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A Comprehensive Study on the Strategies of UK Construction Companies in the Aftermath of the 2007 Global Financial Crisis

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A B S T R A C T

This study explores the profound impact of the 2007 financial crisis on the UK construction industries, examining its prelude, unfolding, and aftermath until 2013. In response to the global economic upheaval in 2007, acknowledged as one of the worst crises since World War II, the research scrutinizes survival strategies employed by UK construction companies. Focusing on three representative construction firms, the study meticulously evaluates annual strategies, aiming to provide insights for both construction companies and readers, fostering a nuanced understanding of survival strategies during economic downturns. The methodology involves a comprehensive review of literature, case studies, and financial analysis during recessionary periods. Employing both quantitative and qualitative approaches, the study compares cash flow, annual reports, and turnover, with a detailed case study of one construction company. Critical appraisal extends to the recession's impact on the Gross Domestic Product (GDP). Findings reveal that construction companies, despite recession challenges, implemented a diverse range of strategies. Consistent approaches emerged across companies to bolster revenue generation. The study underscores the significance of stringent monetary management in influencing cash flow and advocates for strategic mergers with new entities to enhance organizational profitability. In summary, this research contributes valuable insights into the survival strategies of construction companies during economic recessions. The uniformity in strategic approaches across the industry and the emphasis on financial prudence and strategic alliances emerge as pivotal considerations for sustained success.

Keywords: Financial crisis, recession, strategy, construction contractors, cash flow

1. Introduction

In exploring the 'Global Recession' of 2007/8, it is more than just a timeline that captures the complexity (Buckley 2011). The shockwaves began in 2007 with the housing market collapse, shaking economies worldwide. The fall of stock markets and the label 'Great Recession' (Shah 2013) underscore the severity, the worst since World War II. The aftermath, as pointed out by Nicholas and Steyn (2012) and Shah (2013), was widespread job loss, pushing millions into poverty. During this, Lock (2004) suggests that using globalization to make more money can be a risky strategy for companies. This study delves into that. Rather than just looking backward, it zeroes in on how construction companies in the UK navigated through. The goal is to uncover the smart moves these companies made to weather the storm, potentially offering insights for others facing economic turbulence.

The construction industry weathered a tumultuous 6-year span, as illuminated by Gardiner (2014). Among the top twenty companies, the post-financial crisis era marked a divergence in their trajectories, with present standings intricately linked to their positions during the crisis. Gardiner's insight indicates a broad consensus: profit margins contracted across the board. Despite these challenges, the industry exhibited resilience, with companies displaying varied strategies—some expanding overseas, others diversifying domestically.

Crucially, the construction sector holds a pivotal role in the UK economy, contributing a substantial £90 billion (or 6.7%) to the Gross Domestic Product (GDP). Beyond economic value, this industry is a significant employer, constituting approximately 10% of the UK workforce. This workforce is diverse, encompassing three key components:

i. Construction contracting industry,

ii. Construction-related professional services, and

iii. Construction-related products and materials

The multifaceted nature of the construction sector underscores its integral contribution to both the economic and employment landscapes of the United Kingdom.

The impact of the global recession on the construction industry has been stark, especially since 2007. The sector, which initially accounted for 8.9% of the UK's Gross Value Added (GVA), plummeted significantly to 6.7% by 2011. A critical factor contributing to this decline was within the supply chain dynamics. In the construction sector, a substantial 90% of every £1 spent remains within the UK. Notably, the contracting sector emerged as the largest sub-sector, responsible for contributing a significant 70% to the overall value generated.

This downturn is not unique to the UK; globally, the construction sector felt the reverberations of the economic and financial crises, leading to a widespread decline in developed economies too. The disproportionate impact on the construction industry underscores the need for a nuanced examination of its challenges and adaptive strategies in the face of economic uncertainties.

The economic downturn and financial strains cast a broad shadow over the global construction sector. By 2008, reports surfaced of significant collapses among construction companies in developed nations. Survival parameters, including employment, business stability, and profitability, took center stage in the UK construction sector, particularly in contrast to the European landscape. Globally, the UK held a substantial 16% share of the construction contracting value, positioning it favorably in performance comparisons with the rest of Europe.

In a performance-based evaluation by Deloitte, the UK construction sector emerged as a standout player. The country secured the third rank for total sales among 50 major European companies, with combined sales reaching around €38 billion. Balfour Beatty PLC, Carillion PLC, and Kier Group PLC claimed noteworthy positions at 8th, 14th, and 22nd, respectively. These rankings not only highlighted the UK's competitive standing but also underscored the sector's robust performance compared to its European counterparts.

