

# A CRITICAL REVIEW OF RESPONSE STRATEGIES ADOPTED BY CONSTRUCTION COMPANIES DURING AN ECONOMIC RECESSION

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During a recession, companies are forced to restructure and to move quickly to reduce employment, costs, and debt, in order to ensure their survival. In the construction industry, recessions have the effect of reducing resources available to companies as clients procure less, financiers reduce lending and competition increases. Despite an increase of research in the area of strategic management in the last decade, little has been documented on what response strategies construction companies adopt as a result of an economic recession. From a thorough review of previous studies, two key issues became apparent: (1) very few offered a comprehensive and systematic overview and (2) limited connections were made to theoretical typologies such as Porter's generic strategies, which are a widely accepted typology of strategic options for companies. The objective of the paper is to fill this knowledge gap by: (1) critically reviewing the literature on response strategies in the construction industry; (2) developing a taxonomy of response strategies relative to Porter's generic strategies of cost leadership, differentiation and focus; and (3) using the taxonomy framework to critically evaluate the response strategies of Irish and UK construction contractors by drawing on qualitative data from the pilot case studies of an on-going PhD study. The results from the critical review show that the majority of construction companies adopt differentiation strategies in order to survive an economic recession.

Keywords: business strategy, corporate strategy, strategic management, recession, response strategy

## INTRODUCTION

In a volatile market it is by definition difficult to secure a steady flow of work (Boon 1996), resulting in companies being forced to restructure and to move quickly to reduce employment, costs, and debt. Lim et al (2010) demonstrated that construction contractors need to adopt various response strategies in order to stay afloat in a recession. According to Jannadi (1997), the most important factors contributing to business failure as a result of a recession are; difficulty with cash flow, low profit margins, difficulty in acquiring work, lack of experience in the firms line of work, and

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lack of managerial experience. Along with threats, recessions can also bring opportunities and as Lansely and Quince (1981) proposed, the most able firms can exploit opportunities in their markets even during an economic downturn.

During the recent 2007 global economic recession many construction companies failed to adopt appropriate response strategies and as a result led to bankruptcy or liquidation. In Ireland, four of the top ten construction companies ranked in 2007 failed to survive the recession, with construction company failures increasing from 120 in 2007 to 740 in 2011 (Scully, 2012). In the UK, there were 2,785 construction company failures in 2008 and this increased to 3,784 in 2009 (Department for Business, Innovation & Skills, UK Government).

In the field of strategic management little has been documented on what response strategies construction companies adopt as a result of an economic recession. From a critical review of previous studies, two key issues became apparent: (1) very few offered a comprehensive and systematic overview and (2) limited connections were made to theoretical typologies such as Porter's (1980) generic strategies which are a widely accepted typology of strategic options for companies.

This paper will critically review and synthesise existing research on response strategies and practices adopted in the construction industry. It aims to develop a taxonomy of response strategies relative to Porter's (1980) generic strategies of cost leadership, differentiation and focus, and to establish which generic strategy is most common during times of recession. Using the taxonomy framework two pilot case studies, one from Ireland, and the other from the UK, are presented to critically evaluate the response strategies adopted during the 2007 economic recession.

## **RESEARCH METHODOLOGY**

The research methods adopted in this study consist of a critical review and pilot case studies. The critical review involves a thorough review of well known academic journals in the area of construction and project management, which include: Construction Management and Economics (CME), ASCE Journal of Construction Engineering and Management (JCEM), Engineering Construction and Architectural Management (ECAM), Journal of Management in Engineering (JME), International Journal of Project Management (IJPM), and Building Research and Information (BRI). The pilot case studies involve the extraction of qualitative data from a medium-sized Irish contractor and a medium-sized UK contractor using thematic coding based on the framework of Saldana (2011).

A critical review strategy similar to those proposed by Bemelmans et al (2012), Tang et al (2010), and Sun and Meng (2009) was adopted in this study. Some important changes were made as it was felt that an initial keyword search alone did not suffice and ran the risk of missing some important research papers. As a result, the search procedure for papers related to the research involved the following steps:

1. The title and abstract of every paper published within each journal mentioned above was scanned, with some journals going back to the year 1983, e.g CME.
2. A keyword search was also carried out on several online databases, including ScienceDirect, Business Sources Premier, Emerald Database and Taylor & Francis, and resulted in other leading journals being identified.
3. A further review of the abstract of the papers was conducted in order to filter out the less relevant papers.

