Richard Howson loved building things. After graduating from Leeds Polytechnic in 1990 with a bachelor’s degree in construction management, he spent the next 27 years working for a series of British construction companies building roads, hospitals, office complexes, and public works projects. From 1999 through 2017, Howson helped build Carillion Plc into the U.K.’s second largest construction company, serving as CEO from January 2012 until July 2017. Howson resigned from Carillion on July 9, hours after the company announced an £845 million asset write-down. Six months later, in January 2018, the High Court granted a winding-up order for Carillion’s liquidation. Two U.K. Parliamentary committees that investigated Carillion’s collapse called Howson a “figurehead for a business model that was doomed to fail” (HoC, 2018, 88).

Carillion was formed in 1999 through a spin-off from Tarmac, a building materials manufacturer that produced asphalt, cement, and concrete. Its headquarters were in Wolverhampton, a mid-sized city in central England, located approximately midway between Liverpool and London. Carillion’s two primary service lines were construction and facilities maintenance. As a construction contractor, Carillion built roads, bridges, office and apartment complexes, and health care facilities. Through service contracts, the company provided janitorial and maintenance services to nearly 1,000 schools, hospitals, and prisons. Carillion also was one of the primary contractors engaged by Britain’s Network Rail to maintain and repair the nation’s railroad infrastructure. In addition to its U.K. operations, Carillion owned overseas subsidiaries in Canada, the Caribbean, and the Middle East. All told, the company’s 43,000 worldwide employees generated more than £5 billion of consolidated revenues.

Carillion grew rapidly through acquisitions. The first major acquisition was Mowlem, a 184-year-old construction and civil engineering firm, in February 2006 for £350 million. Two years later, Carillion bought building contractor Alfred McAlpine for £565 million. In 2011, Carillion paid £298 million to acquire Eaga, a solar heating company. All three acquisitions were financed primarily through debt. Carillion’s December 2016 balance sheet reported £689 million of debt and a liabilities-to-equity ratio of 5.3, unusually high financial leverage for a construction company.

Carillion appeared healthy in early 2017. The company’s income statement for the year ended December 31, 2016 showed profits of £129.5 million on revenues of £5.2 billion (Carillion, 2017). KPMG’s audit report, dated March 1, expressed no reservations about the company’s past performance or future prospects. Unfortunately, the 2016 annual report failed to disclose significant problems in some of Carillion’s largest construction contracts. A major project with the Royal Liverpool Hospital was behind schedule and over budget due to foundational cracks and asbestos problems. An even larger contract with Mscheireb Properties in Qatar to build hotels, offices, and apartments was mired in legal disputes with each party claiming the other party owed them money.

Carillion surprised investors, employees, and regulators on July 10, 2017 when it announced that it was writing off £845 million of assets. The adjustment resulted from an internal investigation begun after Emma Mercer, Carillion’s recently appointed Finance Director of Construction Services, reported to Carillion’s board of directors certain accounting practices she described as “sloppy” (HoC, 2018, 45). Concurrent with the asset write-down, Richard Howson resigned as Carillion’s

---

2. https://tinyurl.com/y5ovnxlh

*The authors are, respectively, associate professor at University of Richmond and a 2019 graduate of University of Richmond.*
CEO and was replaced by Keith Cochrane. On September 29, Carillion revised the asset impairment charge upward to £1,045 million. The loss reported during 2017 matched Carillion’s cumulative profits from the previous seven years. Meanwhile, the stock price went into freefall as institutional investors dumped their shares and Carillion became the most shorted stock on the London Stock Exchange. When Carillion’s liquidation order was signed in January 2018, it had nearly £9 billion of liabilities (including a severely underfunded pension plan) and only £29 million of cash.

