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CONSTRUCTION BUSINESS UNDER ECONOMIC CRISIS: RESPONSES FROM THAILAND

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Abstract

The Construction industry has contributed significantly to the economic development of Thailand. However, due to economic crisis which began in July 1997, the growth of the construction industry declined to unprecedented low levels. This became a big problem in the country since the construction industry is a labour-intensive industry and it also affects the other industries as well. Some companies have responded to the crisis by implementing a number of measures to survive. In addition, the Thai government has introduced some policies to reduce the impact of the crisis on contractors. However, these measures seem inadequate, as other integrated survival strategies are needed to enhance the long-term development of the industry. Maintaining good relationship with other stakeholders seems necessary in the struggle to break out of the crisis. However, it should be supported by good attitude and intention from all of the stakeholders.

Introduction

This paper describes the construction business during the economic crisis in Thailand. It starts with a review of Thailand's economic condition and the crisis. Then the performance of Thailand construction industry during the crisis is reviewed by showing major factors for business failures and the factors that affected business decisions on entering the industry. Responses towards some severe economic issues from four top construction companies in Thailand are also presented. The paper is based on the researches done in the School of Civil Engineering and the School of Management in the Asian Institute of Technology, Thailand.

Thailand's Economy and the Economic Crisis

Thailand experienced amazing economic growth from 1986 to 1996. It attained two digit economic growth during the period 1988-1990 and around 8-9% in the period 1991-1995 (Table-1). Besides the cheap production facilities available in Thailand, the economic growth was driven by several economic factors such as: increasing export, increasing public investment on infrastructure, expansion in the production capacity of private investment, and boost in agricultural output (Bank of Thailand, 1989-96). During the boom period, higher domestic expenditure was caused by the increase in private consumption significantly as a result of the higher income in non-agricultural sectors, such as real estate, trading, export, tourism, and increasing income. Therefore, the domestic purchasing power showed a higher trend which signaled to the investors to increase investment. Private investment significantly expanded from 1987 up to 1990 with the growth of 41.1%, 41.9%, 37.4% and 36.2% respectively due to foreign investment as a result of relocating production bases from Japan and other newly industrialized countries (NICs). However, due to rapid investment in 1990, the growth rate in 1991 declined to 15.2%. Meanwhile, the public investment sector increased by 43% in 1990 and 35% in 1991 with emphasize on infrastructure projects such as roads, expressways, ports, and basic utilities.

Table 1 Selected Key Indicators

Items	1983	1984	1985	1986	1987	1988	1989	1990	1991
Population (Million People)	49.68	50.64	51.58	52.51	53.43	54.33	55.21	55.84	56.51
Growth rate (%)		1.93	1.86	1.80	1.75	1.68	1.62	1.14	1.14
GDP at Constant 1988 Price (Billion Baht)	1,076	1,138	1,191	1,257	1,377	1,560	1,750	1,945	2,131
Growth rate (%)		5.75	4.65	5.53	9.52	13.29	12.19	11.17	11.17
Construction (Billion Baht)	54	59	59	60	66	74	96	117	138
Growth rate (%)		10.45	0.20	1.47	9.85	12.70	28.35	22.03	22.03
Interest Rate on Saving Dep. (%)	8.5	9.00	8.50	5.50	5.50	6.75	7.25	11.00	11.00
Average Exchange Rate (Baht)	23.00	23.64	27.16	26.30	25.72	25.29	25.70	25.59	25.59

Items	1992	1993	1994	1995	1996	1997	1998	1999p	2000
Population (Million People)	57.29	58.01	58.71	59.4	60	60.6	61.2	61.81	62.4
Growth rate (%)	1.27	1.26	1.21	1.18	1.01	1.00	0.99	1.00	1.00
GDP at Constant 1988 Price (Billion Baht)	2,283	2,474	2,695	2,946	3,120	3,075	2,743	2,859	2,946
Growth rate (%)	8.08	8.38	8.95	9.31	5.88	1.45	10.77	4.22	3.00
Construction (Billion Baht)	139	151	172	184	197	145	88	84	84
Growth rate (%)	4.68	8.66	14.15	6.95	6.87	26.40	38.95	5.38	0.00
Interest Rate on Saving Dep. (%)	6.25	5.00	5.00	5.00	5.00	5.00	4.50	3.00	3.00
Average Exchange Rate (Baht)	25.40	25.32	25.15	24.92	25.34	31.36	41.36	37.81	37.81

