Strategies for Survival During Economic Downturn in Construction Industry A Survey on Construction Companies in Malaysia

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Abstract: Construction industry is considered as one of the major economic sectors, however, there is still lack of appropriate attention given to the development of the industry. History recorded that Malaysian construction industry has suffered high proportion of business failure compared to other industries during economic downturn because in general construction industry respond slowly to environmental changes. The objective of this paper is to define the survival strategy variables (SSVs) used by construction companies in Malaysia for the past two economic downturns to endure competitiveness for survival in the future. Respondents to this research are large construction companies under G7 as per classification of the Construction Industry Development Board of Malaysia (CIDB). The findings of this study are based on 152 questionnaires, out of 600 sent out by the researchers, with a response rate of 25.3%. This study used the one-way analysis of variance (ANOVA) and the frequency analysis as methodologies. The findings show that the construction companies responded differently in the two periods of economic downturn, and among the top key SSVs found were management style, market penetration, quality improvement, market development, and product development.

Key words: Survival Strategic Variables • Economic Downturn • Construction Companies • Malaysia

INTRODUCTION

The construction industry plays a major role as a key indicator and determinant of domestic performance in the economy [1-3]. It is argued that the most significant factors that affect all construction demand is the general economic situation and expectations about how it will change [4].

In Malaysia, the construction industry is the third-biggest sector in terms of productivity following manufacturing and agriculture [5]. The construction industry has a strong influence on growth because of its extensive backward and forward linkages with the rest of the economy [6]. However despite being known as of one the most contributive sectors in a developing country's economy, there is still lack of appropriate attention given to the development of the industry and its contractors [7].

Since 1967, the Malaysian construction industry has suffered several economic downfall and recovered; during the year 1974-1978 because the stock of building premises [8], in 1984-1988 triggered by the US high-interest rate

policy, followed with Asian economic crisis between the year 1997-1998 and the latest is mid-2007 until 2008 because of the global financial crisis where the rise in oil and diesel prices have dramatically influenced in the rise of raw materials [9]. Abu Bakar [10] predicts another downfall of the industry in 2020 to 2024 as a result of human resource crisis. He bases his prediction on past trends, which shows that economic crisis occurs every 10 years in Malaysia.

Figure 1 shows the changes in the annual growth rates of construction in relation to gross domestic product (GDP) in Malaysia during 1967-2005. The growth of construction output generally follows the trend of the economy but the peaks and the troughs are more extreme. The output increase when economic growth strengthens and falls even lower when the economy weakens. The figure also shows that the construction industry grows at a faster rate than the economy during periods of rapid economic growth. During those period of economic downturn the construction industry experience greater declines and remains in recession longer than the economy [8].

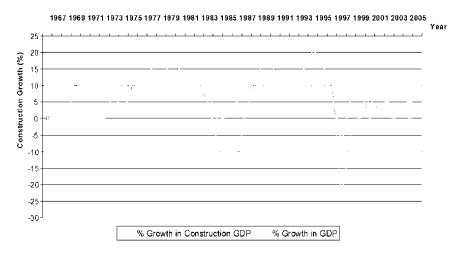


Fig. 1: Annual Growth Rates of GDP and Construction, 1967-2005 Data source: Malaysia economic reports

This study focused at the two worst recessions in Malaysia economic history which from Figure 1. shows that it has happened in 1984-1988 and 1997-1998. Economic downturn in the mid-1980s was considered as recession [11, 8]. Malaysian economy had a large fiscal deficit due to worsening terms of trade, high real interest rates and an increasing debt service burden. Economic downturn during 1996-1999 was considered as another recession or even worse than that experienced by the country in 1985 [11]. The financial crisis was triggered in Thailand when foreign investors lost their confidence and started to withdraw capital due to currency devaluation. In Malaysia, attempts to contain further devaluation caused higher level of interest rate and credit contraction [12]. In fact, although it enjoyed the best pre-crisis economic fundamentals among countries that were hit by the crisis, Malaysia experienced the biggest stock market plunge in the region [11].

Research Objectives: The objectives of this paper are to find out what survival strategy variables (SSVs) the Malaysian construction companies used during economic downturn in the period of 1984-1987 and 1996-1999, and also to study how they responded during these periods of economic downturn while still remaining competitive and helped them survived.

Survival Strategy: The construction industry is categorized by a unique "project format" in which the focus of management is more on the planning and control of resources within the framework a short term project rather than strategic management for a long term effect [1].

