

THE PROSPECTIVE AND CHALLENGES FOR BUSINESS GROUP DIVERSIFYING TO BIOTECHNOLOGICAL INDUSTRY – A CASE STUDY IN TAIWAN

H.M. Chung*

* Dep. of Business Administration, I-Shou University, Kaohsiung, Taiwan

smchung@isu.edu.tw

Abstract: By using case study, this research tries to explore the possible challenges and prospective for business groups diversifying to biotechnology industry in Taiwan, especially an important but under researched topic—managing strategic role conflicts in diversifying process. The result shows that there exists strategic role conflicts in the case company, and the use of clan control is a possible method for managing the conflicts. The group's ignorance for the possible strategic role conflict between managers are possible detrimental for the performance of the newly founded biotechnological company, and even the group's growth.

Introduction

Based on social exchange perspective, this research explores the possible prospective and challenges for business groups diversifying to biotechnology industry in Taiwan, especially an important but under researched topic—managing strategic role conflicts in diversifying process[1]. A business group is a conglomerate of enterprises interlocked through overlapping investments by a small number of core owner-managers[2]. It is a special form of enterprise system found in virtually every market economy, including those of France, Italy, Latin America, Japan, South Korea, China, and Taiwan, etc[3]. Researches highlight that higher level of diversification, especially unrelated diversification, is a typical characteristic of business groups[4]. Unrelated diversification is an appropriate strategy for business groups in emerging markets[5], irrespective of whether this strategy is evaluated from an economies of scope argument[6], a managerial incentives consideration[7], an institutional void cause viewpoint[4], or a leveraging market power perspective[8]. Diversification is a kind of corporate entrepreneurship (CE)[9], and is seemed as a method for bringing the corporate innovative and highly growth opportunities.

A business group's development is rooted in a nation's specific institutional environment, and tends to be interwoven with the nation's economic development. In Taiwan, in addition to the significant contribution made by business groups to Taiwan's GNP, the diversification paths of these business groups are closely related to Taiwan's economic development, and hence merit observation. Published data reveals that prior to 1980, business groups were located primarily in

the cement, textile & wearing, chemical & plastic, and food sectors. However, the years since then have witnessed an increase in the number of business groups diversifying into the unrelated fields that have higher profit potential, such as the electronic, telecommunication, or the biotechnological industry recently[10]. Biotechnology is the top-priority objectives of the Taiwan government's six-year challenge 2008 national development plan. According to BioFronts program director Paul Hsu, the Executive Yuan has already invested about US\$112 million (NT\$3.82 billion) in domestic biotech companies and venture capital funds through a special development fund it controls[11]. Besides the huge input of the government to incubate new biotechnological companies, the large business groups whose core area located in the food, paper or other traditional manufacturing sectors, are eager to diversify into this unrelated field for growth and profit-searching consideration. For example, the Uni-president business group with core area located in the food industry founds a biotechnological company, the ScinoPharm Taiwan Ltd, to provide active pharmaceutical ingredients (APIs) manufacturing and new drug development service; the Yuen Foong Yu business group which is a paper-manufacturing conglomerate founds the Taiwan Genome Sciences (TGS) to focus on the discovery of disease target for the development of therapeutic and diagnostic applications. However, because the biotechnological industry is characterized by highly dynamic, higher technological threshold, and need a long time to break-even, almost all the newly founded biotechnological companies in Taiwan are still in minus profit. Besides the lack of R&D investment argument and the government-linked discussion, the minus profit phenomenon is possible the result of the strategic role conflict between the individuals of the different level management within the biotechnological company.