Source: Asian Development Bank

Due to insufficient assembly of domestic saving and in order to cope with the rapid growth of investment, domestic investors turned to foreign sources for funds. These foreign sources were mostly in the form of short-term foreign currency debts. This condition caused huge deficits in the current account which exceeded the official reserves. Most of the investments were in the speculative products such as stock market, land, housing and condominium and only small amounts were invested in productive activities such as agriculture and manufacturing.

The first sign of the economic crisis was indicated by the collapse of the property sector in the country with total debt around 800 billion baht. Developers were faced with problems of cash flows and defaults on interest payments. In addition, this non-performing loans condition affected the ability of banks and financial institutions to pay back the foreign lenders. As a result, many financial institutions and banks were suspended or closed permanently. The domino effect then affected the other sectors causing severe shrinkage in production, investment, employment of labor, and consumption.

Performance of the Thai Construction Industry

During the booming period, the Thai construction industry experienced a growth rate of 28.3% in 1989 and 22% in 1990.

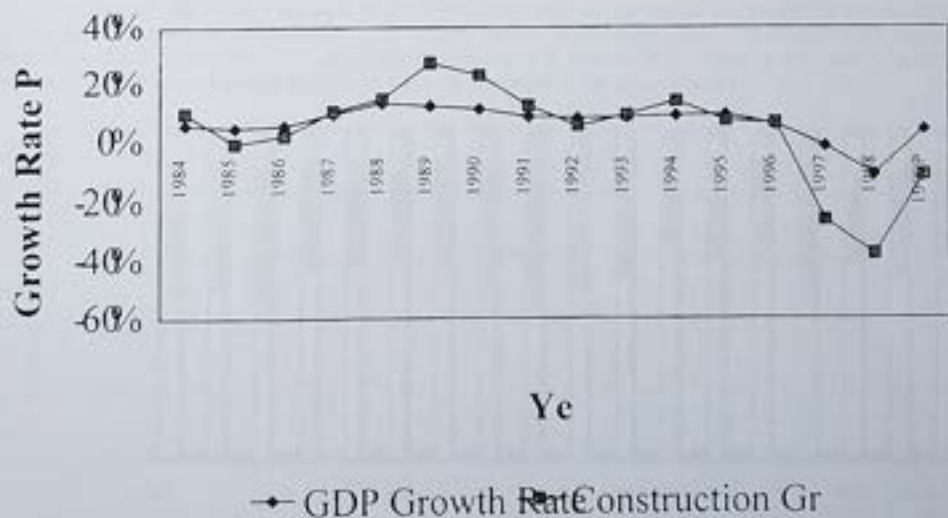


Figure 2 GDP growth rate and Construction growth rate
Source: NESDB and Bank of Thailand

The growth rate then reduced to 13.6% in 1991 and further decreased to 4.7% in 1992 due to the decrease in the national economic. In recent years, the construction industry has been experiencing negative growth rate of -6.9%, -26.4% and -38.9% in 1996, 1997 and 1998 respectively. Thus, the economic situation was the main factor that affected the performance of the Thai construction industry. Figure 2 shows the growth rates of national GDP and the construction industry, while Figure 3 shows the construction investment expenditure on GDP for both public and private sectors in Thailand from 1984 - 1999

