# The Rise & Fall of Carillion Plc: A Case of Failed Corporate Governance, Obfuscated Construction Contracts And Risk Management Gone Awry

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#### **ABSTRACT**

At year-end 2016, Carillion Plc was, per its annual shareholders report, "one of the UK's leading integrated support services companies, with a substantial portfolio of Public Private Partnership projects, extensive construction capabilities and a sector-leading ability to deliver sustainable solutions." The company had projects ongoing in the UK, Canada and the Middle East with revenues to the tune of £5.2 billion, net assets of £729 million, a market capitalization of just over £2 billion, and a workforce of around 43,000 employees, including 19,000 in the UK.

Carillion had the distinction of having clocked double digit growth figures since 2010, in substantial part through acquisitions since 2010, generating revenue through 3 lines of business: support services, project finance and construction services.

The company's 2016 accounts, published on 1 March 2017, presented a promising business outlook. On the back of those results, it paid a record dividend of £79 million on 10 June 2017, and awarded hefty performance bonuses to senior executives. On 10 July 2017, just four months after the accounts were published, the company announced a reduction of £845 million in the value of its contracts via a profit warning. This subsequently was increased to £1,045 million in September 2017, equivalent to the company's previous seven years' profits combined. Carillion's collapse was sudden and from a publicly-stated position of strength, Carillion plunged into compulsory liquidation in January 2018 with liabilities of nearly £7 billion and just £29 million in cash!

Carillion's insolvency remains a major scandal in the UK, if not the largest. In addition to wiping out its shareholder's capital, the company's demise left in its wake: unfunded pension liabilities of £2.6 billion, with respect to 27,000 recipients, the largest hit ever to the UK's Pension Benefit Guaranty Corporation; 30,000 unpaid subcontractors who are owed £2 billion; and uncertainty with regard to 450 service contracts between Carillion and various UK governments, with an initial estimated cost of just under £150 million to ensure continuity of services.

Prima facie, the collapse of Carillion can be attributed to a range of factors, some as naïve as defunct corporate reporting to as sinister as mismanagement of pensions and conflicted financial audits.

This report envisages to investigate and quantify each of these areas in turn, in a bid to apply these and other financial indicators to other contractors in the UK to pre-empt Carillions in the making. The report also intends to suggest best practices for corporate governance, workplace rights and the outsourcing of public services and contracts, apart from analyzing the UK government's handling of the liquidation process.

## INTRODUCTION

On 15 January 2018, Carillion Plc, declared insolvency to the House of Commons and the Official Receiver started to liquidate its assets and contracts shortly after. The insolvency of Carillion will cost UK taxpayers anything between an estimated £148 - £223 million, although this is subject to a range of uncertainties and it could take years to establish the final cost (The National Audit Office, 2018). Anticipated are wider costs to the economy, Carillion's customers, staff, the supply chain and creditors. Interestingly, the Insolvency Service notes that this was the first example of a public limited company continuing to trade while being wound up.

Carillion's collapse has triggered several Parliamentary investigations and inquiries by: the Work & Pensions and Business, Energy & Industrial Strategy Select Committees, focusing on Carillion's corporate governance and the consequences for its pensions schemes; the Public Administration and Constitutional Affairs Select Committee and Committee of Public Accounts, focusing on the lessons for government outsourcing more generally; and a hearing of the Liaison Committee (The National Audit Office, 2018). The examination of the company's insolvency proceedings will provide valuable insights into failed corporate processes, centered around faulty accounting practices and an acute lack of understanding and management of risk by both Carillion Plc and the UK government. These are important lessons for CxO executives, construction managers, project managers, risk managers and advisers.

The company predominantly operated in low-margin industries within highly competitive markets with inherent risks (Chapman, 2018). A large element of Carillion's contracts were government construction and facilities management contracts. The collapse was the most spectacular corporate failure in recent memory. The company was described by the House of Commons as "an unsustainable corporate time bomb, characterized by the increasingly reckless pursuit of growth with scant regard for long-term sustainability or the impact on employees, pensioners and suppliers" (House of Commons, 2018).