Accounting Issues

The bankruptcy of a 42,000-employee company within six months of a £1 billion accounting adjustment attracted the interest of legislators in the British Parliament. The House of Commons (HoC) Business, Energy and Industrial Strategy Committee and the Work and Pensions Committee launched a joint investigation in January 2018 to determine the underlying causes of Carillion’s collapse. Their report, published May 16, 2018, accused Carillion of using “aggressive accounting policies to present a rosy picture to the markets” (HoC, 2018, 44). Specifically, the committees charged Carillion with overstating its goodwill and construction contract revenues and understating its debt.

Goodwill

Carillion’s acquisition-oriented growth strategy resulted in the company reporting £1,571 million of purchased goodwill, 35 percent of its December 2016 total assets. The July 2017 asset write-down included a £134 million adjustment to the goodwill carrying value. Much of the adjustment related to the 2011 acquisition of solar heating company Eaga. Carillion paid £298 million to purchase Eaga but recorded £329 million of goodwill, claiming the company’s liabilities exceeded the fair value of its identifiable tangible assets. Shortly after Carillion bought Eaga, the U.K. government reduced its support for solar energy. Eaga proceeded to suffer five consecutive years of operating losses, yet Carillion never recorded a goodwill impairment loss until 2017.

Construction Revenues

Carillion earned much of its revenue through multi-year construction projects. Accrual accounting required Carillion to recognize revenue in each accounting period during which work was performed. This was done by allocating the total contract revenue according to the percentage of total estimated project costs incurred each period. Equation (1) illustrates the revenue recognition calculation.

\[
\text{Revenue recognized in period } n = \frac{\text{Total contract price}}{\text{Estimated total costs}} \times \text{Costs incurred in period } n \tag{1} 
\]

The fraction in the center of equation (1) represents the expected profit margin on the project. The higher the expected profit margin, the more revenue recognized each period as construction costs are incurred. The unknown variable in the equation is estimated total construction costs. Carillion engineers estimated the total costs before bidding on a project. Project managers updated the estimate periodically as work progressed. If the total cost estimate was too low, the expected profit margin would be too high, and the revenue recognized each period would be overstated.

Carillion’s 2017 accounting adjustment included writing off £729 million of previously recognized revenue. Executives claimed at the time that the write off related to a handful of projects that encountered unexpected delays and cost overruns during the spring and early summer of 2017, after Carillion’s 2016 financial statements had been published. The HoC report pointed out that at least 18 different contracts had provisions made against them and noted: “Problems of this size and scale do not form overnight” (HoC, 2018, 44). The report went on to accuse Carillion executives of overriding internal cost assessments and insisting that healthy profit margin ratios be used to recognize project revenues despite evidence that actual costs would exceed the estimates. In particular, the report pointed to a five-year, £235 million contract to design and build the Royal Liverpool Hospital (HoC, 2018, 41). Construction work began in February 2014 but soon fell behind schedule. A November 2016 internal review estimated that because of cost overruns, the project would lose 12.7 percent. Senior management ignored the revised estimate and continued recognizing revenue using an expected profit margin of 4.9 percent.

Early Payment Facility (EPF)

Carillion relied on an army of suppliers and subcontractors to provide it with materials and assist in the construction projects. Carillion’s standard practice was to pay vendors 120 days after the invoice date. To placate suppliers who needed their money sooner, Carillion established an Early Payment Facility (EPF). Participants in the EPF could sell their invoices
at a discount to Carillion’s bank to receive payment after 45 days. The EPF was an important source of financing for Carillion who did not reimburse the bank until the standard 120-day payment term expired. At any point in time, it was common for Carillion to owe the bank several hundred million pounds for unreimbursed vendor invoices.

Instead of classifying the amounts owed to the bank under the EPF as “borrowing” on its balance sheet, Carillion classified them as liabilities to “other creditors.” This classification excluded the EPF from the debt-to-earnings ratio, which was a key covenant test between Carillion and its lenders. Credit rating agencies Moody’s and Standard & Poor’s complained after Carillion’s bankruptcy that Carillion’s accounting for the EPF concealed its true level of borrowing from financial creditors (HoC, 2018, 43).