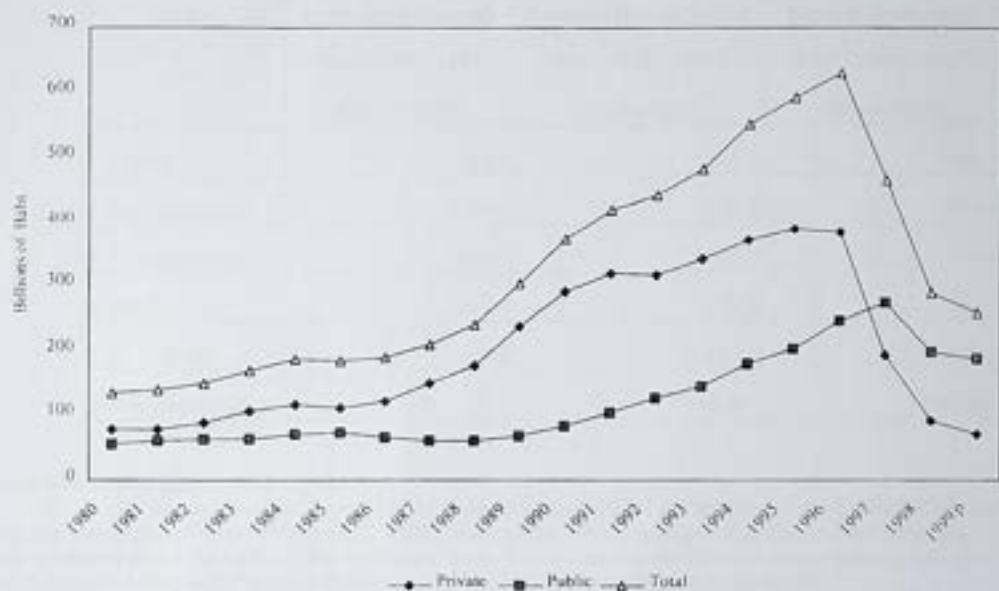


Figure 3 Construction Investment Expenditure on GDP at 1988 prices
Source: Bank of Thailand

In the private sector, the bulk of the investment was concentrated in residential development, such as real estate, condominium. About 50% - 60% of this investment was in the residential development. Meanwhile, the second place is in commercial building, it is around 30% - 40% and industrial sector covers only 7% - 10%. Figure 4 shows the percentage comparison of the project types

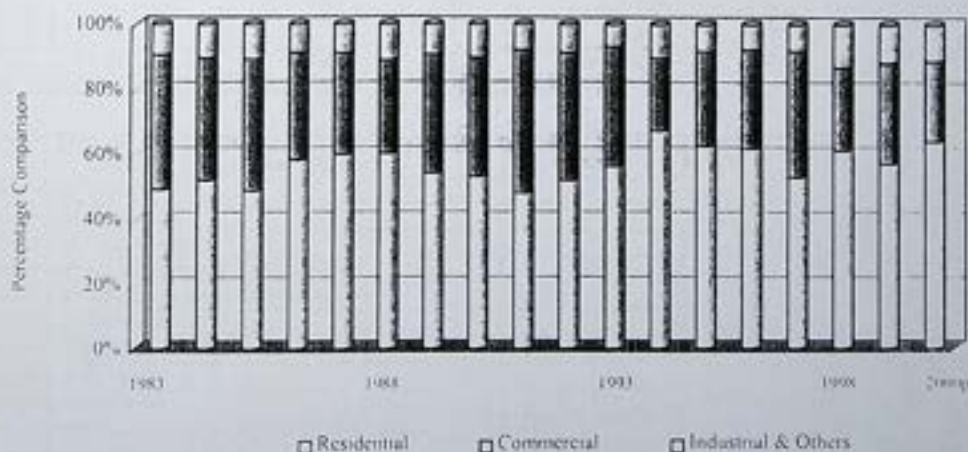


Figure 4 Percentage comparison in the private sector by project types
Source: Bank of Thailand

In the public sector, the demand was more stable than the private sector. However, the national development plan shows that for the energy, communication, transportation and utilities sectors, there is a significant increase in the Seventh Development Plan (1992-1996) and the Eight Development Plan (1997 - 2001) as shown in Table 2.

Table 2 Construction Budget in Development Plan

Items	Sixth Development	Seventh Development	Eight Development
	Plan (1987 - 1991)	Plan (1992 - 1997)	Plan (1997 - 2001)
	(Billion Baht)	(Billion Baht)	(Billion Baht)
1. Energy	233.8	359.8	885.0
2. Communication	69.5	248.8	612.0
3. Transportation	189.1	567.9	1,379.0
4. Utilities	29.4	106.8	262.0
Total	521.8	1,283.3	3,138.0
Percentage change		145.94	144.53

Source: NESDB

Responses to the Economic Crisis

During the economic crisis, a total of 884 construction related companies, out of which 699 are contractors were closed down (Thitipaisan, 1999). Meanwhile, 90 companies abandoned their jobs due to liquidity problems since they are unable to finance work. Table-3 shows the number of companies that were closed during the crisis, while Table-4 shows the number of contractors that abandoned jobs.