As traditionally, construction companies tend to neglect strategic planning, and almost expectedly, tremendously suffer during economic slumps or political instability [13]. There is a need for contingency of survival perspective of the construction organizations, relating with uncertain environments.

Porter [14] suggests the following strategies, which have been called "Porter's Generic Strategies": cost leadership, differentiation of product or service, and focus on narrow segment. Cost leadership strategy entails being the low-cost producer in an industry for a given level of quality. Riggs [15] believes in the need to reduce overhead cost in anticipation of tougher times. Nevertheless, Porter [14] reminds that each generic strategy has its risk. He argues that a firm must select only one of these three generic strategies. Otherwise, the firm will be "stuck in the middle." Lansley [16] finds out the characteristics manifested by large construction companies during the recession in the mid-1970s as a response to the crises. These include flexibility, such that they possess highly innovative and creative problem-solving skills and prudent organization structures, managerial value systems, markets, and technologies. Meanwhile Goold and Luchs [17] agree that successful diversification depends on building of a portfolio of businesses that fit with management styles of firms.

There are also studies about survival strategies for specific country. Boon [18] conducted a study of how firms survived the major downturn in the late 1980s in New Zealand. Boon believed that that there is no one right way to survive rather than an interaction between and a balancing of a number of factors. The 5 key factors

are; market orientation, knowledge base, flexibility in cost structure and productivity capacity, efficiency and price competitiveness, and financial resources. For Chinese construction enterprises Cheah and Chew [19] found that the strategic fields boil down to four main areas; targeted markets (market segment and geography), project management performance, reputation and branding, and management of human assets. Same study for Chinese construction comes from Kang et al. [20] which offered five types of competitive strategies i.e.; cost leadership, differentiation. market/ product diversification. geographical diversification, and vertical/ functional integration. During top sub-contractors in UK facing downturn, Hewes [21] found some strategies that will allow them to weather the storm such as diversification by moving into other sectors and spread the net wider geographically. Those top companies that have been interviewed also believed that innovation is another way to stay profitable. For example is by offering post-tensioning instead of traditional concrete because it can save on materials and foundations and is quicker to build. Being strict management of cash flow also can make firms stick on business during downturn. Otherwise Riggs [15] did not agreed with companies' strategies by diversification new product or services and approaching new market segment. Working in unknown locales and or performing different types of work can be a setup for failure. Instead, increase your marketing efforts to find the right projects, and enough of them. However Riggs quite contradictive by suggesting in expanding in-house expertise to sectors those are outside the firm's specialty. It seems that Riggs supporting product or service development strategy as long not in new geographic areas.

For specific situations during an economic decline, Porter [14] recommends a range of alternative strategies that seem more practical. Porter's strategies have to do with market share, niche segment, disinvestment in areas of weakness, investment in areas of strength, and liquidation of investments in an early phase of a downturn. Ansoff [22] introduces the growth vector components. First of the components is market penetration, which denotes growth direction through an increase in the market share of a product or an increase in market size. Second is market development, which is achieved partly through missions in search for new markets. Third is product development, under which new and improved products are created to replace old ones. Last is diversification, under which a firm creates new products and pursue new markets. Shaw and Goodrich

[23] believe that differentiation is far less forceful and far less expensive than penetration strategy. Especially in marketing, they say, a differentiation strategy could work at virtually any stage of the life cycle, from growth to decline.

However beyond all of those excessive survival strategy theories above Whittington [24] criticized academic study that mapped strategy based only along two axes: outcome of strategy and the process by which it is made. Whittington [24] believed that radical different implication needs to look out beyond those two axes with four generic perspective of strategy; classical, evolutionary, processual, and systematic. Elfring and Volberda [25] suggested for different perceptions of strategy depending on the context of strategy, the process of strategy development, and the context (corporate and environment) that houseboth content and process. Cheah & Chew [19] said that any different theoretical fields within each classification framework should be viewed as complementary rather than mutually exclusive. It is also argued that by implementing western strategic management exclusively to non-western country has raised some doubts. Kang et al. [20] concluded that the application of western thinking of strategic management to the context of the related nation requires careful consideration of the country's macro environment and the industry's unique operational factors.