Moreover, evidence indicates that the UK construction sector not only weathered the storm but demonstrated resilience by maintaining sales output in proportion to the previous year, a feat noteworthy amidst the challenges posed by the global economic downturn.

These comparisons stimulate an inquiry into the resilience of construction companies amid severe economic challenges, fortifying the entire construction sector. This research arises from a genuine interest in comprehending how these companies adeptly navigated the economic crunch. Considering this, a focused exploration seeks to unravel the survival strategies implemented by these organizations during economic crises. This research aims to comprehend how specific UK construction companies navigated the Global Recession (2007-2013), gaining insights into their strategies and evaluating their effectiveness compared to industry counterparts.

2. Literature Review

2.1 Critical Evaluation of Literature

Kitching et al (2009) focused on the uncertainties during a situation that is difficult to predict trends and create preventive action. Increased globalization of economic activity and interconnection across national frontiers renders the current financial crisis from previous. The outcome may be a new economic order; the nature of this can't be fully understood today. The uneven impact on industries, countries, regions, and firms with no single 'recession effect' for either business, or any way ('best way') to adopt for surviving in the market was prevailing. (Green et al 2008)

2.2 Effects of Recession on UK Construction Industry

Construction industry faced massive challenges during 2007-2013 because of the credit crunch and the decline of the housing market. Royal Institution of Chartered Surveyors (RICS) predicted a loss of 300,000 jobs within the construction industry and more than half of resource cutting (52%) warned by the FMB team over the span (Goodier et al 2007). All these findings indicate a dark shade of struggle for the construction companies to survive in the UK and global market.

The prevailed crisis leads to a situation wherein the principal buyers were not able to get mortgage let alone and to pay for a first home. The facts and figures released on the effects of financial crisis in the UK show even worse and uncomfortable findings which includes the 90,000 families living in temporary housing (Green et al 2008). In addition to that, the huge number of families under the council housing waiting lists (1.6 million). It is evident from these results about an emerging need to build new homes. The National House Building Council reports the fact that new homes have started being at their lowest level since 1924, this means no remarkable progress so far in the sector. (Duca, Muellbauer and Murphy 2010)

Table 1 Literature review on the recession strategies since 1958 (Adapted from: Lim, Oo and Ling 2010)

Sl. No.	Recession Strategies	Lansley and Quince (1981)	Wong & Logcher (1986)	Lansley (1987)	Hillebrant, Cannon & Lansley (1995)	Boon (1996)	Mills (1997)	Contractor (1998)	Low & Lim (2000)	Wan-Pun (2009)	Lim, Oo & Ling (2010)	Ranking
1	Cutting bonuses and over time				√				√		√	3
2	Developing a stable network of regular sub-contracting parties					√				√	√	3
3	Developing new relationships with clients				√	√	√		√	√	√	6
4	Explaining current difficulties to staff								√		√	2
5	Focussing on competitive bidding for subcontracting work								√		√	2
6	Freezing or reducing salaries & bonuses				√				√		√	3
7	Implementing stricter financial management				√	√			√	√	√	5
8	Improving safety records		√								√	2
9	Increasing the amount of working capital		√		√						√	3
10	Joint venturing with other firms to further explore business opportunities			√			√	√		√	√	5
11	Learning new skills to further explore business opportunities			√			√				√	3
12	Minimising staff redundancies				√	√		√			√	4
13	Moving or diversifying into new market areas or other lines of business		√	√	√		√			√	√	6
14	Placing greater emphasis on core businesses	√		√	√			√		√	√	6
15	Placing greater emphasis on employees' needs	√		√							√	3
16	Placing greater emphasis on marketing, and effective planning and management		√	√	√				√	√	√	6
17	Placing greater focus on the long-term goals of a firm	√									√	2
18	Providing better contracting services (e.g. providing financial packages)				√						√	2
19	Seeking flexibility in resources, cost structure and financial structure		√								√	2
20	Submitting a lower tender price to secure projects				√			√	√		√	4
21	Tightening of organisational structure				√						√	2
22	Trying new methods and technologies for improved productivity		√						√		√	3
23	Undertaking smaller contracts									√	√	2
24	Implementing stricter day-to-day management protocols										√	1
25	Increasing the use of subcontracting									√		1

The researcher focusses on the methods to deal with economic downturns that affected the UK construction industry and the strategies employed by the construction companies to survive in the market; thereby not going far enough in the wider housing sector. The real chance of survival for the UK construction industry from recession was to address the strategies mentioned in Lim, Oo and Ling (2010) Table 1. The contractions of the UK construction sector during December 2008 at their maximum pace led to adverse effects on almost all traits of the UK economy. Although civil engineering and commercial sectors were at the edge of fall during December 2008, the worst downturn was witnessed by the house building market. Halifax banking reported a 16.2% fall in the house pricing (largest since 1983 records) which shows that along with the house building sector, housing markets also dropped. Most people preferred buying a home against their earnings since mortgage was hard for many. Also, the Bank of England reported a critical fall in mortgage approval (27,000) in November 2008 (Bank of England 2009).