Table-3 Number of Closing Construction Companies: 1 October 1997 - 1 June 1998

Registered Capitals	Number	Percent	Summary of Capitals (Thousand Baht)	Percent
Less than 1 million Baht	173	19.6	64,290	3.9
1 mil. - 2 mil. Baht	523	59.2	536,820	32.2
2 mil. - 5 mil. Baht	120	13.6	288,400	17.3
5 mil. - 10 mil. Baht	32	3.6	166,200	10.0
10 mil. - 50 mil. Baht	34	3.8	460,000	27.6
50 mil. - 100 mil. Baht	2	0.2	150,000	9.0
Total	884	100	1,665,710	100

Source: Thai Contractors Association News, Sep. 1998, pp. 38-39

Table-4 Number of Contractors that Left the Jobs (classified by ministry and department)

Ministry/Government Agency	Number
Ministry of Interior	38
Ministry of Education	21
Ministry of Public Health	10
Ministry of Agriculture and Cooperatives	5
Ministry of Transport and Communications	4
Ministry of Defense	3
Ministry of University Affairs	3
Ministry of Finance	1
Ministry of Industry	1
The Electricity Generation Authority of Thailand	1
Fish Marketing Organization	2
Liquor Distillery Organization, Excise Department	1
Total	90

Source: Thai Contractors Association News, Sep. 1998, pp.52

Those companies could not survive in the crisis due to many factors. In terms of business failure, Ladpala (1999) showed the most serious factors responsible for failure from contractors' point of views is economic condition. The contractors think that the force from the crisis is beyond their control. Managing cash flow, asset and capital are considered to be the second major factor responsible for company failure. The third factor is customers (private sector). Due to economic crisis, the companies found it difficult to collect money from their customers and moreover, the customers are unwilling to compensate fully for price escalations. The fourth factor is human resource ethics. This concerns fraudulent practices. Ladpala's survey of 12 construction companies in Thailand identified the major factors influencing business decision to enter construction industry at establishing time and during the economic crisis situation. At the time of establishment, relationship with clients is the leading factor that influenced business decision to enter the industry. It is followed by source of finance, experience in construction and economic condition as the second, third and fourth factors respectively. However, there is a position change during the crisis. Then, source of finance become the leading factor influencing business decision to enter the industry. Second placed is economic condition, followed by experience in construction, and relationship with client. Related to the business failure in the industry, the knowledge areas of the companies in preparing for business before entering the industry, only 58% of the twelve contractors had preparation on knowledge about economic conditions. Meanwhile, 92% had good knowledge of construction business management and construction techniques. Consequently, they encountered problems in drawing up company strategies.

Prathumsuk (1997) showed that there are twelve economic issues brought by economic crisis which adversely affect the four top players of construction companies in Thailand. Those four top players are public companies that have registered with the Stock Exchange Commission. The issues are:

- Devaluation of Baht: Since the companies are the top-players in the industry, technology-orientation with foreign-made machineries and equipment have been employed. Foreign loans have also been utilized for the companies' operations.
- Increase in Value Added Tax (VAT) from 7% to 10%: It narrowed down the purchasing power of the private clients, it also increased capital spending.
- Interest rates increases: This caused capital cost to increase in the companies.
- Property sector collapse: Two of these companies concentrated in the private sector. The collapse of property sector severely affected the liquidity of those companies.
- Government Austerity Program (Budget Cuts): Postponement and cancellation of government contracts due to inability of government to pursue the projects further, limited the demand in the industry.
- Closure of 58 financial companies: Created liquidity problems in private sector and affected the clients who are dependent on loans from those financial companies.
- Stricter bank credit requirements: This affected the cash flows of the companies and also obtaining funding became harder.
- Energy price increases (e.g. oil, gas): It increased operating costs.
- Construction materials price increases: It increased operating costs.
- Labour wage increases: It increased operating costs.
- High inflation: It increased operating costs.
- Political instability: This caused the stoppage of work due to conflicts with public interests or public protests. It also caused halting of foreign investment in the country.

