



## Research on Cost Control and Management of Real Estate Project

Qun Gao

School of Business Administration, Nanjing Institute of Industry Technology

Nanjing 210046, China

E-mail: g.qun@163.com

### Abstract

This paper takes the cost control and the management of real estate project as the object in research, and analyzes and studies relevant issues. By analyzing the cost structure of real estate construction, this paper identifies problems in cost control and management of real estate construction at present. Besides, this paper puts forward measures for cost control and management of real estate construction, with the hope of offering useful ideas for this issue.

**Keywords:** Real estate project, Cost control, Management

Along with the fast development of China's economy, the real estate industry has achieved wonderful successes, pulling economic development significantly, and contributing a lot to China's economic development. Today, real estate construction assumes more tasks. In 2008, 3,000 billion RMB enters real estate construction. The cost control and regular management of real estate construction turns into the focus. For real estate construction projects, the investment is lasting and high. And lots of agencies, institutions, and people take a part in real estate construction projects. Therefore, the cost control and management is more complicated and has multiple levels. Once the construction cost is out of control, it will lead to a great waste and will bring about more pressures for property management in later. A nice cost control is meaningful for the whole real estate construction project. To realize better cost control and management of real estate construction is important for today's harmonious society.

### 1. Cost Structure of Real Estate Construction Project

The cost of real estate construction is composed of four parts.

The first part is the land cost, accounting for 30% of the total cost. It mainly refers to cost for building land, greening land, equipped facility land, and property management land.

The second part is the construction installation cost, as the main body of real estate construction cost, accounting for 20%-50% of the total cost. Among the construction installation cost, materials cost the most, accounting for 60% of construction installation cost.

The third part is the cost for equipments and machines, accounting for 1%-3% of the total cost. This part is mainly for meeting the needs of operations, management, and maintenance.

The fourth part is other cost, accounting for more than 15% of the total cost. It is difficult to control this part. It mainly includes the cost for investigation and design, the cost for project supervision, and the cost for infrastructure. In special, the management cost usually surpasses the budget, which is the largest part that is hard to control in real estate construction. The management cost is only accounting for 1% of the total cost. But the absolute amount is large. It is easy for the construction company costing more in management.

### 2. Problems in Cost Control and Management of Real Estate Construction

At present, serious problems exist in the cost control and management of real estate construction. For example, for some real estate construction, the design is earlier than the study of feasibility, which makes the later turn into useless. In bidding, some construction companies perform illegally, which makes the bidding fail to control project cost well. The popularization of assigned subcontracts and various subcontracts serve as potential threats for project quality. The delay for project payment, especially for workers' wages, is serious. Some projects can not manage the changes of designs. Construction companies fail to follow the designs completely, which may lead to larger costs for construction. Some construction companies emphasize on the control of quality and period but fail to control the cost. All these activities make the cost of real estate construction out of control in China, which is harmful for the sustainable and healthy development of real estate industry.

### *2.1 Fail to Estimate the Project Exactly*

Investment estimation is performed at the very beginning, namely in the study of feasibility. Present compilation of study of feasibility is lack of details. No effective items to control the number of project. The estimation has a lower preciseness. Besides, the study of feasibility has no necessary investigation. Some potential geological disasters can not be identified effectively, which leads to the rise of costs. Although some companies make “details for implement”, the effect is poor. In order to establish the project, some companies may reduce the number of project and decrease costs.

### *2.2 The Compilation of Project Budget Has Poor Reliability*

At the stage of design, the investigation is far from sufficient. Some fundamental materials for design are inexact. As a result, the design may be irrational and will be changed significantly in construction, which causes the poor reliability of budget.

### *2.3 Working Drawing Budget is Unpractical*

At the working drawing design stage, compile the project budget according to the design. The working drawing budget is to calculate the cost of design. The rationality of working drawing budget is about how to organize the construction and how to reach the design requirements by what kinds of methods, plus how to arrange the construction period, and how to manage workers and machines under different seasons, according to scientific designs. All these tasks are supposed to be arranged by construction companies. For design companies, to compile the budget is unpractical.