According to Cheah and Chew [19], an overview of some unique characteristic of the construction industry, both in general and specific to the nation, is essential for a framework that can help construction enterprises examine the various strategies. Therefore, this literature review applies the survival strategy theories to the context of the Malaysian construction industry. The Construction Industry Development Board (CIDB) has developed a strategic roadmap, called the Construction Industry Master Plan (CIMP), for the construction industry of Malaysia for 2006-2015. CIMP serves as a guide for the development of the Malaysian construction industry and includes recommendations that take cognizance of the current economic development policies of the Malaysian government [26]. Under the CIMP, seven strategic trusts have been developed:

- Integrate the construction industry value chain to enhance productivity and efficiency.
- Strengthen the construction industry image.
- Strive for the highest standard of quality, occupational safety, and health and environmental practices.

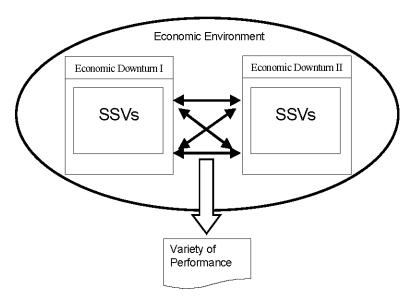


Fig. 2: Research Framework

- Develop human resource capabilities and capacities in the construction industry.
- Innovate through research and development, and adopt new construction methods.
- Leverage on information and communication technology in the construction industry.
- Benefit from globalization, such as through the export of construction products and services.

This study chooses 12 SSVs that are allied with those seven strategic trusts above. Not all 12 variables are used by Malaysian construction companies during the economic downturn. Therefore only variables that are used most are considered as the importance SSV findings.

Research Framework: Figure 2 shows the research framework for this study. The framework relates the of economic environment construction industry in Malaysia. The analysis focuses on the type of SSVs that construction companies used during the economic downturns in order to remain competitive and survived in each period; 1984-1987 and 1996-1999. By comparing the performance of construction companies during both periods of downturn, this study compares the performance of SSVs for the both periods by ranking them in accordance to the responses of the Malaysian contractors. In this way the researchers can differentiate the kind of response for each SSV foreach period of downturn. It is argued by Ansoff [cited in 27] that each of strategy prescriptions

provides a solution only to a particular situation and scenario and that there are no universal prescriptions for management success. Companies operating in different environments need different types of strategic prescriptions to succeed.

Research Method: This research used survey method for collecting data where questionnaires were used as a prime source of the primary data. Each questionnaire was divided into four main sections that cover; respondents' background, firm's background, firm's performance and survival strategies. The first stage involved identification of contractors that survived the two periods of slump. The second stage entailed the gathering of information from the contractors that have survived on their strengths and the survival strategies that help them remain successful till today. The respondents of this study were large construction companies established in the early 1980s and classified under grade G7 by the CIDB. The respondents were randomly selected from various regions of Malaysia, including Penang, Alor Star, Ipoh (representing the Northern region), Kuala Lumpur and Klang Valley (Central region), Kota Bharu and Kuala Terengganu (Eastern region) and Johor Bahru (Southern region). Questionnaires were sent to a sampling frame of 600 respondents by postal service. From 600 disseminated. 175 of questionnaires them only 152 or 25.3% of returned.However, questionnaires were completed and useable. Data was analyzed using relevance statistical method such as frequency and one way ANOVAto establish findings.

RESULTS AND DISCUSSION

Respondent's Background: From the analysis, the job designations of respondents are mainly engineer/quantity (26.7%), manager (20%). Other positions of respondents are project manager (16.7%), managing director (13.3%) and general manager (3.3%). In term of status of firm of respondents, 77% were from private limited, 10% come from sole ownership, 7% from public limited and only 3% were from partnership. In term of value of firm's annual work of respondents, 28% of the respondents were involved in projects worth more than RM 30 million, 24% of the respondents from project worth between RM 5 million – RM 10 million, 17% of the respondents from projects worth more than RM 5 million and 14% of the respondents were from projects worth between RM 11 million - RM 15 million.

Achievement of First Objective

Survival Strategy Variables: Table 1 shows the result of the one-way ANOVA that compares the survival strategies used by the construction companies during the economic downturns in 1984 to 1987 and 1996 to 1999. The result shows that most of the top 10 survival strategies adopted in the first downturn remained among the top strategies in the second downturn, but their rankings had significantly changed.

Those discrepancies illustrate how the Malaysian construction companies responded to two economic down turns which are discussed separately in fulfilling the second research objective.