Roy Ayliff, Director of Professional Practice at the Chartered Institute of Purchasing and Supply, said:

"Once again, the housing sector bore the brunt of the crisis as purchasing managers reported significant reductions in new business. Amidst a climate of doom and gloom, firms were forced to axe more jobs in preparation for what is set to be another year of trouble and turmoil." (Source: Times 2009)

The UK government initiated major plans on construction projects including roads, schools, and health care with public spending. This plan helped the construction industry and attracted many companies to take over government projects irrespective of sector, proportionally ensuring employment for several people (Contracts Journal 2007). The researcher would like to include 'multi-tasking', a key term used in business and hence, construction industry in no way exempts from this process. This means the construction industry must be competitive on all types of economy and need to prepare future business to survive in the market.

The Construction News research revealed the extent of the economic downturn and its effects on the construction industry, which was one of the worst in ages. The study also concentrated on sector by sector and region by region, and the outcome for the rest of the business year. These forecasts helped many small-scale organizations to plan their business model and other major companies to use this reference for planning their survival strategies for the darker days to originate. (Construction Industry Research and Information Association 1992)

The guarantee for employment persisted mostly on infrastructure and London Olympics project however, these projects were not sufficient to survive the overall industrial activities. Private houses, offices and industries were badly affected by the declining economic conditions, which contributed only to one part of the entire industry. Generally, economic growth below 2% has been related to drops in construction productivity. GDP growth for the 2nd quarter was revised down to zero and consensus projections put forward scenarios for growth which was lower even further in 2009.

A severe collapse was witnessed in the flow of innovative projects in the pre-construction pipeline due to the adverse and declining economic conditions. 5% fall in construction sectors in the UK is mentioned by Gardiner (2014). As stated, the most and worst affected category of construction due to economic downturn was the private housing sector. Risk management and reassessment introduced by the banking segment has contributed to the suitable principles for retrieving credit thereby, causing the asset price bubble in the housing market to rupture. (Classens, Kose and Terrones 2010)

Long-term contraction caused by the housing market burst leads to a situation where potential buyers can no longer depend on mortgages for purchasing a house. Without doubt, there was a dependency nurtured for private housing construction to choose alternatives by introducing cost cutting or adjusting to a much lower housing demand (Contracts Journal 2008). The intensity of the credit crunch on other branches of construction was quite different compared to the housing sector. But researchers do accept the fact that there was always a prevailing risk while investing in the industrial, official, retail and hotel projects during the most awful economic conditions.

There were no expectations for a major miracle in the construction sector in view of literature and financial outputs; however, improvements were foreseen towards the concluding half of 2009 with the London Olympics on the horizon (Goodier et al 2007). This will in turn, commence almost all the major works prior to the Olympics 2012. Government although, initiated several construction investments across number of sectors providing educational and health care utmost importance. The plan was implemented to show tremendous increase in the value of construction projects in the year 2009 (Underwood and Khosrowshahi 2012).

Table 2 Top 20 contractors of 2008 in the UK ranked by turnover (Source: Gardiner 2014 p. 23)

	Firm	Turnover(m)	Pre Tax Profit(m)	Pre Tax Margin(%)
1	Balfour Beatty	7488	157.0	2.1%
2	Taylor Wimpey	4714	-19.5	-0.4%
3	Carillion	3951	94.4	2.4%
4	Laing O'Rourke	3037	44.5	1.5%
5	Kier	2127	77.6	3.6%
6	Morgan Sindall	2115	57.6	2.7%
7	Sir Robert McAlpine	1792	46.6	2.6%
8	Interserve	1738	69.3	4.0%
9	Galliford Try	1409	60.2	4.3%
10	Bovis Lend Lease	1383	17.8	1.3%
11	Skanska UK	1308	38	2.9%
12	HBG UK	1043	39.5	3.8%
13	Wates	974	37.7	3.9%
14	Keller	955	103.2	10.8%
15	Rok	950	28.3	3.0%
16	Costain	878	19.8	2.3%
17	ISG	833	8.4	1.0%
18	Bowmer & Kirkland	833	36.6	4.4%
19	Vinci	774	40.5	5.2%
20	Shepherd	685	42.2	6.2%
	Total	38,987	1,000	2.6%

Financial pressure experienced by the Government was in no way different from the private construction sector. All the statistics presented made it evident that even the Government was not resistant to the economic crunch starting with absorption of Northern Rock. In addition, retail sales have declined, unemployment rising and reduced tax receipts due to the drop in the profitability of UK firms. (Vecchi, Hellowell and Gatti 2013)