### *2.4 Do not Follow Basic Construction Procedures and Can not Control Costs*

For some projects, time is urgent. Therefore, the design is maybe imperfect. And the construction does not follow the basic procedures strictly. Sometimes, the study of feasibility turns into useless papers. As a result, the estimation and the budget can not control the project cost effectively.

### *2.5 Contract is not Managed Well, Especially for Subcontracts and External Workers*

Some real estate developers neglect to manage contracts. They do not follow the terms written in contracts strictly. Besides, some developers can not calculate the cost of project quantities correctly. They are incapable of managing external workers effectively.

### *2.6 Irregular Management and Many Changes for Project*

Real estate developers can not design properly and have to change the management methods. Or, the execution is weak. They can change the design as will. Then, the scale of project is increasing and the cost is rising.

### *2.7 The Financing Structure is Unreasonable and Depends on One Financing Channel too Much, Which Contributes to the Rise Of Costs*

At present, the funds for real estate construction in China are mainly from domestic loans, foreign funds, self-collected by construction companies, and other sources. Although financing ways are few and some are immature, limits are more. Sometimes, funds can not arrive in time. In order to insure the process of project, the construction companies have to apply loans from banks. Therefore, a large proportion of construction funds are from banks as loans. And the credit period is long and can not match with investment return. The characteristics of real estate industry determine the lagged-behind investment return. One financing channel increases risks and costs, which leads to the accumulation of loan balance in banks, increasing construction costs and pressures for later in operation.

### *2.8 Cost Management is Unscientific. Lack the Idea of Cost Control. System is Imperfect. Management Cost Is High*

By auditing lots of projects, we find that management is one of factors that cause overspending. Main items that cause overspending include management fees, compensation fees for removing, and supervision. Main reasons include: Lack a perfect cost control system and can not manage and control the cost systematically, which makes it hard to identify the out-of-control of cost in time. Lack the idea of cost control and the constraint mechanism. Project managers are always focusing on quality and construction period, but not cost control. The absence of system makes the expenditure more irregular. No integrated standards for management fee are effective. Workers are more than necessary in construction companies.

## **3. Measures for Cost Control and Management in Real Estate Construction**

### *3.1 Build Up a Scientific Management System for Real Estate Construction and Perfect Relevant Equipped Measures*

(1) The key for cost control is to build up a scientific management system, perfecting relevant equipped measures, and actualizing the separation of “investment, construction, management, and use”.

(2) Reform present construction procedures and make the construction more rational. Simplify administrative approval process and strengthen the approval system.

(3) Build and perfect the supervision of government. Impose effective supervision over real estate project's

investigation, design, bidding, construction, and supervision. Perfect the supervision in construction.

(4) Regulate the investigation, the design, the bidding, and the construction in project. Avoid false bidding and reduce potential risks.

(5) Build a supervision system for investigation and design. Improve the effectiveness of cost control at the very beginning.

### *3.2 Build and Perfect the Cost Control System and Implement a Whole-Process Control Over Costs*

Build and perfect the cost control system. Form an organization to control cost during the process of design, bidding, construction, management, and building. Build and perfect a cost management duty system. Build a cost control system that focuses on project managers, which can help to predict costs and make decision. Build an information management system for cost control to actualize information feedback and process. Information system can help to offer pre-warning for errors, analyzing reasons, advancing suggestions, and realizing a dynamic management of cost control. Make up relevant standards for operations. Optimize business operations. Apply leveled empowerment and management. Establish the responsibilities of positions. Build a check and incentive mechanism for cost supervision. Make up standards for cost control. Inspire workers' motives for cost management.