Achievement of Second Objective

Survival Strategy During Recession in 1984-1987: Table 1 shows that the most important strategies used by construction companies during recession 1984-1987 were management style which had been ranked 1 followed by

market penetration, quality improvement, market development, product development as the top five strategies. Meanwhile problem solving skill, diversification product and acquisition are in the same ranked of six. The rest strategy variables in sequent are technology structure, organizational structure, portfolio planning, and culture development.

During the recession in the mid-1980s, Abdullah [8] found out that the measures undertaken by the government to weather the impact of the international recession further weakened demand for construction. These measures included rationalization of public expenditure, reduction in the availability of credit, increase in the cost of mortgage loans, and temporary freeze on housing loans for government workers. The decline in construction activities led to negative annual growth rates for the company from 1985 to 1987. During this period, the construction companies used the flexible management style as the number one strategy of survival.

Since government froze some of the national and international construction projects to reduce public spending, construction companies must survive with innovation in market penetration especially for companies who have strong financial backup. As a consequence, the Malaysian government was forced to reduce public spending, reduce popular demand for imported goods, and use monetary policy to facilitate growth and provide liquidity for private investment. It reduced interest rates and restructured its long-term foreign debt [28].

Abdullah *et al.* [8] find that the recovery of the economy follow with an improved external environment and adjustment efforts undertaken by the government, have also resulted in increased public and private investments and the recovery in construction demand. The industry's annual growth rate rose sharply from 2.28 % in 1988 to 12.96 % in 1989. The recovery policies inter alia:

Table 1: Survival Strategies applied during Two Period of Economic Downturn in 1984-1987 and 1996-1999

Survival Strategic Variables (SSV)	Recession 1984-1987			Recession 1996-1999		
	Mean	SD	Rank	Mean	SD	Rank
Management Style	3.84	.806	1	3.93	.836	2
Market Penetration	3.81	.628	2	3.82	.715	3
Quality Improvement	3.78	.823	3	3.94	.838	1
Market Development	3.73	.671	4	3.81	.734	4
Product Development	3.71	.786	5	3.78	.681	5
Problem Solving Skill	3.61	.838	6	3.77	.903	6
Diversification Product	3.61	.869	6	3.50	.956	12
Acquisition of Resource	3.61	.772	6	3.60	.836	10
Technology Structure	3.58	.751	7	3.65	.744	9
Organizational Structure	3.57	.778	8	3.69	.778	7
Portfolio Planning	3.38	.875	9	3.67	.897	8
Culture Development	3.32	.835	10	3.51	.933	11

- In stimulating the economy and revitalising the
 construction industry, the government promoted
 private sector investment in low-cost housing and
 revive housing projects which had been abandoned
 by the private sector during the recession. The
 prevalence of more realistically and affordably-priced
 housing units and the more attractive end-financing
 packages offered by financial institutions, facilitated
 the recovery in the demand for private residential
 buildings.
- Increased public sector expenditure on road works and the country's industrialization programmes, which were enhanced after the mid-eighties recession, has provided further relief to the contraction industry. The amendments to the National Land Code in 1986 which liberalised foreign ownership regulations on landed properties have attracted foreign capital. There was an influx of foreign investments on commercial and residential buildings.
- A significant impetus to the recovery of the construction industry was the privatization policy undertaken by the government to consolidate public sector finances

Survival Strategies During Recession in 1996-1999:

Since it was a recession (second time) then it is not surprised to found out the top five survival strategy variables used by Malaysian construction companies are the same with previous recession. The differences for this time is the sequence, the most important one is quality improvement variable (ranked number 1 in Table 1). While the rest of the top five survival strategy variables are management style, market penetration, market development. Therefore developmentand product responding termination of some projects by government and credit contraction, same with previous recession, construction companies focused in flexible management style and breakthrough in market penetration together with evolving market and product development. The construction industry of Malaysia soon had to innovate operational and productivity instruments to gain a competitive advantage in local and global markets [29]. The rest of the strategy variables are the following: problem-solving skills, organizational structure, portfolio planning, technology structure, acquisition of resource, and culture development.