The researcher emphasizes on evidence showing the state of Government finances being poor and prevailing risks on its proposed civil engineering projects lead to situation where, only major infrastructure projects will buoy the UK construction industry (Wolstenholme 2009). M25 motorway widening, and rail projects were set up to provide a boost to the sector. There were several other on-going projects such as the Thames link and the Edinburgh tram line which continued to contribute to the division's capability for some time (Green, Larsen and Kao 2008). The sector also benefited from increased capital expenditure by water and electricity utilities along with the transportation projects. The macroeconomic and sector-specific conditions have a broader impact on the UK construction viewpoint than the local factors as per the present market. (Goodier et al 2007)

'Risk can be mitigated by diversification' is a well-known fact in investment science. However, during a financial crisis, different types of assets tend to move down together by providing very little opportunity for diversification. This phenomenon is known as contagion (Hui and Chan 2013). World Bank Group demonstrates the occurrence of contagion as the increase of cross-country correlations during "crisis times" in relation to that at "tranquil times". The recent financial crisis is considered for consideration for study because of its severity since the Great Depression. Moreover, the magnitude was extremely high in comparison with the latter and affected the world significantly as evaluated by researchers. The kick start of the recession was triggered on September 15, 2008, due to bankruptcy of Lehman Brothers (USA) leading to a global stock market slump.

The studies conducted based on Forbes-Rigobon, Coskewness and Cokurtosis Tests to examine the contagion across the equity and real estate markets of the US, UK and Hong Kong by Hui and Chan (2014) concluded the direction of contagion. Hui and Chan (2013) further mention that US transmit shock to UK and Hong Kong, while UK transmits shocks to Hong Kong during the crisis.

SMEs used 'bank lending' as a common form of finance by loan (36%) and overdraft (53%) facilities available within the banks. "Contractors face ruin as bank refuse loans" was the front-page news in Contracts Journal (2008) which criticized mostly on the credit lines for the contracting companies dry up. However, there have been efforts from the government to force banks to act responsibly over refinancing credit and providing loans.

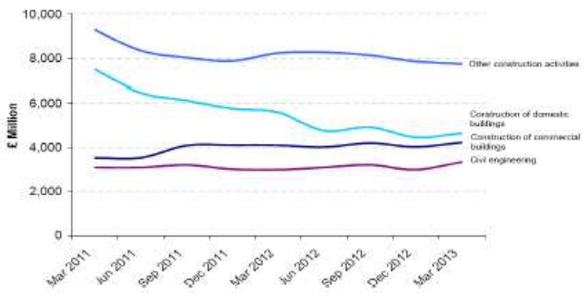

Figure 1Bank lending to construction contracting sub-sectors (Source: Department for Business Innovation Skills 2013 p. 18)

The banks were frozen with authority to any excuse to pull credit from contractors unless initiated by the government. The developing contractors find it hard times for finance due to the strict bank conditions rose including personal guarantees. The graphical representation of bank lending status since the 1st quarter of 2011 is shown in Figure 1. Patrick Waldron, chairman of the Civil Engineering contractors Association's stated that "the SME sector plays a vital role in construction – we will need them when the economy begins to grow again or the cost to the taxpayer of delivering vital infrastructure will be far greater". (Department for Business Innovation and Skills 2013)

2.3 UK Construction in the Changing Global Market

Businesses in the global construction sector faced unique challenges resulting in some dramatic changes for half a decade. The key factors contributed to these being ‘Global Recession’ or ‘Credit Crunch’ or ‘Financial Crisis’ and strategies to overcome the situation are worth mentioning as expressed by Graham (2008). As a result, the industry witnessed a hike in material price, restricted funding, business failures, management risks, government cut-offs and customer decline. The index prices of raw materials in 2008 are shown in Figure 2.

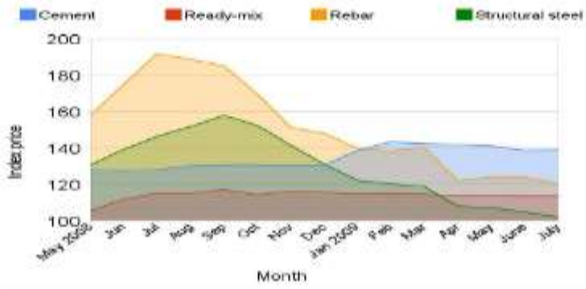

Figure 2 Index prices of raw materials (Source: Graham 2008)

The 2025 forecast of $15,030 billion increase in construction sector at the rate of 4.3% per annum, which is almost 70% higher compared to $8,663 billion in 2012 (Department for Business Innovation and Skills 2013). All these factors were responsible for the operations effectiveness of all the construction companies of now.