The organizational responses of the companies to those economic issues brought by the economic crisis are shown in table-5.

Table-5 Organizational Responses of the Companies to Economic Issues brought by the Economic Crisis

No.	Economic Issues	General Responses
1	Devaluation of Thai Baht	<ul style="list-style-type: none"> • Slowed down on imports of equipment and other machineries • No new hiring of foreign employees • Extended foreign loans • More international projects
2	Increase VAT from 7% to 10%	<ul style="list-style-type: none"> • Add in the cost of projects • Get more turn-key projects
3	Interest rates increases	<ul style="list-style-type: none"> • Enter only into long-term contracts • Speed up project completion • Cut back investments
4	Property sector collapse	<ul style="list-style-type: none"> • Go for more public projects • Strictly select only reputable private firms • Strictly monitor the financial condition of the clients and make sure of payment.

5	Government Austerity Program (Budget Cuts)	<ul style="list-style-type: none"> Negotiate changes and delays Concession-type of works
6	Closure of the 58 financial companies	<ul style="list-style-type: none"> Monitor clients with financial troubles due to "closure" and negotiate ways for payments
7	Stricter bank credit requirements	<ul style="list-style-type: none"> Screens and prepares complete documents for the bank The main shareholders need to support financing Apply credits only for very attractive projects
8	Energy price increases	<ul style="list-style-type: none"> Effect strict savings Add additional costs in new contracts
9	Construction materials price increases	<ul style="list-style-type: none"> Effect strict savings Long-term contract with suppliers
10	Labour wage increases	<ul style="list-style-type: none"> Sub-contract most of the works requiring high labour force
11	High inflation	<ul style="list-style-type: none"> Strict budget monitoring and more effective planning Cost saving/cost-cutting measures
12	Political instability	<ul style="list-style-type: none"> Monitor payment Build relationship with the government

Source: Prathumsuk (1997)

In the management and control system, there are no significant changes. Three of the companies who applied centralization system still keep the system. However, information technology is used more in order to have a good monitoring and control of operations and budget. Meanwhile, one company with decentralization system due to its geographical location of its other companies, and as the company has down-sized become independent, the control is now done by using matrix type. In the management and supervision, participation from top management on financial matters has increased.

The actions taken by the companies during the crisis were not necessarily the best actions or without consequences. Table-6 shows the possible consequences from the responses of the companies.

Table-6 Organizational Responses of the Construction Companies and their Consequences

No.	Organizational Responses	Possible Consequences
1	Cut on organizational expenditures	<ul style="list-style-type: none"> May have adverse effect on the organizational standards, such as reduce quality or workmanship, reduce coordinating among departments in the organization
2	Re-structuring and down-sizing	<ul style="list-style-type: none"> Confusion and complication in new job specifications Relational interaction among the re-structured grouped will take time to achieve synergy, as people and tasks were changed to fit the new structure
3	Stop investments	<ul style="list-style-type: none"> May further hamper the company's growth during crisis, since competitive advantage can be acquired by investing in current available projects like: concession and privatization
4	Postpone expansions	<ul style="list-style-type: none"> May cause the company to loose the chance of attracting clients
5	Cut manpower requirements	<ul style="list-style-type: none"> Will show the inability of the firm to 'maintain stability' of its human resources in times of crisis, becomes a negative asses for the company in the future recruitment
6	Seek new market	<ul style="list-style-type: none"> Can be faced with high-risks, as other markets could turn out to be more turbulent than Thailand, moreover, the inability to view the new market just like how it views the local market, pauses big danger
7	Usage of information technology	<ul style="list-style-type: none"> Very costly and if not properly planned and designed could become a total wastage of highest value to the company
8	Not to enter into short-term credits abroad	<ul style="list-style-type: none"> May loose the chance of entering into new contracts due to capital constraints
9	Employ cost-saving measures	<ul style="list-style-type: none"> May inhibit the chance to maximize inputs and outputs Cause objections from staff and management May affect that part of organization that needs maximum resources
10	Utilization of local resources	<ul style="list-style-type: none"> Companies are top-players and all technologically capacitated, hence local resources (technological) are