When considered holistically, the Carillion's behavior described in the following sections suggest a clear absence of operating boundaries based on a risk appetite statement and associated risk metrics (Financial Times, 2018). Despite the early warning signs that the company was running into significant difficulties, the company either seemed to have a poor perception of the risk it was facing or consciously ignored it (Chapman, 2018). It was not until the preparation of Carillion's January 2018 transformation Group Business Plan that there was recognition that the group had "weak operational risk management" (Carillion Plc, 2018).

The current study seeks to understand the gravity of the situation by focusing on the following broad themes:

- Carillion's role in the market for government services;
- Timeline of events that led to the financial deterioration of the company;
- The UK Cabinet Office's monitoring of Carillion as a strategic supplier;
- The strategic intent of Carillion and its board members, and their conduct;
- The UK government's response and contingency planning to Carillion's request for support;
- Identification of future Carillions in the making.

The investigation assumes a non-evaluative approach and specifically abstains from forecasting the total cost to society or the exchequer of Carillion's liquidation against other possible outcomes. Since the annual financial records for the year 2017-18 and 2018-19 are being currently marked to market, only records until the financial year 2016-17 are employed for analysis and representation at an organizational level. The inferences and commentary made is based on analyzing open records of interviews and public testimonies of key personnel privy to the situation,

review of public records of published and unpublished data Carillion's annual reports and announcements, data provided by Carillion to the Cabinet Office, data from financial analysts, data on suppliers to UK central government from the Cabinet Office's Bravo system, commentary from the National Audit Office and data and information produced by the Official Receiver's special managers as part of their management of the liquidation. At times in this investigation, data from different accounting periods or prepared on different bases have been combined based on the assumption of these being broadly comparable but largely irreconcilable.

## CARILLION & THE PUBLIC SECTOR: WHY THEY MATTER?

When it collapsed in January 2018, it is estimated that Carillion had around 420 public sector contracts across central and local government, NHS bodies, schools and others, which could be categorized as the following (The National Audit Office, 2018):

- Support services, including facilities and energy management, road and rail maintenance, accommodation and consultancy;
- Public-private partnerships, including buildings and infrastructure; and
- Construction services, including building and civil engineering.

Carillion's annual financial report declares revenue of £1.72 billion from the UK public sector for the calendar year 2016-17. Figure 1 depicts the relative distribution of these contracts for the financial year 2016-17.

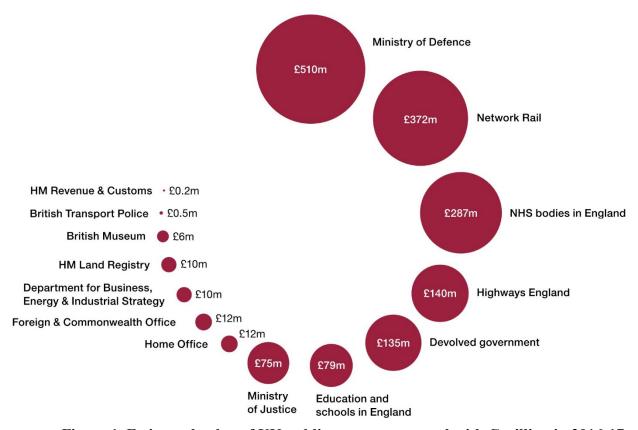


Figure 1. Estimated value of UK public sector contracted with Carillion in 2016-17 (Adapted from The National Audit Office, 2018)

Carillion's annual financial report for 2016-17 declares that UK public sector revenue represented 33% of its £5.2 billion global revenue in 2016, and 45% of its UK revenue. In essence, the UK public sector represented the most reliable and important source of revenue for Carillion, and in loose terms, Carillion could be termed as an extended Public Sector Undertaking. Figure 2 depicts the relative distribution of Carillion's sector specific revenues. The UK public sector revenue can broadly be observed to be at around 40% and steady over the last four years, although this business declined as a share of total revenue as Carillion's global revenues increased.