Apart from the above two firms, there is also an organization which improved its position from 3rd to 2nd in 2014 even with the severe impact of recession – Carillion PLC. The profit margin Carillion increased to +13.4% in 2014 in comparison with +2.4% (2008). This draws attention to the researcher in identifying the strategies implemented by this company in detail. About this, critical evaluation of year wise strategies implemented by Carillion from 2007 to 2013 has been carried out to accomplish one of the objectives.

3. Methodology and Findings

3.1 Theoretical Framework of Research

The theoretical framework of the proposed research is illustrated with the help of Rogers (2003) flow chart shown in Figure 3. Research will evaluate all the results delivered using the step-by-step procedure that includes observation of knowledge, persuading, decision making on adoption or rejection, implementing (review and improve) and confirmation.

The following questions have been adapted from Slevin and Basford (1999):

- What is the existing knowledge about the proposed phenomenon to research?
- What types of knowledge are available (empirical, non-empirical, tacit, intuitive, moral, or ethical) for the research to continue?
- What theory will guide further research into performance management in organizations?
- Is the theory proven through theory-linked research?
- What other theories are relevant to performance strategies?
- How are the applications of these theories and findings accomplished in construction industries?

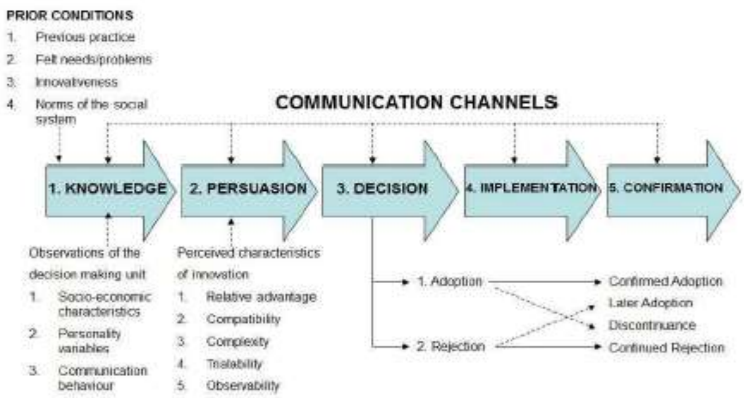

Figure 3 Theoretical framework of research (Adapted from: Rogers, 2003)

3.2 Contracting Companies – Overview, Financial Analysis & Findings

3.2.1 Contractor – Balfour Beatty

Balfour Beatty is a global infrastructure group that delivers world class services essential to the development, creation, and care of infrastructure assets. The company considers the entire life cycle of a project starting from initiation to completion which includes finance and development, design, and project management along with maintenance. With more than 100 years of experience, the contractor operates globally, which includes the UK and the USA along with its presence in 80 other countries. With a generated revenue of £11bn and employee strength over 50,000, the firm estimates value in global infrastructure market as £11trillion 2013-2017. (Balfour Beatty PLC 2012; 2013)

The financial analysis using profit-loss statement, segmental analysis and annual statements collected using FAME clearly mentions the fading of almost all assets in early 2008 due to the adverse effects of credit crunch in the organization. Moreover, Balfour Beatty even witnessed a drastic decline of assets to 4016 (2007: 4544) because of the global recession. (Balfour Beatty PLC 2007; 2008; Financial Analysis Made Easy 2014)

Investments: The impact of financial crisis was noticeable with the significant fall of revenues for PPP and infrastructure projects in Balfour Beatty; one of the top construction companies in the UK reported by Gardiner (2014) was even not left unaffected. The investment statistics demonstrate the extent of erosion during the transition from 2008 to 2009. A major devaluation of £43m to £17m was visible during 2008 and 2009 respectively, making it evident that the recession has taken its extreme efficiency stage.

Shareholders witnessed a considerable decline in the prices of Balfour Beatty and the firm's price per earnings ratio had borne the crunch as cited in Green, Larsen and Kao (2008). This decline in the price of earnings portrays the slowing down of the economy and resulting in the need for novel strategies. Recession contributes to the decline of market prices for shares and increased cash flow problems for the company. This in turn increases the net borrowings which is evident in financial statements of 2007 to 2013. However, it was comparatively less in 2009 when the new strategies were employed by the company. (Hillebrandt, Cannon and Lansley 1995; Goodier et al 2007)

Strategy overview: The key highlights of the strategy were working in 3 core capabilities namely, construction services, support services and infrastructure investments. It is worth mentioning the output of strategies implemented by Balfour Beatty to survive in the struggling market conditions and are as follows sourced from Balfour Beatty PLC (2012).

i. Increased transportation market shares in the USA.

ii. Significant highways win in the US following approval of Transportation Bill.

iii. Acquisition of Subsurface Group to expand energy storage capability.

iv. Highways, rail, and power transmission contract wins.

v. Group business totaling £2bn.