4. The final method was through the reference lists of the papers selected from step 3.

As a result of the search, 79 journal papers have been found. From these, 11 studies were identified which specifically studied 'response' or 'survival' strategies of construction companies during an economic recession. Each of the 11 studies was critically reviewed in order to identify the most frequently adopted response strategies. 88 responses strategies were initially identified with the list being reduced to 36 response strategies that were common in at least two or more of the 11 studies. On this basis, an appropriate classification system, or taxonomy, is proposed (Table 1) whereby the 36 common response strategies are classified according to country of study, and Porter's (1980) generic strategies of cost leadership, differentiation and focus. Under each generic strategy, each response strategy is further grouped according to a specific theme. These eight themes emerged from the critical review and consist of; marketing, financial, human resources (HR)/personnel, technology/innovation, operational/project management (PM), procurement, restructuring, and tendering/contracts.

For the pilot case studies the same taxonomy framework was adopted, whereby the semi-structured interviews conducted with company directors used the taxonomy themes to lead the interviews. From the resulting interview transcripts, process coding was used to identify specific response strategies adopted as a result of the recent economic recession. According to Corbin and Strauss (2008), process coding is used for those that search for 'ongoing action' in response to situations or problems. A total of 38 response strategies (codes) were identified. Using the taxonomy framework each response strategy (code) is classified under a relevant theme and then further classified according to Porter's (1980) generic categories (Table 2).

## **RESPONSE STRATEGIES**

According to Ye et al (2010), a response strategy has become an important instrument for dealing with the challenges of environmental changes, while in business terms, Waddock and Isabella (1989) describe it as the organisational capability of making due response to variations in external environmental factors. Lansley (1987) described them as rapid and creative responses which necessitate the development of new linkages with the environment.

Given the importance associated with response strategies, only a limited number of studies have been conducted on the response strategies adopted by construction companies in responding to an economic recession. These 11 studies are classified under the country of study (see Table 1) and are as follows;

In the US, research carried out by Wong and Logcher (1986) highlighted the strategies that construction contractors adopt in a cyclical environment, while also examining their associated performance. Mills (1996) examined how construction companies were managing to stay afloat as a result of the early 1990's recession.

In China, research conducted by Li and Ling (2012) assessed the critical strategies adopted by architectural, engineering, and construction firms in turbulent economic times and explored their effect on the firms profitability.

In Japan, Hasegawa (1988) examined competitive strategies in the Japanese construction industry following the 'Ice Age' construction slump that continued for a decade from the mid 1970's to 1986.

In the UK, research conducted by Lansley and Quince (1981) examined the strategic responses of a cross-section of UK building companies during the mid 1970's recession and its affect on the company performance. Studies carried out by Hillebrandt et al (1995) involved the examination of the behaviour and strategies of 20 large UK construction contractors during late 1993 and early 1994.

In Singapore, research conducted by Lim et al (2010), found that a total of 33 response actions were taken by contractors to ride out the eight-year recession (1997-2005). Research by Low and Lim (2000) also examined the survival strategies of Singapore contractors, but this was restricted to the period 1997-1998. Another study by the Singapore Contractors Association Ltd (SCAL) in *The Contractor* (1998), conducted a survey of its members to gauge their business sentiments as well as the measures that they may take over the financial crisis.

In Hong Kong, research carried out by Tan et al (2012) assessed the competitive strategies adopted by construction contractors during turbulent times and outlined their effects on performance and its relation to the competition environment.

In New Zealand, research conducted by Boon (1996) examined the survival strategies of small professional firms in a volatile construction market (1987-1992) in Auckland.

## **TAXONOMY OF RESPONSE STRATEGIES**

The proposed taxonomy (Table 1) utilises the well known theoretical typology of Porter's (1980) generic strategies for the classification of the response strategies. Tan et al (2012), and Li and Ling (2012) also proposed Porter's (1980) generic strategies for the classification of strategies during economic turbulence.

Porter's model (1980, 1985) is a well known theoretical framework among business strategists and industrial economists. According to Ormanidhi and Stringa (2008), Porter's model is considered as an insightful and convenient approach to analysing the firm's competitive behaviour due to its popularity, well defined structure, clarity, feasibility, generality and simplicity. Porter's work has also come under criticism by authors such as Fellows (1993), but given the level of importance placed on Porter's work by others in the construction management field (Ramsay (1989), Langford and Male (1991), Betts and Ofori (1992) & (1993), Tan et al (2012), and Li and Ling (2012)) it felt justified to apply its principles to construction.

The proposed taxonomy (Table 1) can be used as a knowledge-based framework for construction companies to use to survive economic turbulence. Of the three generic strategies, differentiation strategies were found to be the most frequently used across the studies, and according to Porter (1980), differentiation is concerned with differentiating the product or service offering of the company, by creating something that is unique. This finding agrees with Li and Ling (2012) who found that differentiation is the one that helps firms survive economic turbulence. In times of excessive competition, Cheah et al. (2007) demonstrated that differentiation has a stronger relationship with performance. The top four differentiation strategies adopted are:

1. investing in R&D/new technologies (Technology/Innovation);
2. increase/improve marketing and advertising (Marketing);
3. improving relationships with stakeholders (Marketing);
4. improve/increase services/products offered (Technology/Innovation).