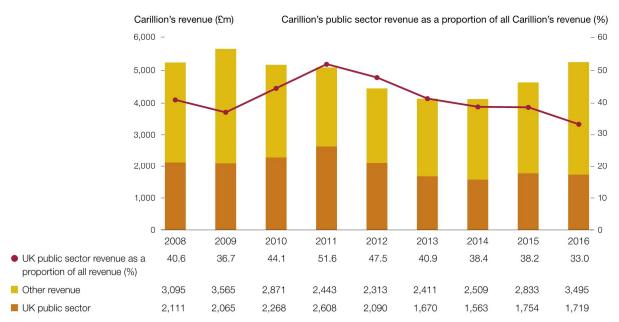


Figure 2. Distribution of Carillion contract types and values for the period from 2008 -16 (Adapted from The National Audit Office, 2018)

# The Rise of The Private Finance Initiative (PFI):

Launched by the ruling Conservative party in 1992, reeling under austerity measures and in a bid to revive the economy after a UK specific recession, the PFI was devised and employed by successive governments to enable the state to fund new public infrastructure without the government having to raise the money up front. It was also envisaged that PFI would transfer construction risk of complicated infrastructure projects from the public sector to the private sector.

The PFI is a distinctive form of procuring assets from the private sector, focused around the creation of a Special Purpose Vehicle (SPV) funded by private sector investors (The Public Administration and Constitutional Affairs Committee, 2018). The SPV is responsible for the financing, construction and maintenance of an infrastructure asset. The SPV would ideally be expected to borrow from banks and others and contract with construction and facilities management companies to commission the asset. The public sector would then be expected to pay back the SPV over the period of the contract (typically 25 to 30 years). This payment would cover the cost of the construction, the cost of the maintenance of the asset and the costs of financing the SPV.

Not only this system of financing led to asset-liability mismatch fueled by short-term borrowing at high interest rates against long-maturing assets, but also eventually grappled with the

power of compounding, dubious accounting standards due to budgeting and laxed accounting standards, tax evasion, asset monetization amongst others leading to much more expensive infrastructure projects than envisaged, in most cases as expensive as 40% than regular contracts. Till date, more than 700 infrastructure assets valued at more £60 billion have been executed via the PFI, some of them still under construction, often involving other UK construction giants like Serco, Interserve, Mitie, G4S, Kier and Balfour Beauty, most of them now increasingly showing signs of distress (Inman, 2018).

#### The Business Case Around Carillion's Public Sector Contracts:

Carillion had smartly capitalized the PFI route to capture market share from less than 1% in the 1990s to gaining one-sixth of all UK public sector contracts by 2016-17 (The National Audit Office, 2018). This was built around a rosy business plan which targeted a net profit margin of 4.5% to 5.5% on such projects (Carillion Plc, 2018). Advisers working for Carillion's creditors found that its public sector portfolio, which covered Carillion's service and facilities management contracts, was a profitable business, although it had become less profitable over time. Operating profit was forecast to reach £9 million in 2017, or 1.4% of annual revenue instead of the estimated £92 million! This was principally attributed to losses and claims under litigation exceeding £242 million on 4 major projects: the Aberdeen Western Peripheral Route, Midland Metropolitan Hospital, Royal Liverpool University Hospital and HM Prison & Probation Service contract (Table 1).