Market overview of Balfour Beatty's annual statement exhibits the organization as an infrastructure player with capabilities in diverse professions. The statement underlines the distinctive combination of asset knowledge and local presence as a competitive strength in the infrastructure markets – particularly transport, mining, water, power, and energy.

3.2.2 Contractor – Carillion PLC

One of the leading construction companies in the UK, Carillion PLC, also has an excellent support services team as well. More than 50,000 employees, the firm can generate annual revenue of £5billion (Carillion PLC 2013; Financial Analysis Made Easy 2014). With the diverse working culture, they operate in the Europe, Canada, Middle East, North Africa, and Caribbean along with major projects in the UK. The organization developed a detailed portfolio during recession to concentrate on support services, Public Private Partnership (PPP) / Public Finance Initiative (PFI) and construction services as 3 core capabilities and work in project vital to society including health care, education, rail, and real estate market. Giving prime importance to quality, Carillion was able to deliver cost effective and sustainable developments for the client (Carillion PLC 2012).

Economic Times (2013) and Construction Journal (2009) reports Carillion among the few companies in the UK who have been successful with the strategies implemented during recession. Pre-recession evidence of literature and cash flow statements for the company indicates a steady performance with amazing growth in revenue (Financial Analysis Made Easy 2014). However, the organization faced severe issues during the economic downturn which was eclipsed by their own pivotal strategies.

The annual statement illustrates the future and pipeline projects secured by the company under the Order book section, which is also amongst one of the key parts of literature review for this research. A thorough examination of the 2009s order book reveals a decrease of £2.7bn in cash flow in comparison to 2008. Even though this is a minor difference in relation to other companies operating in the same sector, there still arose an immediate requirement to overcome these issues during recession. It is worth mentioning and quite satisfying to show a 31% increase in the underlying profit of the company. With respect to a critical evaluation of the above data, it is evident of an overall benefit to Carillion in terms of increased profit even with a marginal decline in the order book. (Carillion PLC 2008; 2009; 2010; Financial Analysis Made Easy 2014; Green et al 2008)

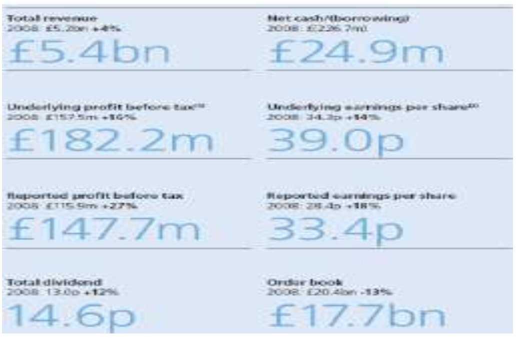

Figure 4 Financial highlight of Carillion PLC (2009) (Source: Carillion PLC 2009)

Support services: The contribution of the support services increased operating profit to 10% and revenue jumped to 8%. The remarkable increase of 65% from 2008 figures was also worth mentioning output from the core capability. (Carillion PLC 2008; Financial Analysis Made Easy 2014)

Public Private Partnership Projects: One of the outstanding and successful strategies adopted by Carillion in the real peak of credit crunch strike 23% hike in operating profit. The revenue flowed up to a 9% increment from the previous year's accounts and financial statements. Along with, a tremendous result in operating profit (23%) was also reported in Contracts Journal (2009) for Carillion's PPP/PFI strategy.

It was well marked in the share price chart of Carillion about the impact of the economic crisis and challenging market the company moved in. Although a total recovery from the worst fall in the 3rd quarter of 2008 is not expected to happen soon, the organization aimed at working together with the government projects (healthcare, education, rail, road, etc.). (Goodier et al 2007)

Financial and Operational Highlights: Figure 4, sourced from Carillion's annual report and compared with literature and FAME shows the financial highlights of the year 2009 in comparison with that of 2008. Shareholders faced a major decline in price per earnings from 2006 to 2008 with the increase in the company's profit. The higher profit was mostly because of the maturity of projects and thereby increased cash flows. These viable reasons also contributed to the organization's turnover, which increased to 22% in 2007 from that of 2006. (Carillion PLC 2009; Financial Analysis Made Easy 2014)

In the year 2008, the debts were paid off due to high borrowings in 2006 to 2007 which made more cash available. But, the life of this system was very low, which was evident when the company witnessed condensed funds. (Contracts Journal 2008)

3.2.3 Contractor – KIER Group

Life-cycle analysis of the financial crisis shows the birth and growth from mid-2007 to late 2013 respectively. But the period between 2007 and 2008 was quite a tedious time for most of the construction sector due to the inexperience of the worst downturn since the 'Great Recession'. KIER group was one amongst those construction companies who were affected by the credit crunch and developed strategies to survive in the market.