“The architect of Carillion’s aggressive accounting”

Richard Adam served as Carillion’s Finance Director from April 2007 through December 2016. Minutes from an August 2017 Carillion board meeting identified “a culture of making the numbers (hitting targets at all costs)” that allegedly existed during Adam’s tenure (HoC, 2018, 27). In early 2017, after he left Carillion but before the surprise accounting adjustment, Adam sold all £776,000 of his Carillion stock, receiving an average price of 212p per share. The price plunged to 57p on July 12 and was nearly worthless by the end of the year. The HoC report called Adam “the architect of Carillion’s aggressive accounting policies,” and noted that he sold his shares “just before the wheels began very publicly coming off and their value plummeted” (HoC, 2018, 46). “These were the actions of a man who knew exactly where the company was heading once it was no longer propped up by his accounting tricks,” the report said (HoC, 2018, 46).

Carillion’s Auditors

KPMG audited Carillion during its entire 19-year history, earning fees of about £1.5 million per year in the latter years. Senior partner Peter Meehan signed the March 1, 2017 auditor’s report stating that Carillion’s 2016 financial statements gave a “true and fair view” of the company’s financial position and the results of its operations. The report identified contract revenues and goodwill carrying value as high-risk assertions and outlined the audit procedures KPMG performed to test the reported values. U.K. Members of Parliament (MPs) asked Meehan during investigative hearings to explain why the auditors had approved Carillion’s questionable contract revenues. “All the contracts were complex in nature,” Meehan testified, “and as such there were a wide range of judgments and estimates involved, and there’s a wide range of acceptable answers, and there is no right answer in terms of those judgments and estimates and contracts” (Sweet, 2019). Peter Kyle, a Labour Party MP, scoffed at Meehan’s response saying he “would not hire [Meehan] to audit the contents of [his] fridge” (Sweet, 2019). While defending the quality of the firm’s work on Carillion, KPMG suspended Meehan and three other members of the Carillion audit team in January 2019 citing concerns about documents provided to Financial Reporting Council (FRC) inspectors during an annual quality review (Sweet, 2019). The FRC announced in April 2019 that it would conduct a complete review of KPMG’s governance, controls and culture to assess whether KPMG was capable of delivering high-quality audits in the U.K. (Trentmann, 2019).

Each of the other Big Four public accounting firms provided significant services to Carillion during the final months and years of its existence. Deloitte collected a total of £51.2 million in fees from 2008 onward for services including internal auditing, advising the remuneration committee, and performing due diligence for acquisitions. Carillion hired EY in July 2017 to oversee “Project Ray,” a program intended to restructure Carillion’s operations and identify cost saving opportunities. Carillion paid EY £10.8 million despite the program’s failure to save the company. Finally, David Chapman, the Official Receiver appointed by the government to oversee Carillion’s liquidation, engaged PwC to assist in the liquidation proceedings. More than 100 PwC staffers worked on the Carillion engagement charging an average rate of £360 per hour. Ironically, PwC earned higher fees working on Carillion’s liquidation than the other three firms earned while Carillion was operating.

Aftermath

Carillion’s various construction projects and service contracts were sold to a variety of competitors and private equity firms. Most of the 43,000 employees were taken on by the acquiring companies, but at least 2,400 people had nowhere to go when Carillion was split up. Retirees fared even worse. Carillion’s pension plans were underfunded by £2.6 billion. Although the U.K.’s Pension Protection Fund (PPF) made up much of the deficit, Carillion pensioners saw their monthly benefits reduced. Carillion owed about £2 billion to its suppliers and subcontractors at the time of the bankruptcy; most received only a fraction of the amounts owed. U.K. citizens and taxpayers suffered a double blow. Carillion represented the
largest ever hit on the PPF, a government-sponsored organization funded by a levy on other pension plans. In addition, Parliament committed £150 million of public funds to ensure the continuity of 450 contracts for essential public services such as road repairs, hospital construction, and school and prison maintenance. Carillion shareholders lost approximately £1.2 billion as the stock price plunged from nearly 300p in August 2016 to only 14p when trading was suspended on January 15, 2018.