Table 1. Quantitative Analysis of Carillion's main loss-making public sector contracts (Adapted from The National Audit Office, 2018)

Sr. No.	Project	Expected loss for 2017, as identified by Carillion and its auditors (£m) (Carillion Plc, 2018)	Comments/Reasons attributed for Loss (The National Audit Office, 2018)
1	Aberdeen Western Peripheral Route	91	<ul> <li>A joint venture contract to design, build, finance and operate a new 58km ring road and associated infrastructure. The primary causes of the losses on the project included:</li> <li>Project selection – the bid price was very low and there were not enough resources for the project;</li> <li>Ground conditions – issues with water and peat that were not foreseen and needed more time to rectify; and</li> <li>Oil pipelines – oil companies had to approve any changes to construction and areas of significant protection.</li> </ul>

2	Midland Metropolitan Hospital	48	<ul> <li>A PFI contract involved building a hospital and providing facilities management services for a 30-year term. The reasons for delays and increased costs included:</li> <li>Critical design elements of the project were 17 months late;</li> <li>Structural designs were poor; and</li> <li>Spatial constraints made it difficult to fit all the plant</li> <li>machinery necessary.</li> </ul>
3	Royal Liverpool University Hospital	83	A PFI contract to build a new hospital, demolish an old hospital and build a car park. In addition to the construction contract, Carillion also won a 30-year facilities management contract from April 2015. The reasons for delays and increased costs included:  • A 14-week delay when asbestos was identified;  • Material delays to the design of the new hospital;  • Structural deficiencies that required repair, due to poor  • design; and  • A lack of due diligence undertaken before the construction work started.
4	HM Prison & Probation Service contract	12	A contract originally with the Ministry of Justice to provide facilities management services in 52 public sector prisons in England and Wales. The reasons for cost escalations included:  • It being a 'first generation' outsourcing contract; and  • Inaccurate tender assumptions.

# RISK MANAGEMENT AT THE GOVERNMENT LEVEL

In 2011, the UK Cabinet Office had introduced a new strategic supplier management approach, aimed to ensure suppliers fulfill their contractual obligations to the central government and that envisaged levels of public service standards are maintained. Strategic suppliers, of which there were then 27, were shadowed by 16 crown representatives (normally part-time senior officials with a commercial background), often supported by partnership managers (senior civil servants) and who met once every 6 weeks to discuss the performance of each strategic supplier and assigned each a risk rating per the guidelines established in the Strategic Supplier Risk Management Policy (ratified in November 2012) (UK Cabinet Office, 2012). Figure 3 depicts this process and how risk management was undertaken.

# Carillion's Risk Management as a Strategic Supplier:

Figure 4 depicts the risk ratings as allocated to Carillion, Plc from 2012 through to 2018. Carillion's risk ratings were changed several times even before 2017, due to the following recurrent concerns:

1. **Delayed payments to suppliers**: Under the Public Contracts Regulations 2015 public sector buyers must pay prime contractors within 30 days and must ensure that their prime contractor includes equivalent 30-day payment terms in any sub-contracts through the supply chain (The

National Audit Office, 2018). Carillion reported that, on average, it was paying its suppliers 45 days after the invoice date for most months during the period 2012-2017, while almost one third of invoices were paid more than 60 days later.

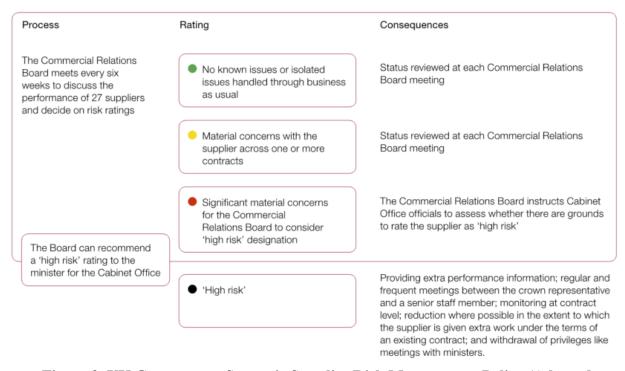


Figure 3. UK Government Strategic Supplier Risk Management Policy (Adapted from UK Cabinet Office, 2012)

2. **Poor performance on key contracts**: Carillion's risk rating was green for most part between August 2013 and January 2016. In February 2016 it increased to amber, following poor performance on a Ministry of Defence facilities management contract esp. the HM Prison and Probation Service contract (The National Audit Office, 2018).