In relation to cost leadership strategies, it contained the highest number of response strategies, accounting for 14 of the 36 response strategies listed. The most common ones adopted relate to HR/personnel strategies, and consist of: upskilling/retraining staff, freezing/cutting salaries, and laying off employees. The most common focus strategies were found to be related to operational/PM strategies (focus on core skills/capabilities), marketing strategies (entry into new construction markets), and tendering/contract strategies (joint venture on contracts).

Table 1: Taxonomy of response strategies adopted as a result of economic recessions

Strategies	U1	U2	C	J	UK1	UK2	S1	S2	S3	H	N
<b><u>Cost Leadership</u></b>											
<i>Financial:</i>											
Implement stricter financial management						X	X				X
Renegotiating loan arrangements						X	X				
Setting aside cash reserves			X				X				
<i>HR/Personnel:</i>											
Upskill/retrain staff		X	X		X				X	X	
Freezing/cutting salaries of employees		X				X	X	X			
Laying off employees		X		X		X	X				
Freezing/cutting bonuses						X	X	X			
Employ staff on a project by project basis						X		X			
Freezing staff recruitment						X	X				
<i>Operational/Project Management:</i>											
Cutting operational/administrative costs			X			X					X
Revert to simple efficiency planning					X	X					
<i>Procurement:</i>											
Cuttings supplier costs/Direct sourcing			X					X			
<i>Restructuring:</i>											
Retrench/downsize business		X							X		X
<i>Tendering/Contracts:</i>											
Lowering project tendering prices						X			X		
<b><u>Differentiation:</u></b>											
<i>Marketing:</i>											
Increase/improve marketing & advertising	X		X	X	X	X			X		
Improving relationships with stakeholders		X	X		X				X		X
Forming partnerships with clients/suppliers					X			X			
Specialising in a particular expertise					X			X			
<i>Technology/Innovation:</i>											
Investing in R&D/new technologies	X	X	X		X			X		X	X
Improve/increase services/products offered			X	X		X			X	X	
Innovative project financing methods				X		X				X	
Innovative project management methods						X				X	
<i>Operational/Project Management:</i>											
Speed up project delivery			X					X		X	
Ensure high quality of inputs			X	X						X	
Provide high quality outputs			X	X						X	

(continued)

Table 1: Taxonomy of response strategies adopted as a result of economic recessions (continued)

Strategies	U1	U2	C	J	UK1	UK2	S1	S2	S3	H	N
<i>Restructuring:</i>											
Changing/adapting organisational structure			X			X					
<b>Focus:</b>											
<i>Marketing:</i>											
Entry into new construction markets	X	X	X	X		X					X
Venturing into overseas markets		X		X		X	X		X		
Diversify into other construction businesses	X			X			X				X
Entry into more specific regions, nationally			X	X							X
Service only a specific group of clients			X								X
Set up a network of partners			X								X
<i>Operational/Project Management</i>											
Focus on core skills/capabilities		X			X	X	X	X	X		X
<i>Restructuring:</i>											
Expand by merger or acquisition				X							X
<i>Tendering/Contracts:</i>											
Joint venture on contracts		X	X	X		X	X		X		
Undertake smaller contracts				X		X	X				

Notes: U1 & U2 = United States studies by Wong & Logcher (1986) and Mills (1996). C = a Chinese study by Li and Ling (2012). J = a Japanese study by Hasegawa (1988). UK1 & UK2 = United Kingdom studies by Lansley and Quince (1981) and Hillebrandt et al.(1995). S1, S2, & S3 = Singapore studies by Lim et al.(2010), Low and Lim (2000), and The Contractor (1998). H = a Hong Kong study by Tan et al.(2012). N = a New Zealand study by Boon (1996).

## PILOT CASE STUDY RESULTS

From the two pilot interviews, a total of 38 response strategies taken to survive the 2007 economic recession were identified and classified in Table 2 using the taxonomy framework developed in Table 1. The Irish company adopted 31 strategies while the UK company adopted 24 strategies out of the 38 listed response strategies. The majority of the response strategies adopted by both companies were found to relate to cost leadership, which according to Porter (1980) involves the pursuit of cost reductions and cost minimisation. The Irish company adopted 17 cost leadership strategies while the UK company adopted 13, which demonstrates the significantly harsher economic climate encountered in Ireland during this time. The most common strategies for both companies within this generic category relate to HR/personnel strategies, consisting of; upskilling/retraining of staff, cutting bonuses, employ staff on a project by project basis, and train staff for ways to reduce costs.