Government Investigations

Carillion’s bankruptcy in January 2018 was one of a trio of accounting scandals that attracted the attention of U.K. legislators. Approximately 11,000 employees lost their jobs in April 2016 when retailer British Home Stores (BHS) closed its doors; owner Dominick Chappell was later convicted of withholding information from the U.K.’s Pensions Regulator. Café chain Patisserie Valerie collapsed in January 2019 following the discovery that its reported assets were overstated by £77 million while its liabilities were understated by £10 million (Kinder, 2019).

After completing its investigation of Carillion, the HoC Business, Energy and Industrial Strategy Committee released a subsequent report examining the effectiveness of the U.K. audit industry (HoC, 2019). Citing BHS, Carillion and Patisserie Valerie, the report claimed the three audit failures were “indicative of a wider crisis of trust in the audit industry” (HoC, 2019, 6). Michael Izza, Chief Executive of the Institute of Chartered Accountants in England and Wales conceded that the public’s faith in auditors’ reports had eroded. The “continual cycle of high-profile corporate failures,” Izza said, had produced a “palpable crisis in public trust” (HoC, 2019, 6).

The HoC report criticized many aspects of auditing practice and the market for audit services. Noting that the Big Four accounting firms performed 99 percent of the FTSE 100 audits and 97 percent of the FTSE 350 audits, it expressed concern about the lack of competition and choice in the audit market for large listed companies. The report asserted that audit firms were “conflicted by the temptation to sell non-auditing services, which are more lucrative” (HoC, 2019, 9), and claimed that “the culture of advisory services does not sit easily with the culture of challenge required by audit” (HoC, 2019, 3). The report claimed that relationships between auditors and clients were complicated by an “alumni effect” with many former Big Four auditors serving on corporate audit committees and as chief financial officers (HoC, 2019, 9).

The committee report discussed a long list of potential accounting and auditing reforms. To address the Big Four accounting firms’ domination of the market for large company audits, the report recommended joint audits conducted by Big Four firms paired with second-tier accounting firms. To address potential conflicts of interest between auditing and advisory services, the report recommended the full legal separation of audit and non-audit services, saying there was a “strong case” for the formation of independent audit-only accounting firms (HoC, 2019, 36). After claiming that “the delivery gap is far wider than the expectation gap,” the report encouraged auditors to prioritize fraud detection and recommended extending the scope of the audit to cover the entire annual report (HoC, 2019, 21). The report said that the 20-year auditor rotation policy adopted by the European Union in 2016 might not be sufficient and recommended seven-year nonrenewable audit contracts. The report recommended that if other reforms proved inadequate, government regulators should consider the independent appointment of auditors to corporate clients.

Case Requirements

1. AS 2401: Consideration of Fraud in a Financial Statement Audit requires auditors to assess the risk that the financial statements might be materially misstated due to fraud. What factors suggest a high risk of fraudulent financial reporting at Carillion? Identify specific accounts KPMG should have paid close attention to in responding to Carillion’s fraud risk.

2. Identify the authoritative guidance for auditing accounting estimates. Discuss the specific risks associated with Carillion’s: (a) construction contract revenues, and (b) purchased goodwill, and briefly describe the audit procedures KPMG should have performed to test the valuation of these two amounts.

3. Identify at least four groups of stakeholders affected by Carillion’s collapse and discuss how each group was hurt.

---

3 AU-C sec. 240, Consideration of Fraud in a Financial Statement Audit, and ISA 240, The Auditor’s Responsibilities Relating to Fraud in an Audit of Financial Statements, contain similar guidance.
4. Discuss the potential problems of: (a) auditors accepting jobs with their former audit clients (the so-called “alumni effect”), and (b) accounting firms providing tax and management advisory services to their audit clients.

5. Discuss the potential benefits and costs of clients hiring auditors for seven-year nonrenewable terms.
References