As stated earlier, the Cabinet Office monitored Carillion's financial health as part of its strategic supplier management and flagged Carillion's increasing debt and pension liabilities in the first half of 2017. Carillion's serious financial difficulties were subsequently substantiated by the second half of 2017, when Carillion issued a profit warning on 10 July 2017, followed by another with its half-year results on 29 September 2017.

The size of the profit warning of 10 July 2017 came as a surprise to the Cabinet Office as it severely contradicted both the information and commentary Carillion had given it up to that point; the publicly available financial information that the Cabinet Office employed for fact checking and the expectations of the capital market (UK Cabinet Office, 2012).

While the Cabinet Office spoke to Carillion on 11 July to discuss the bizarre profit warning, it subsequently increased its contact with Carillion over the next few months and by December it spoke to the company nearly every day in a bid to enhance contingency planning in case of a possible failure (The National Audit Office, 2018).

On 17 November, Carillion announced that by the end of the year it expected to breach the terms on which it was lent money and had made cumulative provisions totaling £1.1 billion by the end of 2017, towards future losses.

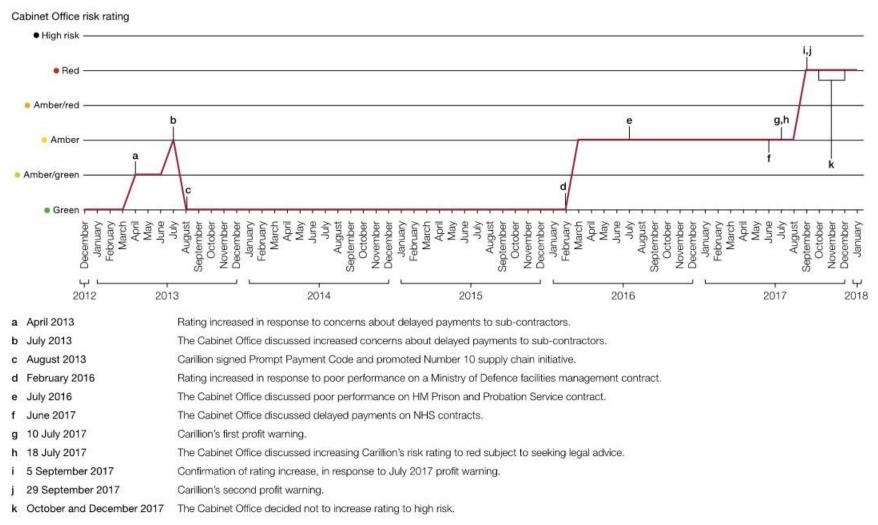


Figure 4. Risk ratings allocated to Carillion from 2012-2018 per the Strategic Supplier Risk Management Policy (Adapted from UK Cabinet Office, 2012)

#### THE INEVITABLE COLLAPSE: A TIMELINE

Post the surprise 10 July 2017 profit warning, the UK Commons Office inducted 8 Cabinet Office and UK Government Investments officials as Carillion 'insiders', forcing Carillion to grant them access to financial statements and proprietary information needed for a forensic analysis, resulting in the re-evaluation of key facts. A timeline of the resulting events is depicted in Fig 5.