As a leading contractor in the construction, development and specialized services including building and civil engineering, support services, private house building, and property development. They in due course introduced Private Finance Initiative by creating PPPs by funding public infrastructure projects with private investment. Kier group employs more than 16,000 employees globally and reported annual revenue of £2.8billion in the annual statements of 2013. (Kier Group PLC 2013)

Interim Highlights: The interim financial highlights justify the increase in underlying profit to +12.2% in 2008 from the previous year. These contributions were made mostly by construction services (62%), support services (15%), homes (13%), property (9%) and 1% from infrastructure investment. But the shades of financial crisis were transparent when comparing the percentage increase of profit in 2006-2007 to 2007-2008 which accounted for +31.3%. (Financial Analysis Made Easy 2014)

Strategy Overview: With just 6 months to 31st December 2008, Kier experienced a drastic shrink of revenue from 5% to 2% which indicates fewer amounts of developments and future project opportunities. The organization set up a survival strategy using framework system by splitting into core capabilities. The services under the framework strategy were as follows:

- Kier Health
- Kier Education
- Kier Custodial
- Kier Retail
- Kier Airports
- Kier Rail
- Kier Water

All the above services were intended to make revenue concentrating on specific areas and clients thereby, making it possible to survive in the difficult economic conditions as cited in the Kier Group PLC (2009). The annual statements and FAME analysis show the decline of the property market. Since then, Kier focused on network rail joint ventures and UK Supreme Court projects as an acting strategy to enrich the order books and success path (Financial Analysis Made Easy 2014).

Shareholders get higher earnings when the price per earnings ratio decreases (Green et al 2008). This increase in earnings was witnessed in first half of 2009 due to the decline in earnings with little changes in the share prices. Henceforth, it defines the terrible state of the construction sector and drop of capital returns.

'Key Performance Indicator (KPI) gives a clear insight to organizations performance' so researcher considers the same as a significant yardstick for this analysis. An indication in the order book demonstrates the future of an organization. Although the financial crisis has restrained growth, there were measures implemented to overcome this stage by Kier Group. The strong track record of the company flourished to sustain with new Power Station opportunities and PFI projects. These strategies were implemented to secure long term projects and survive the financial turmoil (Kier Group PLC 2012; 2013).

4. Data Analysis and Discussion

4.1 Case Study: Carillion Looks Abroad for Growth

Within the context of the Global Recession, this section delves into the strategic approach and performance of Carillion. A case study illuminates one of Carillion's strategies, drawing insights from a synthesis of literatures, financial statements, annual reports, and FAME.

Surviving the recession posed significant challenges for Carillion PLC, a top 20 contractor in the UK. This analysis zooms in on a pivotal strategy: expanding global operations by smoothening on core capabilities. In 2009, this shift translated into a notable difference of £0.2bn compared to the previous year's annual statement (Carillion PLC 2009). A breakdown of total revenue generated (Figure 5) from overseas projects, encompassing Canada, the Middle East, the Caribbean, and the rest of the world. Notably, Canada and the Caribbean projects exhibited a remarkable 4% increase from 2008, while Middle East projects contributed the same percentage to total revenue with a modest 1% uptick from the preceding year.

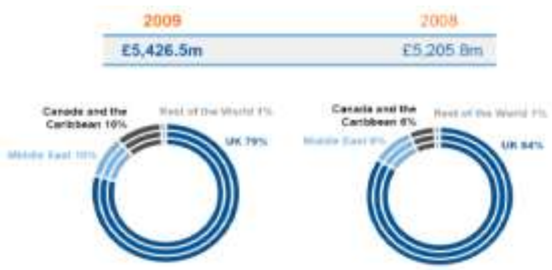

Figure 5 Total revenue for Carillion PLC (2008 v/s 2009) (Source: Carillion PLC 2009)

The firm stands as a formidable contender in securing projects, particularly in sectors reliant on robust public funding, encompassing education, healthcare, rail, and infrastructure projects. This is evident in the 2008 pie chart, revealing an 84% contribution exclusively from UK projects. Significantly, the firm strategically pivoted to concentrate on support services within the UK and extended its construction activities overseas (Graham 2008; Carillion PLC 2008; 2009).