According Lindgren *et al.* [30], the crisis was infected by the large current account deficits; concentration of bank loans in real estate development and financing share purchases; weaknesses in domestic financial system; poor governance and risk management; and too much international borrowing in the corporate sector. Specifically Athukorala [31] mentioned how Malaysia Government exaggerates credit for property projects before hit by the financial crisis:

- Bank Negara Malaysia (BNM) repeatedly pointed to the risk of rapid credit built up with a heavy concentration in property and share trading loans in the banking but failed to take any action to redress the problem. The total cost of various infrastructure projects under construction by 1996 was USD 62 billion included one of the most modern airport in Southeast Asia, Kuala Lumpur International Airport (KLIA) (USD 3.6 million) and an ultramodern administrative capital, Putrajaya (USD 8 billion). These projects were mostly contracted to private companies in the patronage network, which provided the political base of support for the regime. These companies soon became the dominant players in the share market. The construction boom also contributed to the credit boom as providing 'easy' credit to the construction companies from politically connected banks and other 'captive' financial institutions was an implicit condition built into the contractual arrangements.
- Another source of public expenditure blowout was an aggressive overseas investment promotion campaign, implemented with the direct involvement of Prime Minister Mahathir as part of desire to promote Malaysia's image as an economic leader in the third world. Annual overseas investment (mostly in construction and real estate development) by Malaysian companies increased to USD 3 billion by 1996. Off-budget financial support, mostly in the form of government sponsored bank loans, was a key element of the incentive package offered to these investors.

However, it cannot be generally concluded that the currency and capital controls were specifically responsible for the turnaround in the economy [11]. To be truly effective, attention must be paid to crafting policies on education and human resource development, improving the technological infrastructure, expanding the Asia-Pacific market [Soesastro cited in 11] and moving away from dependencies on migrant labor [AbuBakarcited in 11]. There was a consensus among the abovementioned ideas that the element of poor governance could not be separated in explaining the crisis. Corporate

governance has been actively promoted to the Malaysian corporate sector in a period after the crisis. Measures have been taken to improve the aspects of fairness, transparency, accountability and responsibility in running the organizations [12]. Meanwhile the implementation of privatized projects as well as the expansion of government fiscal spending particularly on infrastructure and residential projects has further supported the growth of the construction industry [8].

Comparing the Two Period of Recessions: It is a fact that since the 1960s, Malaysian construction companies have not changed much in terms of technology. They still depend on old conventions on building techniques. The local construction industry needs to undergo a marked evolution of its old construction practices. It must radically upgrade management and technological capabilities to meet even more exacting standard of building performance in the future. Companies that embrace new technologies, innovative processes, collaborative partnerships, improved safety standards, reduced litigation costs through arrangements will have a significant advantage over those that continue to observe old practices. Only with enhanced capabilities and capacity can the industry withstand challenges [29]. Quality improvement is supposed to be followed contiguously by technology structure. Unfortunately, based on practices seen in the two periods of recession, this variable is not seen as priority by Malaysian construction companies.

The top five survival strategy variables for both recessions are tends to focused in management, marketing breakthrough and product development where from literature review it is supported more from modern survival strategies, see [15, 18-21]. Meanwhile the rest seven survival strategy variables in both recessions majority comes from old-fangled theories, especially for diversification product [14, 22] and problem solving skill, acquisition of resource, and organisation structure [16]. Except for technology structure [29] and portfolio planning [17]. Therefore there is correlation and impact between the evolutions of survival strategy theories with the practical practices in the construction industry.

Overall, the different emphasis on the survival strategies during the 2 period of the economic slumps can be a tribute to the early age of the contractors during the first period of economic slump where the emphasis was more on companies' development and during the second period, when the contractors have reached a higher level of maturity where emphasis is more on increase competitiveness.

CONCLUSION

Faced with volatile environment, sound strategy formulation should help construction companies survive and sustain growth. The findings from this study are expected to serve as a lesson and guide for construction companies in Malaysia in facing any economic downturn in the future. This study contributes to some extent to the empowerment of Malaysian construction companies in term of surviving the economic slowdown. From the finding, there are differences of priority for survival strategy variables comparing two periods of economic slump. However among the top key SSVs found were management style, market penetration, improvement, market development, and product development. The implication on the current practice is that the key SSVs that were found to have greater impact on the survival strategy should be a guide for contractors in Malaysia to face future economic down turn. However, the influence of environment need to be taken into consideration in any decision that leads to adoption of any of the key SSVs discussed above.

The real world is obviously more complex than what could be analysed through static reliance on a single field of theories. Recent research shows that the most important factor determining the competitiveness and profitability of organizations is the extent to which they match their strategies and capabilities to the environment in which they operate [27]. One of the limitations of this study is this research was carried out in Malaysia, the findings might not applicable to the rest of the world. Beside that the survival strategy variables need to be cultivated by developing other important resource and competencies that is still limited in this study. Further research can also be carried out on the impact of these top key SSVs on the companies' performance in future researches.

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