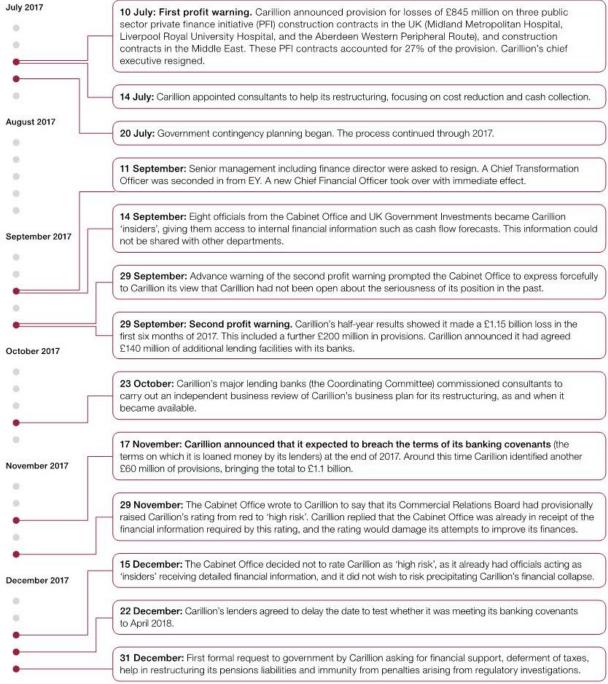


Figure 5. Timeline of Important Events affecting Carillion, Plc during 2017. (Adapted from The National Audit Office, 2018)

#### PREVENTING CONTAGION: CONTINGENCY PLANNING

Post the surprise 10 July 2017 profit warning, the UK Commons Office inducted 8 Cabinet Office and UK Government Investments officials as Carillion 'insiders' to ensure greater transparency in exchange of and for access to vital information, apart from helping monitor the situation on a day to day basis.

Between July and December 2017, Carillion's financial situation continued to worsen. Prima Facie, a number of reasons could be attributed for this, including a hardening of attitudes among lenders, leading to withdrawal of existing line of credits and other lending facilities; tougher and harder negotiation tactics from an increasing position of strength exercised by potential suitors and existing customers of Carillion's assets leading to delay in cash flow realization along with increasing cases of below fair market value realization; and suppliers who wanted shorter payment terms (<30 days) for continuation of services (UK Cabinet Office, 2012).

# UK Parliament, the Lenders and Carillion's Business Audit:

The 8 Cabinet Office and UK Government Investments officials, termed as Carillion 'insiders' inducted on 11 July, started to enhance government contingency plans for the possible failure of Carillion on 20 July. Acting swiftly, the UK Commons Office appointed law firm Dentons on 24 August to advice on legal aspects of the contingency plans for the anticipated liquidation of Carillion, Plc and its subsidiaries (UK Cabinet Office, 2012).

The Coordinating Committee of the UK Cabinet Office and the Lenders had commissioned FTI Consulting to produce an independent business review of Carillion in October 2017. This review remained in draft form as it was still subject to agreement with Carillion's management, and hence was never shown to lenders or the Cabinet Office. The bone of contention was FTI Consulting's analysis of Carillion's capacity to win future business and the profit margins achievable, which Carillion's management vehemently opposed and believed was too pessimistic and overstated Carillion's capital needs. This draft established the following inferences (FTI Consulting, 2017):

- Carillion's true past trading position and cash generation reporting were dubious, because of Carillion's focus on enhancing the reported level of profitability and net debt;
- Management notoriously concentrated too much on short-term profitability at the expense of long-term viability;
- Carillion's dubious trading position and aggressive procurement had jeopardized liquidity, and most of £140 million of emergency funding, with sensitivity analysis indicating a shortfall of £495 million in just the emergency funding by August 2019, a 3 folds increase;
- Additional lending or capital infusion was deemed highly risky while the extensive pension liabilities remained an overhang;
- Carillion's business plan was too optimistic about uncertain items such as disputed claims
  against customers or other contractors, and the willingness of private sector customers to
  give Carillion building work in the short term;

Since July 20, the UK Cabinet Office had been persuading Carillion to do its own contingency planning. However, Carillion explained to the Cabinet Office that given the complexity of the business, its apparent immediate focus on successful restructuring and a lack of funds, it was unable to do meaningful contingency planning (The National Audit Office, 2018).

Instead, Carillion recused itself and engaged Ernst & Young(EY) for contingency planning in November 2017.