### *3.3 Emphasize on Designs, Strengthen Contract Management, Be Strict with Design Changes, and Regulate the Procedures of Changes*

Design is the most important ring for cost control in real estate construction, which can directly impact the construction period and investment scale. Therefore, it is necessary to select a design company carefully, checking its quality, experience, and general competence. By following the principle of convenience, select reasonable design indexes and control construction cost. Select the scheme properly and optimize the design to decrease the investment cost. Strengthen contracts management and supervise subcontracts and external workers. Control the changes of design strictly. Build a system for changing designs. Set limits for procedures of changing.

### *3.4 Enlarge the Financing Channels and Optimize the Debt Structure. Decrease Financing Risks and Reduce Capital Costs*

Enlarge financing channels further. Absorb more funds to participate into real estate construction. Decrease the size of loans from banks and avoid too much dependence on banks. Reduce capital costs. Construction companies should try to get fiscal low interests and official allowance. Explore new financing channels, such as assets reengineering, stock financing, issuing corporate debts, short-term financing, BOT, auction, listing in market, and absorbing foreign funds.

### *3.5 Control the Removing Fees*

(1) The government takes a part in land expropriation and removing. The government can help to solve this most difficult issue. In perspective of costs, it is more economical than solving this issue by the construction company.

(2) Make up a system for compensation standards. The government can issue a series of standards for compensation in certain region. Then, the compensation will be fairer, which can benefit the stability of society.

(3) Ensure the compensation. At the very beginning, it is necessary to take the compensation into consideration, avoiding the misuse of compensation. Whether the compensation can reach its owner is an extremely important issue.

(4) Make the design be preciseness as much as possible. Ensure the predictability of land expropriation. Meanwhile, owners should prepare well for the construction. Shorten the time distance between design and construction. Besides, coordinate the relationship between the construction company and the local government. Deal with the illegal building properly.

(5) For land be used for certain period, the contract can restrain the construction company for the quantity, the type, and the time. Or, the construction company is responsible for the expenses of land be used for certain period. Owners can apply relevant certificates.

### *3.6 Control Management Costs and Reduce Expenditure*

The construction company should strengthen internal control. Perfect the system. Build an effective constraint mechanism. Stop conspicuous consumption and improve the consciousness of saving. Reduce management costs.

(1) Build up the system. Strengthen the construction of financial system. Perfect the financial management rules. Make up relevant regulations for expenditure. Standardize the approval of expenditure. Establish the responsibilities of positions and work standards.

(2) Apply the budget control and execution system. Compile a management budget and follow the budget strictly. Check the costs according to financial system and the budget. Analyze and examine the expenditure indexes. Allocate the management budget among functional sectors. The later can puts forward suggestions for the use of management fees. Financial sectors should compile the plan for expenditure by balancing the management expenditure. After the

approval, all sectors can compile the month expenditure plan.

(3) Sign a target and responsibility contract for cost control. The construction company and relevant functional sectors can sign a target and responsibility contract for management cost, controlling the cost based on the contract and plan. Management expenditure should follow the approval procedures and authorities. Control the cost by plans and apply the target check system. Management expenditure should be associated with the process of construction, ensuring the normal, legal, and reasonable expenses.

#### **4. Conclusion**

The cost control and management of real estate construction is a systematic project. Its success depends on all participants' dedication. The guidance thought for cost control and management of real estate construction is in accordance with the idea of building a resource-saving society in China. This paper is supposed to exert certain effect on China's real estate construction, with the hope of benefiting the cost control and management of real estate construction in future.

#### **References**

- Dong, Pan. (2005). *Civil Building Project Supervision*. Dalian: Dongbei University of Finance & Economics.
- Gao, Qun. (2007). *Bidding for Construction Project and Contract Management*. Beijing: China Machine Press.
- Ma, Libin. (2009). Confirmation and control of project cost in the construction process. *Transpo World*, No.11(2). P22-23.
- Qian, Kunrun. (2003). *Architectural Engineering Quota and Budget*. Nanjing: Southeast University.
- Zhang, Sufei. & Gao, Qun. (2007). *Analysis of Real Estate Investment*. Beijing: China Machine Press.