Strategic role conflict is a phenomenon when managers facing inconsistent behavioral expectations under the condition of strategic renewal[12]. Strategic renewal is an evolutionary process with the purpose for organizations coping with the environmental change, a key activity associated with the survival and growth of any profit-making organization. Role conflict can occur from dissensus within an individual or from dissensus between two or more individuals[13]. Because the strategic roles of top level managers focus on decision-

making that different from the roles of communicating information of middle level managers, it is easier to have different role expectations between the individuals of these two managerial levels[14]. When the company needs strategic renewal due to the pressure from environmental change, the different role expectations between top and middle level managers may cause conflict and disturb the implementation of strategic renewal. When the industrial environment of a company is highly dynamic, the probability of strategic role conflict is higher, and then it could be destructive to performance.

Biotechnological industry is characterized by highly competitive and dynamic. Besides the technological barrier, the market position and the proper steps of commercialization are also critical for companies in this industry. And they all need the cooperation and implementation ability between individuals of different managerial levels. For business groups interested in diversifying into this newly industry, the capital-raising and technological barrier are not the only considerations. They need to consider the possible risk and loss caused from the strategic role conflict of different level managers. Strategic role conflict can not be eliminated, but it can be managed and controlled[12]. It is one challenge for business group diversifying into the biotechnological industry, but it also provides opportunity to bring innovative ideas for the newly biotechnological company and the business group.

Using in-depth case study in a newly biotechnological company that is founded by a business group in Taiwan, this research tries to explore the possible strategic role conflict between the top and the middle level managers in this newly founded biotechnological company, and then discusses the possible prospectives and the challenges for business group to diversify into the biotechnological industry.

Materials and Methods

Materials: Because almost the newly founded biotechnological companies do not go public in Taiwan, the public information is limited. Even the *Business Groups in Taiwan*, a dictionary published annually by the China Credit Information Service, does not provide any cue for business groups diversifying to this field. Due to the limited public information, this research tried to collect the information by case-study, especially by interviewing the key persons in the focal company. Furthermore, this research will refer the limited public reports or company website information to verify the interview results.

Methods: A case study, especially the interview method will be used.

Results

Company Backgrounds: The focal company is a biotech venture by a large business group and the government in Taiwan. This company develops drugs to

treat strokes, heart problem and cancer, and it makes pharmaceutical products for other companies and specializes in active pharmaceutical ingredients. It is the largest independent US Food & Drug Administration-approved biotechnology company in Asia [15]. Because this company is a model combined the governmental and private funds in the Tainan Science-based Industrial Park, a location arranged for developing biotech industry in Taiwan, the officials hope this company will be a lead player in the development of both the park and the industry [16].

In the company's senior management team, almost all the top level managers have related work experience in the chemical and pharmaceutical business in USA. The CEO of this company is a former executive at US based biotechnological company, and she has in-depth experiences in strategic planning, business development and manufacturing. Besides the necessary knowledge and related business experiences in the biotech industry, the former working experience of the top level managers also provide global connection network with other pharmaceutical companies. And the connection network established by the senior managers seems helpful in marketing strategy and market searching for the focal company. Furthermore, it also provides strategic alliance opportunities with other famous pharmaceutical companies for the focal company. In order to overcoming the higher barriers of entrance in the biotechnology market, the companies in this industry usually establish active alliances with each other. For the smaller and newly biotechnological companies, making alliances with larger ones are helpful for their survival [17].

However, although the established alliance network is helpful for market exploitation and overcoming entry barrier, it also possibly constrains the speed of change when the environment is highly dynamic and the management team needs to renew strategy. Reviewing the mission and strategy of the focal company, new drug development and custom manufacturing for biotech or pharmaceutical companies are the two business objectives. The company's top managers hope the OEM (original equipment manufacturing) concept and custom manufacturing in biotechnological market can be compared to that of semiconductor foundry Taiwan Semiconductor Manufacturing Corp (TSMC), and has successful result as the TSMC. However, there exists contradiction between developing new drug and accepting OEM model in the market and resource exploitation. The potential OEM customers are possibly the competitors in the drug market. Furthermore, the OEM sector and drug-developing sector in the company may contend limited resource and then leads to conflict. When the middle level managers have different perception and mindset as the top level managers, the strategic role conflict may happen and constrains the growth of the newly founded company.