The researcher identifies a primary rationale for this shift—support services present a lower likelihood of project cancellation compared to construction projects. Carillion PLC strategically divested its investments at times to alleviate debt, and there were no indications of major procurements soon (Carillion PLC 2007; 2008). Acquisitions, including Mowlem and Alfred McAlpine, detailed in Section 4.2.1, further underscore the company's strategic moves. Noteworthy is the firm's adeptness in engaging with the government in Public Private Partnership (PPP)/Public Finance Initiative (PFI) projects.

The organization's diversification strategy to explore new markets has proven successful (Carillion PLC 2013; Financial Analysis Made Easy 2014). Strategy Director Staffan Engstrom confirms, "Margins on construction work are just 1.5% compared with around 5% for support services and international" (Carillion PLC 2013), a sentiment echoed by the researcher in the data analysis overview.

This strategic shift is paramount for discussion, marking a transformative alteration in the business model of a once purely UK-based constructor. One of the major strategies which played a pivotal role in Carillion PLC was the acquisition of several construction firms in the UK including Mowlem in 2006, Alfred McAlpine and Vanbots in 2008.

4.2 Findings

One of the prominently endorsed strategies in the literature, focusing on developing new client relationships, is evident in Carillion's dedicated pursuit of new support services contracts. Another noteworthy approach involves placing greater emphasis on core business and concentrating on long-term goals, as demonstrated by the firm's strategic split into core capabilities and a focus on Public Private Partnership (PPP)/ Public Finance Initiative (PFI) projects, respectively.

The company's foray into new markets, coupled with diversification, is underscored by its construction projects in the Middle East, Canada, and the Caribbean. The positive impact of this strategy on revenue and profit margins is evident in Figure 5's pie chart. Additionally, Carillion has cultivated a robust network of subcontracting, as substantiated by Boon (1996), Wan-Pun (2009), and Lim, Oo & Ling (2010). The financial statements reviewed by the researcher consistently reveal a strong financial management strategy, aligning with approaches advocated by Hillebrant, Cannon, and Lansley (1995) and other literature outlined in Table 1.

However, a unique strategy that emerged during the 2007-2008 period, immediately after the onset of the recession, is worth noting. Termed as an 'integration strategy' by the researcher, Carillion acquired two companies, Mowlem, and Alfred McAlpine. This breakthrough acquisition significantly bolstered the firm's financial performance even during the tumultuous years of economic downturn. Considering the limited mention of this strategy in existing literature, the researcher deems it exceptional, attributing its contribution to the overall success of Carillion PLC.

5. Conclusion and Recommendations

The study culminates in a critical evaluation and analysis of the strategies implemented by UK construction companies during the Financial Crisis of 2007-2013. The research sheds light on various facets, examining three UK construction companies in detail and delineating the transformative journey of one specific company. The researcher interprets the results using a well-structured methodology designed to achieve the predetermined objectives. Both quantitative methods, involving a comparison of financial statements, cash flow, and profit-loss statements during the economic crisis, and qualitative methods, employing case studies, literature review, and histograms, were skillfully executed as part of the exploration.

The key findings and conclusions of this research are summarized as follows:

i. The literature review underscores the global impact of the recession on construction companies, highlighting pivotal moments of struggle and emphasizing the effectiveness of strategies employed by construction companies during downturns.

ii. Financial analysis and the review of annual reports from three UK construction companies affirm the crisis's impact mentioned in the literature, corroborated by the decline in profits reflected in the cash flow statements. A meticulous comparison of each year's financial highlights facilitated a detailed exploration of the strategies.

iii. Case studies functioned as a crucial tool in demonstrating the effectiveness of survival strategies, providing practical insights into real-world scenarios.

iv. Strategies exhibited diverse outcomes when implemented. While developed for survival and profit during challenging times, not all strategies yielded positive results consistently. Acknowledging this, the identification of unique strategies was also undertaken, aligning with literature.

v. Ultimately, comparing the strategies employed by three construction companies in the UK during the recession reveals a fundamental truth: "there is no one-size-fits-all strategy." This implies that the construction industry must tailor its approach based on the prevailing circumstances rather than adopting a universal strategy.

5.1 Recommendations for future research

The researcher would like to conclude the study by providing recommendations for further research as mentioned below:

- The critical evaluation of 'crisis survival' strategies implemented by construction companies around the world is a broader subject of investigation.
- A detailed study on the small contracting companies and other SME's can also be recommended.
- Likewise, practical comparison of strategies using field study and market research opens a door to future research.

5.2 Limitations of research

The major limitations experienced in this research are stated underneath:

- The limitation in conducting a comprehensive study for all the construction companies in the UK was experienced due to the limited amount of time.
- The review and evaluation of data(s) was made using literature, annual reports, and FAME. But the credibility of data cannot be assured in some areas where confidentiality of organization comes first.

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