Table 2: Response strategies adopted during the 2007-2012 recession

Strategies	UK	Ireland
<b><u>Cost Leadership</u></b>		
<i>Financial:</i>		
Implementing stricter financial management	X	X
Renegotiating loan arrangements	X	
New Financing arrangements with clients	X	
Acquire overdraft facilities	X	
<i>HR/Personnel:</i>		
Upskill/retrain staff	X	X
Freezing salaries of employees	X	
Cutting salaries of employees		X
Cutting bonuses	X	X
Cutting overtime		X
Employ staff on a project by project basis	X	X
Reduce staff perks		X
Train staff for ways to reduce costs	X	X
Increase staff working hours		X
Employ cost claim consultants		X
<i>Technology/Innovation:</i>		
Reduce R&D budget		X
<i>Operational/Project Management:</i>		
Use resources more efficiently	X	X
Increase in the use of subcontractors		X
<i>Procurement:</i>		
Cuttings supplier costs/Direct sourcing	X	X
Adopt Just-In-Time purchasing	X	X
<i>Restructuring:</i>		
Close regional offices	X	
<i>Tendering/Contracts:</i>		
Lowering project tendering prices		X
Increase revenue through project claims		X
<b><u>Differentiation:</u></b>		
<i>Marketing:</i>		
Increase in advertising		X
Improve relationships with clients	X	X
Improve public relations	X	X
Change company brand image	X	X

(continued)



Table 2: Response strategies adopted during the 2007-2012 recession (continued)

Strategies	UK	Ireland
<i>Financial:</i>		
Offering of financial packages for clients		X
<i>Technology/Innovation:</i>		
Investing in innovation -R&D/new technologies	X	
Improve/increase services/products offered	X	X
Innovative project management methods	X	
<i>Operational/Project Management:</i>		
Speed up project delivery		X
<b>Focus:</b>		
<i>Marketing:</i>		
Entry into new construction markets	X	X
Increase market share in existing market	X	X
Target less vulnerable clients	X	X
<i>Restructuring:</i>		
Increase the company's asset base	X	X
<i>Tendering/Contracts:</i>		
Joint venture on contracts	X	X
Undertake smaller contracts		X
Front loading tenders		X

In relation to differentiation strategies, the Irish company adopted 7 while the UK company adopted 6. The most common strategies for both companies within this generic category relate to marketing strategies, consisting of; improve relationships with clients, improve public relations, and changing company brand image. In relation to focus strategies, the Irish company adopted 7 while the UK company adopted 5. The most common strategies for both companies within this generic category relate also to marketing strategies, and consist of; entry into new construction markets, increase market share in existing market, and target less vulnerable clients.

The results of the pilot case studies found that cost leadership strategies were the most commonly used during the 2007 recession. These findings differ from the critical review findings of the 11 studies, which found that differentiation strategies were the most commonly adopted during economic recessions. This can be explained by the fact that most of the companies in the critical review studies were large companies, while the pilot case studies were medium-sized companies. These findings agree with Cheah et al (2007) who found that large companies have more resources and competencies to differentiate themselves from their competitors, and therefore adopt differentiation strategies, while small and medium-sized companies adopt cost leadership strategies.

## CONCLUSIONS

This study critically reviewed and synthesised 11 studies on response strategies adopted in the construction industry as a result of economic recessions. This resulted in the development of a taxonomy of response strategies to economic recessions relative to Porter's (1980) generic strategies. The taxonomy framework was also used to critically evaluate the response strategies of Irish and UK construction contractors to the 2007 economic recession.

The results from the critical review show that the majority of construction companies adopt differentiation strategies in order to survive an economic recession, while the pilot case study results show that cost leadership strategies were mostly used in the 2007 recession. Within the limits that are possible with a pilot study, it is acknowledged that the conclusions must be regarded as tentative, however it is felt that they provide an indication of the severity of the current recession experienced, more so by Irish construction companies, than by UK construction companies. The pilot case studies will form part of an on-going PhD study which aims to investigate the response strategies of Irish and UK construction contractors to the economic downturn 2007 – 2012. The study will be extended to examine large, medium and small construction contractors in Ireland and the UK.

This study contributes to knowledge and practice in the strategic construction management field by proposing a comprehensive taxonomy of response strategies that construction companies can use to survive economic turbulence. It also provides a platform for academic researchers in their future studies in this field. Researchers could examine trends in organisational restructuring and in the strategic management processes of construction firms during economic recessions. It could also extend to areas such as investigating the response strategies adopted by failed companies during economic recessions.

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