Source of Strategic Role Conflicts: The preliminary interview with key persons in the focal company shows that there exists strategic role conflict between the top

and the middle level managers within the company, primary focus on the different perceptions on strategic preference, preference of new drug development, path of drug's commercialisation and the R&D ability.

As showed in Table 1, on the strategic preference, the top level managers make the drug development and OEM strategies simultaneously, but the middle level managers consider the OEM model is more suitable for the company. On the preference of new drug development, the past work experiences tell the top level managers to develop multiple new drugs simultaneously in order to leveraging the risk of just one drug. However, the middle level managers stand for developing one new drug in a period of time based on resource and capital consideration. On the path of drug's commercialisation and the R&D ability, the top level managers are optimistic, but the middle level managers are more or less conservative. The different past work experience and the cognition on the resource utilization between the top and middle level managers in the focal company are possible the causes of the strategic role conflicts between them.

Table 1: Strategic Role Conflict between Top and Middle Level Managers

Source of Strategic Role Conflict	Top Level Managers	Middle Level Managers
Strategic Preference	Developing New Drug and Implementing OEM Model	OEM
Preference of New Drug Development	Developing Multiple New Drugs Simultaneously	Developing One New Drug in a Period of Time
Path of Drug's Commercialisation	Optimistic	Conservative
R&D Ability	Optimistic	Conservative

Discussion

As introduced before, strategic role conflict cannot be eliminated, but it can be managed and controlled. And the primary means for solving the role conflict and reducing the opportunism are organizational controls [18]. Approaches to organizational control are choice between market control, characterized by price competition, bureaucratic control, entailing the use of rules, and clan control, focus on the establishment of member's commitment [19]. When the market is characterized by hepercompetitive and dynamic, companies cannot produce sustainable source of competitive advantage by existing position, and they must modify existing competencies and position to create a series of short-lived advantgaes. In order to react the dynamic environment as soon as possible, the company need to establish the member's commitment

and consensus, and then decrease the possible role conflict within the company. Therefore, among the three kinds of alternatives, the use of clan control can decrease strategic role conflict when the market environment is dynamic and hypercompetitive [12].

The biotechnological industry, or the pharmaceutical industry specifically, is characterized by dynamic and competitive. In order to decrease the strategic role conflict within the focal company, the top level managers are better to use clan control to establish the commitment of the middle level managers and other employees. Specifically, establishing the company's mission and target by participation of the middle level managers, using long-term compensation, such as the stock option, and communicating with the middle level managers to search for the perception consensus on products and markets, are all the possible methods to establish commitment. And they are the possible methods for decreasing the existing strategic role conflict within the focal company.

For the business group interested in diversifying into the biotechnological industry, the success or survival in this industry are not just decided by the amount of investment. The right strategies and right persons are critical. By right strategies, the choice between the OEM model and brand establishment is the most important one. It can decide the following business model and the market position of the company. By right persons, the past working experiences are not the only consideration for a proper CEO or other senior managers, the communication and commitment-establishing ability are more or less important. The inter-personal communication ability of the top level managers is not only helpful for decreasing possible strategic role conflicts between them and others, but it is also helpful for the company to react to the environment and renewal its strategies as soon as possible.

Conclusions

Biotechnology is the top priority in Taiwan's economic development. Besides the government, the business group is another key player in this industry. The success of the biotechnological company not only depends on the financial issues, but also on the strategy issues, such as the strategic role conflict problem. Strategic role conflict is destructive for the performance, but it also a good opportunity for strategic renewal. In the case of this study, the method of managing the strategic role conflict between the top and middle level managers is by using clan control, establishing commitment and consensus within the company. However, the following report and public information about this company shows that some critically technological middle managers quit after communicating with the top level managers. Furthermore, the largest shareholder, the business group, considers to sell its share of this company to other biotechnological multinational company. These

information reveals that the focal company does not solve the strategic role conflict, and the conflicts does not become a possible opportunity for strategic renewal.

