 2004, pp. 467–471.

⁴⁰R. Gatty, *Portrait of a Merchant Prince: James Morrison, 1789–1857*, Pepper Arden, 1977.

⁴¹See, for example, C. E. Stretton, *The History of the Midland Railway*, Methuen & Co., 1901, p. 81.

⁴²*Hansard’s Parliamentary Debates*, ser. 3, vol. 72, 1844, c. 255.

⁴³The one exceptional bank was the one of George Carr Glyn, the chairman first of the London and Birmingham, and then of its successor, the London and North Western Railway.

⁴⁴*The Times*, 2 Oct., 1846, p. 6.

⁴⁵*The Times*, 18 Sept., 1845, p. 8, bottom of 4th column. This letter stimulated some further correspondence, see *The Times*, 24 Oct., 1845, p. 8.

⁴⁶See, for example, J. Micklethwait and A. Wooldridge, *The Company: A Short History of a Revolutionary Idea*, The Modern Library, 2003.