Post the second profit warning, as a last resort on its part, the UK Cabinet Office appointed PricewaterhouseCoopers(PwC) on 17 September to advise on contingency planning and dealing with the consequences of Carillion's insolvency. The Cabinet Office, with the help of PwC, undertook an options analysis at the beginning of January to decide whether to support Carillion. Over the course of a week, working with the Cabinet Office and HM Treasury, PwC produced high-level estimates of the costs of each option on a 'rough order of magnitude' basis. Both the consultants ultimately looked at two scenarios in some form or the other: liquidation; and the carving out of parts of the company for sale, with liquidation for the rest (The National Audit Office, 2018), with the possibility of extracting just 7 pence worth of value for every pound of lenders capital!

# **Contingency Planning post the Second profit warning:**

On 20 July 2017, the UK Cabinet Office called together Carillion's customers in central government departments and asked them to provide information on their contracts, including whether they had contingency plans, in the event of a collapse. Following Carillion's second profit warning, on 29 September 2017, the Cabinet Office again asked for revised contingency plans for key central government contracts and set 17 November as the deadline for submitting contingency plans, covering legal, financial and operational options on a contract-by-contract basis (The National Audit Office, 2018).

Ultimately, the Cabinet Office received 65 contingency plans (corresponding to an equal number of active projects) from 26 public bodies and in consultation with PwC and EY, pegged the estimated cost of contingency anywhere between £233 million and £678 million depending on how the following were accounted for:

- Termination payments to Carillion;
- Loss of productivity and degradation in level of service owing to transferring responsibilities to new providers;
- Anticipated increase in staff costs, including management time;
- Cost of Re-procurement;
- Higher prices and Premiums of alternative providers;
- Purchase of new IT infrastructure with no pricing parity;
- Cost of legal and insurance services.

## **LEARNINGS & CONCLUSION**

Though the UK parliamentary investigations and UK Cabinet Office inquiries referred to highlight a number of failings in management practices esp. in the science of risk management and corporate governance, Carillion only exacerbated the situation by curating a portfolio in highly competitive markets where margins are notoriously low.

This case study though trying to piece the different pieces of this story scattered over an extended timeline, has not attempted to record every aspect of Carillion's debilitating company behavior. Carillion's fall from grace can be principally attributed to failed corporate governance, obfuscated construction contracts and a general sense of neglect towards risk management with the following aspects playing second fiddle:

- Much of Carillion's growth was achieved through acquisition, backed by questionable amounts for "goodwill". When Carillion tanked, all the accumulated "goodwill" was ultimately reduced to zero;
- Well into 2010, Carillion adopted what has been termed 'aggressive accounting', a practice of declaring revenue and profits based on optimistic forecasts, before the profits have been realized (Chapman, 2018), a fallacy in the science of accrual-based accounting practice. Not only this need the future forecasts to be accurate but also to come true eventually, no of which unfortunately happened;
- This aggressive accounting led to inflated dividend distribution. In the five years from 2012 to 2016, Carillion paid out £63 million more in dividends than it generated in cash from its operations, an absolute no-brainer!
- Carillion's true past trading position and cash generation reporting were dubious, because of Carillion's focus on enhancing the reported level of profitability and net debt;
- Management notoriously concentrated too much on short-term profitability at the expense of long-term viability;
- Carillion's business plan was too optimistic about uncertain items such as disputed claims against customers or other contractors, and the willingness of private sector customers to give Carillion building work in the short term;
- Carillion lacked integrated Management Information Systems and management (at most levels: lower, mid and senior) lacked adequate financial information to manage the business. (FTI Consulting, 2017) Carillion's lenders found the "presentation and availability of robust historical financial information", such as historical unit prices, cash flows and profitability, to be non-existent or bogus;
- Carillion vehemently rejected opportunities to inject equity into the growing company and instead adopted a debt laden spending spree. Over the eight years from December 2009 to January 2018, Carillion extended its borrowing from £242 million to an estimated £1.5 billion more than five times the value at the beginning of the decade i.e. a CAGR of 40%;
- Carillion's board ever since its existence were supported by, rather reliant on the Big 4 of the accounting worlds: Deloitte, PwC, EY and KPMG as Carillion's internal auditors or in an equivalent capacity. Though the role of such internal auditors was to provide a review of and assurance that an organization's corporate governance, internal control and risk management processes are operating effectively (Chapman, 2018), seldom was this observed with the Big 4. They seemed to wake up to the gravity of the situation only when the UK Cabinet Office stepped in;
- The UK Government's monopoly and transfer of risk to the private sector, gave it considerable negotiating power as the only buyer in the markets that Carillion operated in. Not only did the UK government stipulate the risk to be absorbed by bidders, set prices and standards of quality, but also grossly misunderstood the cost of services they sought and hence had a general attitude of denial towards change orders (At the time of liquidation, Carillion had in excess of 3,500 change orders pending on just the HS2 project);
- Carillion's dubious trading position and aggressive procurement had jeopardized liquidity, and most of £140 million of emergency funding, with sensitivity analysis indicating a shortfall of £495 million in just the emergency funding by August 2019, a 3 folds increase;
- Additional lending or capital infusion by both the UK government and potential suitors was deemed highly risky while the extensive pension liabilities remained an overhang;