The motivation of business groups to diversify into the biotechnological industry is for searching growth and profit opportunity. But the group's ignorance for the possible strategic role conflict between managers are possible detrimental for the performance of the newly founded biotechnological company, and even the group's growth. As the key investor in the newly founded biotechnological company, the business group is better to set the key goal for the company and the group, solve the conflict in the focal company, and then transfer the conflict as a chance for strategic renewal to achieve the innovative and growth purpose. Strategic role conflict is one challenge for business group's diversification, but it also opens a prospective chance for the business group.

References

- [1] DESS G. G., IRELAND R. D., ZAHRA, S. A., FLOYD S. W., JANNEY J. J. AND LANE P. J. (2003): 'Emerging issues in corporate entrepreneurship', *Journal of Management*, **29(3)**, pp. 351-78
- [2] NUMAZAKI I. (1986): 'Networks of Taiwanese big business: A preliminary analysis', *Modern China*, **12(4)**, pp. 487-534
- [3] WHITLEY R. D. (1991): 'The social construction of business systems in East Asia', *Organization Studies*, **12(1)**, pp. 1-28
- [4] KHANNA T. AND PALEPU K. (1997): 'Why focused strategies may be wrong for emerging markets', *Harvard Business Review*, **75(4)**, pp. 41-51
- [5] HOSKISSON R. E., EDEN L, LAU C. M. AND WRIGHT M. (2000): 'Strategy in emerging economies', *Academy of Management Journal*, **43(3)**, pp. 249-67
- [6] TEECE D. J. (1980): 'Economies of scope and the scope of the enterprise', *Journal of Economic Behavior and Organization*, **1(2)**, pp. 223-47
- [7] TOSI H. AND GOMEZ-MEJIA L. (1989): 'The decoupling of CEO pay and performance: An agency theory perspective', *Administrative Science Quarterly*, **34(1)**, pp. 169-89
- [8] GHEMAWAT P. AND KHANNA T. (1998): 'The nature of diversified business groups: A research design and two case studies', *Journal of Industrial Economics*, **46(1)**, pp. 35-61
- [9] BURGELMAN R. A. (1991): 'Intraorganizational ecology of strategic making and organizational adaptation: Theory and field research', *Organizational Science*, **2(3)**, pp. 239-62
- [10] CHINA CREDIT INFORMATION SERVICE (2003): 'Business groups in Taiwan', (China Credit Information Service, Taipei)
- [11] FELLER G. (2004): 'Taiwan pushes on biotech', *Research Technology Management*, **47(4)**, pp. 4-5
- [12] FLOYD S. W. AND LANE P. J. (2000): 'Strategizing throughout the organization: Managing role conflict in strategic renewal', *Academy of Management Review*, **25(1)**, pp. 154-77
- [13] BIDDLE B. J. (1979): 'Role theory: Expectations, identities, and behaviors', (Academic Press, New York)
- [14] MINTZBERG H. (1973): 'The nature of managerial work', (Harper & Row, New York)
- [15] HEANEY B. (2002): 'Chinatrust keen on biotech firms', Taipei Times, Internet site address: <http://www.taipetitimes.com/News/archives/2002/1/05/0000178431>
- [16] BIOTECH EAST, (2001), Internet site address: <http://www.biotecheast.com/print.php?sid=784>
- [17] BARLEY S. R., FREEMAN J. AND HYBELS R. C. (1992): 'Strategic alliances in commercial biotechnology', in NOHRIA N. and ECCLES R. G. (Eds.): 'Networks and organizations: Structure, form, and action', (Harvard Business School Press, Boston), pp. 311-47
- [18] HOSKISSON R. E., HITT M. A. AND HILL C. W. L. (1993): 'Managerial incentives and investments in R&D in large multiproduct firms', *Organization Science*, **4(2)**, pp. 325-41.
- [19] OUCHI W. G. (1980): 'Markets, bureaucracies, and clans', *Administrative Science Quarterly*, **25(1)**, pp. 120-42.