		either not available, insufficient or are inferior as compared with the highly-tech ones made abroad
11	People in the organization are kept well-informed of the changes and actions	<ul style="list-style-type: none"> Negative output may cause confusion (especially due to unpredictable periodic changes) Inflict low-morale of the personnel Negative outputs and information (even temporary) could spread outside the walls of the company, which, could be damaging to its reputation
12	Seek full cooperation and inflict discipline to management and staff	<ul style="list-style-type: none"> May not gain full support of the personnel and management As most of the Thai workmen have been inclined to become easy-going and spoiled by the comforts of the past economic boom, hence any disciplinary measures may take some time

Source: Prathumsuk (1997)

Meanwhile, the government tried to relieve the suffers from liquidity problems by launching several actions (Thitpaisan, 1999), such as:

- For the projects that had contract before 2 July 1997, the duration can be increased 180 days and 120 days for projects after that date.
- The contractors are not required to submit bank guarantee when requesting retaining fees.
- The government repealed the deduction of retaining fee for every contract in the public sector.
- The advance payment has been increased from 10% of total value of projects to 15%.
- Reducing working guarantee period from 2 years to 1 year.
- Approving payment duration has been expedited within 10 days.
- Compensating the contractors due to escalation of construction materials.

Proposed Actions to Develop the Industry

Several actions have been taken by the contracting companies in Thailand in order to survive in the economic crisis period. The government has also undertaken some measures to relieve the problems even though the effects are limited to the public sector. However, these measures are still not enough for the contractors to develop in the near future. The contractors are facing more challenges such as globalization and Asean Free Trade Agreement (AFTA). Not only do Thai contractors need to take other actions immediately, but the government also needs to act. Moreover, the government has introduced a free market legislation in 1999 that allow foreign companies to enter the Thai construction industry.

Some strategic actions that could be taken by the contractors and the government in facing the AFTA era are as follows:

For the contracting companies:

- Keeping the cost-cutting policy in the organizations by not neglecting the quality of work and balancing with the priority needs of information technology. Increase productivity (efficiency and effectiveness) in the organizations
- Merger with other construction companies in order to provide better services (contractors and contractors, contractors and designers, or contractors and suppliers)
- Maintaining good relationships with the suppliers and create mutual understanding. It may create a system where the contractors and the suppliers may have a win-win solution in the crisis period
- Maintaining good relationships with the financial institutions (local or foreign) by maintaining the credibility of the companies.
- Seeking other attractive construction markets abroad.
- Have a coordination with government and other professional associations or agencies in simplifying the procurement system and procedure (clear, transparent and fair), strengthening the law and regulations
- Have a coordination with the education institutions and other R&D centers in doing research and development and in developing the human resources of the organizations.

For government, the following can be done:

- Works together with the professional associations or agencies in straightening the procurement system and procedure, law and regulations. Create a fair and transparent environment for doing business in Thailand
- Reduce corruption or any other improper practices in the industry.
- Maintain stable legal-political and socio-economic environment. Control the macro-economic condition of the country and provide legal assurance to investors.

- Provide supporting factors (regulations, tariff, as a facilitator, stimulator, etc) and leave the detail development to the market system.
- Improve the education system that benefit the construction industry and the country as a whole.

All of the strategies should be implemented based on good attitude and the good intention of helping each other to get out of the crisis and succeed in the globalization era.

Summary

Thailand has experienced construction boom in the past. However, the economic crisis has caused the construction industry to suffer and it now needs serious attention. Some large companies have taken several actions that might save them from the crisis. Cost-cutting policy, freeze on investments, restructuring and downsizing, going for more public works, strict selection of credible clients in the private sector and more involvement from the management in the financial management are some of the approaches adopted. The government also tried to relieve the problems by launching several actions. However, all the actions taken thus far can help only the organizations. Meanwhile, additional actions are needed to develop the industry on long-term basis, especially as it faces the globalization and AFTA era. Integrated strategies, good attitude and intention are needed to break out from the crisis and succeed in the future.

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