Already baffled by the humanitarian and social crises of Carillion's collapse, the UK government has rejigged its Strategic Supplier Risk Management Policy in 2019 to apply the learnings from Carillion's liquidation and pre-empt future collapses. As of the first quarter of 2019, a few major contractors have started depicting trends reminiscent of the events before Carillion's first profit warnings.

These contractors are Kier and Eiffage, who have been picking up the slack on the HS2 behemoth post Carillion's exit. Both contractors are reeling with limited cash flow visibility and have followed similar aggressive accounting procedures as followed at Carillion, with speculation rife about having already partially booked profits until FY 2022 on a few key accounts in their current and past balance sheets. Interestingly, Carillion's demise has negatively affected Balfour Beatty, the UK's largest construction firm, which expects to take a £45m hit just from the Aberdeen Highway contract.

#### REFERENCES

- Carillion Plc. (2018, January 15). Group Business Plan. *Investors Presentation*, 6. London, United Kingdom.
- Chapman, D. R. (2018, December). Ineffective Risk Management and the collapse of Carillion. *PM World Journal, VII*(XII), 1-16.
- Financial Times. (2018, May 16). *Unravelling a web of failures at UK outsourcer Carillion*. Retrieved from Financial Times: https://www.ft.com/content/37f63372-58f3-11e8-b8b2-d6ceb45fa9d0
- FTI Consulting. (2017). *Project Ray: Independent Business Review.* London: The Business, Energy and Industrial Strategy and Work and Pensions Committee, UK Parliament.
- House of Commons. (2018, May 18). *Carillion Contents*. Retrieved from Publications & Records:
- https://publications.parliament.uk/pa/cm201719/cmselect/cmworpen/769/76908.htm Inman, P. (2018, February 3). *After Carillion and Capita, is PFI itself on the critical list?*Retrieved from The Guardian: https://www.theguardian.com/politics/2018/feb/03/pficarillion-capita-critical-list-outsourcing
- The National Audit Office. (2018, June 7). *National Audit Office Press Releases*. Retrieved from Investigation into the government's handling of the collapse of Carillion: https://www.nao.org.uk/press-release/investigation-into-the-governments-handling-of-the-collapse-of-carillion/
- The Public Administration and Constitutional Affairs Committee. (2018). *After Carillion: Public sector outsourcing and contracting*. London: House of Commons.
- UK Cabinet Office. (2012, November 7). www.gov.uk. Retrieved from Transparency Data: Crown Representatives and strategic suppliers: https://www.gov.uk/government/publications/strategic-suppliers